Newport Chemical Depot Reuse Master Plan

Matrix Design Group Inc.
Integrated Design Solutions

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Executive Summary

Background and Overview

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Impacts and Implementation Considerations

Section in progress

This study was prepared under contract with the Newport Chemical Depot Reuse Authority (NeCDRA) with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of the NeCDRA and does not necessarily reflect the views of the Office of Economic Adjustment.

1 Background and Overview

After initial recommendations were issued by the Secretary of Defense, the 2005 Base Realignment and Closure (BRAC) Commission prepared a list of recommended base closures for the President on September 8, 2005. On September 15, the President approved a final list, which included Newport Chemical Depot, and transmitted it to Congress. By law, the Depot must close before September 15, 2011, but it could potentially close ahead of schedule in 2010.

The Newport Chemical Depot has been a major regional employer, providing over 500 jobs to area residents and acting as an economic engine for the surrounding towns and population centers.

Property Setting and Description

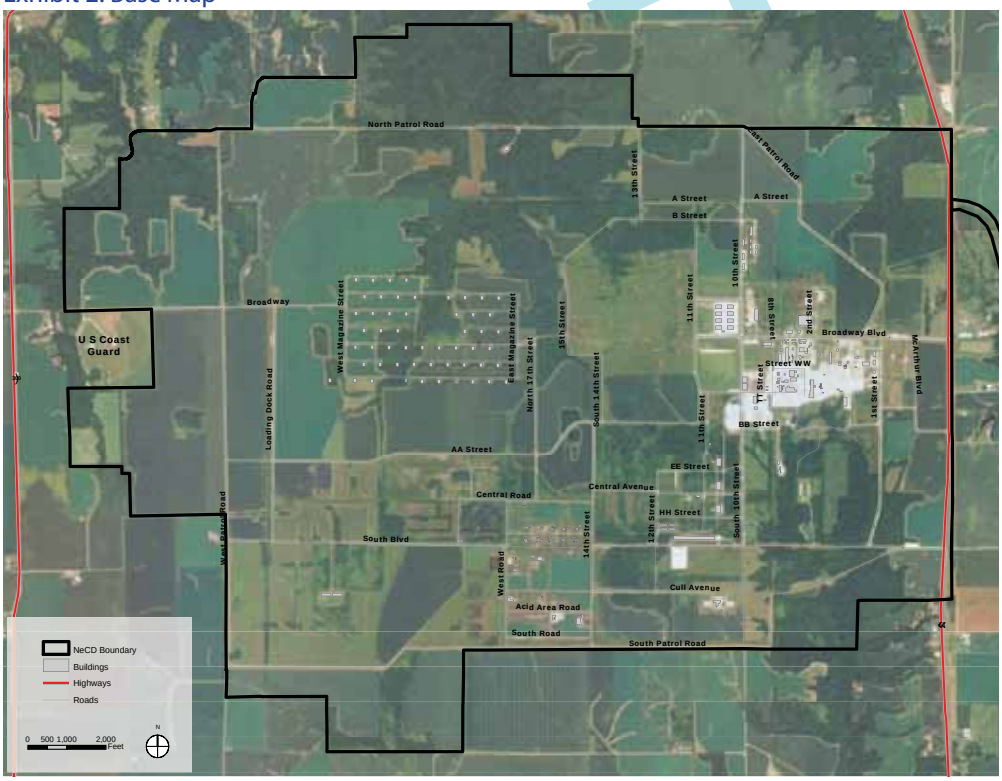
The Newport Chemical Depot is an approximately 7,000 acre facility located in west-central Indiana, in Vermillion County, near the town of Newport. Other towns in the vicinity of the base include Clinton, Quaker, Dana, and Montezuma. **Exhibit 1: Regional Context Map** shows the location of the Depot with respect to surrounding towns and interstate highways in the area.

In a regional context, the Depot is about 65 miles west of Indianapolis, and about 140 miles south of Chicago. The Indiana/Illinois state line is only two miles from the western boundary of the base.

Primary access to Newport Chemical Depot is provided by State Highway 63, which runs on a north/south axis near the eastern boundary of the property. **Exhibit 2: Base Map** shows an aerial view of the Depot, revealing the internal roadway network as well as the location of prominent structures and facilities on the property.

Exhibit 1: Regional Context Map

Exhibit 2: Base Map



The Newport Chemical Depot Reuse Authority

In preparation for the closure of the Newport Chemical Depot, the Newport Chemical Depot Reuse Authority (NeCDRA) was created to oversee and facilitate the creation of a reuse master plan for the Depot. Over the course of 2009, the NeCDRA and its consultant team worked with the local community to create a plan and implementation strategy for conversion of the Depot to civilian use.

The Newport Chemical Depot Reuse Authority Board

The NeCDRA Board of Directors, appointed by Vermillion County Commissioners, are listed below:

- Jack Fenoglio (Clinton) - President
- Tom Milligan (Dana) - Vice-President
- Robert Rendaci (Clinton) - Treasurer
- Albert Clark (Cayuga) - Board member
- Arden Kilgore (Cayuga) - Board member

The NeCDRA's Executive Director is William Laubernds and the Office Manager is Susie Jones.

The Consultant Team

To assist with the redevelopment planning for the Newport Chemical Depot, the NeCDRA selected **Matrix Design Group** as the lead planning consultant. Matrix Design Group is a Denver, Colorado-based planning, engineering, and environmental consulting firm with extensive military base realignment and closure planning experience.

Also on the Matrix Design Group team are three additional firms with specific areas of expertise:

- **Burns & McDonnell** (utilities and infrastructure)
- **Economics Research Associates** (market and economic analysis), and
- **Garrity and Knisely** (legal services)

Newport Chemical Depot Reuse Authority Guiding Principles

The NeCDRA is charged with the responsibility of preparing a reuse master plan for the Newport Chemical Depot. Accordingly, the NeCDRA established the following guiding principles to provide a basic framework for evaluating proposed new uses of the Depot:

- Acquire the property at no cost to the NeCDRA or the community
- Develop a reuse plan for primarily industrial and agricultural uses
- Ensure preservation of natural resources
- Maximize local jobs and investment for Vermillion County and the region

The Federal Property Screening Process

The BRAC process allows for various federal, state, and local agencies and other non-profit organizations to apply for and be considered for property within a closed military installation. There are two levels of screening, the first of which is the "federal to federal" screening, during which other DoD organizations are notified by the Department of the Army (or other applicable Military Department) of the availability of "excess" property. After consideration by these components, other federal departments are then given the opportunity to request portions of the property. The parcels within the installation remaining that are not transferred to these agencies under this first level screening activity are considered "surplus" property.

The second level of screening is conducted by the Local Redevelopment Authority, and considers the surplus property, as defined above. During this process, the LRA provides notice of the availability of surplus property to homeless provider organizations, state and local governments, and potential recipients of public benefit conveyances, or "PBCs." The following sections of this Report describe this process as it relates to the potential redevelopment of the 7,000-acre Newport Chemical Depot.

Federal Determination of Surplus Property

During the BRAC Federal property screening process, no requests were made by any Federal agencies to the Department of the Army for any military property at Newport Chemical Depot. As such, the entire 7,000 acre property was declared surplus in the November 14, 2008 issue of the *Federal Register*.

State and Local Screening Process

The federal Base Closure Community Redevelopment and Homeless Assistance Act governs the process of how federal defense facilities can be disposed. The Act was designed to accommodate the impacted communities' multiple interests in base reuse, including meeting the national priority to assist homeless individuals and families; for Economic Development Conveyances (EDC) for business growth and expansion; and for Public Benefit Coveyances (PBC) to provide for reuse of land and building assets for a public purpose. The Act provides for a community-based process whereby government and not-for-profit organizations may propose the reuse of surplus military property to provide vital public services such as education, health care, open space or parks, parks and recreation related uses, law enforcement, prisons, transportation terminal facilities, public buildings and facilities; the Act also provides for a community-based process whereby government and not-for-profit organizations serving homeless individuals or families participate in the local reuse planning process. The local redevelopment authority is responsible for developing a reuse plan for Newport Chemical Depot that appropriately balances the needs for economic redevelopment, certain public facilities and amenities, and homeless assistance.

State and Local Screening Notice of Interest

State and local eligible parties were allowed to prepare requests for surplus property at Newport Chemical Depot once the state and local screening process began with the distribution of an announcement of available surplus property inviting interested parties to submit Notices of Interest (NOIs) to the NeCDRA outlining their proposals for reuse of any portion of that property. The announcement soliciting NOIs was published in the November 28, 2008 issue of the *Clintonian* newspaper and sent to the State of Indiana, local governments, and not-for-profit agencies in the vicinity of the Depot.

The announcement soliciting NOIs also invited interested applicants to an informational workshop held on January 20, 2009, designed to give an overview of the redevelopment planning process, information on land use constraints, and information on the NOI process. Applicants were also invited to a base tour that took place on January 27. Attendance by interested parties at either the workshop or the base tour was not required to submit a NOI proposal, but was encouraged.

The announcement also detailed what was required in each proposal, as well a list of Federal agency contacts that applicants could call to discuss the eligibility of their proposals for free or below-market acquisition of Federal land through a Public Benefit Conveyance.

Each application submitted by an organization other than a homeless provider was requested to have the following elements:

- A description of eligibility for Public Benefit Conveyance
- Proposed use of the property
- A description of buildings and property necessary for reuse proposal
- Time frame for occupation
- A description of the benefit to the community, including the number of jobs estimated to be generated

Four NOI applications were received by the NeCDRA, as discussed in **Section 5** of this document.

The Master Planning Process

After soliciting proposals from national planning consultants, the NeCDRA interviewed and selected Matrix Design Group, Inc. (Matrix) in December, 2008 to help it prepare a reuse master plan for the Newport Chemical Depot. Funded through a grant from the Office of Economic Adjustment (OEA), the Department of Defense, the Matrix scope of work developed for the project and approved by the NeCDRA Board was based, in part, on the following NeCDRA study parameters:

- Use a forward-thinking and inclusive approach
- Establish initial community goals and objectives, respecting important community interests and values
- Provide for public outreach and identify the needs of the community
- Implement and maintain a website devoted to the redevelopment of Newport Chemical Depot and the planning process as a means of keeping the public informed and to receive comments
- Conduct a market study, addressing national, regional, and local potential for redevelopment
- Conduct a detailed facility survey of the property to include land area, buildings, infrastructure, utilities, and environmental conditions
- Collate known environmental issues, using existing and such other inventory and other information as may be needed and recommend a base reuse master plan that is environmentally acceptable to the Army, regulators, and the community at large
- Prepare a summary analysis map identifying opportunities and constraints associated with redevelopment at the base
- Use broad planning principles to develop a series of alternative reuse master plans and property disposition strategies that the NeCDRA would utilize when working with the Army in the future
- Identify when, how and what disposition methods should be used for property transfer from the Army and alternatives for the completion of the environmental cleanup, including "early" transfer under CERCLA and privatization of the environmental cleanup
- Assist the NeCDRA community in the federal and state, local and homeless provider screening process
- Assist the community in reaching consensus around a final base reuse master plan
- Develop an implementation strategy to describe how the redevelopment would occur and recommend the next steps for implementation

Components of the Planning Process

The final NeCDRA-approved Reuse Master Plan for the redevelopment of the Newport Chemical Depot, as described in **Section 5: The NeCD Reuse Master Plan**, is based on a planning process that has considered a variety of significant data related to physical characteristics, environmental conditions of the property, market, economic and financial issues, and regulatory considerations; pertinent on-base, as well as off-base issues have been addressed. The Plan is also the product of an extensive public engagement program that has generated local, regional, and statewide public interest, serious comment and review, and active participation at many community levels, as described in **Section 2: The Public Engagement Program**, which follows this section. No one issue has dominated the process, and no one issue is the basis for the Plan. As with all large-scale, complex, and multi-faceted redevelopment projects, the NeCD Reuse Master Plan reflects the combination of conditions that best positions the property for successful long-term redevelopment, and balances that against community goals and objectives, environmental sustainability, and political / regulatory realities.

The 9-month planning study followed a three-phased process that included:

- **Phase A: Project Scope Refinement and Management**, which focused primarily around the development of a scope of work that reflected budget considerations and planning goals, expectations, and the timeframe for the project.
- **Phase B: Inventory and Assessment Activities**, the period during which physical, market and economic, and facility data was collected and evaluated. This phase also included the public engagement program to solicit ideas from the general public as well as receive feedback on alternative plans developed.
- **Phase C: Conceptual Master Planning**, during which conceptual plan alternatives were formulated, evaluated and compared, and the Base Reuse Master Plan was finalized.

The Project schedule for conducting the Study and the Matrix Design Group Scope of Services, as approved by the NeCD Board of Directors, is included in **Appendix G** of this report.

2 Public Engagement Program

Understanding and considering community issues related to the reuse of the Newport Chemical Depot was a critical step in the planning process. The closure of the Depot—a vital part of the local community for over six decades—will have a profound impact on the region, as will its redevelopment over the coming decades. From the beginning, the Newport Chemical Depot Reuse Authority committed to an open and transparent planning process in which citizen comments and ideas were actively solicited at every stage. Consequently, the project's Public Engagement Program was organized to meet that commitment. Through the interactive public engagement elements described in this chapter, the consultant team listened and learned from citizens, business and property owners, and other stakeholders from throughout west-central Indiana about the variety of issues, ideas, and concerns that affected the reuse planning for the Depot. Public feedback was instrumental in the development of the Newport Chemical Depot Reuse Plan.

Stakeholder Interviews

Early in the planning process, primarily in February and March, 2009, the planning team conducted one-on-one interviews with a wide variety of stakeholders interested in the Depot's redevelopment. These individuals came from a variety of backgrounds and interests, including:

- Local residents and property owners
- Local business owners
- Local elected officials
- Local government staff
- Representatives from major employers in the area
- Representatives from regional utility providers
- Representatives from local, regional, and state economic development organizations
- Representatives from local Chamber of Commerce and other civic organizations
- Local school district representatives

The interviews were designed to allow the consultant team to gain knowledge about the Depot and the surrounding community from various perspectives and how the closure and reuse of the Depot will impact, or be impacted by, these perspectives. Some of the topics discussed during the interviews included:

- Site characteristics, strengths and weaknesses
- Reuse goals, opportunities and constraints
- Implementation needs, challenges and barriers

The stakeholder interviews also provided important background information that became the framework for discussion during the Focus Groups and Workshops.

Public Meetings

Three major general public meetings were conducted during the NeCD reuse planning effort:

- Public Meeting #1 – Project Introduction
- Public Meeting #2 – Existing Conditions and Visioning
- Public Meeting #3 – Preferred Reuse Plan

Public Meeting #1: Project Introduction

The first public meeting was held on February 24, 2009 at North Vermillion High School, with the purpose of introducing the project and the planning process to the public. Approximately 50 people were in attendance. Prior to the formal presentation, the public had the opportunity to familiarize themselves with the Depot's physical layout by viewing several large aerial photos of the Depot posted in the school's auditorium lobby.

The following list summarizes the major elements of the Public Meeting #1 presentation (a copy of the entire presentation is provided in **Appendix A**):

- Introduction of the NeCDRA board members
- Introduction of the consultant team
- Overview of the project's goals and objectives

- Examples of military sites closed under previous BRAC rounds and their redevelopment progress
- General approach to the NeCD Reuse Planning project
- Description of the project's public engagement program
- Description of the project's major work items and deliverables
- Description of the project's schedule

Following the presentation, the planning team took questions and comments from the public, which covered a broad range of topics related to the Depot's reuse. For the complete list compiled during the meeting of the public's spoken comments and ideas, please see **Appendix A**.

Public Meeting #2: Existing Conditions and Visioning

The second public meeting was held on May 16, 2009 at South Vermillion High School, with approximately 40 people in attendance. The purpose of the meeting was twofold: to present the consultant team's Existing Conditions findings, and to engage the public in a "visioning" survey.

The meeting began with a half-hour Open House in the lobby of the school's auditorium, where the public could review 30 large-scale plotted maps reflecting the various Existing Condition factors that were researched and analyzed by the consultant team. These maps are discussed in **Chapter 3** and provided in **Appendix C**. Also available for public review during the Open House were copies of the Facilities Assessment document that included descriptions, photos, and diagrams for each of the Depot buildings surveyed. The summary of the Facilities Assessment is presented in **Chapter 3**, and **Appendix D** includes detailed survey forms completed for each major structure. During the Open House, members of the consultant team were on hand to explain the various exhibits, answer the public's questions, and receive the public's feedback on the Existing Conditions results. Finally, stationed around the lobby were several large aerial photo maps of the Depot along with colored markers for the public to use to record on the maps any comments, questions, ideas, or concerns they had relating to the Depot's future reuse.

The formal presentation by the consultant team covered the following topics:

- Introduction of the NeCDRA board members and the consultant team
- Overview of the project's goals and objectives
- Review of the work tasks completed to date and the project's overall schedule
- Description of the Notices of Interest received
- Review of the public engagement activities completed and planned
- A "virtual tour" of the Depot through a combination of maps and on-the-ground photos
- Summary of the Facilities Assessment
- Summary of the Environmental Assessment
- Summary of the Infrastructure/Utilities Assessment
- Review of the planning team's Development Suitability Analysis
- Summary of the Market/Economic Assessment and 26 different potential "market sectors"

Following the presentation, the Visioning Survey was introduced. The Survey was designed to lead the public through a series of questions to reveal what the public's "vision" is for the future reuse of the Depot. The first section of the Visioning Survey was organized around 26 potential market sectors discussed during the Market/Economic Assessment portion of the presentation. The public was asked to respond to each sector as a future use at the Depot, and given the option to answer "Strongly Support," "Mildly Support," Mildly Oppose," and "Strongly Oppose" for each one. The public was also given space to record what they felt may be some of the positive and negative impacts of each market sector as a potential future use at the Depot. The 26 market sectors presented in the Survey were:

Agriculture and Forestry:

- Conventional Crops
- Specialty Crops
- Dairy Farming
- Livestock Farming
- Poultry Farming
- Specialty Livestock
- Tree Plantations/Logging

Business and Industrial:

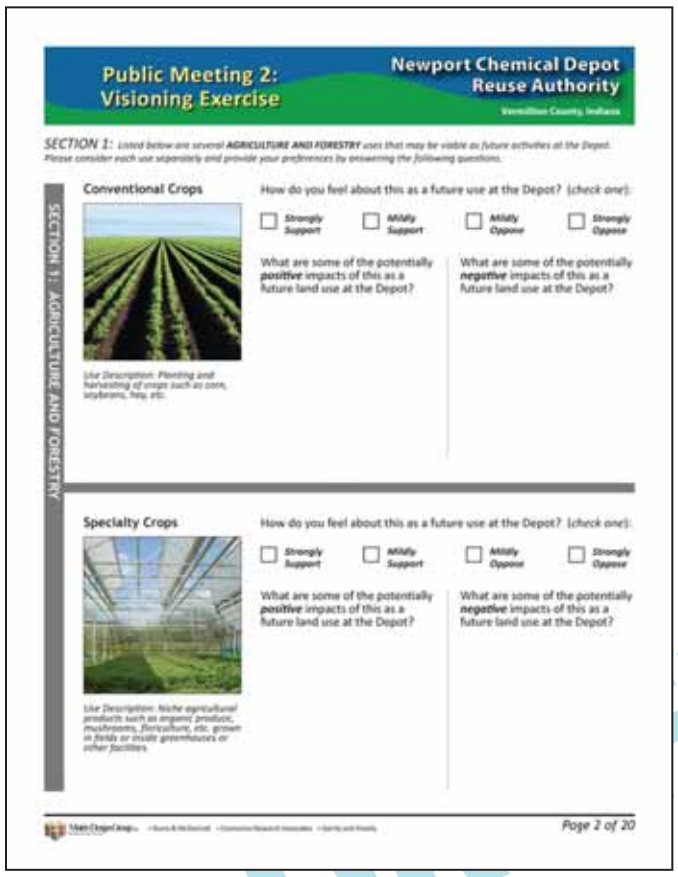
- Food Production
- Explosives Testing and Manufacturing
- Wind Turbine/Blades Manufacturing
- Advanced Manufacturing
- Data Storage Center
- Hazardous Waste Storage
- Chemicals Manufacturing
- Sanitary Landfill
- Tactical Driving Facility

Energy-Related:

- Coal-Fired Power Plant
- Nuclear Power Plant
- Coal Gasification Plant
- Bio-Fuels Production
- Alternative Energy Facility

Institutional:

- University Research
- Correctional Facility
- Law Enforcement Training
- National Guard Training
- Regional Utility Facilities



Public Meeting 2:
Visioning Exercise

Newport Chemical Depot
Reuse Authority
Vermillion County, Indiana

SECTION 1: Listed below are several AGRICULTURE AND FORESTRY uses that may be viable as future activities at the Depot. Please consider each use separately and provide your preferences by answering the following questions.

SECTION 1: AGRICULTURE AND FORESTRY

Conventional Crops

How do you feel about this as a future use at the Depot? (check one):

☐ Strongly Support ☐ Mildly Support ☐ Mildly Oppose ☐ Strongly Oppose

What are some of the potentially **positive** impacts of this as a future land use at the Depot?

What are some of the potentially **negative** impacts of this as a future land use at the Depot?

Use Description: Planting and harvesting of crops such as corn, soybeans, hay, etc.

Specialty Crops

How do you feel about this as a future use at the Depot? (check one):

☐ Strongly Support ☐ Mildly Support ☐ Mildly Oppose ☐ Strongly Oppose

What are some of the potentially **positive** impacts of this as a future land use at the Depot?

What are some of the potentially **negative** impacts of this as a future land use at the Depot?

Use Description: Niche agricultural products such as organic product, mushrooms, floriculture, etc. grown in fields or inside greenhouses or other facilities.

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In the second part of the Survey, five questions were asked that focused on broader aspects of reuse of the Depot:

- Prioritization between Agriculture and Forestry, Business and Industrial, Energy-Related, and Institutional land use categories
- Appropriate balance between natural resource conservation and economic development land uses
- Future use of areas with prime farmland soils
- Future use of areas with native prairie grasses
- Future use of areas with unfragmented forests

Answer options were provided that covered the spectrum from one extreme to the other for each, and the public was asked to record their thoughts and comments about these future land use topics.

Teen Workshop

As part of the public outreach effort, the consultant team held a special Teen Workshop to engage some of the local youth in Vermillion County in the Newport Chemical Depot reuse planning process and, more importantly, to learn from them their thoughts, ideas, and vision for the Depot site.

The teen workshop was held over a two day period. On May 15, 2009, approximately 15 students from South Vermillion High School and about an equal number of students from North Vermillion High School joined representatives from the consultant team and the NeCDRA board, along with Col. Hibner, the NeCD commander, for a two-hour bus tour of the Depot. Students were provided with information about the Depot's natural resources, history, environmental issues, redevelopment potential, and other aspects of the facility, and were also asked for their thoughts on how the Depot's reuse could proceed. For almost all of the students, it was their first opportunity to experience the inside of the Depot, and understand the extent of the property and the diversity of its resources.

On the following day, May 16, 2009, a few hours before Public Meeting #2 began, the students were presented with the Existing Conditions results and were led in a discussion by the consultant team, relating those results to what the students had observed during the previous day's tour or the Depot. The students then participated in the same Visioning Survey exercise described above.

Summary of Visioning Results

The following summarizes the results of the Visioning Survey:

- Of the 26 potential market sectors, a majority of Survey respondents indicated support (either Strongly or Mildly) for all but two of the sectors listed above, with only Hazardous Waste Storage and Sanitary Landfill receiving a general lack of support.
- The ranking of land use categories by priority was Business and Industrial first, followed by Energy-Related, Agriculture and Forestry, and finally Institutional.
- Regarding the balance between natural resource conservation and economic development, about 50% favored an emphasis on economic development, about 35% favored an equal balance between the two, and about 15% favored an emphasis on natural resource conservation.
- Regarding the use of areas with prime farmland soils, about 20% indicated these areas should be used for agricultural use only, with about 80% indicating they should be used for non-agricultural development uses to some degree.
- Regarding the use of areas with native prairie grasses, slightly less than 50% favored maintaining the native prairie grass conservation areas, and slightly more than 50% favored their use for agricultural, business, or other types of development to some degree.
- Regarding the use of unfragmented forest areas, about two-thirds favored maintaining the unfragmented forest areas intact, with a balance within these areas between conservation/recreation and forestry uses, and about one-third favored the use of these areas for other types of economic development to some degree.

Please note that the Visioning Survey was not intended to be a statistically significant survey nor a binding poll; rather, it was designed to inform the planning process by providing a general sense of the public's attitudes toward various aspects of the future reuse of the Depot.

A copy of the complete Visioning Survey is presented in **Appendix A**.

Public Meeting #3: Preferred Reuse Plan

The third and final public meeting was held on September 16, 2009 at North Vermillion High School. Approximately 60 people were in attendance. The focus of the meeting was to present to the public the Preferred Reuse Plan map and to receive input from the public before finalizing the map as the draft Reuse Master Plan map.

Large plotted maps of the Preferred Reuse Plan were posted in the school auditorium lobby for review by the public prior to the start of the meeting. The formal presentation by the consultant team covered the following topics:

- Introductions
- Project Overview, Goals, Milestones
- Public Engagement Summary
- Public Visioning Survey Summary
- Land Planning Process Review
- Reuse Plan Concepts
- Preferred Reuse Plan
- Public Questions and Comments

A number of individuals asked questions or provided input regarding the plan and its implementation. Overall, the plan was very well received and no opposition to the plan or its various elements was voiced.

The following day, Thursday, September 17, 2009 at their regularly scheduled monthly meeting, the NeCDRA board voted to advance the Preferred Reuse Plan map as the draft Reuse Master Plan map and to instruct the Matrix planning team to complete the Reuse Master Plan report based accordingly.

Focus Groups and Workshops

Throughout the planning process, several workshops and focus group meetings were held to gather information and/or discuss reuse options relating to specific topics, the results of which are discussed below:

Land Use Focus Group

On March 26, 2009, the consultant team conducted its first focus group meeting, targeting the discussion to land use issues. Held at the Depot, participants included representatives from Mason & Hanger, the contractor that operates and maintains the Depot for the federal government, as well as local U.S. Army officials, adjacent property owners, conservation and soil experts, and local farmers. The discussion focused around the various land uses occurring and surrounding the Depot, with a special emphasis on the Depot's natural resources and agricultural uses.

Infrastructure Focus Group

On April 8, 2009, the Infrastructure Focus Group meeting was held at the Depot. Attendees to this meeting included representatives from Mason & Hanger, the U.S. Army, Vermillion County, and representatives from local utility providers. The focus of this meeting included detailed discussions about the Depot's existing water, sewer, gas, electric, and other utility conditions and capacities, the Depot's integration with civilian utility systems, and the future infrastructure needs and challenges for the Depot's reuse. Also discussed was the Depot's transportation assets and potential future roadway and rail connections.

Economic Development Focus Group

On April 9, 2009, the Economic Development Focus Group was held at the Clinton City Hall. Attending this focus group were representatives from local, regional, and state economic development agencies; major utility providers; banks and lending institutions; and area colleges and universities. The discussion focused on potential viable market sectors such as bio-fuels and other alternative energy uses, government and institutional uses, educational research, manufacturing, business incubator, and other market sectors.

Development Workshop

On August 16, 2009, the NeCDRA and its consultant team welcomed about thirty representatives from various major utility, transportation, railroad, energy, and financial organizations, as well as local and regional economic development experts, to a Development Workshop. The purpose of the workshop was to discuss with workshop participants various physical attributes of the areas of the Depot that will be designated for Business and Technology uses. Specifically, the planning team wanted to receive from these development experts their input regarding the appropriate location, proximity,

size, and configuration of future Business and Technology land use areas at the Depot. Receiving this feedback helped the planning team configure future Business and Technology land use areas on the Reuse Master Plan in a manner that would facilitate long-term flexibility and development opportunities for the community.

Newport Chemical Depot Reuse Authority Meetings

Another aspect of the public outreach effort included the Newport Chemical Depot Reuse Authority's monthly and other special meetings. Not only were these meetings open to the public, as required by law, but at each meeting, members of the public were provided the opportunity to make comments to or ask questions of the NeCDRA board members and/or staff. Meeting agendas and minutes were made available to the public throughout the project duration. Copies of all NeCDRA board minutes are presented in **Appendix A**.

Project Website

One of the major communication tools used by the project team was the project website, located at **www.NeCDRA.com**. While the website was created to provide information specific to the reuse planning effort, by naming the website after the Reuse Authority itself, rather than the reuse planning project, the website domain name, architecture, and branding can continue to serve the Authority for years throughout the plan implementation stage. The website contains seven main pages:

Process

This page provides a summary of the project work plan—the tasks necessary to complete the Reuse Plan—as well as a downloadable PDF of the entire detailed project Scope of Work. Also available is an overview of BRAC planning in general prepared by the Office of Economic Adjustment.

Information

The Information page provides the bulk of the planning-related materials, exhibits, and documents developed throughout the project. Materials available to the public on this page include a variety of background documents about the Depot prepared by the Army, documents related to the Notice of Interest and Homeless/State/Local Screening process, and dozens of reports, assessments, and other documents generated by the consultant team throughout the project duration. Also available on the Information page are dozens of maps and other exhibits, public meeting materials, and short news items that provide timely updates on the project.

3 Existing Conditions

Newport Chemical Depot, as with most military installations, is surrounded by a broad mix of public-sector and private-sector uses and properties, communities of various sizes and characteristics, and a diverse natural landscape. As a federal property, compliance with local land use, zoning, and other regulations do not generally apply, and as a military property, the built environment on base often takes very unique forms, both horizontally and vertically, to accomplish a specific military mission. To help understand the similarities and differences between on-base and off-base environments, how they affect each other, and to lay the groundwork for the development of the Reuse Plan, a thorough existing conditions assessment was conducted. A summary of this assessment is presented in the sections below.

Economic and Market Analysis

This section contains a summary of an economic analysis conducted on Newport Chemical Depot and its surrounding area. The complete analysis, including its disclaimer, can be found in **Appendix B**.

Summary

Economics Research Associates (ERA) was retained by the Matrix Design Group Inc. to provide an economic and market analysis for the redevelopment of the Newport Chemical Depot. ERA's main tasks were to assess the market and economic characteristics of the region, evaluate the competitive position of the Newport site, identify opportunities for its reuse, and estimate the impacts of likely targets for reuse. ERA has contextualized the Newport Chemical Depot in the greater economy by evaluating trends statewide and in a ten county region that includes Vermillion, Warren, Fountain, Montgomery, Putnam, Parke, Vigo and Clay counties in Indiana, and the Illinois counties of Edgar and Vermilion. While trends in the ten counties are most relevant for redevelopment, ERA has also profiled change in Vermillion County, for as the location of the Newport Chemical Depot, economic development of the facility will have the most profound effect upon this geography.

Some of what ERA has learned includes the following:

- The Newport Chemical Depot is not located in a region of considerable economic growth. Near-term business and employment expansion at the Newport Chemical Depot must reflect this important regional context.
- Despite a growing labor force statewide, the labor force of the ten counties has remained unchanged, indicating new workers are not moving to the region. As existing workers transition to retirement, this trend will have long term economic development implications should the region not be able to replenish its workforce. Redevelopment of the Newport Chemical Depot is an opportunity to attract new, younger workers to the ten counties, enhancing the region for economic development.
- Employment in the ten counties is solidly geared towards manufacturing, suggesting a reliable market for redevelopment at the Newport Chemical Depot. Regional manufacturing clusters include automotive, chemicals, plastics, and agribusiness sectors.
- The Depot's former role as a chemical plant reflects the state and region's chemical industry cluster. West central Indiana is a preferred location for these manufacturers due to the region's well-educated workforce, its universities, and water availability through dolomite bedrock aquifers. This water resource may play a role in the Depot's reuse through ethanol production or chemical manufacturing.
- National and international companies have dominated the majority of historical business expansions and new starts in the ten counties. These companies generally have settled in the area to be close to their consumer and supplier networks-- there may be opportunity to target vendors and suppliers of Vigo County companies for incorporation at the Newport Chemical Depot.
- Degree programs at surrounding universities emphasize agriculture, engineering and biological sciences. This ultimately has implications for ten county business development in advanced manufacturing, agribusiness, life sciences, as well as cross-over industries like alternative energy.

Key findings as they relate to industrial supply and demand and growth potential at the Newport Chemical Depot are summarized below.

- Over the past ten years, demand for industrial and commercial space in the ten counties has been modest. During this period, the region experienced no speculative industrial or commercial development.
- Demand for industrial space in the region has been driven primarily by advanced manufacturers, typically by companies with no more than 200 employees. The majority of these users are international companies that have capitalized upon proximity to raw material inputs and consumer base. Over the next five to ten years, economic development officials project top industrial demand in the region to be by smaller-scale (50 to 100 employees) advanced manufacturing establishments.
- The Indiana warehousing/distribution market has been strong in recent years although Indianapolis continues to dominate this market. While the Newport Chemical Depot from a size perspective could accommodate warehousing/distribution uses, from a competitive standpoint, demand at the Depot is likely to be limited given the nearest interstates (I-70 & I-74) run only east/west and are ten to fifteen miles from the site.
- Generally speaking, the average size of a vacant industrial parcel in the ten counties is fairly small at 110 acres—there are few industrial parks statewide that could accommodate large-scale industrial uses like the Newport Chemical Depot.
- There are three available megasites at industrial parks in the ten counties—all three sites offer immediate access to rail. From the standpoint of business attraction at the Newport Chemical Depot, development of a rail spur will be critical.
- Office uses are not a driver of real estate development in the ten counties. There are no class A business parks in the ten counties, revealing the region historically has not attracted the type of corporate office users that would drive business park development at the Newport Chemical Depot-- ERA would not anticipate office uses at the Newport Chemical Depot other than those supporting Newport Chemical Depot tenants.

Overall Conclusions

While market conditions suggest that full redevelopment of Newport Chemical Depot is several years from fruition, trends within the ten county industrial and office markets are informative as to the types of users likely to drive its redevelopment. Based upon site

characteristics, economic base, broader market and policy trends, ERA has identified six redevelopment opportunities in manufacturing, energy production, R&D and institutional uses:

Manufacturing

ERA is confident smaller to mid-sized manufacturers will dominate the growth potential at the Newport Chemical Depot over flex, office, and distribution business models. Manufacturing growth is likely to be concentrated in both durable and non-durable sectors, by users that fit the profiles below:

- Businesses able to capitalize upon the region's agricultural base and access to water such as manufacturers of chemicals, biofuels and foods;
- Advanced manufacturing sectors that require proximity to the end-user such as manufacturers of wind towers and blades, or advanced automotive inputs like batteries;
- Manufacturing sectors requiring a skilled/professional labor force that can maximize regional university resources including manufacturers of chemicals or medical devices.

There is distinct opportunity at the Newport Chemical Depot to capitalize upon the growing wind market just north of the site in Benton County. Should northern Indiana continue to experience wind energy growth, then a wind component manufacturer located at the Newport Chemical Depot would be strategically located support this growth.

Agriculture

Agricultural uses at the Newport Chemical Depot is another land use opportunity that can provide cash flow in the form of land leases, while functioning as a critical buffer between more intensive industrial uses and the surrounding community. Agricultural land leases are already in place at the Newport Chemical Depot, and their potential for growth is tied to expansion in the regional agricultural base. Three market and policy factors support the conclusion that regional agriculture is growing, and will continue to be a prominent industry in the region:

- The number of farms in the ten counties and the acreage devoted to farming in Vermillion County grew between 1997 and 2007;
- Statewide growth in the market value of agricultural products sold (4.7%) exceeded growth for the same period nationwide (4.0%). Annualized productivity in the ten counties also grew during this period.

- The Indiana State Department of Agriculture has made agricultural economic development a priority, with incentives targeted to support industry diversification in sectors that include foods, biofuels and specialty crops such as organics.

All of these trends have favorable implications for continued agricultural growth around the Newport Chemical Depot, which may be tied to farming, energy development or R&D in conjunction with a research university.

Energy

Energy uses at the Newport Chemical Depot are an opportunity to both serve future Newport Chemical Depot tenants with electricity, while responding to broader nationwide trends that support a growing demand for alternative sources of energy. There are two distinct opportunities for energy and fuel production at the Newport Chemical Depot:

- Ethanol or biodiesel production; and
- IGCC coal gasification

Market and policy factors are supportive of ethanol plant development at the Newport Chemical Depot:

- Indiana is a major producer of biofuels. Over the past year, the industry in Indiana grew by twelve new ethanol and four biodiesel plants that employ 620 workers.
- The rich agricultural base of the ten counties and chemical manufacturing cluster ensures the workforce as well as agricultural inputs for a biofuel plant.
- Indiana has joined Iowa, Kansas, Michigan, Minnesota, Ohio, South Dakota, and Wisconsin in adopting the Energy Security and Climate Stewardship Platform Plan which establishes shared Midwestern goals for biofuels production and use—this should drive future demand for ethanol.
- Consumption of renewable fuels in the US is growing, a trend which should drive long-term demand for biofuels and other alternative fuels.

Gasification is an example of an emerging coal technology with promise for development in Indiana and nationwide. Opportunities for IGCC development at the Newport Chemical Depot are both market and policy-driven:

- Demand for energy at the Newport Chemical Depot is likely to grow as manufacturing and other energy-intensive processes are incorporated on site-- a new plant to meet the energy needs of these tenants is only one possibly for energy-related development at the Newport Chemical Depot.
- The Newport Chemical Depot's proximity to Cayuga enhances the site for IGCC development in three ways: 1) the Cayuga substation reduces the need for infrastructure associated with IGCC development thereby reducing potential project costs; 2) the Cayuga substation would allow the generated power to access the grid; and 3) there is demand in Cayuga for gas which could be supplied by an IGCC system at the Newport Chemical Depot.
- The State of Indiana currently incentivizes IGCC development through tax credits and other benefits. Newly constructed IGCC facilities are eligible for tax credits equal to the sum of 10% of the first $500 million of investment in the facility plus 5% of any investment over $500 million.
- Roughly $4 billion in incentives has been pledged by the federal government to further develop clean coal technology—federal dollars are already being leveraged by Duke Energy to study carbon sequestration at the proposed gasification project in Edwardsport, Indiana.
- Officials from the Center for Coal Technology Research at Purdue University revealed interest to develop a coal gasification plant using IGCC technology at the Newport Chemical Depot. Critical to the concept would be the development of a rail spur on site.

State Correctional Facility

The rural setting of military bases makes correctional facilities a logical reuse, especially a site like the Newport Chemical Depot that is not immediately adjacent to an interstate. While there is no guarantee the State would chose the Newport Chemical Depot for a correctional facility, ERA does consider it to be a relevant opportunity for the following reasons:

- Indiana is presently at 100% capacity in terms of prison space;
- The healthcare and educational resources of the ten counties would be regarded as key assets when evaluating the Newport Chemical Depot for prison development by the IDOC;
- Plans are underway for the Miami and Wabash correctional facilities to issue up to $45 million in bonds for additional space as current facilities are approaching capacity; and

- Under the Senate's 2010-2011 budget, the IDOC would receive a $61 million, two-year funding increase. Community Corrections, a state crime prevention and diversion program, would receive a $3 million increase.

Research and Development

R&D in conjunction with a university or institute is another opportunity for redevelopment at the Newport Chemical Depot. Based upon state-level initiatives in conjunction with program expertise at surrounding universities, ERA has identified the following fields for emphasis when marketing the site for R&D:

- Biofuels (ethanol and biodiesel) and clean coal technology;
- Agriculture; and
- Advanced automotive technologies

The Newport Chemical Depot is likely to be most marketable for R&D activities that require 1) a significant amount of space; or 2) a degree of seclusion or security. One specific opportunity may include a vehicle test site for basic evaluation. While present economic conditions have adversely affected the US automotive market, current automotive R&D in Indiana in propulsion and hybrid-electric battery technology will eventually need to be tested. Such a testing facility may range in size between 200 and 500 acres, and would focus upon evaluating just one or two aspects of vehicle technology.

Community Planning Issues and Influences

The following section describes the general land use, transportation, and natural resource conditions that surround the Depot and that provide the broad community planning context for the Reuse Plan.

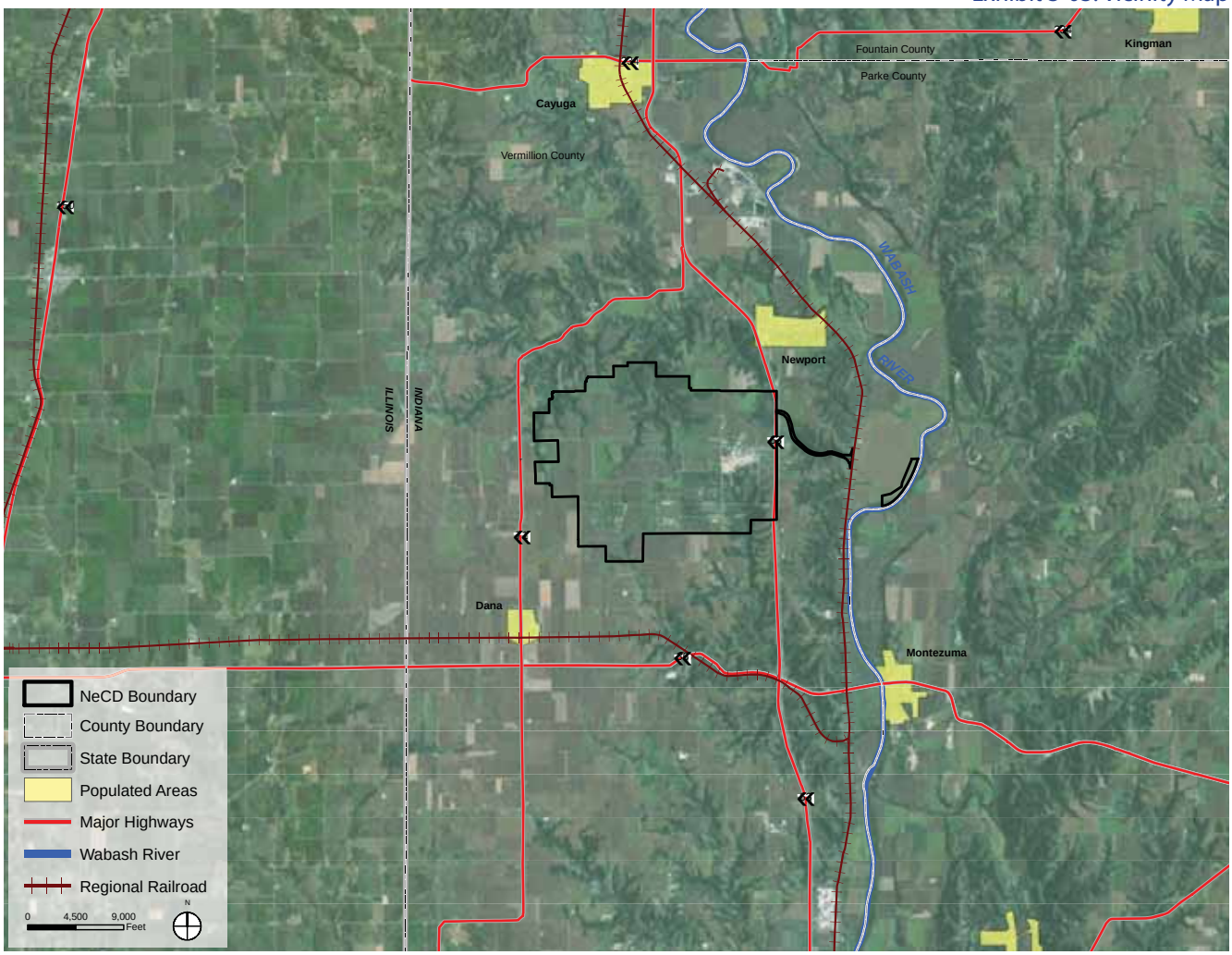
Regional Setting

The Newport Chemical Depot is located in Vermillion County in west central Indiana, approximately 65 miles west of Indianapolis. Vermillion County, with a total area of 260 square miles and a 2000 census population of 16,788, is bordered by Warren County on the north, Fountain and Parke Counties on the east, Vigo County on the south, and Edgar and Vermilion Counties in Illinois on the west. The closest larger cities to the NeCD are Terre Haute (population 59,614) in Vigo County, located approximately 25 miles south of the Depot, and Danville (population 33,904) in Vermilion County, Illinois, located approximately 22 miles to the north northwest.

The largest city in Vermillion County, Indiana is Clinton (population 5,126), which is located 12 miles south of the Depot. The small community of Newport (population 578), from which the Depot takes its name, is the county seat of Vermillion County and is located two miles to the north. Other nearby towns include Dana (population 662), located approximately three miles to the southwest; Montezuma (population 1,179) located five miles to the southeast; and Cayuga, (population 1,109) located seven miles to the northwest.

The Wabash River, which forms the eastern boundary of Vermillion County, is located about two miles east of the main Depot facility, with the Depot's Ranney Wells located immediately adjacent to the river's western bank. The Wabash, the largest river in Indiana, flows approximately 500 miles from north central Indiana southward into the Ohio River.

Exhibit 3-03: Vicinity Map



Land Use and Zoning

Vermillion County is primarily agricultural in nature, with farmland dominating its rural landscape. Located several miles from the closest communities, the Depot is surrounded on all sides by agricultural fields or, in a few areas, wooded areas. To the north, west, and south, the closest residential uses—generally stand-alone farm houses—are located approximately one mile from the Depot's boundaries. Immediately adjacent to the Depot's western boundary is a 100-acre US Coast Guard property that contains a communications tower and related technical facilities.

Along Highway 63, which forms the Depot's eastern boundary, are a few farm houses and other detached residential structures as well as two non-residential/farm uses. The Vermillion County Jail is located immediately across Highway 63 from the Depot's main gate, and a Vermillion County Public Works Garage is located across Highway 63 from the Depot's far northeastern corner.

All properties adjacent to and surrounding the NeCD are located in unincorporated Vermillion County and have been zoned by the County as "A" (Agricultural), with the exception of the two County-owned properties mentioned above, both of which are zoned "B2" (Business).

Transportation and Utilities

The NeCD has good access to Indiana's State highway system and the federal interstate system. Primary north-south roads in the area include Indiana 63, a four-lane divided highway that forms the eastern boundary of the main Depot facility, that runs from Terre Haute north through Vermillion County into Warren County, where it merges with US 41. Approximately one mile west of the Depot's western boundary is Indiana 71, a two-lane road that runs from the community of Blanford about 12 miles south of the Depot, through the town of Dana and past the Depot, before merging with Highway 63 two miles north of Newport.

The closest primary east-west road is US 36, a two-lane highway located approximately two miles south of the Depot's southern boundary. US 36 traverses across Indiana and much of the United States and provides a direct east-west connection between Indianapolis and Springfield, Illinois.

The Depot is also conveniently located approximately half way between two major east-west Interstate highways. Interstate 70 connects Indianapolis with St. Louis, Missouri and runs through Terre Haute about 30 miles south of the Depot, and Interstate 74 connects Indianapolis with Champaign and Peoria, Illinois and runs through Danville approximately 20 miles north of the Depot.

The Depot is also located in proximity to two CSX freight rail lines. A CSX rail line runs north-south approximately one mile east of the main Depot's eastern boundary and roughly parallels Highway 63. Historically, a rail spur serving the base connected to this CSX rail; the right-of-way for the spur is included as part of current NeCD property to be transferred. Another CSX line runs roughly parallel to US 36 two miles south of the Depot's southern boundary.

All major trunk utilities (natural gas, electric, telephone, etc.) are provided adjacent to or near the Depot property. Details on how these various utilities are connected to and provide service to the Depot are discussed in the On-Base Conditions section below.

Natural Resources

The natural environment that surrounds the Newport Chemical Depot supports a variety of ecosystems and habitats that thrive in rivers, forested areas, open prairie, flatlands, and in areas that interface between croplands and forest. This section describes some of these natural resources in the vicinity of the Depot, as well as some of the geography and climate found in the area.

Water

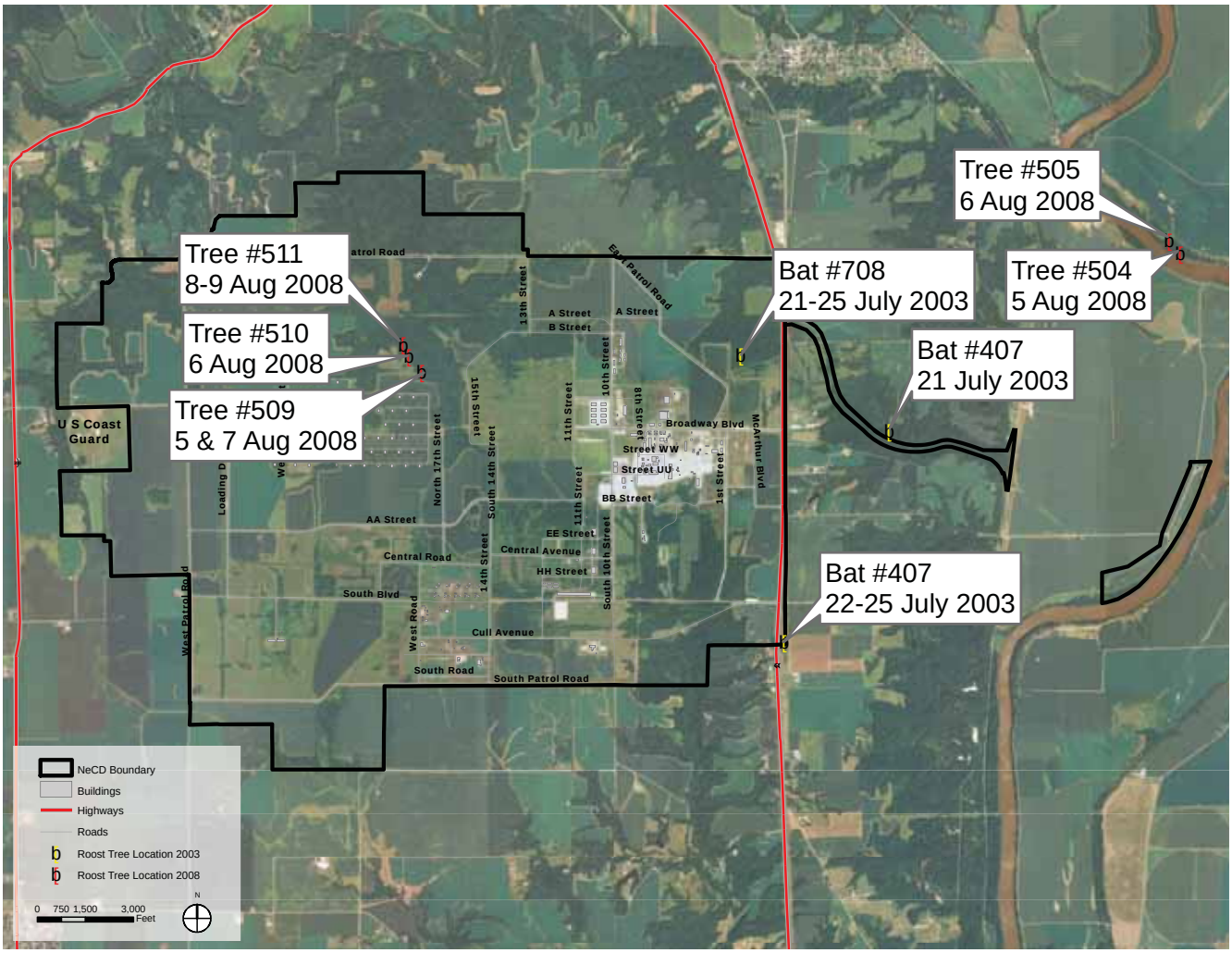
The lands in the vicinity of Newport Chemical Depot enjoy abundant water resources, due in large part to the proximity of one of Indiana's most notable water resources, the Wabash River. The Wabash, which drains the vast majority of Indiana's farmland, is a roughly 500 mile long waterway flowing to the southwestern corner of Indiana, where it meets the Ohio River. The river discharges an average of over 30,000 cubic feet per second, and flows through Vermillion County on a generally north-south axis, passing by Newport Chemical Depot roughly two miles from its eastern boundary. The Little Vermillion River, a small tributary to the Wabash, runs from west to east less than two miles north of the Depot, joining with the Wabash near the town of Newport. The Little Vermillion has numerous creeks and streams feeding into it, including some that traverse the Depot itself.

Most of the water used in the area comes from wells that tap the bottom land along the Wabash River. Rainfall is sufficient for diversified agriculture uses except during short intervals during the height of summer, when evaporation from soils can exceed rainfall for brief periods and complicate farming activities. Fortunately, rainfall during the springtime wet season is usually adequate to prepare the soil for the summer months. Average annual precipitation is 41 inches, ranging from 35 inches to 50 inches on a ten year cycle.

Wildlife

West Central Indiana has a wide variety of wildlife species, the most common of which include the white-tailed deer, white-footed mouse, deer mouse, prairie vole, meadow vole, opossum, short-tailed shrew, masked shrew, eastern mole, northern myotis (bat), bog lemming, raccoon, coyote, cottontail rabbit, and bluegill. Additionally, numerous other less common or endangered species as well as migrating birds can be found on occasion in the area. Although less common than the northern myotis, the indiana bat has been observed with frequency in the area, despite being listed as endangered by the U.S. Fish and Wildlife Service. A map depicting documented bat habitat areas appears as Exhibit 3-04: Bat Habitat below.

Exhibit 3-04: Bat Habitat



The lands surrounding Newport Chemical Depot consist of a mixture of fragmented and unfragmented forests as well as croplands, creating a significant amount of habitat that is ideal for animals that thrive in buffer areas in between dense, wooded areas and grasslands; many of the most common species found in the area fall into this category.

Geography

The vicinity of Newport Chemical Depot consists of a fairly flat plain carved by various broad but shallow stream beds. Elevation varies somewhat, especially along the slopes of major stream beds, but generally remains between 500 and 700 feet above sea level.

Newport Chemical Depot is located at the convergence of two natural regions— the Grand Prairie, which stretches westward to the Rocky Mountains and is characterized in its eastern section by tall grass and dark, fertile soil; and the Central Till Plain, which has flat or gentle terrain due to past glaciation. The fertile soils of Tallgrass Prairie make it attractive for cultivation, and hence only a tiny fraction of Indiana's former Tallgrass Prairie remains. In an attempt to preserve this dwindling ecosystem, NeCD has an ongoing prairie restoration program in place that began in 1994, which has resulted in one of the largest continuous sections of intact prairie in the state.

On-Base Conditions and Characteristics

Land Use

The Newport Chemical Depot is approximately 7,000 acres in area. The main facility is generally rectangular in shape, covering an area roughly four miles east-west by two and three-quarters miles north-south. In addition to the main facility, the NeCD property also includes a 65-acre curved "Railroad Right-of-Way" subarea, as well as a 75-acre arc-shaped "Ranney Wells" subarea along the western bank of the Wabash River. See Exhibit 3-05: Main Facility and Exhibit 3-06: Railroad and Wells Area maps. The following sections provide a brief overview of the various subareas within the main NeCD facility.

Exhibit 3-05: Main Facility

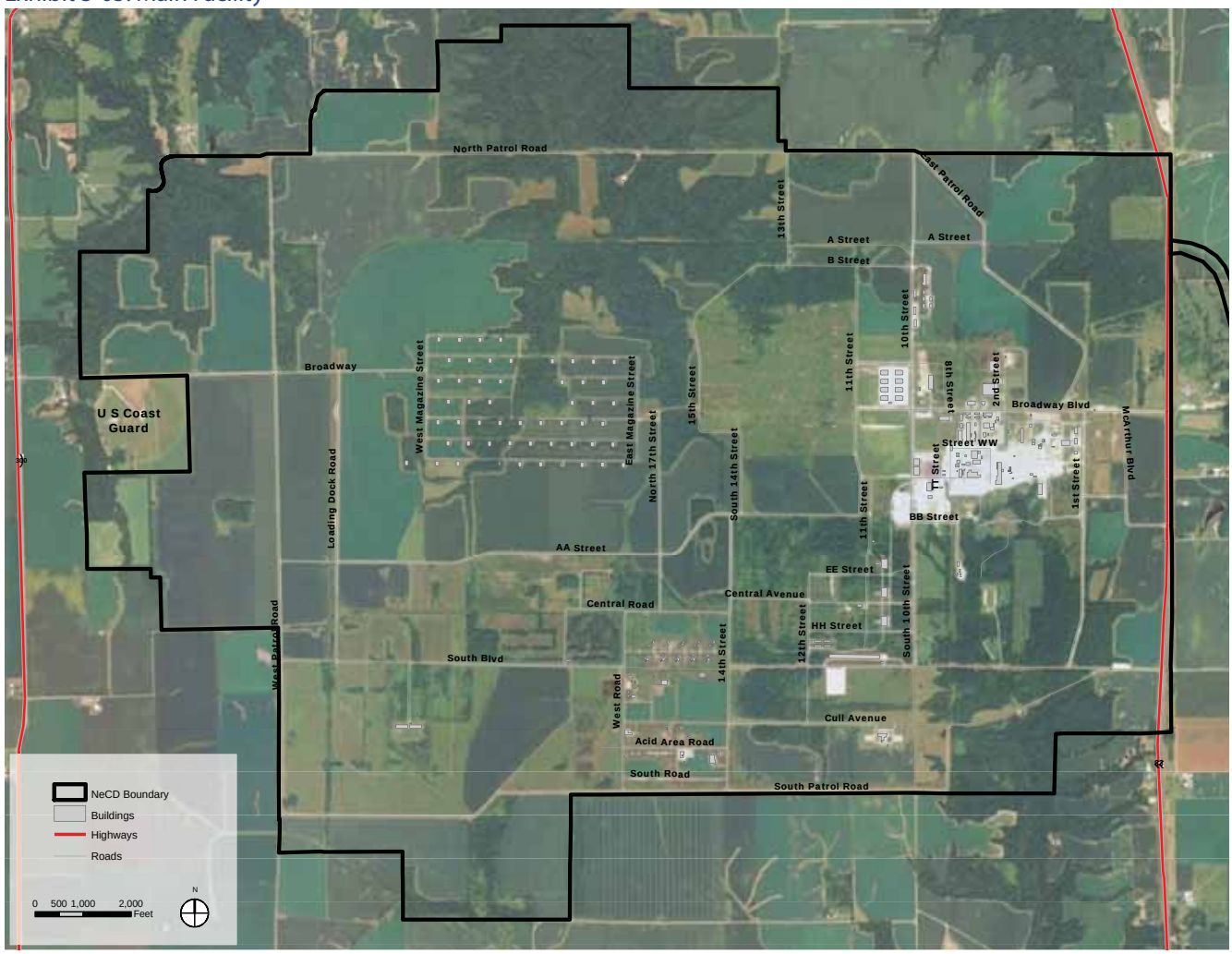
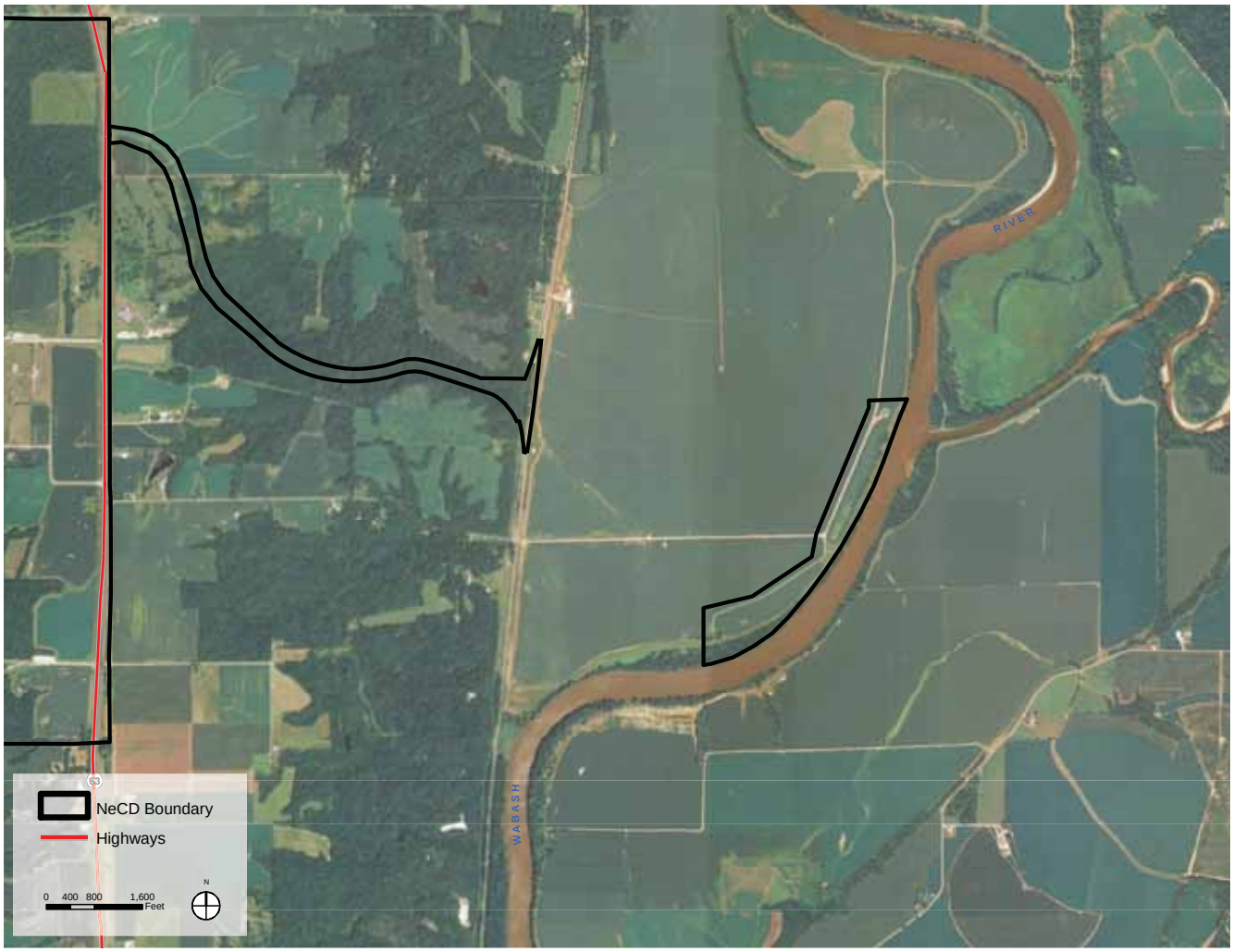


Exhibit 3-06: Railroad and Wells Area



VX (Demil) and Shops Subrea

The largest concentration of buildings and other elements of a built environment is located in the east central portion of the main Depot facility. Located generally between Broadway and BB Street, 1st Street and 10th Street, this area contains the former VX production facilities which, as of 2009, are in the final stages of demolition. Consequently, much of the former VX area is now gravel-covered lots, concrete foundations, and open fields. North of the VX area, primarily focused along Broadway, the road leading from the Main Gate, is the Shops area, which contains smaller light-industrial buildings that house a variety of maintenance, operations, and support functions. North of Broadway is the Depot's water reservoir and treatment facility, as well as a few other smaller occupied buildings and several abandoned or partially demolished structures. At the northwest

corner of Broadway and 10th Street are eight concrete storage igloos, the newest structures at the Depot. See Exhibit 3-07: Buildings Detail Map 1 for a close-up aerial image of this area.

Exhibit 3-07: Buildings Detail Map 1

The northeastern corner of the base is dominated by agricultural fields and a large block of unfragmented forest. The southeastern corner of the Depot, from BB Street to the southern Depot boundary east of 10th Street, is primarily covered by forested land and agricultural fields, as well as the Depot's sewage treatment facility and recycling storage yard.

Former RDX Subrea

The area that once housed numerous structures relating to the production of RDX is located from 11th Street to 15th Street, BB Street to B Street. All former RDX structures have been demolished, however, their foundations and a variety of above and below ground process sewers remain. Surrounding these industrial remnants is a mix of woods and open fields.

Headquarters Building / Bookends Subarea

South of BB Street, between 10th Street and 14th Street, is an area containing a variety of structure types and uses. In the area just east of 14th Street are the "bookends"—the informal name given to a grouping of 44 large concrete monolithic forms. Built decades ago by the Army for blast-protection purposes, these structures are laid out in a grid pattern over a roughly 30-acre area. While these structures were never used and are without function today, they remain as a feature of the landscape, surrounded by trees, overgrown vegetation, and open grassy fields. East of the bookends is a generally wooded area within which are several old concrete foundations, abandoned buildings, and storage and warehouse facilities, some of which are in functioning condition. The final notable structure in this subarea is the Headquarters building, located south along Cull Avenue just west of 10th Street.

Former TNT Subarea

The area south of AA Street and west of 14th Street to the southwestern corner of the Depot was once the area where TNT and associated components were produced. The largest concentration of TNT-related structures is located between West Road and 14th Street, south of Central Road. These structures have been abandoned for several decades and exist in varying states of deterioration. Along with the structures themselves are additional remnants of the TNT production process including numerous above-ground and below-ground process sewers, detention ponds, and other industrial elements. Surrounding these abandoned facilities is a mix of trees and open fields. Farther west, the area is dominated by agricultural fields and an occasional foundation or ground feature relating to the former TNT production process.

Exhibit 3-08: Buildings Detail Map 2 shows the southern portion of the Headquarters/ Bookends subarea and the eastern portion of the Former TNT subarea.

Exhibit 3-08: Buildings Detail Map 2

Richmond Magazines Subarea

The west central section of the Depot is the location of the former Richmond Magazines. Spread across the terrain in a checkerboard manner, the small earth-mounded structures are surrounded by planted agricultural fields and small wooded areas.

Northwestern / Far North Subarea

The remainder of the Depot's main facility, consisting of land generally west and north of the Richmond Magazines, is almost entirely undeveloped from an industrial perspective and dominated by agricultural fields, natural drainage corridors, and large blocks of unfragmented forests. A small arms range, located just south of the North Patrol Road, is the only active facility in this large subarea.

Transportation

The Newport Chemical Depot contains numerous roadways that provide access to most areas within the 7,000-acre property. These roads were also created to directly suit the transportation needs for the various chemical production activities and other functions taking place at the Depot as an active military installation.

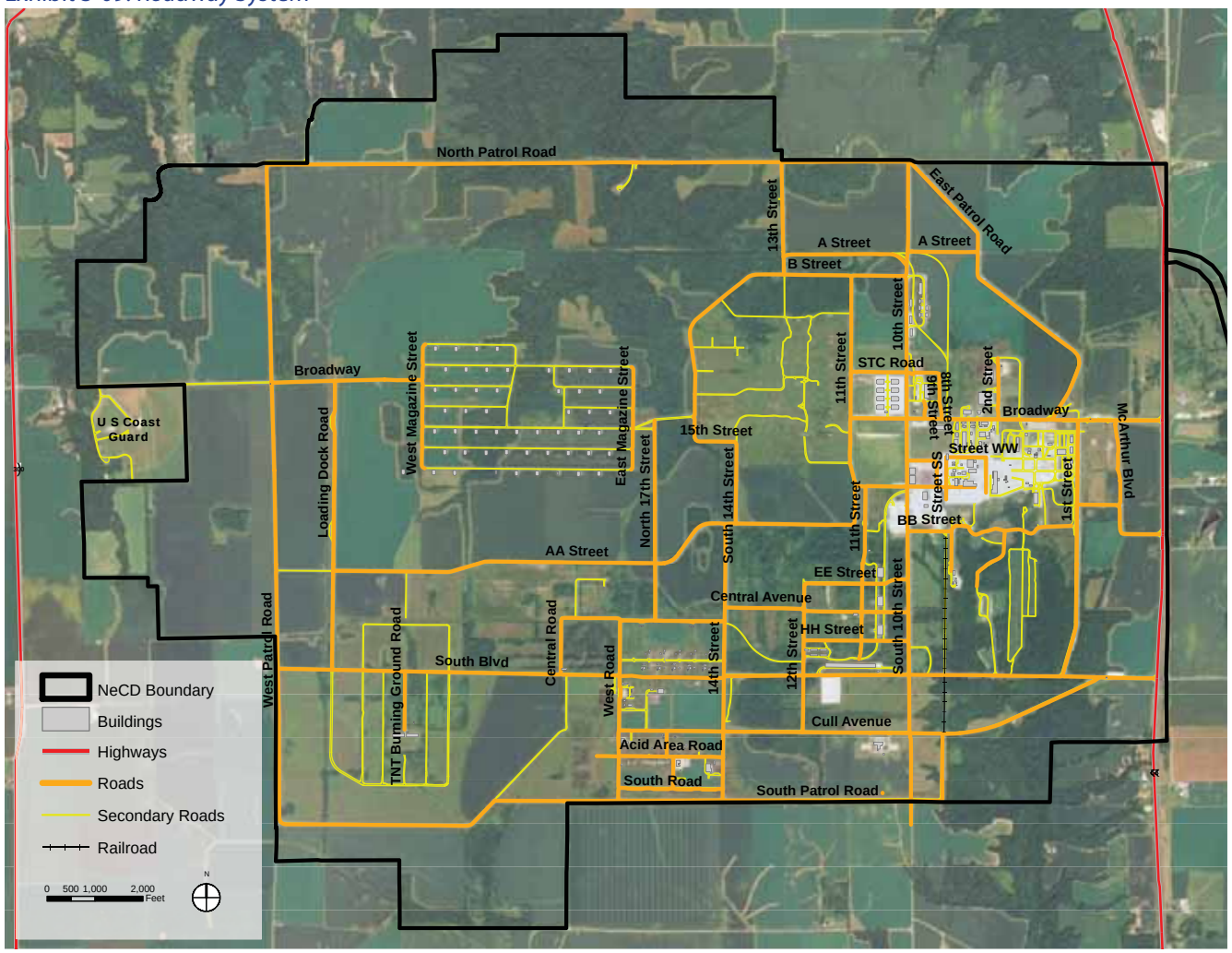
Unlike a municipal roadway system, the roads at the Depot do not have a clear hierarchy. Rather, they range in indeterminate levels of quality and capacity. However, the roads at the Depot can generally be categorized into primary and secondary roads.

Primary roads within the Depot can be generally described as two-lane paved roads. The quality of the pavement ranges from excellent to substantially deteriorated. The best of the primary roads include the perimeter roads (the North, South, East, and West Patrol roads), as well as Broadway, South Boulevard, AA Street, and Cull Avenue as east-west streets, and 1st Street, 10th Street, 14th Street, and Loading Dock Road as north-south streets. Other primary roads have not been maintained primarily due to the cessation of activities on or near them, resulting in a deterioration of the roadway surface.

Secondary roads generally provide access to individual buildings or sites. In many cases, these secondary roads consist of gravel or an unpaved (dirt) condition, and many are barely passable by motor vehicle.

Exhibit 3-09: Roadway System, shows the location of all roads within and adjacent to the Depot.

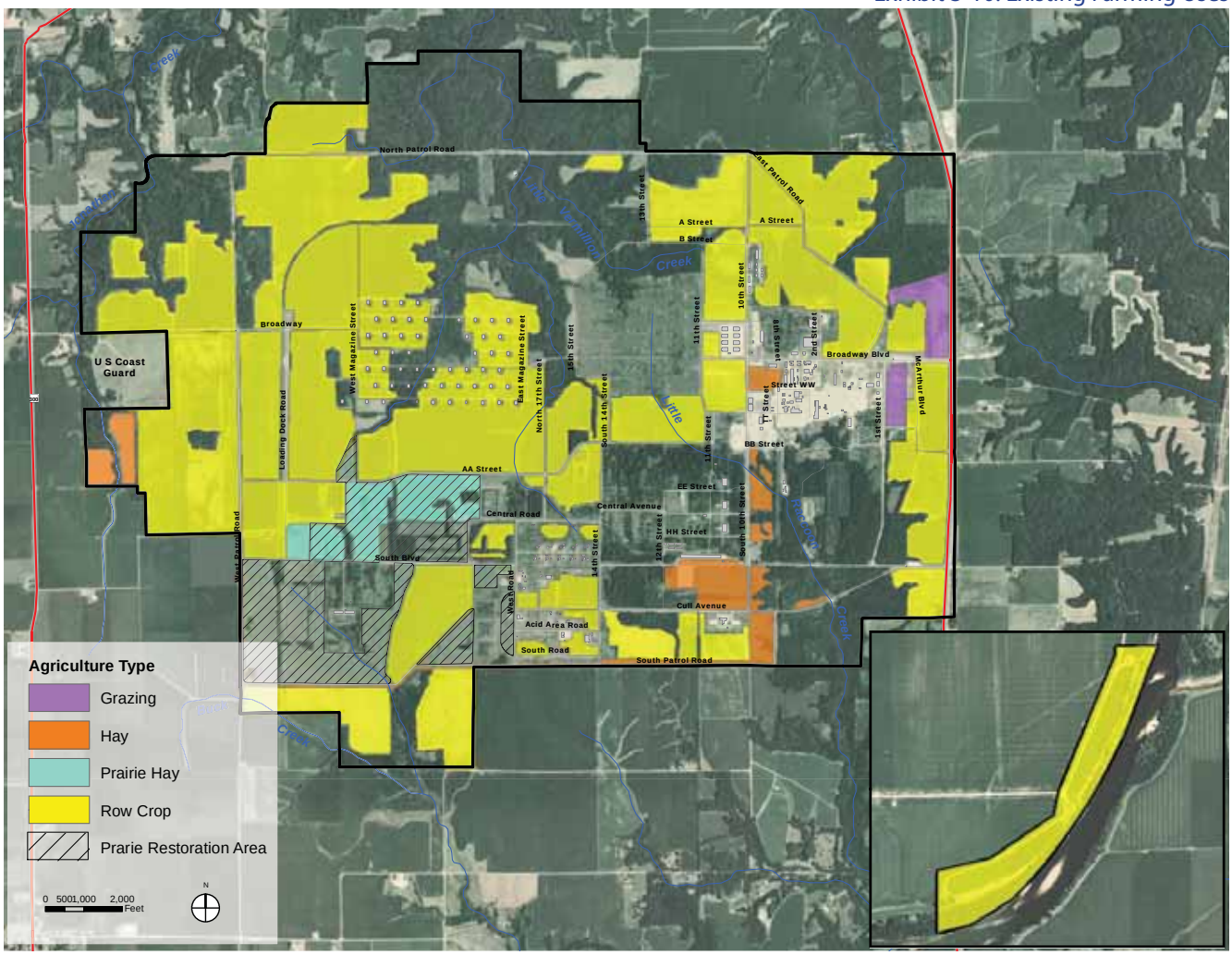
Exhibit 3-09: Roadway System



Agricultural Resources

As mentioned previously, the lands surrounding the Depot are heavily developed for agricultural production, given the fertile soils, plentiful rainfall, and good drainage found throughout this part of Indiana. Such is also the case within the Depot property. Over the years, the Army has leased to local farmers Depot land that was unutilized or needed by the Army only as a buffer, for agicultural development. Given the quality and high value of this land for agricultural uses, approximately 3,300 acres, nearly one-half of NeCD property, is actively used by area farmers for agricultural purposes. The vast majority (approximately 2,900 acres) of these agricultural parcels is used to grow row crops, mostly corn and soybeans, with the balance used for hay production and grazing. Exhibit 3-10: Existing Farming Uses, shows the areas within the Depot that are used for various agricultural purposes.

Exhibit 3-10: Existing Farming Uses



Natural and Cultural Resources

The vast majority of the 7,000-acre property consists of agricultural fields or natural areas. Even those areas where the remnants of a built environment remain, such as the former TNT and RDX areas, the landscape is dominated by planted fields, woods, or natural drainage corridors. Consequently, the Newport Chemical Depot contains a wide variety of flora and fauna within its boundaries, which were described earlier in the Community Planning Issues and Influences section. The following paragraphs describe additional aspects of the Depot's natural and cultural resources.

Natural Systems

Exhibit 3-11: Natural Systems and Exhibit 3-12: Topography show the primary physical features within the Depot, including major drainageways, larger blocks of unfragmented forests, streams, and wetlands. Also shown on the Natural Systems exhibit is the location of the Army's "Prairie Restoration Area." As a voluntary effort, the Army set aside approximately 220 acres of land from agricultural development for the purpose of allowing that land to thrive in its original native tall-grass prairie state. The western one-third (approximately) of the main Depot facility was originally tall-grass prairie, representing the extreme eastern edge of a prairie ecosystem that extended all the way west to the Rocky Mountains.

Exhibit 3-11: Natural Systems

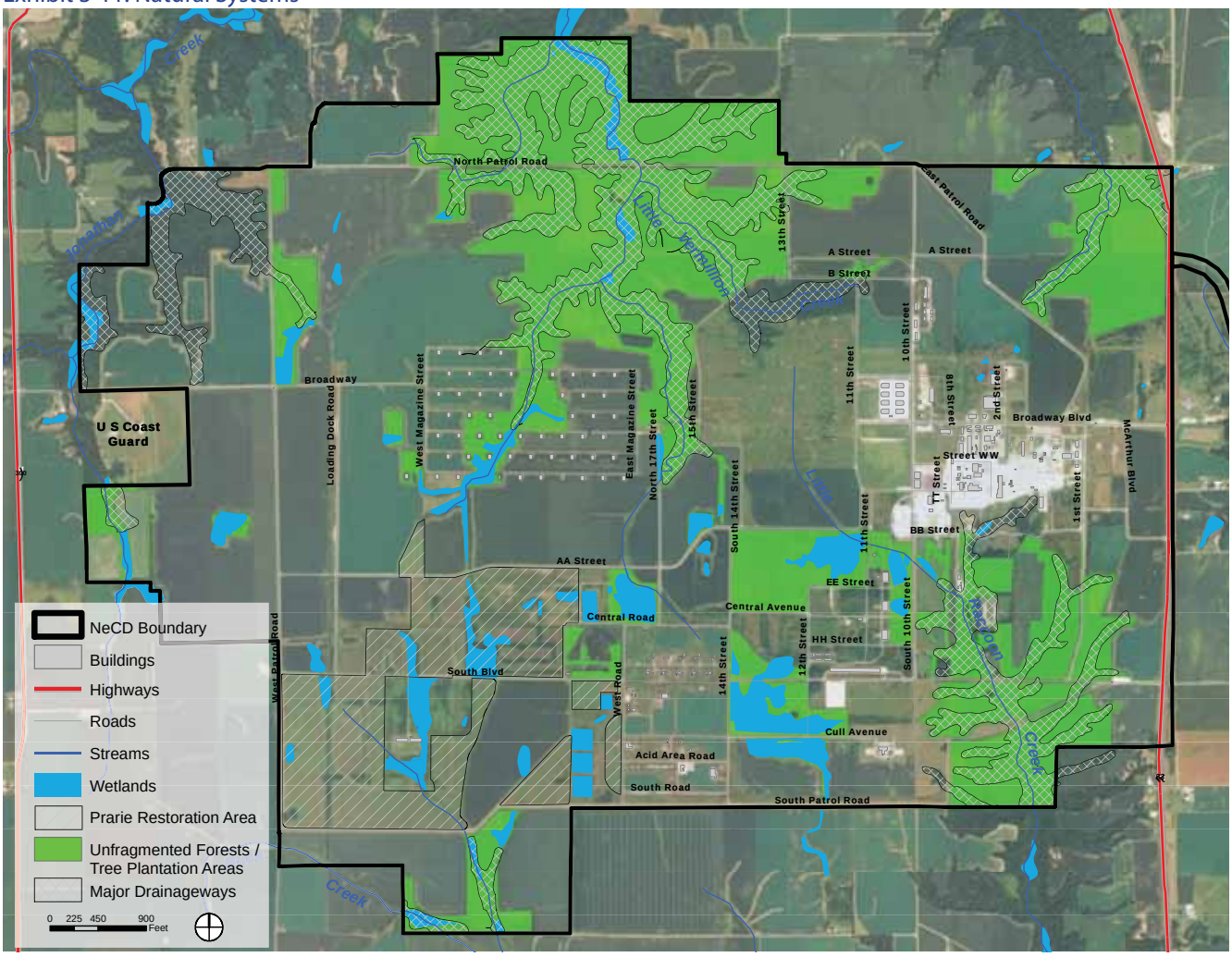
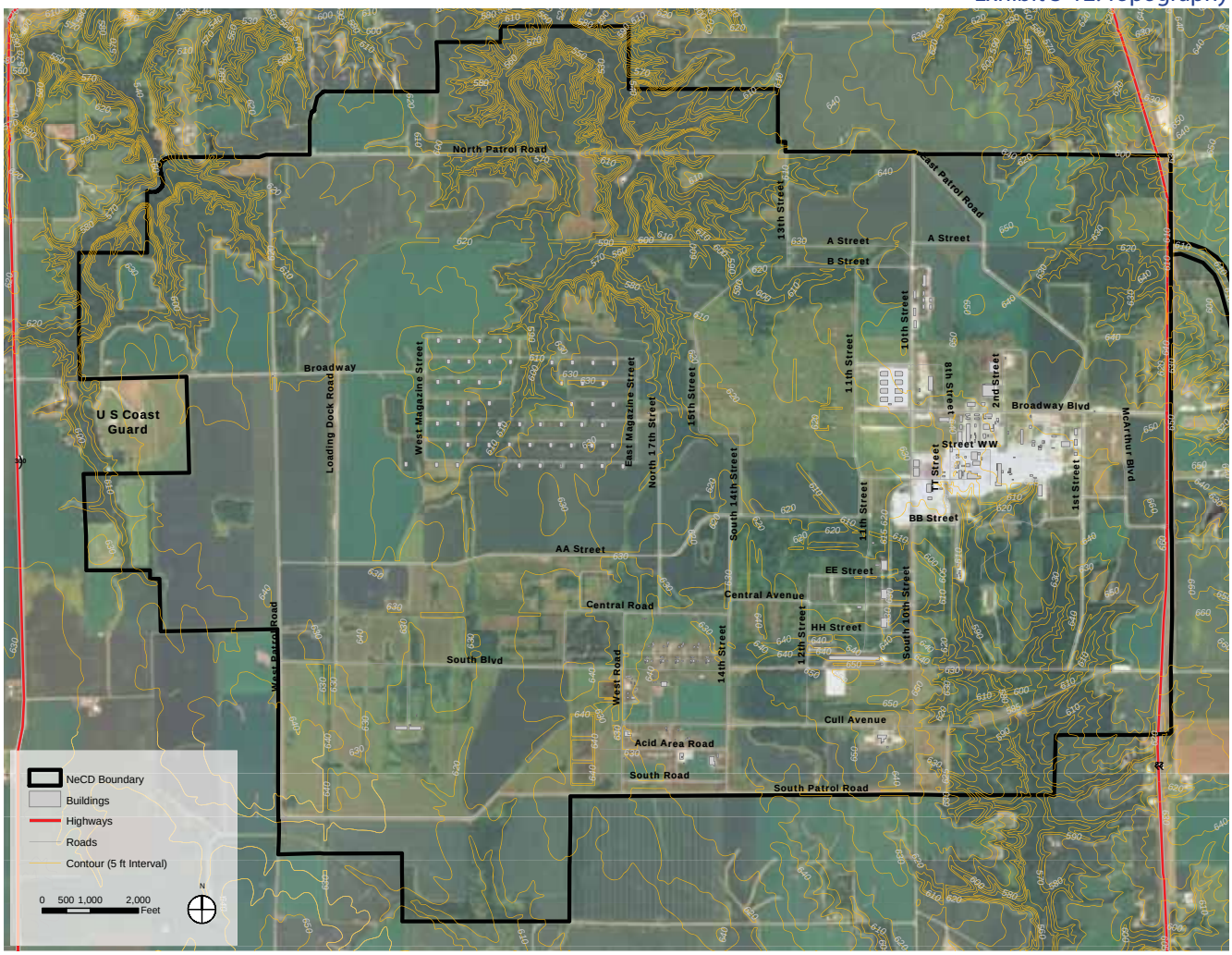


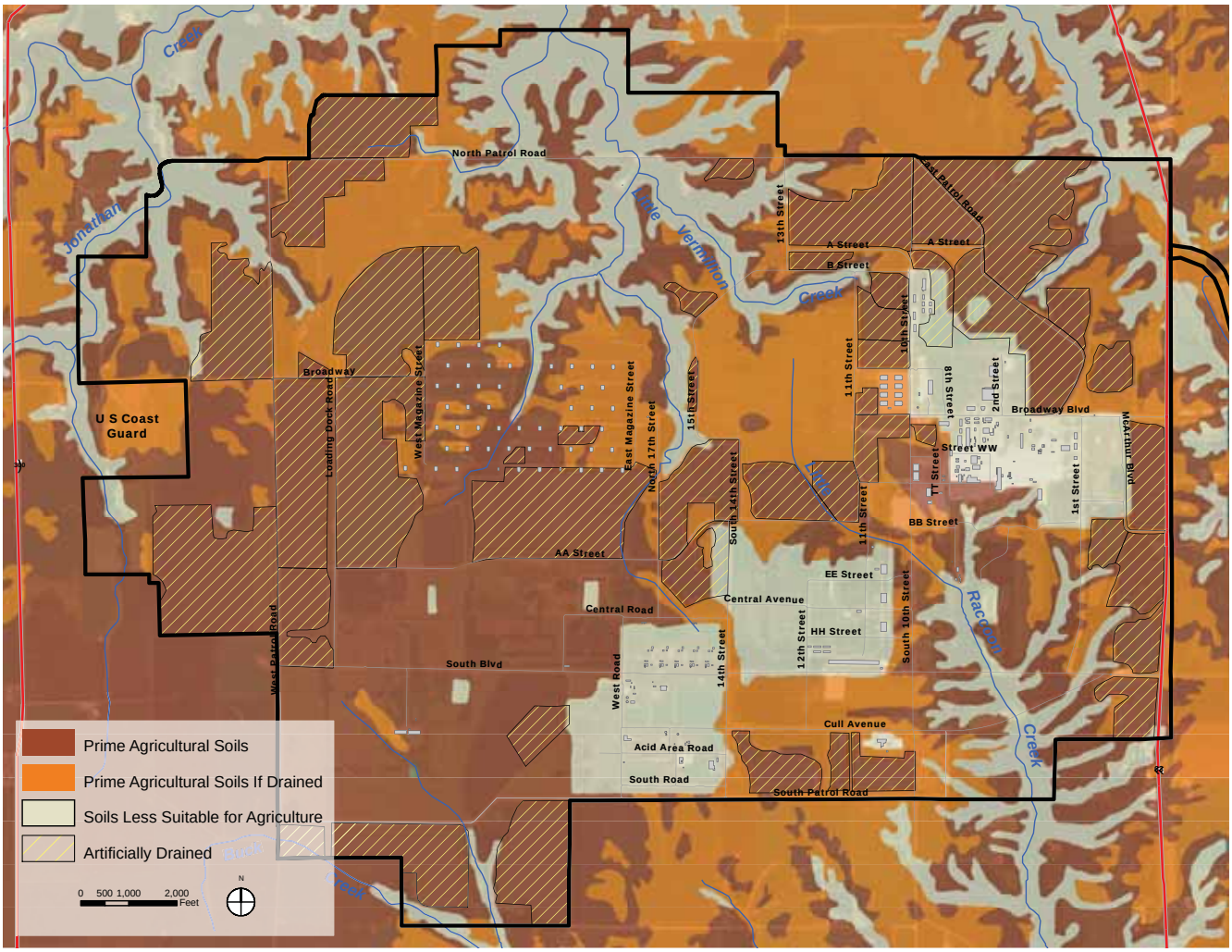
Exhibit 3-12: Topography



Soils

Much of the Newport Chemical Depot land contains rich, fertile soil that is excellent for agricultural production. As stated above, portions of the Depot, particularly the southwestern quadrant, were once covered by native tall-grass prairie. These former prairie lands offer the highest quality soils for agricultural production. On Exhibit 3-13: Soils, these areas are shown in the brown color. Surrounding these best prairie soil areas are other soil types slightly less fertile than the prairie soils, but still very high quality soils by all other standards. These other soils benefit from improved drainage. Over the years, the Army has installed tile drainage systems in hundreds of acres of fields throughout the Depot, shown on the exhibit with the diagonal hatch. As a consquence of the improved drainage, these areas are also considered as having soils on par with the best native prairie soils. The areas shown on the exhibit in orange contain the slightly-less-than-prime soil types that are not tile drained.

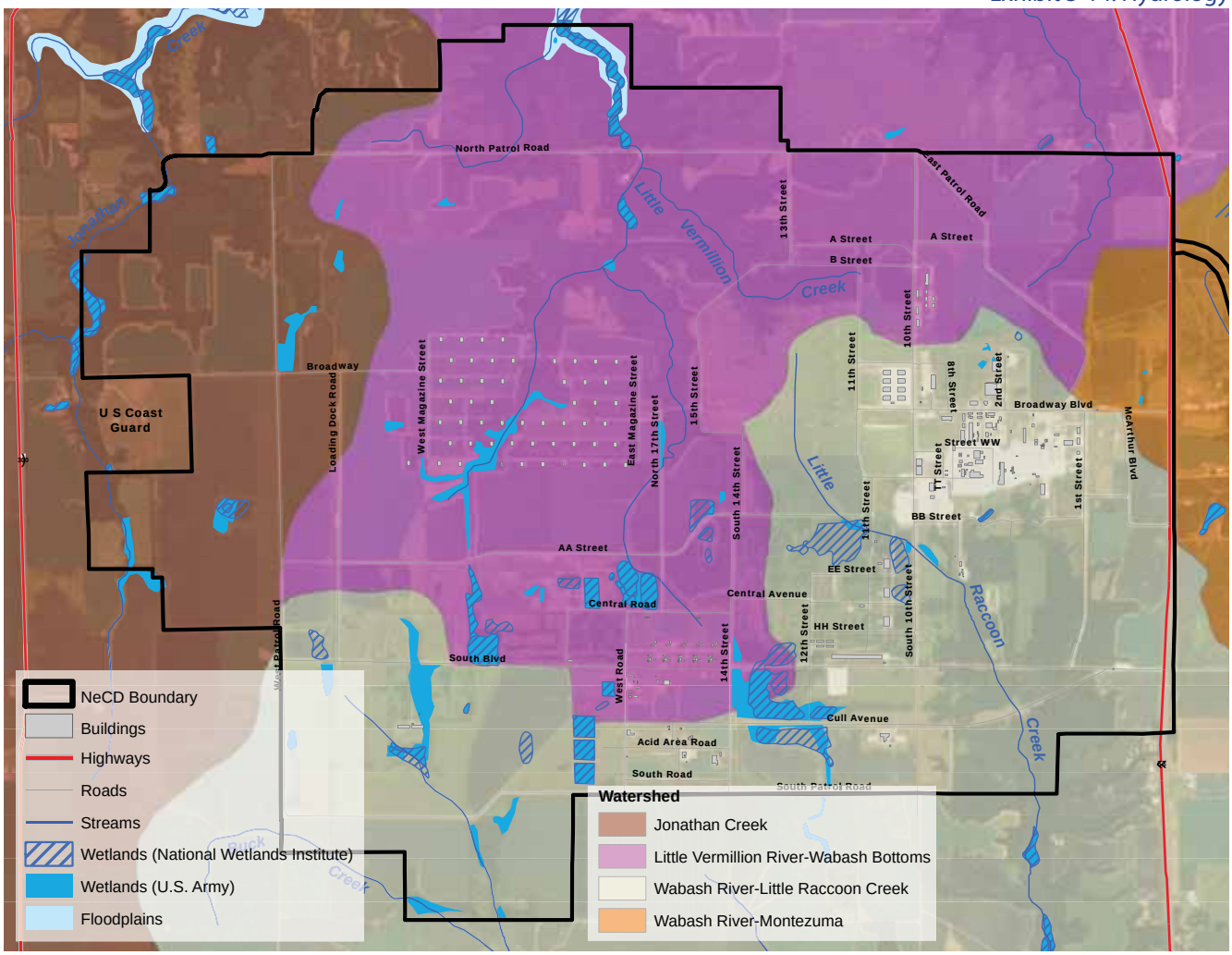
Exhibit 3-13: Soils



Hydrology

The land within the Newport Chemical Depot drains into one of four natural drainage basins. The majority of the facility drains north into the Little Vermillion Creek watershed or south into the Little Raccoon Creek watershed. A small portion of the Depot closest to the Wabash River drains directly into the Wabash-Montezuma watershed, with the far western end of the Depot draining into the Jonathan Creek watershed. These areas are shown on the Exhibit 3-14: Hyrology map.

Exhibit 3-14: Hydrology

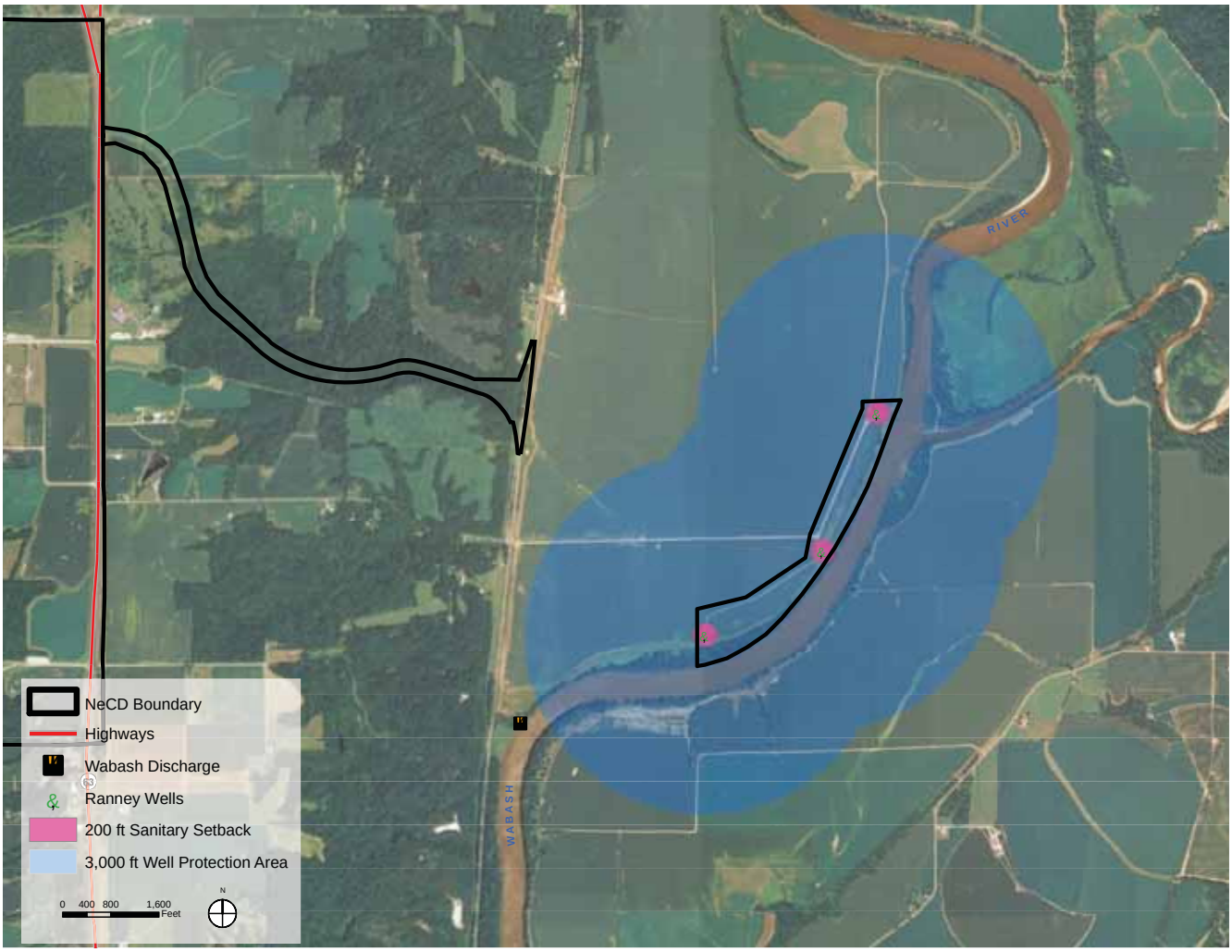


Water Resources

As described in the Community Planning Issues and Influences section, the Depot enjoys abundant water resources. Not only does the area receive sufficient rainfall for dry-land farming and contain a good system of natural drainage ditches, creeks, and rivers, but also the Depot is located near a massive underground aquifer. It was the proximity to this aquifer that was one of the primary reasons the federal government chose this site for the Depot, given the government's need for vast quantities of high-quality fresh water to produce "heavy water" as part of the Manhattan Project during World War II. The Army originally established six wells along the western bank of the Wabash River that tapped into this aquifer. Three of those wells were later sold to private landowners, but the other three remain part of NeCD property and are located within the Ranney Wells Subarea.

Exhibit 3-15: Water Resources shows the location of these wells and the location of two regulatory zones that help protect the quality of the aquifer: a 200-foot Sanitary Setback and a 3,000-foot Well Protection Area.

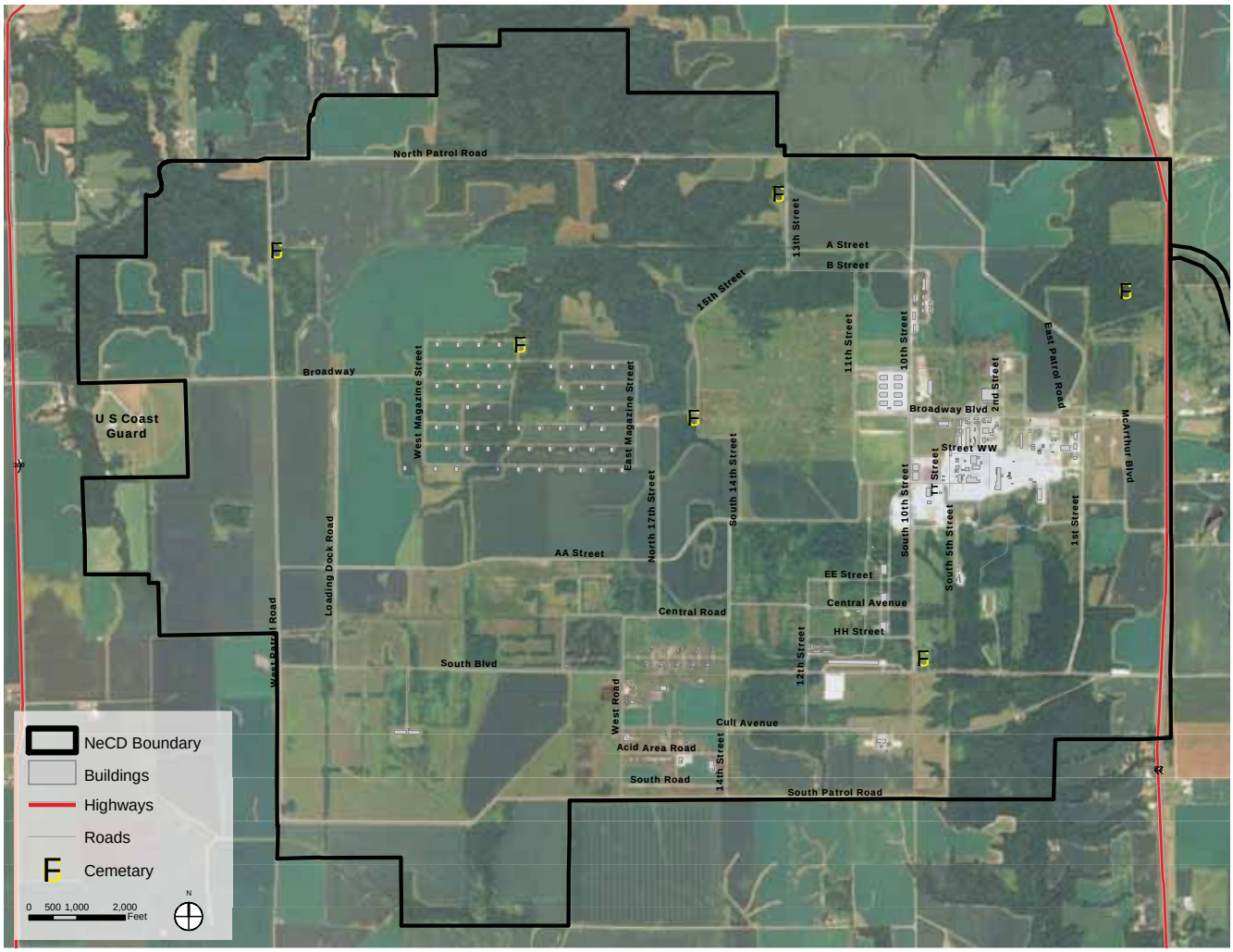
Exhibit 3-15: Water Resources



Cemeteries

Six small cemeteries are located within the boundaries of the Newport Chemical Depot. Exhibit 3-16: Historical and Cultural Resources shows the location of the cemeteries. The largest of these cemeteries (but still a small cemetery by most standards) is located at the northeastern corner of 10th Street and South Boulevard. The remaining five cemeteries are very small—some containing no more than a just a few graves—and are usually located in wooded areas.

Exhibit 3-16: Historical and Cultural Resources



Utility Infrastructure Systems

General conditions and characteristics of infrastructure systems that serve the Newport Chemical Depot (NeCD) are presented below for the transportation, gas, electric power supply and distribution, communication, water, wastewater and storm water systems. Prior to implementation of the Reuse Plan, additional inventories and assessments will be necessary to establish the extent to which these systems will need to be improved, expanded and/or extended.

The results of this inventory summarized here are based on several on-site assessments and a review of multiple documents provided by NeCD staff and representatives of Mason & Hanger Corporation, the operator of the Depot. As a result of these activities drawings

and documents were obtained that provided additional information regarding the infrastructure utilities at the site. These documents included the following reports and studies:

- Newport Chemical Facility WWTP Joint Use Feasibility Study, dated 1998, prepared by THE PATHFINDERS
- Gas System Assessment, dated November 2000, prepared by THE PATHFINDERS
- Water System Assessment, dated October 2000, prepared by THE PATHFINDERS
- Site Assessment Report, dated May 2, 2006, prepared by STAUBACH
- Newport Chemical Depot Infrastructure Assessment, revised March 2008
- Depot Utility Management Plan, revised march 20, 2008

Review of the utility infrastructure systems not only considered historical and existing conditions within the Depot, but also the potential for the existing systems to meet future redevelopment within the Depot. The following general conclusions can be made regarding the infrastructure at the NeCD:

- Natural gas is available at the NeCD and can meet the needs of most industrial developments.
- Electrical service is available at the NeCD and can meet the need of most industrial users. The on-site transmission and distribution system will be required to be upgraded for significant users.
- Communication systems including telephone and fiber optic are available on the site. These would need to be modified or upgraded to meet the needs of the developer.
- Water is a major asset at the facility. Water supply in the range of 15 to 30 million gallons per day is available. Upgrades to the supply pumping and distribution system will be required to achieve these levels of supply.
- The NeCD has the potential to be a regional supplier of water.
- The NeCD has the ability to treat 0.194 million gallons per day of wastewater. Excess domestic wastewater treatment capacity of approximately 0.15 million gallons per day exists at the treatment plant.

- Future industrial development that has industrial processes that produce wastewater will be required to pre-treat wastewater prior to discharge to the NeCD wastewater plant. Due to the limited capacity of the NeCD wastewater plant it may be necessary for future industrial users to treat process water or participate in upgrading the NeCD wastewater plant to meet specific needs.
- Availability of areas for stormwater management will not be an issue at the NeCD due to the large area of undeveloped property.
- Easements are intact for off-site utilities including water and electric.
- Defined rights-of-way will need to be established as the NeCD is developed. Significant utility mains and lines are typically located adjacent to existing roadways; however specific rights-of way will need to be established as the property is developed.
- On-site utility operations (gas, electrical, water, wastewater, stormwater management, and telecommunications l) will likely be be transferred to Vermillion County. Only those portions of the site that will be active upon transfer should remain in service to minimize operating costs.
- The utilities should be thoroughly evaluated for compliance with state, county and local ordinances. Costs for bringing them into compliance, if necessary, should be developed.

The observations listed above will be further reviewed and supplemented as part of more detailed planning efforts. Additional discussion of each of the infrastructure systems is presented below.

Natural Gas Distribution System

Panhandle Eastern Pipeline has an 8-inch diameter transmission main that traverses north-south in the right-of-way of Indiana Highway 63. Natural gas is delivered to the NeCD by Panhandle Eastern Pipeline via a 4-inch diameter service line that branches off this main near the southeast corner of the NeCD property in the Highway 63 right-of-way. This 4-inch diameter services conveys natural gas to a Panhandle Eastern owned central metering station (#4292) located just east of Building 144 where the pressure is reduced to 30 psi for local delivery. Exhibit 3-17: Natural Gas shows the location of the natural gas lines at the Depot.

Panhandle Eastern owns the service line up to the and including the metering station, and owns and maintains an oderizer on the facility side of the station. The NeCD owns and operates the natural gas distribution system on the facility side of the metering station. Natural gas is distributed from the metering station by an 8-inch diameter steel line south to Building 7700 and by a 4-inch diameter polyethylene line to the de-militarized and shops area. The 8-inch diameter line formerly served the TNT production area, but has since been terminated just west of Building 7700. Natural gas plastic piping has been installed in the shops area since 1994.

Natural gas service at the NeCD is currently restricted to approximately the eastern one-third of the site in the vicinity of the industrial area. Service is concentrated in the main shops area and proceeds north to Building 402A. The main administration building (Building 7700) is served from the central metering station by an 8-inch diameter steel line that traverses south from the station and then west along South Boulevard to 10th Street where it turns south to Cull Avenue and connects to the administration building.

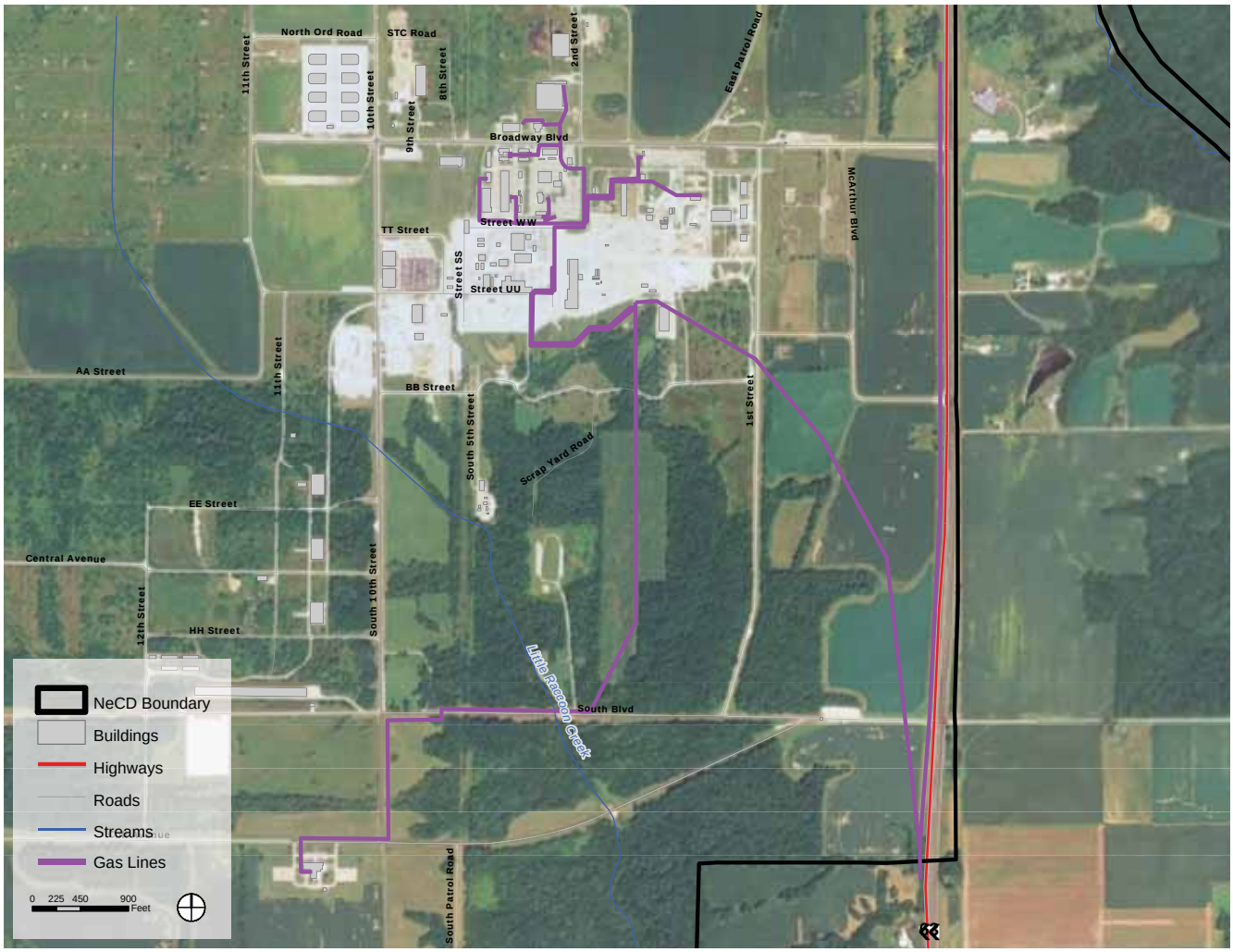
Steel gas lines at the NeCD were installed in the 1970s and are cathodically protected. Minimum maintenance has been performed on the steel lines and the cathodic protection system in the last 25 years. Their overall condition is unknown and considered to be questionable. Tracer wire was not installed with the plastic pipe lines in all locations. All current, operating lines are installed underground with the exception of a 1-inch diameter steel overhead line along the northeast corner and face of Building 144 that extends to Building 143.

The NeCD has had preliminary discussions about privatization of the gas distribution system with Indiana Gas, (currently Vectron Energy Delivery of Indiana - North), which showed no interest in acquiring the gas distribution system.

Summary

Natural gas to the NeCD is available for most types of industrial development. New service lines, possibly from the central metering station to areas being developed, may be necessary based on the condition of the steel lines and ability to provide the quantity of gas required by the development. It is anticipated that individual gas meters will need to be provided for new development.

Exhibit 3-17: Natural Gas



Electric Power Supply and Distribution System

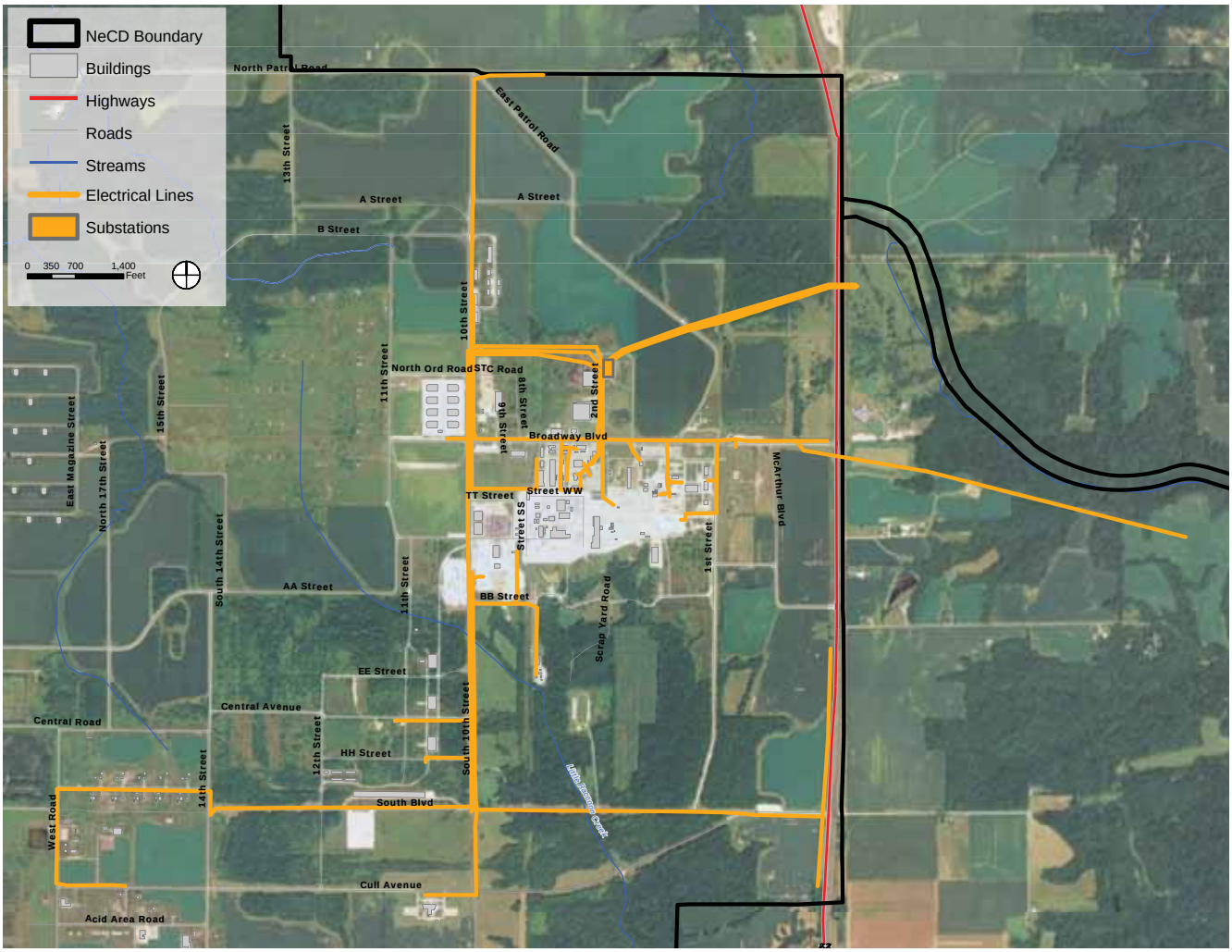
Electrical power to the NeCD is supplied via 69 KV and 12.47 KV systems by PSI Energy, a subsidiary of Duke Energy. The transmission and distribution system is owned by the by the U.S. Government with a demarcation point for the 69 KV and 12.47 KV lines near Indiana 63 and the NeCD main substation. The 69 KV service is available as a four wire WYE service. A 13.8 KV backup feeder is available from Duke Energy.

The incoming 69KV power supply is converted to 13.8 KV, 3 phase, three wire DELTA at the NeCD main substation. The main substation contains two transformers, a 3500 KVA transformer and a 2500 KVA transformer. The 2500 KVA transformer serves as a spare. The 13.8 KV DELTA service is distributed to the developed area of the facility, with the exception of the Chemical Neutralization Area.

The Chemical Neutralization Area is served by its own substation. Incoming 69 KV power is converted to 4160 V, 3 phase, DELTA at the Chemical Neutralization Substation. Two relatively new 7500 KVA transformers are located at this substation.

The NeCD, which currently owns and operates the on-site transmission and distribution system, discussed the privatization of its transmission and distribution system with Cinergy. Cinergy had no interest in acquiring the system due to the ratio of maintenance cost to return, the age of the system and contrasting design criteria (DELTA versus WYE system). See Exhibit 3-18: Electrical System.

Exhibit 3-18: Electrical System



Summary

Electrical power to the NeCD is available for most types of industrial development. New service lines, possibly from main substation to areas being developed, may be necessary based on the type of development. It is recommended that the NeCD develop costs and consider converting the existing DELTA system to a WYE system, which is the current industry standard. It is anticipated that individual electric meters will be required for the development.

Telecommunications Systems

Telephone: The NeCD has DISN telephone trunk lines that enter the facility in underground cable. AT&T bonded twisted pair cable is available on the site. Government owned telephone lines are located throughout the NeCD. Both above ground and below ground copper cables exist. Some of the buried cables were installed as recently as 2002 and 2004. Private Business Exchange (PBX) lines exist at the main administration building (Building 7700) and the Chemical Neutralization administration building.

Internet: Internet connections have been installed throughout the developed areas of the NeCD. Both copper and fiber optic are available on site.

Summary

Telecommunications systems are available at the NeCD. It is anticipated that telecommunications requirements will be dependent on the specific developer needs and that modifications or upgrades to the existing telecommunications systems will be required.

Water System

Water Supply: The water supply consists of three government-owned wells, referred to as Ranney Well Collectors No.1, No.2, and No. 3. These wells are located in the floodplain of the Wabash River on government owned property approximately 3 miles east of the NeCD. Each well was originally equipped with three pumps, each with a capacity of 4,500 to 5,000 gpm. Based on review of available information these wells are capable of producing 15 to 30 million gallons of high quality water per day. Access to the well area is via a government owned, unimproved 1.5 mile access road.

Well Collector No. 3, installed in 1942, is the only active supply well to the NeCD. Its production capability has been significantly reduced due to lack of need and maintenance of the horizontal collector piping. The original pumps and motors have

been inactive for approximately 30 years and have been replaced by a 60 hp and a 50 hp turbine pump. The current pumping capacity of this well is approximately 400 gallons per minute (gpm). Well Collectors No.1 and No. 2 have not been operated in more than 40 years and are expected to need to be rehabilitated before being put into service. Well Collector No. 3 will also require maintenance and repair to maximize it water supply capabilities. Easements for electrical services to the collector wells and raw water piping from the wells to the NeCD are intact. A propane gas backup heating source exists at Collector Well No. 3 to prevent any damage that may be caused by freezing. The four propane tanks are tethered to prevent them from being displaced by a flooding event.

Raw water from the collector wells is pumped directly into a seven million gallon reservoir (Building 402A) at the NeCD. The raw water supply piping is considered to be in questionable condition. The transmission piping is primarily 48-inch diameter cast iron, with some smaller diameter carbon steel pipe. Raw water from Well Collector No. 3 is transmitted via a new 18-inch diameter high density polyethylene pipe to a 48-inch diameter cast iron main that discharges into two 36-inch diameter cast iron mains at the seven million gallon concrete reservoir.

Storage: Building 402A, a seven million gallon reservoir, is the only active raw water storage facility at the NeCD. This reservoir and its related pump house (Building 412A) are in poor to fair condition and will require structural maintenance. There are two Drinking Water pumps, two Service Water pumps, and two Fire Water pumps located in the pump house. These pumps and related equipment are expected to be in need of significant maintenance or replacement in the next decade. The drinking water storage facility is the elevated tank (Water Tower 510), with a capacity of 100,000 gallons.

A 60,000 gallon elevated tank in the former TNT area once served as a secondary raw water storage facility at the NeCD. This tower is out of service and is in need of repair. Based on limited review completed as part this report it may not be economical to put the tank back into service.

Distribution: Water service within the developed area on the NeCD is provided via a system that includes a Drinking (potable) Water distribution system, a Fire Water system, and a Service Water system. Reliable water service does not exist west of 10th Street with the exception of the services to the administration building, Building 3005 and the Fire Water System in the former TNT area. The Drinking Water, Service Water and Fire Water systems appear to be in fair condition.

Drinking Water is chlorinated and transferred to Water Tower 510 by two inline pumps located in the pump house. Drinking Water from Water Tower 510 is distributed via a 20-inch diameter steel transmission main to industrial and shops area at the site. This 20-inch main once provided water to the TNT area; however it is no longer in service beyond the industrial and shops area. Drinking Water mains and services consist of piping ranging from 10-inchs to 1.5- inches in diameter. Piping materials in the industrial and shops area consist of cast iron pipe with lead and oakum joints and polyvinyl chloride (PVC) pipe. New ductile iron and plastic water main was installed to provide service to the Chemical Neutralization area.

The Service Water system is supplied directly from the seven million gallon reservoir pump house by a 20-inch diameter spiral wound steel transmission main and 36-inch diameter cast iron pipe. The steel transmission main has cathodic protection. The condition of the main and cathodic protection system is relatively unknown. The Service Water system provides water to the Vermillion County Jail, the administration building (Building 7700) and Building 3005. Water is chlorinated for potable use at each of these facilities.

The Fire Water system piping primarily consists of cast iron pipe. Fire hydrants are located throughout the NeCD. Evaluation of hydrant spacing and code compliance will be required for any new development. The NeCD currently provides water service to the Vermillion County Jail via its service water distribution system.

Based on discussion with NeCD staff, the system is in compliance with IDEM monitoring requirements and operating permits.

Summary

The existing water treatment and distribution system at the NeCD has sufficient capacity to serve the developed areas of the site. The NeCD has the potential to supply water to meet the needs of most industries and to potentially serve as a regional water supplier in Vermillion County and the surrounding region. Significant maintenance and repairs are required to bring the system back to a operating level where it can supply 15 to 30 million gallons a day of water. See Exhibit 3-19: Domestic Water and Exhibit 3-20: Fire (Service) Water.

Exhibit 3-19: Domestic Water

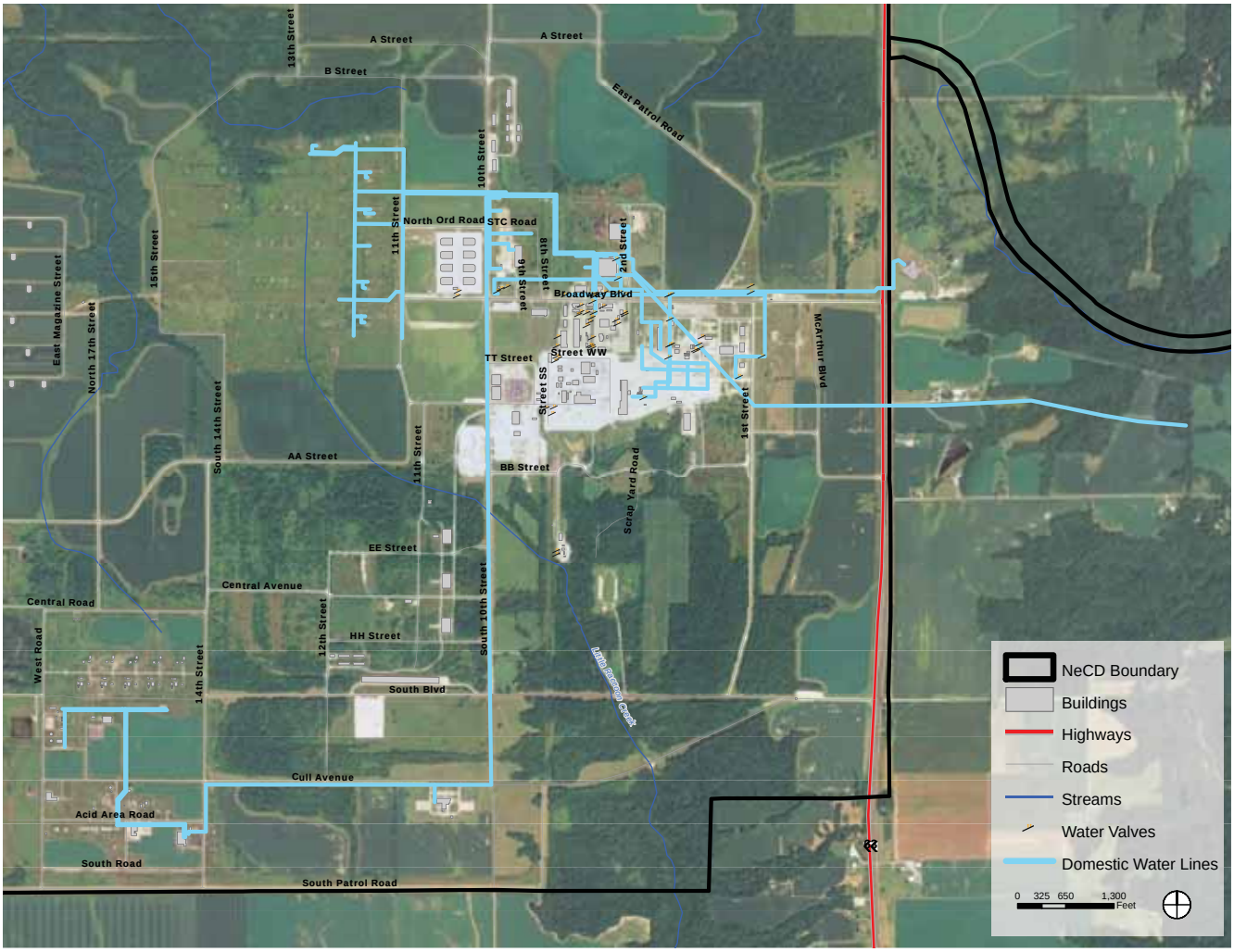
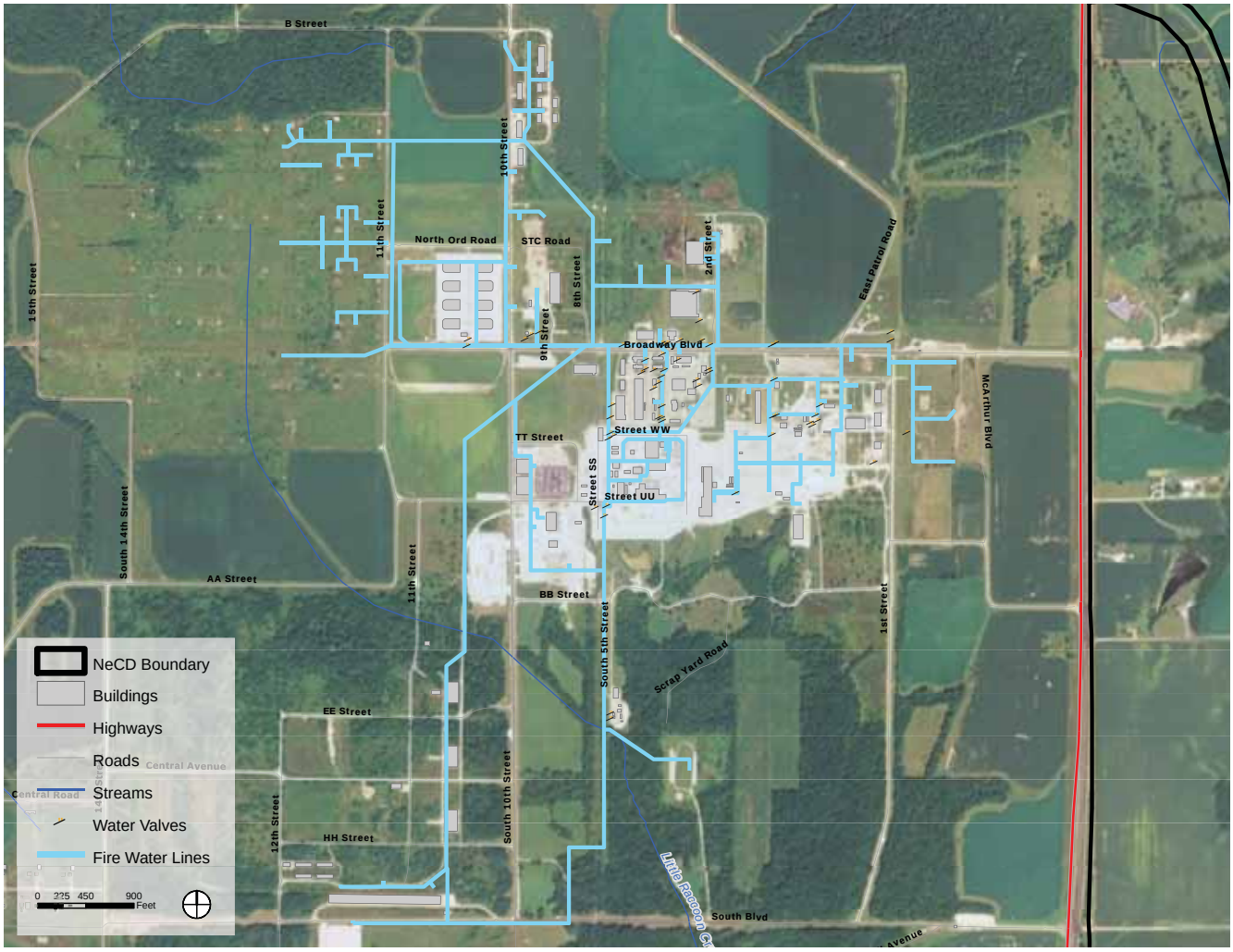


Exhibit 3-20: Fire (Service) Water



Wastewater Treatment and Collection

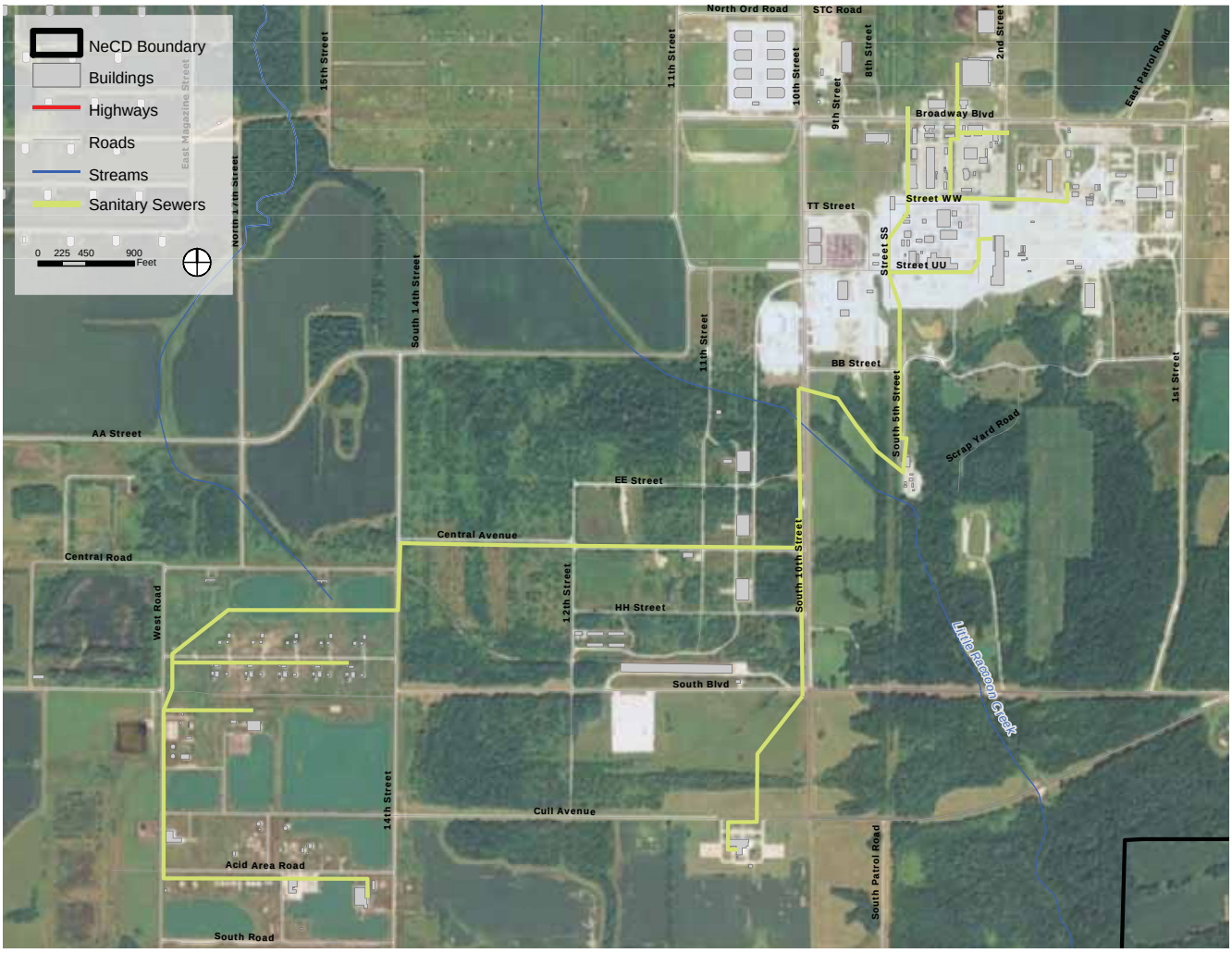
The wastewater treatment and collection system at the NeCD consists of a centralized wastewater treatment plant and sanitary sewers that are located primarily within the developed are of the facility.

Wastewater Treatment Plant: The wastewater treatment plant components include a bar screen, comminutor, primary settling tank, secondary aeration tank, secondary settling tank, sludge digester, and a disinfection system including a chlorine contact tank and dechlorinator. Treated wastewater is pumped to the Wabash River at a permitted outfall. A stand-by generator is located at the plant to maintain operations in the event of a power outage.

The wastewater treatment plant has a capacity of approximately 0.194 million gallons per day (MGD), with a peak hourly flow rate of approximately 0.54 MGD. The plant has the capacity to serve approximately 3,000 people. Review of available information indicates that the NeCD generates approximately 40,000 gallons per day of wastewater. The plant has sufficient capacity to treat wastewater generated by the NeCD and available capacity of approximately 0.14 MGD.

Sanitary Sewer Collection System: The sanitary sewer collection system is primarily a gravity system and collects wastewater from the developed area of the site. See Exhibit 3-21: Sanitary Sewer System.

Exhibit 3-21: Sanitary Sewer System



Summary

The existing wastewater treatment and collection at the NeCD has sufficient capacity to serve the current developed area of the site. Excess capacity of approximately 150,000 gallons exists at the plant. This should be sufficient to treat domestic wastewater from approximately 2,000 additional people at the site. The existing plant was not designed to treat industrial wastewater. An industrial pre-treatment program acceptable to IDEM will be required to accept industrial wastewater at the plant. Pre-treatment of industrial wastes by the associated industry will be required. Larger industrial process operations will likely need to treat their own water prior to discharge or participate in upgrading the existing plant to meet their needs.

Stormwater Management

The stormwater management system on the NeCD consists primarily of open drainage system comprised of natural and manmade drainage ditches, open channels and swales.

Many of the existing and former agricultural tracts are drained by field tiles to improve soil drainage. The NeCD has maintained these drainage systems and has installed new field tiles as necessary to support leasing of the agricultural properties.

A retention basin is located on the property that services the redwater ash basins and gypsum sludge basins in the former TNT burning grounds. This basin has a permitted outfall at its point of discharge into an open channel on the property.

Summary

The NeCD has a significant amount of undeveloped property that can be used for stormwater management. While state, county and local stormwater management requirements will need to be met, it is not expected that stormwater management requirements will limit development of the site.

Buildings and Facilities

The following section provides a brief overview of the current physical state of key buildings and their immediate surroundings at the Newport Chemical Depot; a detailed assessment of each building is provided in the Appendix.

As part of this building assessment, 28 buildings and facilities were inspected. The following building elements and systems were evaluated:

- Site Layout
- Building Structure and Envelope
- Architectural and Spatial Qualities
- Mechanical, Electrical and Plumbing Systems

The purpose of the facility assessment was threefold: (1) to identify and document the current physical condition of significant buildings and facilities at the site; (2) evaluate the reutilization or adaptive reuse potential of these facilities; and, (3) determine the conditions and characteristics that might impact a building's cost-effective reutilization or reuse.

In addition to data gathered, significant information, including facility maps and building plans, was collected through interviews with Mason & Hanger staff, and from interviews with and record documents provided by employees of Parsons Infrastructure and Technology Group, Inc. (Parsons), the disposal facility operations contractor. Through a combined analysis of real property records, public works plans and documents,

information provided by on-site contractors and information collected from visits to each of the facilities an evaluation matrix was prepared to summarize the current condition and characteristics of all major buildings and facilities on the Newport property.

Evaluation Approach and Inventory Assumptions

Through on-site reconnaissance, a baseline property condition assessment was conducted, based on information from site and building documents and from a walkthrough observation. The walkthroughs and data collection were performed generally in accordance with the standards outlined in ASTM E 2018-01 *Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process* to identify and communicate the presence of conspicuous defects or material deferred maintenance by non-intrusive visual observations.

Buildings Inventoried

To provide the maximum benefit to the Newport Chemical Depot Reuse Authority for evaluation and implementation purposes, only structures that were considered "significant" to the reuse master planning process were included in the on-site building surveys. Facilities inventoried included 23 buildings and supporting infrastructure on the installation proper and five (5) additional buildings within the Parsons cantonment area, considered by base personnel to be in the best physical condition and with the greatest potential for reuse. The 28 facilities assessed include:

7700	(HQ Bldg)
7702	(Ambulance Garage)
7703	(Generator Shed)
121A	(Warehouse)
121B	(Warehouse)
402A	(Reservoir)
412A	(Pump House)
723A	(Laundry*)
733K	(Vehicle Storage)
A3301	(Magazine)
A3200	(Entry Control Facility)
713A	(Shipping & Receiving)
717A	(Maintenance Shops)
717B	(Generator/Boiler Shed)

710	(Equipment Storage)
303	(Records Storage *)
255A	(Fire Department Training*)
227A	(Warehouse*)
3036A	(Propane Compressor*)
3036B	(propane Mixer*)
709A	(Fire House*
510	(Water Tower*)
1001A	(Water Tower Pump*)
223A	(Parsons – Warehouse)
2032	(Parsons – Office/Warehouse)
1034	(Parsons - Administrative)
1035	(Parsons - Administrative)
3001	(Parsons - CDB)

Property Condition Assessment (PCA) Forms


Newport Chemical Depot
Property Condition Assessment
P2032

Property Condition Assessment forms were prepared for 19 of the buildings identified for evaluation. These forms documented general findings related to facility's architecture, structure, HVAC, mechanical, electrical, and site conditions. Opinions of probable cost for noted deficiencies and remedies were not provided as part of this process. A list of personnel resources and contacts who assisted the Planning Team in this evaluation, along with a list of current building occupants, are provided in the Appendix of this report. Survey staff consisted of experienced / registered architects or professional engineers familiar with commercial, residential, institutional, and industrial building construction materials and methods. Site reviews documented and/or reviewed the following:

- Record drawing information
- Location
- Accessibility
- Building code compliance

- General building information
- Year built, area in size, length, width, height, and number of stories
- Architectural, structural, and electrical characteristics
- Site accessibility
- HVAC, plumbing, fire alarm, and sprinkler systems
- Roofing, interior and exterior characteristics
- Structural integrity
- Energy efficiency
- Expansion potential and feasibility
- Adaptive reuse potential
- Operation and maintenance issues and costs
- Recent and planned improvements
- Noted deficiencies
- Photographic documentation

Summary of Significant Buildings and Facilities

General descriptions of the major facilities assessed at the Newport Chemical Depot are provided below. Completed property condition assessment forms are provided in the Appendix.

Administration Building

Building 7700 houses the Newport Chemical Depot Headquarters function. The 31,480 square foot facility is located in the southwest quadrant of the installation near the intersection of Cull Avenue and South 10th Street. Built in 1973 the three story steel frame building has concrete masonry unit walls and includes its own water chlorination facility in the basement. In addition to the installation administration function the building houses a small medical clinic, the emergency operations center and water testing laboratory. Ancillary facilities include building 7702, an 820 square foot, two bay CMU garage and an approximately 80 foot tall steel truss tower supporting a radio repeater owned by the Indiana State Police.

Raw Water Inlet House and Reservoir

Building 402A is comprised of the 864 square foot raw water inlet house and 58,000 square foot raw water storage reservoir. The two story wood frame inlet house contains two 36" diameter inlet pipes that bring raw water from a series of wells supporting the installation to the 7 million gallon water storage reservoir housed in the single story reinforced concrete reservoir building. First constructed in 1942 the facility not only provides raw water for use on the installation; it was an integral part of the nation's heavy water production capability. Attached to the north side of building 402A is building 412A, a 6100 square foot reinforced concrete facility housing the service, domestic and fire water pumps and chlorination room. A small 1,600 square foot second story room contains the mechanical, electrical and alarm equipment.

Surety Storage and Training

Building 733K is a 12,800 square foot wood frame warehouse building constructed in 1942. The Surety Storage and Training facility is representative of numerous similar warehouse buildings found across the installation. The buildings typically have concrete slab on grade foundations with heavy timber framing clad with lightweight steel siding and flat built up roofs. Building 733K is in relatively good shape having undergone renovations as recently as 2000. The building currently provides vehicle storage and classroom training space to the installation. Located on the north side of Broadway Boulevard building 733K is in close proximity to the fire station as well as the stores and procurement and maintenance shops that comprise the industrial core of the installation.

Ammunition Storage Igloo

Building A3301 is typical of eight ammunition storage igloos constructed on the site in 2002 for the storage of VX-filled ton containers. The igloos were used until the last VX-filled container was removed to the Newport Chemical Agent Disposal Facility (NECDF) on July 28, 2008. The 3,125 square foot bunker is constructed with a cast in place concrete floor slab, cast in place concrete bulkhead walls at each end of the building, and corrugated steel plate arches covered in crushed rock form the exterior walls and roof. Access into the bunker is through a pair of blast doors hung on the front face of the building. The storage igloos are in a secured area on the northwest corner of 10th Street and Broadway Boulevard. Access to the igloo area is through a single story entry control facility (building A3200). The 1,500 square foot reinforced concrete entry control facility includes two small offices, bullet proof glass at all windows and a 125 KW, 408V emergency generator with a 550 gallon diesel underground storage tank.

Maintenance Shop NECDF

Building P3001 is part of the Newport Chemical Agent Disposal Facility currently operated by Parsons. Built in 2003 the building was originally constructed for chemical agent destruction but never was used for that task, instead it has been used as maintenance shops for the NECDF. The single story, high bay, steel frame building encloses 62,795 square feet of floor area. The bulk of the facility consists of 20 foot high open bays although there are several modular interior office spaces with enclosed 10 foot ceilings. The steel frame, metal clad, slab on grade construction of this building is representative of most buildings within the NECDF.

Environmental Conditions

Overview

This section presents a summary of known and potential environmental conditions at NeCD that have been considered as part of the reuse planning process. Additional details regarding existing environmental conditions, as well as a data gap analysis are discussed in the comprehensive environmental review document included in the Appendix.

This environmental analysis was conducted using limited data generated by other parties; the findings and conclusions, however, are based on the consultant's professional opinions, and on documents provided and produced by others. It should be noted that the potential exists for unreported and unknown environmental issues associated with the site or surrounding area that are not included in this document. A list of references used during this analysis is presented in the Appendix.

Background

Approximately 22,000 acres of land that encompasses NeCD was originally purchased by the War Department in 1941 for the purposes of constructing a 1,3,5-Trinitro-1,3,5-triazine (Royal Demolitions Explosive [RDX]) explosives production facility, known as the Wabash River Ordnance Works. The RDX facility was operational beginning in 1942 until it was placed on standby status in 1946. After World War II, NeCD was reduced to an area of approximately 7,000 acres. In 1943, production facilities for the manufacturing of heavy water related to the Manhattan Project were constructed at NeCD for the Atomic Energy Commission (AEC). The heavy water plant was placed on standby status in 1946, but was reactivated from 1952 through 1957 to support the Korean War effort.

A chemical plant for the production of the nerve agent O-ethyl-S-(2 diisopropylaminoethyl) methyl phosphonothiolate (VX) was constructed in 1958 by the Food Machinery Corporation (FMC) in the area of the former heavy water production facility. From 1960 to 1968, all of the United States' VX was produced at NeCD until halted by President Richard Nixon. The VX was stored at NeCD until its destruction at the Newport Chemical Agent Disposal Facility from 2002 until 2008. In 1970, a 2,4,6-trinitrotoluene (TNT) production facility was constructed to support the Vietnam War. Only two of the five production lines operated, and the production was discontinued in 1975.

In 1999, through a contract with the Tennessee Valley Authority, (TVA), Parsons Infrastructure and Technology (Parsons) was hired to demolish the chemical production facilities that included the Former Chemical Agent VX Production Plant, build the Newport Chemical Demilitarization Facility (NeCDF), destruct chemical weapons, and demolish the NeCDF after demilitarization. Construction of the NeCDF was completed in 2003, and the last container of VX was destroyed in 2008.

Mason and Hangar, the current operator of the Depot, is a caretaker only, and does not produce or manufacture any products. Active buildings at NeCD include facilities formerly used to store the onsite chemical agent inventory, as well as administrative, security, and maintenance buildings used to support the military mission. Inactive buildings include facilities associated with former production of TNT and RDX.

The chemical production activities conducted at NeCD have resulted in known and potential contamination of soils, groundwater, surface water, and structures, and numerous landfills and dumps are present at the site. Contaminants at NeCD include explosives, chemical agent components, volatile and semivolatile organic compounds, metals, petroleum hydrocarbons, and asbestos.

Environmental laws governing the storage, disposal, and cleanup of hazardous wastes, including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA), are applicable to contamination at NeCD. NeCD has been the subject of various environmental actions, studies, and cleanup actions since the 1970s, and is currently regulated under a RCRA Part B Permit. The most recent RCRA Part B permit was issued by the Indiana Department of Environmental Management (IDEM) on January 5, 2006. Many sites have been investigated by the Army under the Department of Defense (DOD) Installation Restoration Program (IRP) in accordance with CERCLA requirements. The IRP was developed by the DOD to comply with federal guidelines for managing and controlling past hazardous waste disposal actions. The IRP focuses on cleaning up contamination from past hazardous waste operations and past hazardous material spills. Because this property is governed by both RCRA (for transfer, storage, and disposal of wastes) and CERCLA (for cleanup of historical contamination), there are sometimes separate identification numbers and names assigned to the same area. For the purposes of this report, only the RCRA Solid Waste Management Unit (SWMU) numbers are used to identify a particular area. Additionally, all SWMUs will require closure under the RCRA permit.

Known Areas of Environmental Concern

Historically, industrial operations were present at NeCD to support a variety of military missions, including the manufacture of explosives (RDX and TNT), heavy water, and chemical agent. Currently, there are known environmental sites in active and inactive phases of investigation and remediation at NeCD. These sites are being investigated and/or remediated by the Army under the supervision and guidance of the IDEM. A summary table of known information about each site and by Study Area as defined by the Environmental Condition of Property (ECP) report prepared for the DOD by SAIC is included in Table 2 in the Appendix. Maps showing known and potential environmental constraints are provided as Exhibits 3-22: Known Environmental Constraints Related to Reuse, and Exhibit 3-23: Potential Environmental Constraints Related to Reuse, respectively. Larger versions of these maps are also available in the Appendix.

Exhibit 3-22: Known Environmental Constraints Related to Reuse

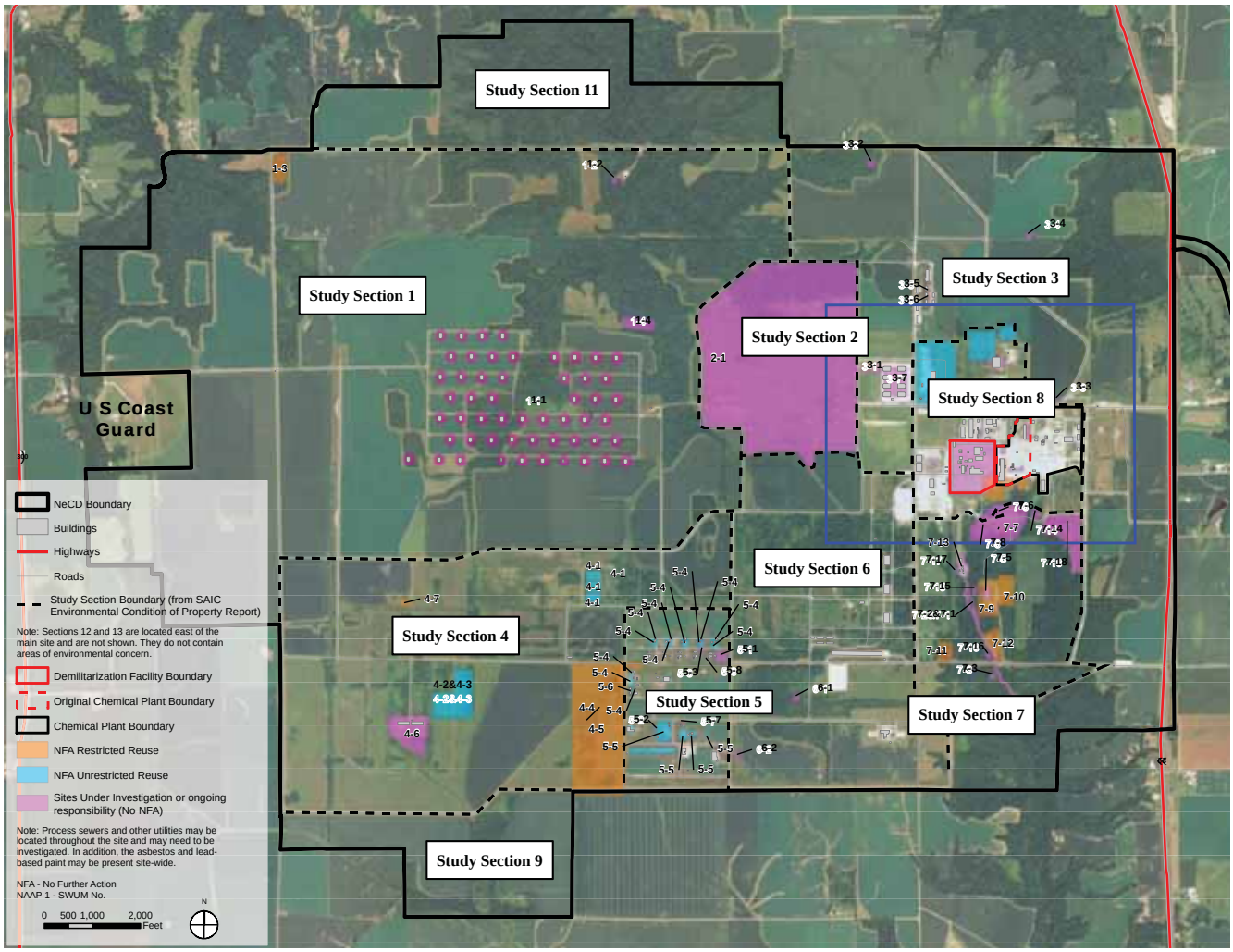
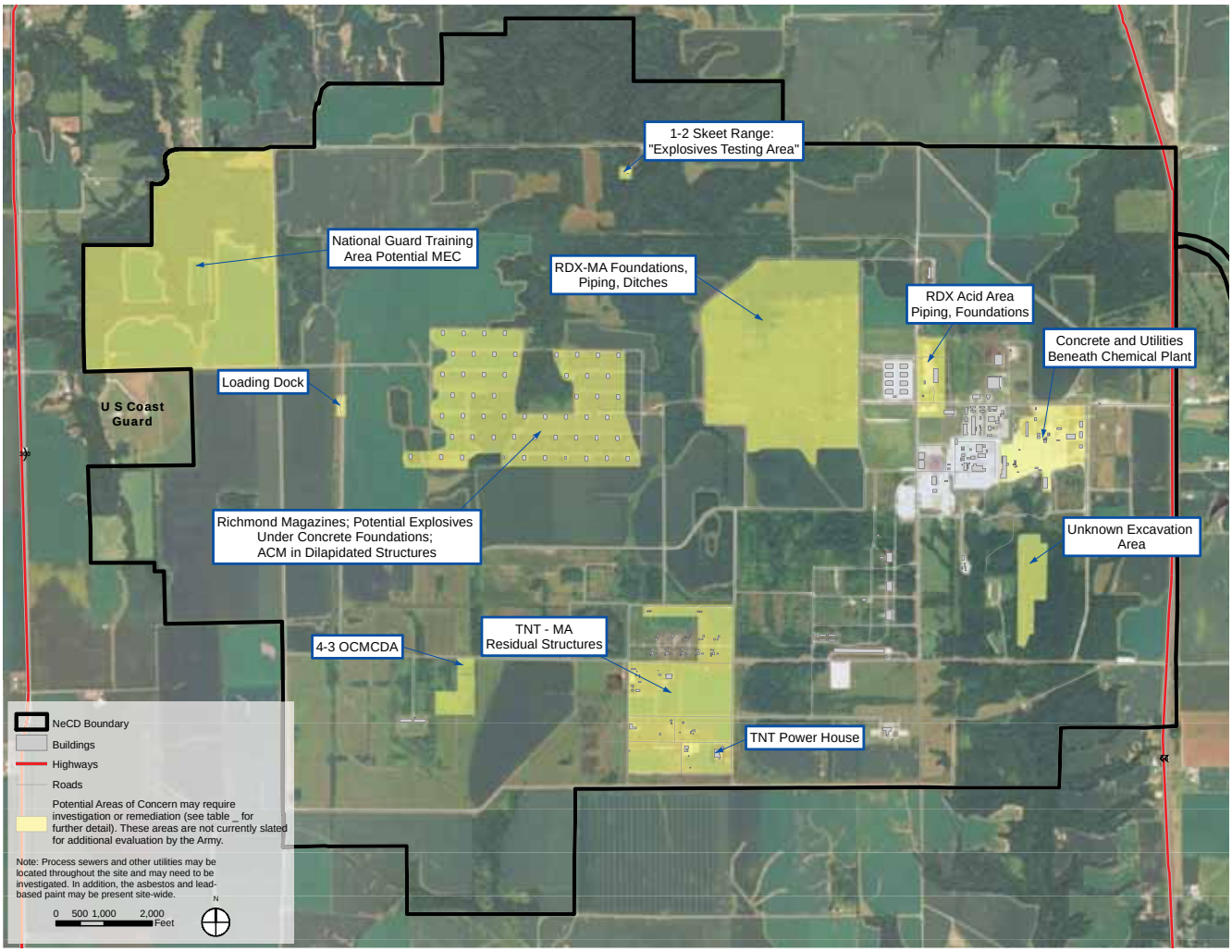


Exhibit 3-23: Potential Environmental Constraints Related to Reuse



Active and Closed Known Environmental Sites

There are 72 SWMUs and 10 areas of concern (AOCs) identified in the RCRA Permit. Sixty-four of the sites have been issued No Further Action (NFA) letters by IDEM, indicating that no further investigation or remedial action is required. Many of the sites also have Land Use Controls specifying any restrictions in place to protect human health and the environment. Specific issues related to each of the active and closed known environmental sites are listed in Table 2 presented in the Appendix. Issues include the potential need for further sampling/analysis for additional contaminants; requirements for institutional controls; and, clarification of type of NFA letter issued for the site (e.g., restricted NFA limiting some types of uses at the site or unrestricted indicating no restrictions on future land uses).

In addition to the known SWMUs and AOCs included in the RCRA permit, the Army identified an additional 35 sites that required investigation in the Environmental Condition of Property (ECP) report dated August 2007 prepared for the Army by SAIC (SAIC 2007). Results of these investigations were presented in the Site Investigation Report dated May 2009 (SAIC 2009). Many of the sites have been ruled out as environmental concerns, although some indicate the need for Land Use Controls or additional investigation. A summary of each of the sites identified by the Army is included in Table 2 in the Appendix.

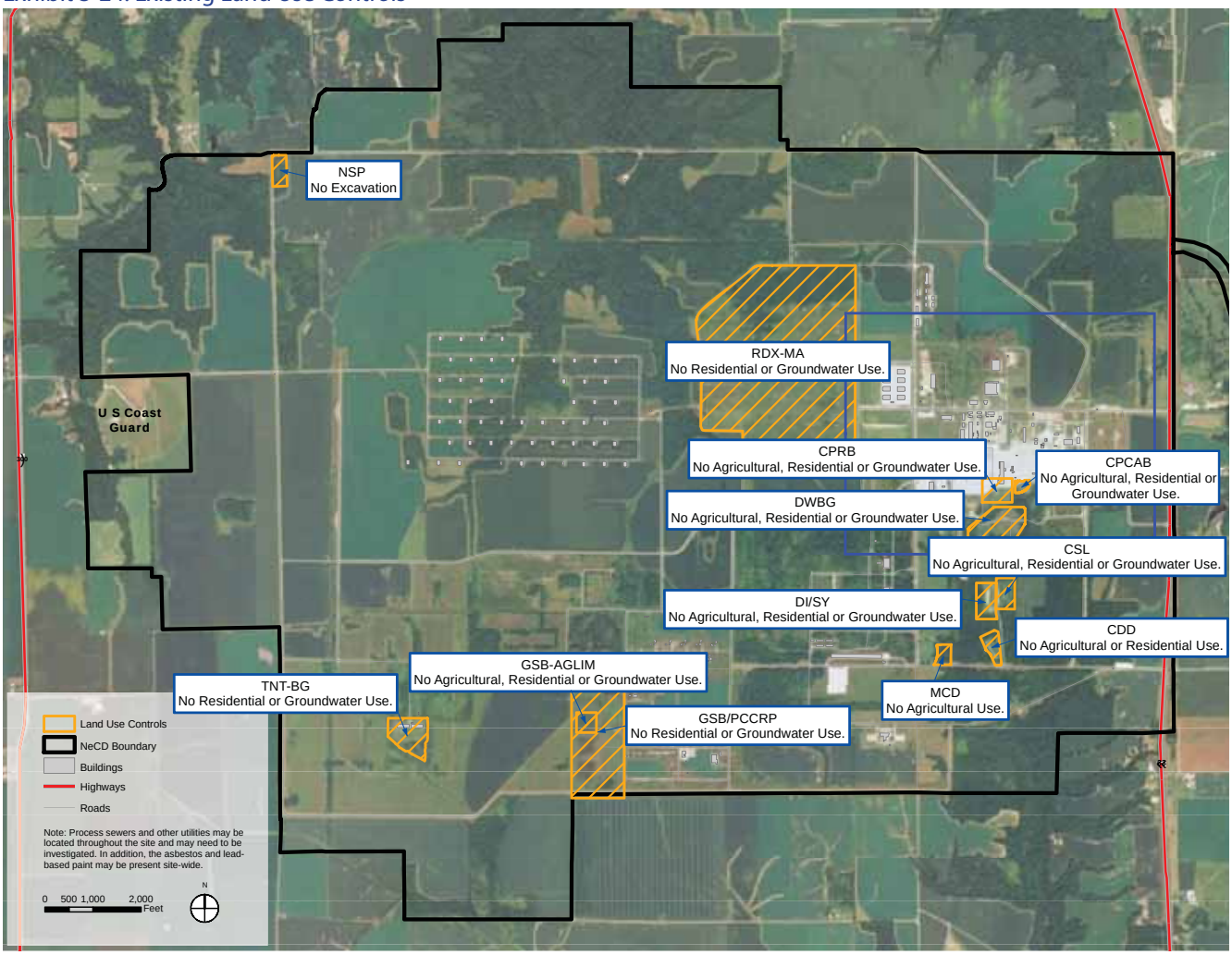
Potential Areas of Environmental Concern

The Army has completed an extensive amount of investigation and remediation at NeCD. However, based on review of environmental information, historical uses of buildings and areas, and processes conducted at NeCD, there are data gaps related to environmental conditions on the property. Data gaps were identified for the sites identified by the Army (e.g., IRP sites, SWMUs, and the ECP sites), as well as for unknown or potential areas of concern. These data gaps are detailed in the Appendix, where the gaps are summarized by Study Area, as well as site-wide. A summary of the potential areas of environmental concern and data gaps is presented below.

Existing Land Use Controls

The Final Newport Chemical Depot Land Use Control Implementation Plan dated October 2005 (SAIC 2005) outlines procedures to ensure proper enforcement of restrictions imposed on current or future use of NeCD at 12 known contaminated areas. The document provides information on the location of hazardous waste and disposal sites, and enacts land use restrictions in the form of administrative controls including prohibiting one or more of the following: excavation, groundwater use, agricultural use, and residential use, as shown in Exhibit 3-24: Existing Land Use Controls. Where specific land use controls are not considered appropriate for the planned reuse, they are noted in the Appendix. For example, it should be noted that many agricultural use areas have groundwater use restrictions, prohibiting the use of groundwater for any purpose including irrigation or livestock watering. Additionally, certain areas restrict residential use, but not industrial use (e.g., RDX Manufacturing Area). However, it is likely that explosives are still present beneath the former building foundations that were not removed, and construction in these areas may require specialized equipment and qualified construction personnel, as well as remediation of explosives to enable industrial development. Additional details related to these issues are presented in the Appendix.

Exhibit 3-24: Existing Land Use Controls



Underground Utilities and Concrete Foundations

It is expected that many of the existing utilities at NeCD will be or have been abandoned in place. The existing utilities, especially in the Demilitarization Area, are located under very thick concrete foundations (approximately 10' thick) which may present a difficulty in assessment or removal when the facilities are closed. In addition, process sewers from historical activities are located throughout the former production areas and should be investigated to determine if adverse environmental impacts exists from either leaks in the existing lines, abandoned lines or at the sewer outfalls. Utilities that will be abandoned should be removed, or lacking removal, grouted in place to prevent preferential flow of any contaminants that may remain in the subsurface.

Potential Explosives Contamination

Many structures associated with the former explosives manufacturing or storage and loading areas have been demolished, burned, and/or otherwise removed. However, many structures in the TNT MA remain, and many concrete foundations in the RDX MA, RDX Acid Area, and TNT areas were not removed; although, limited explosives contaminated soils removal was conducted in the manufacturing areas, no soils were removed beneath the concrete structures. Additionally, it is unclear from review of existing documentation what decontamination was performed in the structures and lines, and whether underground piping and ditches were decontaminated and/or removed. Explosives contamination may remain in residual structures and beneath foundations in the former explosives manufacturing areas at NeCD.

Two loading docks were identified west of the Richmond Magazines where raw explosives were loaded/unloaded. No documentation related to investigation of the potential presence of explosives was identified during this review. The Richmond Magazines were used for storage of raw explosives, as well as finished ammunition products. Two "representative" magazines were included in the ECP Site Investigation, and explosives were identified inside one magazine, but not at the drainage areas outside the magazines. All of the Richmond Magazines have the potential for explosives or explosives residue to be present inside and outside the magazines, and should be inspected and decontaminated or remediated as necessary.

Although NFAs have been issued for the TNT MA, and LUCs are in place at the RDX MA, industrial construction in these areas may require removal of additional structures and infrastructure, and may require remediation of additional explosives contamination beneath or within said structures/infrastructure. It should be noted that specialized contractors and equipment will be necessary to conduct construction in these areas, and that additional remediation costs are likely if development occurs in these areas.

Munitions and Explosives of Concern (MEC)

The Army conducted a Historical Records Review (HRR) for NeCD in accordance with the Military Munitions Response Program (MMRP) as required by DOD regulations. While three locations of potential concern identified during this review did not warrant additional investigation or further review as part of the MMRP, these sites may present MEC hazards at NeCD. The three locations include:

- Small Arms Range
- National Guard Training Area
- Old Chemical Munitions Component Detonation Area.

The Small Arms Range was identified for further lead testing as part of the ECP. The results of that investigation are pending. A map from 1961 for the Wabash River Ordnance Area indicated that the area now known as the Small Arms Range was once labeled the "Explosives Testing Area." A copy of this map is included in the Appendix. It is unknown whether the existing Small Arms Range was indeed used for explosives testing, but further investigation should be conducted into this possibility. Contaminants other than lead may be present, and depending on the types of "explosives testing", the possibility for MEC also exists.

Approximately 350 acres in the northwest corner of NeCD were used as the National Guard Training Area for the training of troops. The guard reportedly used smoke grenades during training activities. Because the area was considered an "Active Training Area" during the HRR, no investigation was recommended for this site. The potential exists for MEC in this area. A portion of the 350 acres is currently leased for agricultural use, and has presumably been plowed or farmed. However, much of the 350 acres are forested and have the potential for MEC.

The Old Chemical Munitions Component Detonation Area (OCMCDA) was reportedly co-located with the RDX Burning Grounds in the southwestern portion of NeCD. Limited information exists on the OCMCDA, and the investigation and closure of the RDX Burning Ground and OCMCDA did not definitively locate the area where this detonation occurred. Open detonation areas are likely to contain MEC, and potentially unexploded ordnance. No geophysical surveys or MEC investigations were conducted in this area, the OCMCDA has not definitively been located, and the potential exists that it is actually in a different area than previously investigated. Although an NFA is in place for the RDX Burning Ground and OCMCDA, MEC investigations were not performed; this data gap should be addressed.

Potential Burial Area

A large portion of land directly south of the former Chemical Plant has been clear cut and replanted with trees. According to the ECP, this practice was used in areas where wastes were disposed and, as a result, numerous areas were identified for further investigation in the ECP Site Investigation. However, the area identified on Exhibit 3-23: Potential Environmental Constraints Related to Reuse has not been investigated to date, and represents, therefore, a data gap.

Asbestos-Containing-Materials and Lead-Based Paint

Due to the age of some of the buildings at NeCD, asbestos and lead-based paint are likely to be present in buildings onsite. Comprehensive asbestos and lead-based paint surveys suitable for demolition purposes have not been performed, although more limited information is available. All buildings on NeCD should be considered to contain ACM and LBP. Utility lines composed of Transite (asbestos material) will require special handling and disposal if encountered during construction. Steam lines may be asbestos wrapped if still in place. The cost of abatement and proper disposal of these materials during redevelopment can be significant, and should be considered during preparation of budgets and for planning purposes.

Petroleum Hydrocarbons

Conflicting information concerning the status of underground storage tanks (USTs) and above ground storage tanks (ASTs) formerly or currently in use at NeCD was reviewed. According to the "UST/AST Permits" section of the ECP, twenty-four underground storage tanks (USTs) currently or historically existed at NeCD. The USTs held diesel, gasoline, and fuel oil. Seventeen USTs have been closed, and six are active and regulated by IDEM. However, Section 5.4 of the ECP, Table 5-6 lists four active tanks, and nine removed tanks. SWMU 66 included five USTs at four locations across NeCD; those locations are unspecified. Also, according to the ECP Report, a 1,000-gallon UST in the RDX acid area was removed in January 2007; contaminated soil was identified and reportedly left in place. The actual number of existing permitted tanks should be rectified, and the status of removed USTs and any sampling data should be reviewed and evaluated. The potential exists for petroleum hydrocarbon impacted soils to remain in locations of removed USTs. These soils sometimes are unsuitable from a geotechnical perspective for building and redevelopment activities. Management of petroleum impacted soils may be required at NeCD during development activities.

According to the ECP report, 17 current and former ASTs were present at NeCD for the storage of fuel oil, propane, used oil, ethylene glycol, and diesel fuel. Currently, there are four active ASTs used for fuel oil; thirteen ASTs have been removed or closed, none of which are regulated by IDEM. The active ASTs are not regulated by IDEM. The size and location of the ASTs is reported differently in various sections of the ECP. Section 5.1.3 of the ECP reports four active ASTs that range in capacity from 225 to 550 gallons of fuel oil for emergency generators, although it is also reported in the same section that two 10,000-gallon ASTs and two 500 gallon ASTs all containing fuel oil are present. In Table 5-7 it is reported that three active ASTs are present, and range in size from 225 to 480 gallons, and hold diesel fuel. The locations, sizes, and current status of all tanks should be confirmed by the Army.

Potential Radiological Contamination

An area known as the "P-9" Plant and Dana Heavy Water Plant may have used unsealed radioactive materials. SAIC reportedly reviewed information related to the Dana Heavy Water Plant provided by the Department of Energy, and concluded that there was a low probability of the Dana Heavy Water Plant causing radioactive contamination. However, no additional information related to the P-9 Plant was reviewed, and attempts to obtain additional information regarding location, uses, and radiological information were unsuccessful. Additional information regarding the P-9 Plant should be obtained from the Army.

4 Development Suitability and Reuse Plan Concepts

With the completion of the Existing Conditions assessment phase of the project, which evaluated the current status of a variety of physical, market/economic, and environmental factors at the Depot, the next phase—crafting the Reuse Master Plan—could begin. To assist in developing the final reuse plan, the planning team completed two interim steps: a Development Suitability Analysis and the creation of several Reuse Plan Concepts. This chapter discusses these two important steps.

Development Suitability Analysis

The first step in creating a framework for potential ways in which the Depot could be used in the future was to determine the "suitability of development" for all land at the Depot. To do this, the planning team categorized various physical and environmental factors identified during the Existing Conditions phase by the degree to which each factor would potentially impact the development suitability of land on which it is found. The three broad development suitability categories created were:

- Most Suitable
- Moderately Suitable
- Limited Suitability or Not Suitable

Additionally, given the importance and preponderance of farming in the region, agriculture was not viewed by the planning team as a placeholder land use until "higher" forms of development, such as business and industrial, could be supported. Rather, agriculture (and other similar uses that rely on natural resources such as forestry) was treated as an independent and equal form of development. Consequently, two separate development suitability analyses were undertaken:

- Agriculture/Forestry Development Suitability
- Business/Industrial Development Suitability

By understanding where the most (or least) suitable areas were located for both types of development, future land uses could be directed to different areas within the Depot in a manner that respects and potentially maximizes each.

Agriculture/Forestry Development Suitability

The three major factors evaluated as part of the process of creating the Agriculture/ Forestry Development Suitability map included:

- Soils
- Natural Systems
- Environmental Constraints on Agriculture

Maps showing these factors are found in **Chapter 3** and in **Appendix C**.

The specific attributes from these three maps that were associated with the three levels of suitability discussed above were:

Most Suitable:

- Prime Agricultural Soils
- Unfragmented Forests/Tree Plantation Areas
- Areas Without Environmental Constrains for Agriculture

Moderately Suitable:

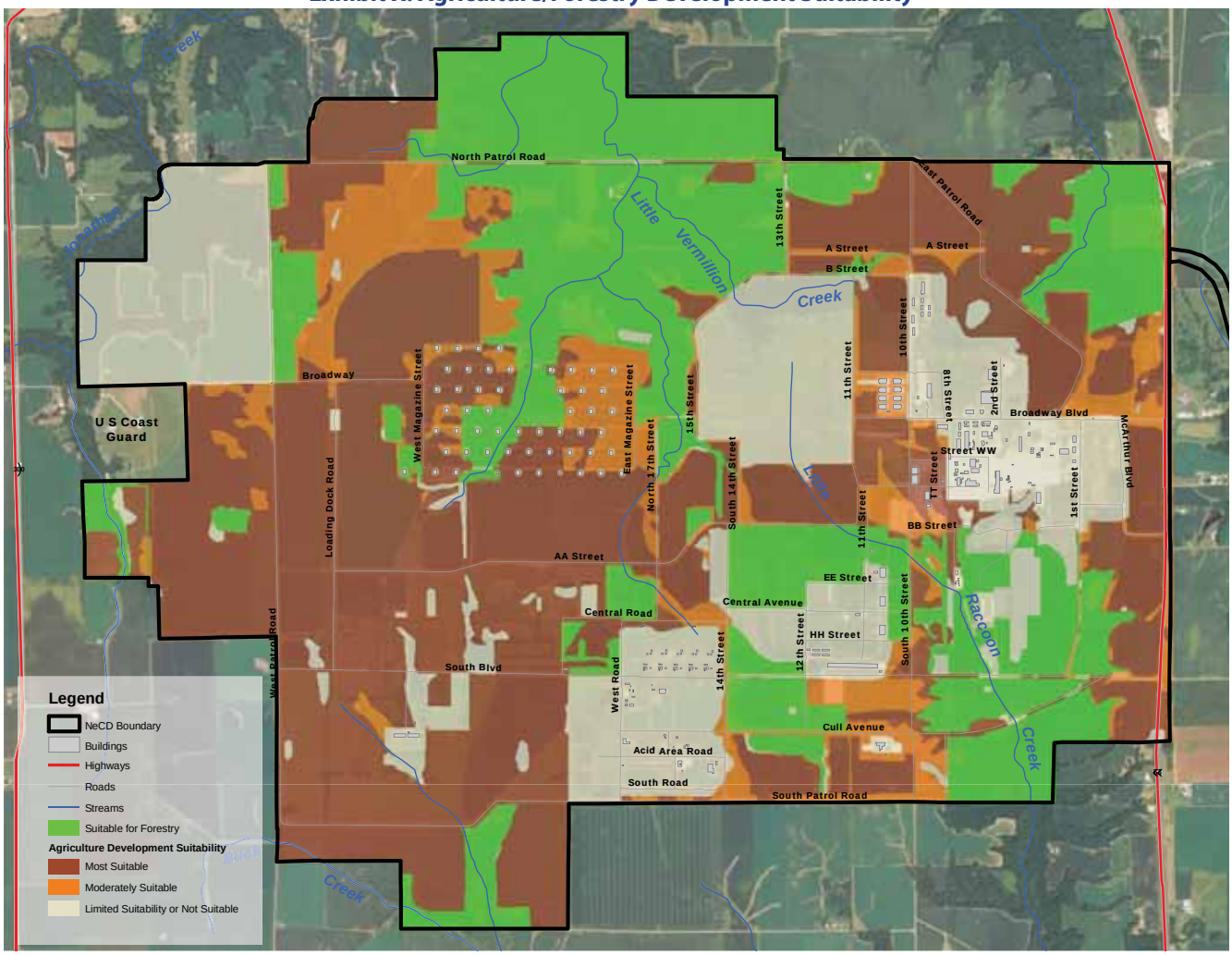
- Prime Agricultural Soils If Drained

Limited Suitability or Not Suitable:

- Soils Less Suitable for Agriculture
- Wetlands
- Areas With Environmental Constraints for Agriculture

By geographically overlaying these various attributes, the following **Exhibit X: Agriculture/Forestry Development Suitability** map was produced:

Exhibit X: Agriculture/Forestry Development Suitability



Business/Industrial Development Suitability

The two major factors evaluated as part of the process of creating the Agriculture/Forestry Development Suitability map included:

- Natural Systems
- Environmental Constraints on Business/Industrial

Maps showing these factors are found in **Chapter 3** and in **Appendix C**.

The specific attributes from these three maps that were associated with the three levels of suitability discussed above were:

Most Suitable:

- Areas Without Environmental Constraints for Business/Industrial

Moderately Suitable:

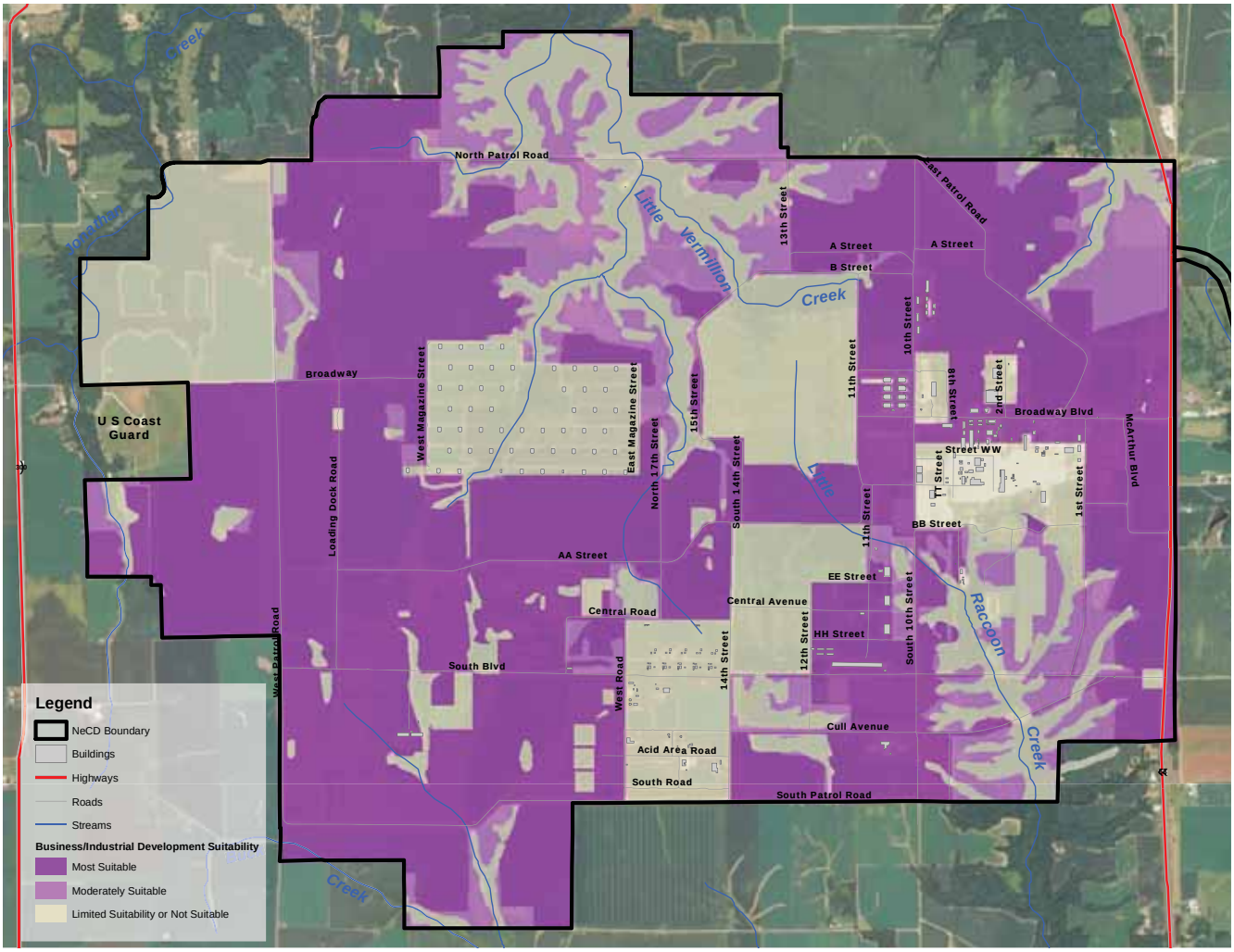
- Unfragmented Forests/Tree Plantation Areas

Limited Suitability or Not Suitable:

- Major Drainageways
- Wetlands
- Areas With Environmental Constraints for Business/Industrial

By geographically overlaying these various attributes, the following **Exhibit X: Business/ Industrial Development Suitability** map was produced:

Exhibit X: Business/Industrial Development Suitability



As both Development Suitability maps were created independently of each other, there are many areas of overlap between the two maps; for example, areas that are considered Most Suitable for both Agriculture/Forestry and Business/Industrial. However, understanding the degree to which land at the Depot is suitable for both types of development provided a broad framework to begin the process of creating various future land use concepts.

Reuse Plan Concepts

The planning team created three Reuse Plan Concepts (A, B, and C) from which the Reuse Master Plan evolved. The Reuse Plan Concepts increased in land area devoted to non-agricultural development from A (least) to C (most). The Reuse Plan Concepts were not intended to stand as independent, competing alternative solutions for reuse of the Depot. Instead, they were created to present a variety of plan themes and elements in different combinations, locations, and configurations—intentionally varied across the three concepts—to illuminate multiple reuse opportunities. The Reuse Plan Concepts were reviewed and commented on by the NeCDRA, real estate developers, economic development experts, members of the farming and natural resources communities, and the general public, with the idea that the final Reuse Master Plan would reflect a hybrid of themes and elements from the Reuse Plan Concepts.

The Reuse Plan Concepts were based on key principles important to the Newport Chemical Depot Reuse Authority and the community:

- Conservation of natural and cultural resources
- Continuation of agricultural-related uses
- Long-term market flexibility
- Creation of jobs and economic development for the region

There were also several themes and elements common to all three Reuse Plan Concepts:

- The largest blocks of unfragmented forests are maintained as natural conservation areas
- Major natural drainage corridors are maintained as natural conservation areas

- Noncontiguous natural areas are connected through "green corridors" where necessary
- Right-of-way for a Highway 63/Highway 71 east-west connection is provided or preserved
- Agricultural uses are concentrated in the areas with the best soils
- Opportunities for "mega-site" development are created

Additionally, while the two Development Suitability maps discussed above served as a starting point for the creation of the Reuse Plan Concepts, some of the land areas identified on the Development Suitability maps as "Least Suitable or Not Suitable" for environmental reasons were included within a development zone on the Reuse Plan Concept maps. Several of the environmental constraints identified on the "Environmental Constraints on Agriculture" and "Environmental Constraints on Business/Industrial" maps that contributed to a "Least Suitable or Not Suitable" designation on a Development Suitability map are areas where environmental data gaps exist, investigations are pending, or future environmental investigations may be required. However, for the purposes of designating future land uses on a Reuse Plan Concept map, it was assumed that environmental constraints that exist today are capable of being removed or overcome to allow for development in the future. Similarly, areas with other existing constraints (such as abandoned military buildings and foundations that would likely need to be removed before redevelopment could occur, or areas without any infrastructure at all) were not precluded from being included within a future development area.

Reuse Plan Concept Land Use Descriptions

This section provides a brief description of the different land use categories found across the three Reuse Plan Concept maps. One should keep in mind that the various non-agricultural land uses shown on the concept maps are future land use designations. Until market demand justifies their development, these areas would remain in their existing agricultural or natural condition use.

Natural Conservation Areas

Land shown with this designation would remain in its natural state into the future, featuring forests, native prairie areas, and other existing natural systems. Compatible activities such as hunting, fishing, camping, and hiking are potential uses within the Natural Conservation Areas.

Agriculture & Forestry

These areas would allow for a variety of agricultural uses typically found in the region (such as planted crops and livestock grazing) as well as tree plantations and timber harvesting. Native prairie areas found within Agriculture & Forestry land could be preserved or used for prairie hay or other agricultural production.

Business & Technology

Areas identified as Business & Technology could accommodate a wide variety of uses such as office / industrial parks, research and testing facilities, manufacturing and production, storage and distribution, energy production, agribusiness, educational, and institutional uses.

Highway-Oriented Commercial

This designation could include uses such as auto / truck service plazas, restaurants, hotels, and convenience stores.

Energy Research & Production

An area specifically designated for larger-scale energy production and energy-related educational, research and development, storage, and distribution activities.

Agribusiness Education & Research

This area could include test fields, greenhouses, and similar facilities or sites related to agribusiness education and research.

Natural Systems Education & Research

An area that could include sites or facilities oriented to education and research on the region's flora and fauna, climate, geology, hydrology, or other environmental conditions.

Shared Research and Conference Facilities

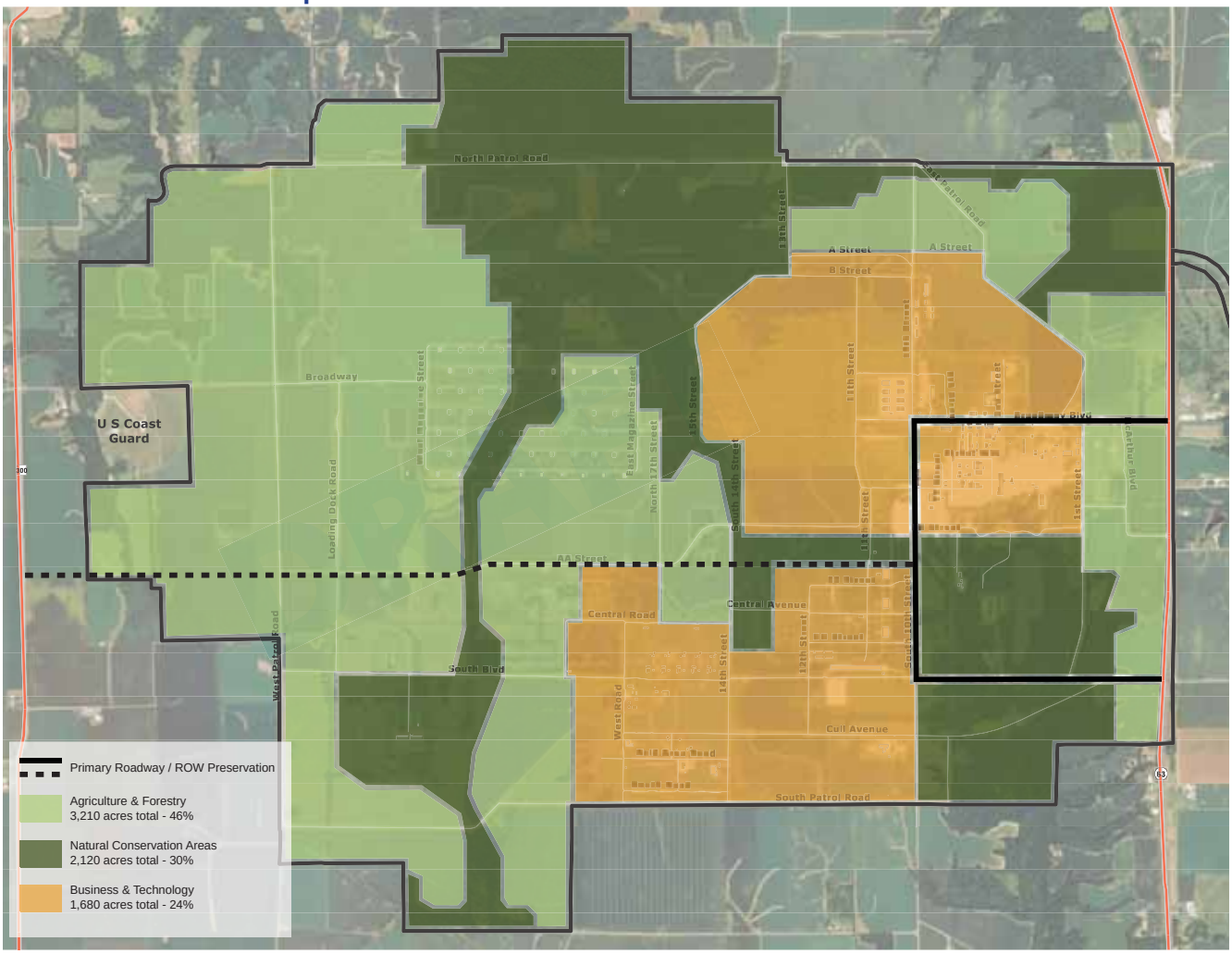
An area designated for a conference facility shared by all users at the Depot and available to the community at large, as well as other educational, research, or support facilities and services that promote collaboration or economies of scale for Depot users.

Reuse Plan Concept "A" Summary and Map:

Plan Concept A provides the most amount of land for both agriculture and natural areas, with approximately 76% of the land designated for those uses, and approximately 24% for business and technology development. Plan Concept A focuses business and technology

uses primarily in the areas where current or former military facilities exist, and buffers those uses from Highway 63 with agriculture. The transportation framework for Plan Concept A minimizes new roadway investments by upgrading existing Depot roads to create a simple U-shaped arterial road that provides access to the three business and technology areas. **Exhibit X: Reuse Plan Concept "A"** is presented below:

Exhibit X: Reuse Plan Concept "A"

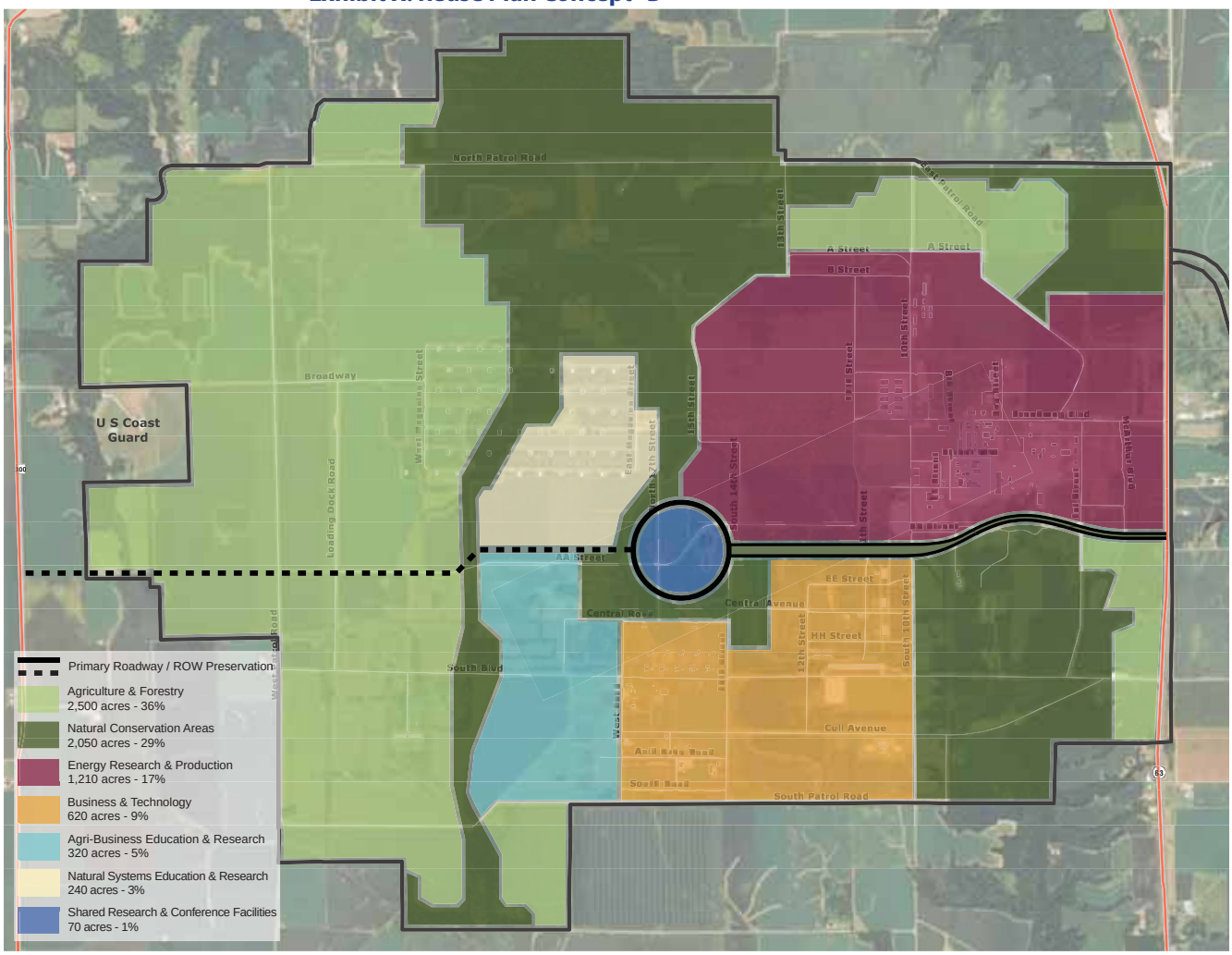


Reuse Plan Concept "B" Summary and Map:

Plan Concept B provides approximately 65% of the land for natural conservation and agricultural development, and approximately 35% for other types of development. Plan Concept B promotes an energy and research emphasis to the Depot's reuse. Specific areas are designated for energy production, business and technology, agribusiness, and natural systems uses and research activities, that are oriented around a central "commons"

that would provide land for a conference center and other shared or support services and facilities. The transportation framework for Plan Concept B includes a new arterial parkway that provides access to the various land use districts and emphasizes the central hub. **Exhibit X: Reuse Plan Concept "B"** is presented below:

Exhibit X: Reuse Plan Concept "B"

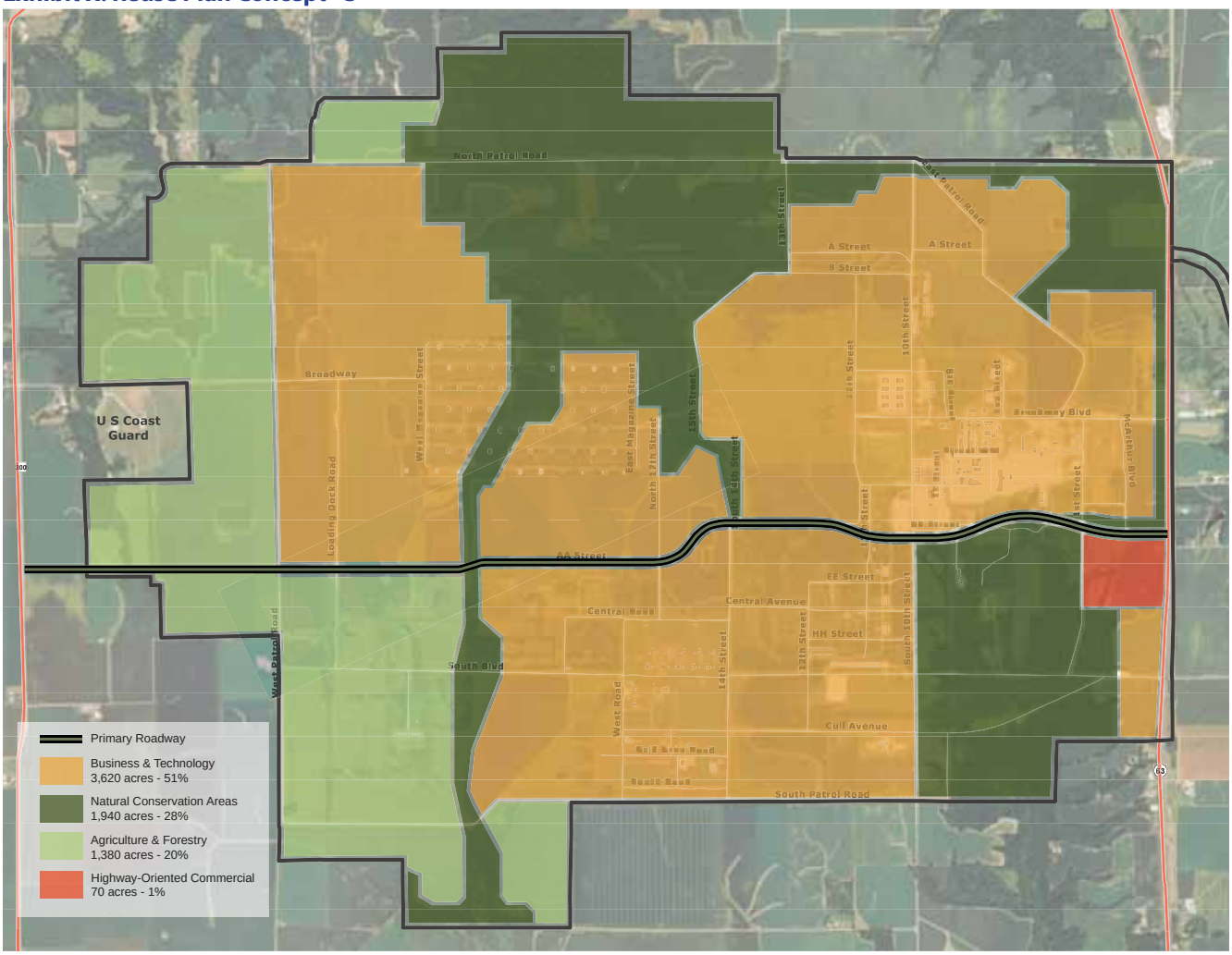


Reuse Plan Concept "C" Summary and Map:

Plan Concept C provides a closer balance between natural conservation, agriculture, and industrial development, with approximately 48% of the land designated for natural conservation or agriculture, and approximately 52% for business and technology uses. Plan Concept C consolidates agricultural uses to the western edge of the Depot and designates the remaining non-conservation areas for general business and technology uses to create multiple "mega-site" development areas. Smaller districts for business uses

are provided along Highway 63. Plan Concept C's transportation framework relies on an arterial parkway across the Depot that provides access to all land use districts and creates a regional east-west connection between Highways 63 and 71. **Exhibit X: Reuse Plan Concept "C"** is presented below:

Exhibit X: Reuse Plan Concept "C"



Preferred Reuse Plan

The three Reuse Plan Concepts were reviewed and commented on by the NeCDRA, real estate developers, economic development experts, members of the farming and natural resources communities, and the public in general. Based on that feedback as well as the NeCDRA's guiding principles, public visioning results, and existing physical, market/economic, and environmental conditions, the planning team crafted from the Reuse Plan Concepts' various themes and elements a Preferred Reuse Plan that was presented

at Public Meeting # 3 in September, 2009 (see **Chapter 2: Public Engagement**). After citizen feedback at Public Meeting # 3 and additional review by the NeCDRA and the planning team, the Preferred Reuse Plan map became the Newport Chemical Depot Reuse Master Plan map and the basis for the Reuse Master Plan itself, as discussed in the next Chapter.

Newport Chemical Depot Reuse Plan 5

Section in progress

6 Plan Implementation

Section in progress

Appendix A: Public Engagement

All appendices in progress

Appendix B: ERA Market/Economic Report

Appendix C: Existing Conditions Maps

Appendix D: Facility Assessment Sheets

Appendix E: Environmental Assessment Supporting Materials

Appendix F: Notice of Interest

Applications Received