



U.S. DEPARTMENT OF ENERGY

OFFICE OF SCIENCE
OAK RIDGE, TN

REQUEST FOR PROPOSAL NO. DE-ORR-0037830

To be considered for award, offers conforming to the requirements shall be received no later than 4:00 pm EST, Monday, December 1, 2025.

Change Log

Version	Date	Description
1.0	09/30/2025	Initial Release
1.1	10/14/2025	Revisions for clarification made to Section 1.0 - Executive Summary, paragraph d. and Section 3.4 – Eligible Offeror(s) and Project Configuration

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1.0 EXECUTIVE SUMMARY

a. The United States Department of Energy (the “Government” or “DOE”) is committed to maintaining and enhancing American leadership in Artificial Intelligence (AI) and energy generation to promote economic competitiveness, national security, and scientific advancement. Executive Order (EO) 14318, Accelerating Federal Permitting of Data Center Infrastructure; EO 14179, Removing Barriers to American Leadership in Artificial Intelligence; EO 14299, Deploying Advanced Nuclear Reactor Technologies for National Security and EO 14154, Unleashing American Energy direct agencies to leverage federal assets to support this objective. AI infrastructure, including data centers, is critical for AI training, inference, scientific research, and various essential services, while energy generation is critical for protecting the United States’ economic and national security and military preparedness by ensuring that an abundant supply of reliable energy is readily accessible.

b. The Atomic Energy Act of 1954, 42 U.S.C. 2011, et. seq., as amended, authorizes DOE to grant leases or easements to non-federal entities for the use of real property. The Lease is only intended to be for the use of federal land and does not include any utilities or other services from the Government, unless as otherwise negotiated with the Government.

c. Pursuant to the foregoing EOs and statutory authorities, the Oak Ridge National Laboratory Site Office (“OSO”) in collaboration with the Oak Ridge Office of Environmental Management (“OREM”), is issuing this Request for Proposals (the “RFP”) to solicit proposals from entities interested in entering into a long-term Lease Agreement(s) covering real property located in Oak Ridge, TN (the “DOE Sites”). The Lease Agreement(s) with the Government that would result from this RFP are for the purposes of designing, financing, permitting, developing, constructing, installing, owning, maintaining, operating, and decommissioning AI data center and/or energy generation infrastructure (the “Project”) including, but not limited to: data center facilities with specialized computing equipment; associated cooling facilities; energy supply infrastructure; transmission and storage infrastructure; and other ancillary facilities and equipment reasonably required for the installation, maintenance, operation, decommissioning, and site restoration/remediation of AI data center and/or energy generation infrastructure given the available real property described herein.

d. Eligible Project configurations include Integrated AI Data Center and Energy Projects (Site Area A and Site Area B, or Site Area B only), Phased Integrated AI Data Center and Energy Projects (Site Area A and Site Area B, or Site Area B only), or Energy Infrastructure Projects (Site Area B only). In all cases, proposals should include new energy generation or a plan to partner with a new energy generation effort in the region. Examples of eligible project configurations:

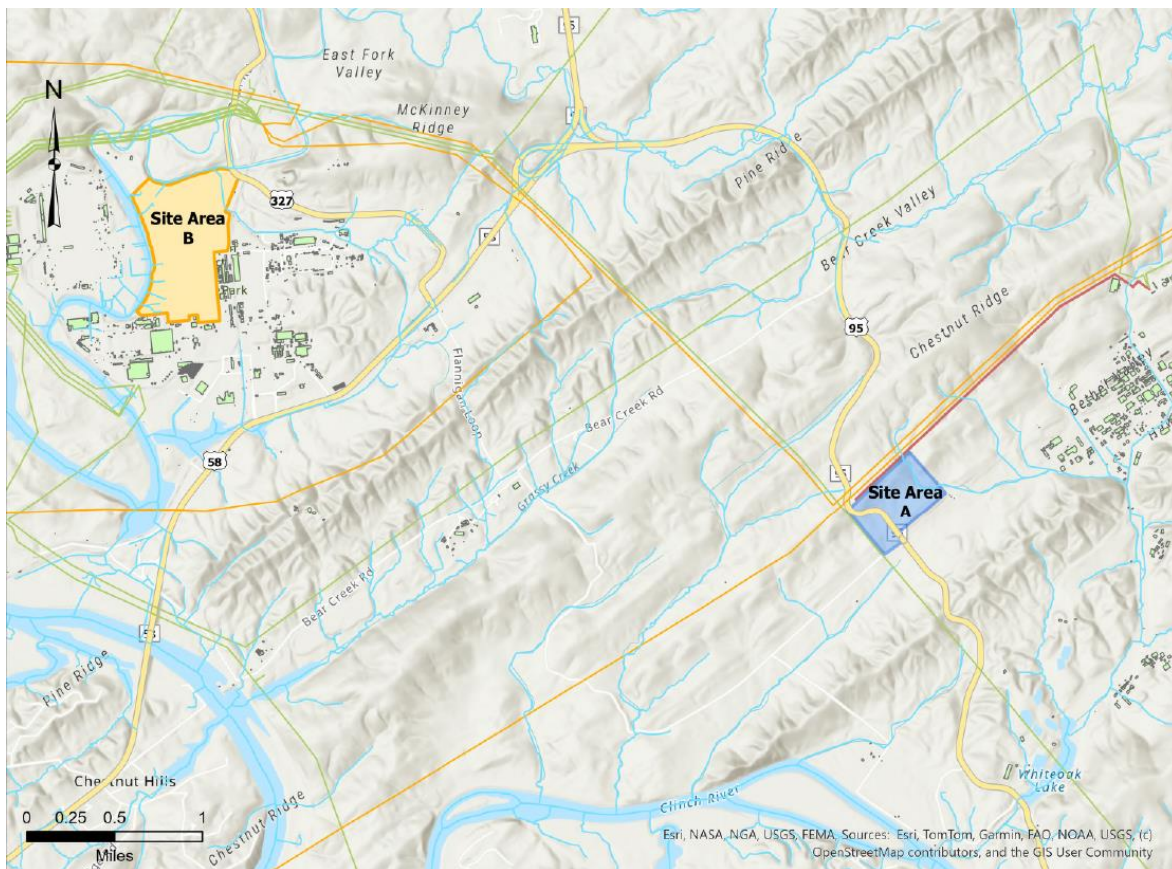
1. Site Area B is utilized for both AI Data Center development and a supporting energy project (integrated or phased integrated).
2. Site Area A is utilized for AI Data Center development. Site Area B is utilized for a supporting energy project (integrated or phased integrated).
3. Site Area A, Site Area B, or both Site Areas A and B, are utilized for AI Data Center development, and the Offeror plans to work with a supportive new energy generation effort in the region.
4. Site Area B is utilized for new energy generation infrastructure. See Section 3.4, Eligible Offeror(s) and Project Configurations, for further details.

e. The Government is interested in proposals for rapid development of AI data center capacity to meet commercial market needs and of generation to power data center capacity. The Government understands that the generation may come online at a different time from the data center that is part of the same proposal or an affiliated proposal. For example, a first phase with a rapidly developed data center using grid power may be followed by a second phase with data center expansion and new generation.

f. The Government is open to considering proposals that integrate innovative energy generation and storage technologies with the AI data center infrastructure, particularly geothermal and nuclear generation technologies. The Offeror(s) shall be responsible for the Project's interconnection of new energy generation with the electric utility provider.

g. The Government has identified available tract(s) of land (the "Property") as depicted in Appendix A. Offeror(s) may propose Projects on all or a portion of this land, and the Government may consider multiple Projects. The Government further anticipates that there may be multiple AI data center or energy generation infrastructure facilities, with each located on a different tract of the Property, and that the size of each tract of land will depend on the proposed AI data center or energy generation infrastructure technology to be deployed. Not all of the proposed Project must be on the property.

h. This RFP is for the development of land in Oak Ridge, TN, identified as Site Area A (OSO property) and/or Site Area B (OREM property), as depicted below and more specifically identified in Appendix A.



Oak Ridge, TN – Location Map. Site Area A / Site Area B

Offeror(s) may submit proposals to develop a single tract or multiple tracts. The combined available acreage consists of approximately 245 +/- acres. Proposals must clearly identify the Site Area and proposed use of the tracts of land, as described in Section 4.3.

Site Area A - Office of Science: AI Data Center only

The Site Area provides a total of approximately 95 +/- acres located at the intersection of Bethel Valley Road and TN Highway 95, in the City of Oak Ridge immediately west of Oak Ridge National Laboratory (ORNL). Incorporated within the 95 +/- acres are two parcels, one consisting of approximately 73 acres (northeast corner of intersection) and approximately 22 acres (northwest corner of intersection). Offeror(s) may submit proposals to develop the Property, as described in Section 2.0 and Appendix A.

Site Area B – Office of Environmental Management: AI Data Center and/or Energy Generation Infrastructure Facility

The Site is in an area known as the East Tennessee Technology Park (ETTP) or Heritage Center, formerly the site of the K-25 Gaseous Diffusion Plant (for uranium enrichment) constructed as part of the Manhattan Project during WWII. Offeror(s) may submit proposals to develop up to 150 acres of the Property, including the defined National Historic Preservation (NHP) Footprint (approximately 83 acres, with restrictions) and the K-25 Building Site (part of the Manhattan Park National Historical Park), and additional land available (up to 67 acres), as described in Section 2.0 and Appendix A.

The Government may decide to allow development on any, all, or none of the tracts proposed in the Offeror(s)' response. Should the Government decide to allow development of multiple tracts, it may choose to select additional proposals from this RFP, conduct a new competition, or address the use of these lands in another manner, consistent with applicable laws. In accordance with and subject to the terms, requirements, and conditions of this RFP, the Government will evaluate all proposals received from Offeror(s) and may qualify and select one or more Offeror(s) with whom to enter into Lease negotiations. The Government may also decide to conduct a "down-select" while evaluating proposals, as discussed in Section 5.1. An Offeror(s) with whom the Government enters into a written and legally binding Lease Agreement is hereinafter referred to as a "Selectee".

The Government's objectives in issuing this RFP and potentially entering into a Lease Agreement(s) for the Property include, but are not limited to, the following (collectively, the "Objectives").

- i. Enter into a Lease Agreement for the Property (or portion thereof) for the purposes set forth in Section 1.0.c in accordance with DOE's legal authorities and consistent with the terms documented in the RFP.
- ii. Enter into a Lease Agreement for use of the Property in a manner consistent with the following AI infrastructure priorities and strategic goals (**Site Area A**):
 1. Enhancing national AI computing capacity through secure and scalable infrastructure, including innovative compute, cooling, and power delivery/control technologies for AI training and/or inference workloads.

2. Supporting DOE mission priorities in science, energy, research and development (“R&D”), and/or national security.
 3. Identifying opportunities that could support ORNL’s high-performance computing (HPC), AI, quantum computing (QC) needs for secure, scalable, energy- and water-efficient infrastructure beginning as early as October 2028/Fiscal Year 2029.
 4. Providing infrastructure that may align with ORNL mission programs and R&D priorities, prioritize DOE ORNL’s sovereign AI capabilities, and materially benefit the regional innovation economy.
 5. Providing high-value opportunities for collaboration among DOE ORNL, the Offeror, its partners, and other industries.
 6. Establishing an ecosystem where United States-based technology companies can work within a consortium model for accelerating innovation in HPC, AI, QC, and specific industry sectors such as energy, pharma, or aerospace.
- iii. Enter into a Lease Agreement for use of the Property in a manner consistent with the following AI infrastructure priorities and strategic goals **(Site Area B)**:
 1. Enhancing national AI computing capacity through secure, scalable, and energy- and water-efficient infrastructure, including innovative compute, cooling, and power delivery/control technologies for AI training and/or inference workloads.
 2. Supporting DOE mission priorities in science, energy, and/or national security.
 - iv. Enter into a Lease Agreement for use of the Property in a manner consistent with the following energy infrastructure priorities and strategic goals **(Site Area B)**:
 1. Ensuring an abundant, readily accessible supply of reliable energy.
 2. Advancing the commercial readiness of domestic technologies, particularly nuclear and geothermal, for energy generation, distribution, and/or storage.
 - v. Enter into Lease Agreement(s) for use of the Property in a manner that minimizes risk to the Government.
 - vi. Enter into a Lease Agreement(s) for use of the Property in a manner that is compatible with the Government mission and adjacent Government uses at DOE Oak Ridge, TN Site.
 - vii. Enter into a Lease Agreement for use of the Property in a manner that minimizes and/or mitigates environmental and cultural impacts.
 - viii. Enter into a Lease Agreement for use of the Property consistent with best commercial practices.
 - ix. Enter into a Lease Agreement for use of the Property in a manner that supports relationships with State and local Governmental authorities, federally recognized Tribes, and the surrounding communities.

2.0 EXISTING CONDITIONS

There are two areas of consideration available for the proposed developments. Site Area A is available for the sole purpose of providing an area(s) for an AI Data Center. Site Area B is available for the purpose of providing an area(s) for an AI Data Center and/or Energy Generation Infrastructure Facility.

Site Area A – AI Data Center

Background: The DOE’s Oak Ridge National Laboratory Site Office (“OSO”) oversees multiple sites, including ORNL, Oak Ridge Institute for Science and Education, and general management of the surrounding government lands. ORNL is the largest DOE science and energy laboratory under OSO oversight, occupying roughly 4,400 acres on the Oak Ridge Reservation (“ORR”). The lab employs more than 7,000 staff, supported by thousands of contractors, and an active community of visiting researchers. ORNL hosts world-leading user facilities such as the Spallation Neutron Source (“SNS”) and the Frontier supercomputer, currently one of the most powerful computing systems in the world. ORNL’s annual operating budgets exceed \$2 billion, with significant capital investment in facilities, utilities, and advanced research infrastructure. Key strengths of the Oak Ridge, TN area include:

- Federal Anchor: Oak Ridge National Laboratory (4,400 acres, ~7,000 employees, >\$2B annual budget) ensures long-term infrastructure investment and stable demand.
- Power Supply: The Tennessee Valley Authority (“TVA”) provides abundant, low-cost, reliable electricity with redundant transmission and renewable integration options. Industrial power rates are competitive nationally.
- Connectivity: High-capacity fiber networks tied to ORNL and regional carriers; proximity to DOE supercomputing facilities provides robust backbone connectivity.
- Workforce: Concentration of engineers, technicians, and skilled trades accustomed to mission-critical facilities and high compliance standards.

Site Mission: OSO/ORNL mission focuses on advancing discovery science to address national priorities, including energy security, environmental sustainability, and national security.

Key objectives include:

- Energy Innovation: Develop technologies for secure, affordable, and reliable energy to support economic growth and energy independence.
- Scientific Research: Conduct multidisciplinary research that translates advancements into real-world applications, addressing national priorities.
- National Security: Provide solutions to safeguard critical infrastructure and address emerging threats through scientific breakthroughs.
- Collaboration and Innovation: Foster partnerships with industry, academia, and government to drive innovation and create job opportunities.

Research focus areas include:

- High-Performance Computing: Integrate advanced computing technologies, including AI and quantum computing, to enhance research capabilities.
- Nuclear Science: Conduct research in nuclear materials and safety to support energy and security initiatives.

- Environmental Science: Address environmental challenges through innovative research and technology development.
- ORNL's mission in 2025 emphasizes its role as a leader in scientific research and technology development, aiming to make impactful contributions to society and the economy.

Property Description: The proposed land area is located in Bethel Valley, in the southwestern portion of the Oak Ridge Reservation (“ORR”) and identified as Site Area A. Bethel Valley is the site of the main plant of ORNL. Site Area A is located on the northerly side of the intersection of Bethel Valley Road and TN Highway 95. The Site Area provides a total of approximately 95 +/- acres located at the intersection of Bethel Valley Road and TN Highway 95, in the City of Oak Ridge immediately west of ORNL. Incorporated within the 95 +/- acres are two parcels, one consisting of approximately 73 acres (northeast corner of intersection) and approximately 22 acres (northwest corner of intersection). The Property is to be leased as-is, with opportunity to investigate as part of the due diligence. Detailed Property information is contained in documentation provided in Appendix A – Site Area A.

Utilities and Infrastructure: TVA provides reliable, large-scale electric power, with options for industrial rate structures and renewable integration. The region benefits from a resilient grid, redundant transmission, and established rights-of-way supporting heavy industrial loads. High-capacity fiber optic networks link ORNL, nearby industrial parks, and the Knoxville metropolitan area. The region’s water, wastewater, and waste-handling infrastructure is scaled to federal operations, with expansion potential for new commercial developments.

Environmental Considerations: Site-specific environmental conditions, potential hazards, and any known environmental constraints or sensitivities are summarized with references listed in Appendix A – Site Area A.

Security and Access: There are no site-specific security protocols or access restrictions to the Property. Site Area A is outside of the access-controlled (fenced) area of the Laboratory, bisected by TN Highway 95. Adjacent areas, specifically to the West of the identified parcel, and including easements and patrol roads, are controlled areas with specific access restrictions.

Local Community Context: The Property is within the DOE ORR, which is within the City of Oak Ridge, Roane County, Tennessee. Federal property within the municipal limits is not subject to local zoning regulation; however, new development will be coordinated with local municipalities. Due to the history and environmental constraints of the area, DOE can provide further information to guide soil disturbance activity and understand site restrictions. Construction activity will require approval by DOE, the regional office of the U.S. Environmental Protection Agency (“EPA”), and the Tennessee Department of Environment and Conservation (“TDEC”).

Site Area B – AI Data Center and/or Energy Generation Infrastructure Facility Energy Generation

Background: The former K-25 building was once the largest industrial building in the world and contributed significantly to the Manhattan Project that ultimately ended WWII. Because of its historical significance, there have been multiple attempts to preserve any original aspects of the facility, but these attempts proved futile due to the age and deteriorated state of the facility. The entire building was demolished in 2013, and per an agreement, as amended in 2019 and 2021 under Section 106 of the National Historic Preservation Act (“NHPA”), hereafter referred to as the 2012 Memorandum of Agreement (2012 MOA), the parties agreed that DOE would preserve the original slab and construct an Equipment Building and a Viewing Tower. The Equipment Building was intended to be a replica cross-

section of the K-25 building and to be used to display authentic (original) equipment while the Viewing Tower was intended to provide a view of entire footprint of the K-25 building. The plan for an Equipment Building and a Viewing Tower plan was cost prohibitive and was not constructed. A Viewing Platform was constructed (now called the William Wilcox Interpretive Center) which overlooks the former K-25 Footprint. In 2015, the K-25 Building Footprint became part of the Manhattan Project National Historical Park, as codified in Subsection 3039 of the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015 (the Manhattan Project National Historical Park Act). The Manhattan Project National Historical Park Act, 2012 MOA, and associated amendments currently restrict development on the K-25 Building Site and restrict uses to commemoration and interpretation activities. The MOA parties can amend the MOA to permit development consistent with the purposes of the Manhattan Project National Historical Park Act. Further, a primary objective of the establishment of the Manhattan Project National Historical Park, the 2012 MOA, and associated amendments has been to demonstrate the enormous scale of the K-25 building (which was one mile from end to end and covered over 44 acres) and generally enhance the public’s understanding of the Manhattan Project in Oak Ridge, TN. Because a primary objective has been to demonstrate the scale of the K-25 building, it is presumed that a proposed energy generating facility or AI data center would need to convey the scale of the K-25 building, particularly as seen from the perspective of the Interpretive Center / Viewing Platform (i.e., be constructed to draw attention) (i.e., highlight the footprint of the former building) in a design that is acceptable to the Signatory Parties of the 2012 MOA, as amended. As a conceptual example, a rendering of the Equipment Building replica is included in Appendix A.

Site Mission: OREM’s mission since 1996 has been to remediate the site and reindustrialize the site for the economic benefit of the community. Potential use of the Property for national advancement and innovation can draw strong correlation with the historical purpose of the Manhattan Project (and particularly the K-25 Building Footprint) and must be subject to agreement with the Signatory and Invited Signatory parties to the 2012 MOA.

Property Description: The Property is to be leased as-is, with opportunity to investigate as part of due diligence. Detailed Property information is contained in documentation provided in Appendix A. The NHP K-25 Footprint is a National Historical Park and is subject to historical interpretation through agreement among the Signatory and Invited Signatory parties to the 2012 MOA, as amended. Development is contingent upon agreement between these parties. Development on the Footprint may involve an accurate representation (or replica) of the former buildings and orientation of the former K-25 plant. The additional land available (up to 67 acres) provides a buffer around much of the NHP Footprint up to Poplar Creek, excluding a DOE waste area, and has been used for vehicular circulation, staging, and outdoor storage. The Property is located in the center of the industrial park, with shared access to SR 327/Blair Road and a combination of shared and public access to SR 58/Oak Ridge Turnpike and is located 5 miles west of Interstate Highway I-40.

Utilities and Infrastructure: Electricity to the Property is distributed by the City of Oak Ridge Utility Business Office (UBO) by contract with TVA. The Property contains overhead lines at the north end of the property, with major TVA transmission lines crossing Heritage Center nearby. Existing and future capacity shall be determined through partnership with these entities. Public water and sanitary sewer service is available from the south end and east of the property, provided by the City of Oak Ridge. Natural gas is available and provided by the Oak Ridge Utility District. Fiber optic connectivity is also available. See Site Map in Appendix A.

Environmental Considerations: Site-specific environmental conditions, potential hazards, and any known environmental constraints or sensitivities (wetlands, protected species, flood zones, archaeological sites, etc.) are summarized with references listed in Appendix A.

Security and Access: There are no site-specific security protocols or access restrictions to the Property; however, internal roads will need to accommodate shared access with adjacent property owners and DOE. At the south end of the property, the NHP footprint is adjacent to the K-25 History Museum and K-25 Interpretive Center, which receive visitors daily, and where appropriate safety and access controls will need to be coordinated.

Local Community Context: Heritage Center is located within the City of Oak Ridge, TN, with an estimated population of 34,000, and part of the Greater Knoxville metropolitan area of about 900,000. The Property is surrounded by non-federal-owned property and will be expected to maintain alignment with local zoning regulation for Industrial use and construction. DOE administers a Site Reuse Suppose Program to guide soil disturbance activity and educate users about site-specific restrictions. Certain construction activity requires approval by DOE, the regional office of EPA, TDEC, and the Department of the Interior, depending on location and extent anticipated construction activity.

2.1 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

DOE's decision whether to execute a lease is subject to several environmental laws, including the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321, et seq.) and direction provided in EO 14318 and the DOE NEPA Implementing Procedures (<https://www.energy.gov/nepa/articles/doe-nepa-implementing-procedures-june-2025>). NEPA requires federal agencies to consider the potential environmental impacts of their proposed major federal actions prior to making a decision. While NEPA compliance is a federal agency responsibility and the ultimate decision remains with the federal agency, all Qualified Offeror(s) will be required to assist in the timely and effective completion of the NEPA process in the manner most pertinent to their proposed Project.

Applicable to Site Area A Only:

DOE may choose to enter a third-party agreement wherein the Qualified Offeror(s) pays an environmental contractor of DOE's choosing to prepare the required NEPA documentation, and DOE directs the work of that environmental contractor. DOE must fully comply with NEPA prior to Lease Agreement execution, or if the NEPA process is not completed before lease agreement execution, then the agreement shall be contingent on completion of the NEPA process. Additionally, Qualified Offeror(s) have the option to prepare any required environmental impact statement or environmental assessment (EA) based on Section 2.3 of DOE's new NEPA implementing procedures.

As highlighted in Section 3.0 of DOE's NEPA implementing procedures, DOE will use all available means to improve the efficiency of its implementation of NEPA. DOE will make a determination of the required level of NEPA review as soon as practicable after identifying that it has a proposal requiring NEPA review.

If DOE has established a categorical exclusion (Appendix B of Title 10, Code of Federal Regulations (CFR), Part 1021 and DOE's NEPA implementing procedures) or adopted under section 109 of NEPA another agency's categorical exclusion listed in the other agency's NEPA procedures (42 U.S.C. § 4336(c)) (Appendix C of DOE's NEPA implementing procedures), DOE will apply the categorical exclusion(s), as appropriate. If DOE cannot apply a categorical exclusion to the proposed action, DOE will evaluate significance of the proposed action's reasonably foreseeable effects consistent with Section 3.2 of DOE's NEPA implementing procedures. (See Section 2.2, Determining the required level of NEPA review, for further information.)

Applicable to Site Area B Only:

The lease footprint shown in Figure 1, Site Area B, was addressed as part of the NEPA Environmental Assessment (EA) for Transfer of Land and Facilities within the East Tennessee Technology Park and Surrounding Area, Oak Ridge, TN (DOE/EA-1640), October 2011, which received a Finding of No Significant Impact (FONSI) for a range of industrial uses. DOE will review proposed projects to determine whether they fall within the allowable uses of the above referenced NEPA EA FONSI, or whether they fall within a NEPA categorical exclusion, or whether further NEPA evaluation is needed. For example, DOE may prepare a supplement analysis to determine whether a supplement to the 2011 environmental assessment is required consistent with Section 3.9 of DOE's NEPA implementing procedures. If DOE has established a categorical exclusion (Appendix B of Title 10, CFR, Part 1021 and DOE's NEPA implementing procedures) or adopted under section 109 of NEPA another agency's categorical exclusion listed in the other agency's NEPA procedures (42 U.S.C. § 4336(c)) (appendix C of DOE's NEPA implementing procedures), DOE will apply the categorical exclusion(s), as appropriate. If the proposed project falls outside the allowable uses in the above reference 2011 EA, and if DOE cannot apply a categorical exclusion to the proposed action, DOE will evaluate significance of the proposed action's reasonably foreseeable effects consistent with Section 3.2 of DOE's NEPA implementing procedures. (See Section 2.2, Determining the required level of NEPA review, for further information.)

If DOE determines that further NEPA evaluation is needed, DOE may choose to enter a third-party agreement wherein the Qualified Offeror(s) pays an environmental contractor of DOE's choosing to prepare the required NEPA document, and DOE directs the work of that environmental contractor. DOE must fully comply with NEPA prior to realty agreement execution, or if the NEPA process is not completed before realty agreement execution, then the agreement shall be contingent on completion of the NEPA process. Additionally, Qualified Offeror(s) have the option to prepare any required environmental impact statement or environmental assessment, including related supplements and supplement analyses, based on Section 2.3 of DOE's new NEPA implementing procedures (DOE NEPA Implementing Procedures June 30, 2025) available at <https://www.energy.gov/sites/default/files/2025-06/2025-06-30-DOE-NEPA-Procedures.pdf>.

As highlighted in Section 3.0 of DOE's new NEPA implementing procedures, DOE will use all available means to improve the efficiency of its implementation of NEPA. DOE will make a determination of the required level of NEPA review as soon as practicable after identifying that it has a proposal requiring NEPA review.

DOE may use an early scoping process to help determine the required level of NEPA review. DOE may engage any applicant and other parties, as will be beneficial, in the early scoping process. An early scoping process may include, as appropriate to the proposal, steps such as: preliminarily identifying the federal agencies and other parties that will be involved and that have decisions to make related to the proposal; the range of reasonable alternatives and rationale for excluding certain alternatives from detailed analysis; the scope of environmental effects to be analyzed and rationale for excluding certain environmental effects from analysis; and the schedule.

DOE shall develop and modify, as appropriate, a schedule for preparation of any required environmental assessment or environmental impact statement that meets the requirements, including page limits and deadlines, in NEPA and DOE's NEPA implementing procedures.

2.2 COMPREHESIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)

Applicable to Site Area A Only:

The proposed land is subject to land use controls applicable to this area pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). These land use controls include a prohibition on groundwater use and residential use. Reference <https://www.energy.gov/ehss/comprehensive-environmental-response-compensation-and-liability-act>.

Applicable to Site Area B Only:

The proposed land is subject to land use controls applicable to this area of ETPP pursuant to CERCLA. These land use controls include a prohibition on groundwater use, a requirement for DOE approval for excavations, and a requirement for passive vapor intrusion mitigation. DOE OREM has established the Site Reuse Support Team to provide assistance in incorporating CERCLA land use controls into the planning, design, and execution of construction work at ETPP.

3.0 GENERAL LEASE AGREEMENT REQUIREMENTS

This Section 3, inclusive of sub-sections, lists general requirements that shall be complied with by the Selectee(s) and/or the Government to enter into a Lease Agreement for the Property (collectively, the “General Lease Agreement Requirements”). This is not an exhaustive list of requirements; other requirements may apply to the use of the Property. The Government has the right to impose any and all requirements necessary or desired to ensure the Lease Agreement is in compliance with applicable local, State, and Federal laws, regulations, and DOE policies.

3.1 TERMS AND REQUIREMENTS

- a. Transfers, assignments, and subleases are not permitted without prior written approval by DOE, which may be withheld for any justifiable reason.
- b. The Government and its agents and employees reserve the right to enter the Property at reasonable times, and at any time in an emergency, without charge, liability, or abatement of rent, for any purposes not inconsistent with the Selectee(s)’ permitted use.
- c. The Government shall have the right to terminate the Lease Agreement under certain conditions to be defined in the Lease Agreement.
- d. The Selectee(s)’ use(s) of the Property shall be compliant with the Lease Agreement terms, all applicable laws and regulations, and compatible with the mission of the DOE Site at which the Property is located.
- e. The Selectee(s) shall ensure that insurance policies required are obtained and maintained throughout the term of the Lease Agreement in accordance with the requirements set forth in Appendix B (the “Insurance Requirements” attached hereto and incorporated herein by this reference).
- f. Any and all utilities and services necessary or required for the Project as a result of, or related to, the Lease Agreement shall be coordinated between the Offeror(s) / Selectee(s) and service provider, at Offeror(s) / Selectee(s) sole cost and expense, unless as otherwise negotiated with DOE. DOE will enter into separate Easement Agreements with the respective service providers (e.g., electric, gas, water, and communication) after Offeror(s) / Selectee(s) provides all drawings, plans, specifications to DOE for review, approval, and concurrence. Services obtained or provided by the Offeror(s) must be compatible with existing site infrastructure. The cost of any improvements to the existing site infrastructure required to provide the services is the responsibility of the Offeror(s) and must comply with all site requirements and procedures.
- g. The Property would be leased as-is. Any preparation of the Property to make it suitable for the Selectee(s)’ operation such as clearing, grading, and erosion control shall be obtained and provided for by the Selectee(s), at its sole cost and expense, in accordance with NEPA and all local site requirements.
- h. The Selectee(s) are not permitted to interconnect to any DOE-owned electrical/utility infrastructure/assets without prior written approval by DOE, which may be withheld for any justifiable reason.
- i. The Selectee(s) will have full responsibility at their sole cost and expense to find and execute an agreement with the electric utility provider for an appropriate point of transmission-level interconnection, if required. This RFP does not require or otherwise obligate DOE to purchase any service or product from or of the Project. This RFP also does not require or obligate DOE to modify or upgrade existing infrastructure to accommodate interconnection.

j. At the present time there are no known or expected Lease Agreement expenditures related to this Project. In the event that Lease Agreement expenditures are later identified, they will be determined by the Government, prior to the execution of the Lease Agreement. Any requirement for any payment or obligation of funds by DOE pursuant to the Lease Agreement shall be subject to the availability of funds, and no provision herein shall be interpreted to require the obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. §1341, nor shall anything herein be construed to imply that the Congress will appropriate funds for any payments in accordance with the Lease Agreement.

k. Upon the expiration or earlier termination of the Lease Agreement, the Selectee(s) shall, at no cost to the Government and to the reasonable satisfaction of the Government, demolish or remove all or a portion of, as designated by the Government, structures or improvements located on the Property, abandon, vacate or remove utilities or other infrastructure from the Property, restore the Property and surrender the Property to the Government in the condition it existed on the date the Lease Agreement was executed, unless the Government, at its sole discretion and subject to applicable law, elects to retain all or a portion of the Lease Agreement improvements located on the Property, without compensation to the Selectee(s). In coordination with the DOE Site Office, Selectee(s) shall be responsible for conducting a baseline survey of the site in accordance with accepted standards and methods and consisting of but not limited to, vegetation mapping, wildlife and habitat assessments, and soil and hydrology profiles, including contaminants. Selectee(s) shall give the DOE Site Office a copy of the baseline survey prior to commencement of improvements at the site. Selectee(s) shall retain copies of the baseline survey in its records for the duration of the Lease. Upon expiration or earlier termination of the Lease, Selectee(s) shall consult with the DOE Site Office to identify an appropriate reference plot(s) elsewhere on DOE property that includes terrestrial and aquatic (lotic, riparian, and wetland) features of the type impacted by improvements to serve as a benchmark for restoration of the site. DOE Site Office shall establish reasonable restoration objectives, standards, and metrics for restoration completion and the duration of monitoring and adaptive management to achieve restoration targets, which is typically more than five years depending on the ecosystem type and the impacts to it. The baseline survey also may be used to inform mitigation actions under the Mitigation Plan. Additionally, the Selectee(s) shall be responsible for any remediation costs and/or other costs associated with returning the Property to the condition it existed on the date the Lease Agreement was executed.

l. Impact of environmental requirements on the Lease Agreement Structure:

Applicable to Site Area A Only: As this RFP and a potential Lease Agreement are/would be structured, DOE may complete NEPA, NHPA and other environmental requirements and then execute a Lease Agreement, or DOE may execute a conditional Lease Agreement that is contingent on the completion of NEPA, NHPA and other environmental requirements (including, for example, completion of the NEPA analysis and decision document such as a Finding of No Significant Impact (FONSI) or Record of Decision (ROD)) and a decision to proceed with the Project and satisfaction of NHPA). If, after completion of NEPA and NHPA, DOE decides not to proceed with the Project, the conditional Lease Agreement would be terminated. Prior to taking actions, before the completion of NEPA, the Selectee(s) must receive authorization from DOE. Specific actions shall be submitted in writing to the Real Estate Contracting Officer responsible for the administration of this action for assessment by the NEPA Compliance Officer (NCO). The NCO will make fact-specific determinations on whether the actions are allowable actions prior to completing the NEPA review. Examples of typically allowable activities include, but are not limited to, the preparation and submission of applications for licenses, permits, or other regulatory authorizations necessary for the Project; and

background regulatory work such as the production of engineering studies, feasibility studies, or designs that will be needed to support regulatory approvals. Examples of activities that are typically not allowable include construction of facilities or activities that are surface disturbing or involve exploitation of resources. DOE's NEPA analysis will be conducted pursuant to NEPA, as amended, 10 CFR part 1021 and DOE's NEPA implementing procedures.

Applicable to Site Area B Only: As this RFP and a potential Lease Agreement are/would be structured, DOE may complete NEPA, NHPA and other environmental requirements and then execute a Lease Agreement, or DOE may execute a conditional Lease Agreement that is contingent on the completion of NEPA, NHPA and other environmental requirements (including, for example, completion of the NEPA analysis and decision document such as a Finding of No Significant Impact (FONSI) or Record of Decision (ROD)) and a decision to proceed with the Project and satisfaction of NHPA). If, after completion of NEPA and NHPA, DOE decides not to proceed with the Project, the conditional Lease Agreement would be terminated. Prior to taking actions, before the completion of NEPA, the Selectee(s) must receive authorization from DOE. Specific actions shall be submitted in writing to the Real Estate Contracting Officer responsible for the administration of this action for assessment by the NEPA Compliance Officer (NCO). The NCO will make fact-specific determinations on whether the actions are allowable actions prior to completing the NEPA review. Examples of typically allowable activities include, but are not limited to, the preparation and submission of applications for licenses, permits, or other regulatory authorizations necessary for the Project; and background regulatory work such as the production of engineering studies, feasibility studies, or designs that will be needed to support regulatory approvals. Examples of activities that are typically not allowable include construction of facilities or activities that are surface disturbing or involve exploitation of resources. DOE's NEPA analysis will be conducted pursuant to NEPA, as amended, 10 CFR part 1021 and DOE's NEPA implementing procedures. With respect to NHPA, DOE's "agency official [may] authoriz[e] nondestructive project planning activities before completing compliance with section 106, provided that such actions do not restrict the subsequent consideration of alternatives to avoid, minimize or mitigate the undertaking's adverse effects on historic properties" consistent with 36 C.F.R. § 800.1(c).

3.2 FINANCIAL REQUIREMENTS

a. Offeror(s) must provide the Government documented evidence demonstrating that it has or will have all funds/financing necessary to accomplish and complete planning, design, permitting, construction, and operation of the AI data center and/or energy generation infrastructure facilities on or before the date of Lease Agreement execution. This could include but is not limited to a corporate parent guarantee of credit facility, an appropriate financial or investment company guarantee of credit facility, audited company financial statements, or other evidence of adequate financial resources that is acceptable to the Government.

b. The Selectee(s) shall not cross-collateralize or cross-default the Lease Agreement, or the assets or revenues of the Project, without prior written approval of the Government, which approval shall not be unreasonably withheld. The Selectee(s) shall not assign, pledge, provide as collateral, or otherwise transfer its interest in the Lease Agreement, in the net cash flows, or in the ownership of the Project, in whole or in part, without prior written approval of the Government. Where the Selectee(s) will be arranging financing for the Project, the Selectee(s) shall seek prior

written approval of the Government for any planned future changes in the Project ownership or cash flows.

c. The Selectee(s) shall be solely responsible for the payment of any property taxes, personal property taxes and assessments, including special assessments, utility rents, any charges imposed in lieu of ad valorem taxes, and all other taxes or charges levied against the Project (including the costs of contesting such taxes), or assessments levied against the Selectee(s) interest in the use of the Property or against its activities or operations on the Property.

d. **Applicable to Site Area A Only:** Prior to five (5) years of the expiration of the Lease or termination, the Government will require the Selectee(s) to establish and maintain a decommissioning bond to manage the demolition of improvements installed by or for the Selectee(s) on the Property and restore the Property to the condition in which it existed on the date the Lease Agreement was executed.

Applicable to Site Area B Only: The Government will require the Selectee(s) to establish and maintain a decommissioning bond to manage the demolition of improvements installed by or for the Selectee(s) on the Property and restore the Property to the condition in which it existed on the date the Lease Agreement was executed, upon the expiration or termination of the Lease Agreement.

e. The Selectee(s) shall, at its sole expense, obtain all required permits and approvals and pay all required expenses and fees in connection with its development of the Project.

f. **Applicable to Site Area A Only:** Should the Offeror(s) wish to pursue financing from DOE's Loan Programs Office (LPO), a description of the specific Project scope to be covered by the LPO loan should be provided. Offeror(s) that intend to seek LPO financing should specify how they plan to complete the Project while remaining in compliance with the denial of double benefit rule. For more information on this topic, please see Section 3.5, Integration with LPO.

Applicable to Site Area B Only: Should the Offeror(s) wish to pursue financing from DOE's Loan Programs Office (LPO), a description of the specific Project scope to be covered by the LPO loan should be provided. Offeror(s) that intend to seek LPO financing should specify how they plan to complete the Project while remaining in compliance with the denial of double benefit rule. DOE may execute a conditional Lease Agreement with the Selectee(s) that is contingent on the finalization of a LPO agreement for a loan, if the success of the proposed Project is dependent on LPO financing. For more information on this topic, please see Section 3.5, Integration with LPO.

3.3 DEVELOPMENT AND USE REQUIREMENTS

- a. The Government may enter into a Lease Agreement that would include the following periods:
 - i. An initial development period to establish Project requirements, to complete regulatory and permitting requirements such as National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), and other applicable regulatory requirements, secure Project financing, complete Project design, order long lead-time items, and complete any other tasks required to begin construction of the AI data center and/or energy generation infrastructure facilities. (See Section 3.1.1. above for further discussion of NEPA and allowable interim actions,

- prior to the completion of NEPA.) The development period for the Project(s) should include the appropriate schedule to support permitting and approvals, such as utility interconnection agreements, as well as licensing of the energy generation assets, if required. For nuclear reactors, licensing can be pursued through either the U.S. Nuclear Regulatory Commission (NRC) or through DOE authorization.
- ii. A Project construction timeline consistent with commercial best practices for constructing a project of the proposed type. A construction timeline for each major component of the Project should be included.
 - iii. An initial operations base period for the AI data center or energy generation infrastructure, prior to any potential renewal periods.
 - iv. **Applicable to Site Area A Only:** Required decommissioning, and site restoration/remediation is required no later than 24 months prior to the end/termination of the Lease Agreement, unless amended in writing to DOE.
 - v. **Applicable to Site Area B Only:** Required decommissioning, and site restoration/remediation is expected to occur during a 24-month period after the end/termination of the Lease Agreement, unless amended in writing to DOE.
- b. All development activities on the Property shall be in accordance with applicable Federal, State, and local laws, rules, regulations, and ordinances, including building codes, as they may be amended from time to time.
 - c. The Project shall be viable without any commitment or contribution, monetary or otherwise, from the Government (potential financing opportunities from DOE's Loan Programs Office (LPO) notwithstanding; see Section 3.5).
 - d. All development and construction on the Property shall be compatible with the plans, programs, and missions of DOE Site at which the Property is located.
 - e. Development and construction on the Property will be subject to DOE security requirements, as deemed acceptable to the Government.
 - f. Relocation of existing improvements on the Property, if any, shall be at the Selectee(s)' sole cost and expense and will be subject to the Government's consent and approval, which may be conditioned or denied.
 - g. The Selectee(s) shall, at its sole cost and expense, erect a fence or boundary demarcation around the perimeter of the Property, as deemed necessary by the Government and of a type and kind approved by the Government. Such fence or boundary demarcation shall not prevent DOE from entering the Property in an emergency situation without prior notification to the Selectee(s).
 - h. Selectee(s) is responsible for preventing where possible, minimizing, and repairing soil erosion during the term of the Project. Further, Selectee(s) must restore areas of erosion resulting from the construction and/or removal of improvements on the Property and the adjacent land impacted by the erosion.
 - i. Prior to the commencement of any construction, the Selectee(s) shall deliver to the Government payment or decommissioning bond in amounts and subject to conditions deemed acceptable to the Government, as described in Section 3.2.d.
 - j. All uses and activities on the Property shall be in compliance with all applicable Federal, State and local laws, rules, regulations, and ordinances.

- k. The Property shall not be used or permitted to be used in any way or for any purpose except as expressly permitted by the Government and set forth in the Lease Agreement.
- l. The following uses and activities are prohibited on the Property due to security and operational incompatibility:
 - i. Any use or activity that adversely affects the adequate protection of the health and safety of the Project development workforce, community or the Government, and its mission execution workforce.
 - ii. Structures, activities, and operations that adversely affect site security.
 - iii. Any use or activity that is incompatible with environmental, operational, or land use constraints at the DOE Site.

3.4 ELIGIBLE OFFEROR(S) AND PROJECT CONFIGURATION

This RFP is open to a range of entities, including but not limited to:

- a. **Private Sector Companies:** Established companies with demonstrated experience in developing, financing, constructing, operating, and maintaining infrastructure projects, particularly those related to AI data centers, energy generation, energy storage, and/or advanced computing facilities.
- b. **Data Center Operators and Developers:** Companies with a proven track record in the design, build, and operation of large-scale data center facilities, with an understanding of the specific requirements for AI/compute-intensive workloads.
- c. **Energy Infrastructure Developers and Operators:** Entities with expertise in developing and operating energy generation, transmission, and storage facilities, particularly those with experience in innovative and sustainable energy solutions.
- d. **Consortia and Partnerships:** Collaborative teams comprised of multiple organizations that collectively possess the necessary expertise and capabilities across relevant domains such as data center operations, energy infrastructure, AI hardware/software, finance, and project development. Proposals developed by consortia/partnerships may potentially be better situated than individual companies to propose Projects that address the complex and multi-sector nature of this initiative. Consortia are encouraged to clearly define the roles and responsibilities of each member in their proposal.

DOE is seeking proposals for comprehensive AI data center and energy infrastructure projects. Offeror(s) may propose projects within the following configurations:

- a. **Integrated AI Data Center and Energy Projects (Site Area A and Site Area B, or Site Area B only):** Proposals that encompass both the AI data center facility and the associated energy infrastructure necessary to power it, beyond backup or emergency generation. These proposals are particularly encouraged to incorporate innovative energy generation and/or storage solutions, aligning with DOE's commitment to reliable energy, and energy- and water-efficient operations. Offeror(s) are encouraged to include in their Project Plan a comprehensive strategy to meet their energy needs with energy additions, including new generation and infrastructure to deliver that generation to the AI data center.
- b. **Phased Integrated AI Data Center and Energy Projects (Site Area A and Site Area B, or Site Area B only):** As referenced above with an initial phase of a data center that comes on

quickly to meet near-term commercial market compute needs followed by later phase(s) of data center and generation to power it. Offeror(s) should articulate a strategy for powering the AI data center facility in the initial phase, including investment in transmission and related infrastructure.

c. Energy Infrastructure Projects (Site Area B only): Proposals focused specifically on developing innovative energy generation, transmission, or storage infrastructure. Such proposals are encouraged to demonstrate a link to and/or support for potential or planned AI infrastructure development, but it is not required.

Examples of eligible project configurations:

- Site Area B is utilized for both AI Data Center development and a supporting energy project (integrated or phased integrated).
- Site Area A is utilized for AI Data Center development. Site Area B is utilized for a supporting energy project (integrated or phased integrated).
- Site Area A, Site Area B, or both Site Areas A and B, are utilized for AI Data Center development, and the Offeror plans to work with a supportive new energy generation effort in the region.
- Site Area B is utilized for new energy generation infrastructure.

Eligible Offeror(s) are limited to those entities that are organized under the laws of the United States, its states, territories, or possessions; have majority domestic ownership and control; and have a physical place of business in the United States. All Eligible Offeror(s) will be reviewed for risks of undue foreign influence prior to decision making by DOE (see Section 3.4.3). As part of the review, DOE may require that the Eligible Offeror(s) provide additional disclosures and information to inform the reviews. DOE will not review offers made by foreign persons or organizations. Determinations by DOE that an entity is ineligible due to risk evaluations are subject to DOE's sole discretion.

3.4.1 Entity of Concern Prohibition

Prohibition

No Entity of Concern, as defined in [Section 10114 of Public Law 117-167 \(42 USC 18912\)](#), may receive any grant, contract, cooperative agreement, or loan of \$10 million or more in DOE funds, including funds made available by the Consolidated Appropriations Act, 2024 ([Public Law 118-42](#)).

In addition, for all Departmental activities authorized under [Public Law 117-167](#), no Entity of Concern (including an individual that owns or controls, is owned or controlled by, or is under common ownership or control with an Entity of Concern) may receive DOE funds or perform work under any authorized activity, subject to certain penalties. See [Public Law 117-167](#) and [Division D, Title III, Section 310 of Division D of the Consolidated Appropriations Act of 2024 \(Pub. L. No. 118-42\)](#) for additional information.

By submitting a proposal in response to this RFP, the Offeror(s) is certifying that neither the Offeror(s) nor any of the Project participants qualify as Entities of Concern.

Definitions

Entity of Concern is defined as in Section 10114 of Public Law 117-167 (42 USC 18912), also known as the CHIPS and Science Act, as any entity, including a national, that is—

- a. identified under Section 1237(b) of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (50 U.S.C. 1701 note; Public Law 105–261);
- b. identified under [Section 1260H](#) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (10 U.S.C. 113 note; Public Law 116– 283);
- c. on the [Entity List maintained by the Bureau of Industry and Security of the Department of Commerce](#) and set forth in Supplement No. 4 to part 744 of Title 15, CFR;
- d. included in the list required by section 9(b)(3) of the Uyghur Human Rights Policy Act of 2020 (Public Law 116–145; 134 Stat. 656); or
- e. identified by the Secretary, in coordination with the Director of the Office of Intelligence and Counterintelligence and the applicable office that would provide, or is providing, covered support, as posing an unmanageable threat—
 - i. to the national security of the United States; or
 - ii. of theft or loss of United States intellectual property.

3.4.2 Transparency of Foreign Connections

Offeror(s) must provide a transparency of foreign connections disclosure and certification as it relates to the proposed Project participants. Include a separate disclosure for the Offeror(s) and each proposed participant.

Disclosure Format: For the convenience of the entity providing the disclosure and certification a template is available at [Transparency of Foreign Connections | Department of Energy](#); however, the entity is not required to use this specific format. If another format is used, the signatory must include the same substantive information, a signature, date, and the certification statement provided at [Transparency of Foreign Connections | Department of Energy](#).

Disclosure exceptions by entity type:

- a. U.S. National Laboratories and domestic government entities are not required to respond to the Transparency of Foreign Connections disclosure.
- b. Institutions of higher education are only required to respond to items with an asterisk symbol (*).
- c. The applicability of disclosure requirements is determined by the entity type. Regardless of whether the applicant is exempt, the subrecipient(s) must provide these disclosures unless the subrecipient is also exempt.

Offeror(s), regardless of entity type, must provide complete responses for Project team members that are not U.S. National Laboratories, domestic government entities, or institutions of higher education.

Questions: Contact rtesinfo@hq.doe.gov.

DOE reserves the right to request additional or clarifying information based on the information submitted.

Prior to selection and during the life of the lease, if circumstances change which impact the accuracy of the disclosures (e.g., foreign ownership or control changes), the Offeror(s) must submit updated disclosures to DOE within fifteen (15) business days of learning of the changed circumstances.

3.4.3 Due Diligence Review for Research, Technology and Economic Security

All proposals submitted to DOE are subject to a research, technology, and economic security (“RTES”) risk review to identify potential risks of undue foreign influence. As part of the review, DOE may contact the Offeror(s) and/or proposed Project team members for additional information to inform the review. This review is conducted separately from the technical merit review. Selected Projects are subject to ongoing RTES reviews and monitoring during the life of the lease. DOE may share information regarding the risks identified as part of the RTES due diligence review process or monitoring with other federal agencies.

In the event an RTES risk is identified, DOE may require risk mitigation measures, including but not limited to, requiring that an individual or entity not participate in the Project. If significant risks are identified and cannot be sufficiently mitigated, DOE may elect to eliminate the Offeror(s) from consideration or terminate the lease.

DOE’s decision regarding a due diligence review is not appealable.

3.5 INTEGRATION WITH DOE

3.5.1 Integration with LPO

The Loan Programs Office (LPO) provides attractive debt financing for high-impact, large-scale (e.g., \$1 billion+, no maximum loan size) energy, energy infrastructure, and manufacturing projects in the United States. LPO’s financing supports projects that meaningfully contribute to the United States energy security, grid reliability, and lowering costs for all Americans.

LPO is able to provide loans and loan guarantees through several financing programs. Of particular relevance to this RFP, the Title 17 Energy Financing Program (Title 17) provides financing to support American energy deployment, through two primary vehicles:

- Innovative Energy and Innovative Supply Chain (Section 1703, 42 U.S.C. 16513). To qualify for Section 1703 financing, energy projects must involve either innovative technologies or be paired with investments from State Energy Financing Institutions (SEFI), which are entities established by a state, Indian Tribal entity, or Alaska Native Corporation to provide financing support or credit enhancements for eligible energy projects and to take steps to reduce financial barriers to the deployment of eligible energy projects.
- Energy Dominance Financing Program (EDF) (Section 1706, (42 U.S.C. 16517), recently expanded and revised by the One Big Beautiful Bill Act (OBBBA). To qualify for Section 1706 financing, a project must satisfy one of the following eligibility criteria: (1) retool, repower, repurpose, or replace energy infrastructure that has ceased operations, (2) enable operating energy infrastructure to increase capacity and output; or (3) support or enable the provision of known or forecastable electric supply at time intervals necessary to maintain or enhance grid reliability or other system adequacy needs.
- Examples of eligible project types that may qualify for LPO financing include: nuclear reactors, enhanced geothermal systems, investments into grid stability and reliability, and

development of energy infrastructure to support AI and data center deployment. Across the supply chain, eligible project types may also include fabrication and nuclear component manufacturing. As revised by OBBBA, projects seeking financing through the 1706 EDF Program must receive a designated Conditional Commitment from LPO on or before September 30, 2028.

Loans can be direct loans from the Federal Financing Bank (FFB) backed by a 100% “full faith and credit” DOE guarantee with no minimum or maximum loan size and flexible structures. The loan amount may be up to 80% of eligible project costs and up to 30 years in repayment term. LPO debt must be senior secured or pari passu with other senior secured debt. LPO can consider lending unsecured to a wide array of borrowers including investment grade utilities that do not have the ability to issue secured debt. For additional details on LPO loans and loan guarantees, visit: Overview | Department of Energy (<https://www.energy.gov/lpo/overview>).

For details on LPO loan pricing, visit: Pricing for LPO Financing by Program | Department of Energy (<https://www.energy.gov/lpo/articles/pricing-lpo-financing-program>).

LPO engages early with applicants and remains a partner for the lifetime of the loan through a six-step process, outlined as follows:

- a. Pre-Application – LPO meets with the potential applicant to discuss project eligibility, application process, and applicant questions to help determine if the project is a good fit for LPO financing.
- b. Application and Review – This step occurs in two parts. In Part I, LPO reviews the project to determine technical eligibility in accordance with the underlying statutes. In Part II LPO determines project viability and readiness to proceed into due diligence based on programmatic, technical, environmental and financial evaluations, including traditional underwriting of debt.
- c. Due Diligence – If Part II is accepted, LPO and the applicant engage third-party advisors (paid for by applicants) and negotiate the proposed transaction structure and term sheet details.
- d. Conditional Commitment – Following due diligence, finalization of a term sheet, receipt of required interagency and DOE approvals, and validation that the proposed transaction satisfies all statutory requirements, LPO offers a conditional commitment and term sheet to the applicant. The conditional commitment is contingent on the borrower satisfying certain conditions precedent and other requirements of the conditional commitment.
- e. Financial Close – LPO and the applicant execute definitive financing documents, subject to additional conditions precedent to loan disbursements.
- f. LPO Monitoring – LPO monitors the project and acts as a trusted partner for the life of the loan, acting in the best interest of the Government and taxpayers.

LPO Title 17 loans are subject to a “denial of double benefit” or “federal support restriction” which prohibits DOE from issuing loan guarantees to projects that are expected to benefit directly or indirectly from certain other forms of federal support¹. Offeror(s) intending to seek LPO financing should specify how they plan to successfully complete the project while remaining in compliance with the denial of double benefit rule. An applicant may face restrictions on their ability to secure a loan through LPO financing if they are also obtaining rights for the use of federal land at below fair market rates or relying

¹ [Inflation Reduction Act, Pub. L. No. 117-169, section 50141, 136 Stat. 1818, 2043 \(2022\)](#)

on certain types of arrangements with federal agencies to support the project or obtain goods or services from the project. The federal support restriction comes into play in cases where the project is dependent upon future federal spending to ensure its viability and ability to repay a guaranteed loan.

See Appendix H for more information about the applicable statutory requirements on “denial of double benefit.”

LPO will work with applicants to understand how federal support restrictions might impact each potential project. DOE encourages potential applicants that may seek or anticipate federal support for a proposed project to arrange a pre-application consultation to better understand the potential impact to any loan guarantee issued under Title 17: [Request a Pre-Application Consultation with LPO | Department of Energy](#). The LPO process will be subject to applicable rules and requirements, including but not limited to the NEPA.

3.5.2 Integration with GDO

The Grid Deployment Office (GDO) serves to strengthen the reliability, resilience, and secure delivery of electricity essential to achieving American energy dominance. GDO catalyzes investments in critical transmission and generation infrastructure by providing funding and technical expertise to drive infrastructure investment and overcome longstanding barriers to transmission, generation, and grid resilience.

GDO offers several financial assistance programs that can accelerate speed to power for data centers and other large electricity customers. GDO supports the rapid expansion of grid capacity to enable deployment of AI – from streamlining interconnection and permitting to advancing the development of large-scale generation, transmission, and grid modernization projects – through the following primary vehicles:

- **Transmission Facilitation Program (TFP)** administers funding to build out new interregional transmission lines across the country. TFP is a revolving fund program that aims to address the financial barriers in the development of large-scale transmission lines and upgrading existing transmission lines. Under the TFP, DOE is authorized to engage in three financing options with transmission developers:
 - Capacity contracts with eligible projects where DOE would serve as an “anchor customer” to buy up to 50% of planned line rating for up to 40 years and to sell the contract to recover costs.
 - Loans from DOE.
 - DOE participation in public-private partnerships within a national interest electric transmission corridor (NIETC) where such projects are necessary to accommodate increased electricity demand across multiple states or transmission planning regions.
- **Grid Resilience and Innovation Partnerships Program (GRIP)** administers funding to expand grid capacity and enhance grid flexibility. Funding through this program supports grid modernization, interregional transmission, and improvement in the resilience of the power system against extreme weather. GRIP accelerates the deployment of transformative projects that will help to ensure the reliability of the power sector’s infrastructure.
- **AI for Interconnection (AI4IX)** administers funding to accelerate the interconnection process for new energy generation through the introduction of artificial intelligence techniques.

- **Coordinated Interagency Transmission Authorizations and Permits (CITAP) Program** streamlines the federal environmental review and permitting process for transmission infrastructure, establishing DOE as the lead agency to coordinate interagency environmental reviews and permitting processes, including coordination and consultation with tribes, state and local entities.

4.0 INSTRUCTIONS TO OFFEROR(S) / SELECTEE(S)

4.1 GENERAL

- a. This RFP is not for an acquisition of goods, services, or facilities for DOE consumption/use and as such, is not governed by the Federal Acquisition Regulation (FAR). This RFP supports a real estate transaction granting temporary use of DOE controlled property. DOE is opting to solicit responses to this RFP to form a decision on granting one or more Lease Agreements on this Property, but DOE retains its right to grant use of this Property in any manner it deems appropriate, consistent with applicable laws and regulations.
- b. In no event shall this RFP or any agreement arising as a result of this RFP require or otherwise obligate DOE to purchase any service or product from the Project. The Government makes no representations regarding the Offeror(s)' ability to secure an agreement(s) for sale and purchase of the services or products arising directly or indirectly from the Project, Lease Agreement, or the Property.
- c. Responses to comments and questions received in the Request for Information on Artificial Intelligence Infrastructure on DOE Lands were considered in development of this RFP. All information concerning this RFP, including generalized responses to questions from prospective Offeror(s), will be available to all other prospective Offeror(s). If the information is necessary in submitting offers, or if the lack of it would be prejudicial to any other prospective Offeror(s), the information will be provided in response to comments or may be furnished as an amendment to the RFP.
- d. After the receipt, potential down-select, and evaluation of acceptable responses to this RFP, the Government may, at its sole discretion, communicate with one or more Offeror(s) to clarify information in the submittal or negotiate the terms, conditions, agreements, plans, schedules, etc., to effectively implement the Offeror(s)' proposed development, use, management, operation, decommissioning, and site restoration/remediation of the Property in a manner that is acceptable to the Government.
- e. While the Government intends to enter into a Lease Agreement with one or more Offeror(s), it is under no obligation to do so and reserves the right to cancel this RFP and reject all submissions at its sole discretion. The Government reserves the right to suspend and/or amend all provisions of the RFP and to waive informalities and minor irregularities in proposals received where it is in the Government's best interest to do so.
- f. By participating in the RFP process, Offeror(s) agree to indemnify and hold harmless the United States, its officers, employees, and consultants from all claims, liabilities, and costs related to this RFP. Under no circumstances will the Government be liable for any real estate brokerage commissions, finder's fees, or other forms of compensation related in any way to activities undertaken by any person as a result of this RFP. This includes any and all activities related to negotiations with the Offeror(s).
- g. Offeror(s) shall be responsible, at its own expense, for all costs associated with its proposal, including but not limited to, preparation costs, legal consulting, engineering, permitting, and compliance with applicable laws and regulations. DOE is not responsible for any costs associated with Offeror(s)' proposals.
- h. This RFP may be amended by formal written amendment. If this RFP is amended, then all terms and conditions that are not amended remain unchanged.
- i. The RFP proposal shall contain the Offeror(s)' best terms and be complete in accordance with this RFP. The Government may, at its sole discretion, conduct discussions with one or all

Offeror(s), at any time, and for any reason, to clarify information in the submittal, typically through negotiations after Offeror(s) submissions and prior to selection of Offeror(s). Any discussions become part of the Offeror(s) submission and will be considered by the Government in making its Offeror(s) selection.

j. Offeror(s) shall comply with the DOE Mandatory Clauses attached as Appendix C (the “DOE Mandatory Clauses”) hereto and incorporated herein by this reference, if required based on the specific Project, terms, and conditions negotiated. Compliance with these clauses shall be required during the term of the Lease Agreement.

k. Proposals that fail to furnish required information or that fail to meet any terms and conditions of this RFP may be rejected by the Government. Offeror(s) whose proposals are rejected for being incomplete will not be notified by the Government of the specific deficiencies in its proposal. Rejected proposals will not be evaluated further. Offeror(s) will not be allowed the opportunity to amend their proposals, and the Government will only notify Offeror(s) that its proposal has been rejected without further explanation.

l. Offeror(s) shall submit a signed cover letter as shown in Appendix D (the “Offeror(s) Cover Page”) attached hereto and incorporated herein by this reference. Each proposal must contain the name and mailing address of the Offeror(s) and be properly executed. A proposal executed by an attorney or agent on behalf of the Offeror(s) shall be accompanied by two authenticated copies of the power of attorney or other evidence of agency or authority to act on behalf of the Offeror. If the Offeror(s) is a corporation, a corporate officer authorized to bind the corporation must execute the Offeror(s) Cover Page and provide a corporate certificate or resolution evidencing that corporate officer’s authority to submit a proposal to enter into a Lease Agreement for the Property in response to this RFP. If the Offeror(s) is a Partnership, Limited Liability Company or any other entity, the Offeror(s) must provide evidence that the party signing the Offeror(s) Cover page has the authority to sign or bind the entity.

4.2 RESTRICTION ON DISCLOSURE AND USE OF DATA

a. Offeror(s) should not include trade secrets or business-sensitive, proprietary, or otherwise confidential information in their proposals unless such information is necessary to convey an understanding of the proposed Project or to comply with a requirement in the response to the RFP. Offeror(s) are advised to not include any critically sensitive proprietary detail. All submitted responses are subject to 5 U.S.C. § 552, the Freedom of Information Act (FOIA), and DOE’s FOIA regulations found at Title 10, CFR, Part 1004, and may be released publicly contingent on the FOIA exemptions identified in 5 U.S.C. § 552(b).

b. Offeror(s) who choose to submit trade secrets or business-sensitive, proprietary, or otherwise confidential information shall provide two copies of the submission. The first copy should be marked “non-confidential,” with the information believed to be confidential deleted. The second copy should be marked “confidential” and must clearly and conspicuously identify the trade secrets or business-sensitive, proprietary, or otherwise confidential information and must be marked as described in part (c) below. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under FOIA or other applicable laws. The Government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose as authorized by law.

c. Offeror(s) who include in their proposals non-public data that they do not want disclosed shall mark the title page with the following legend: “Consistent with federal information disclosure statutes such as the FOIA, this proposal includes data that shall not be disclosed outside the Government and its representatives and shall not be duplicated, used, or disclosed in whole or

in part for any purpose other than to evaluate this proposal.” Further, Offeror(s) shall provide markings on each page noting any instances of non-public data. Consistent with DOE’s FOIA Regulations at Title 10, CFR, Part 1004, the final determination whether to release information shall, after appropriate consultation with submitters, be DOE’s.

d. If, however, a Lease Agreement will be signed with a Offeror(s) as a result of or in connection with the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting Lease Agreement or as needed for environmental documentation or as required under FOIA. Offeror(s) should be aware, however, that the Government may share financial information with Congressional committees, if requested by the committees as part of their oversight function.

4.3 SUBMISSION OF RESPONSES

a. Offeror(s) shall submit proposals in response to this RFP via e-mail directly to ryan.fuesting@science.doe.gov no later than 4:00 pm EST on Monday, December 1, 2025 (the “Proposal Due Date”).

b. Submitted proposals shall be written in the English language and correspond with the Sections, Factors, and Subfactors listed in Table 1 and as further described in Section 4.4. Proposals are to be provided on 8.5 x 11-inch page with margins no less than one inch on all sides and standard 12-point font using Microsoft Word and/or Adobe Systems Portable Document Format (pdf). Page numbers must be included in the footer of every page.

c. Offeror(s) should be aware and consider within their proposal that the selection process may also consider program policy factors, as addressed in Section 5, in determining which proposal(s) to select for subsequent negotiations. Offeror(s) should include specific information regarding which, if any, of the program policy factors their proposal fulfills for consideration by the Government.

4.4 FACTORS FOR CONSIDERATION

Table 1 - Consideration Factors

Factor	Section	Factor Description
1	4.4.1	Project Description
2	4.4.2	Project Plan
3	4.4.3	Return to the Government
4	4.4.4	Organizational Structure, Experience, and Past Performance
5	4.4.5	Financial Capability

Factors 3 and 5 are the most important factors and when combined are more important than the remaining factors. Factor 4 is less important than Factors 3 and 5 but is more important than Factors 1 and 2. Factors 1 and 2, which are of equal importance to each other, are the least important factors.

4.4.1 Project Description

Proposals shall include a project narrative that describes a high-level overview of the proposed Project. The project narrative shall include the type of project being pursued, the team’s rationale for pursuing the Project, the specific tract(s) of land being pursued, as well as a description of the proposed facility’s

conceptual layout and acreage within the tract of land offered by the DOE Site. If the Project is a Phased Integrated AI Data Center and Energy Project, the project narrative shall describe Offeror(s)' approach to each phase.

The proposal shall provide a description of the energy generation technology being pursued and the planned technology vendor. Offeror(s) shall include the current nature of the relationship between the Offeror(s) and the energy generation technology vendor (if the Offeror(s) is not the proposed energy generation technology vendor), as well as an up-to-date status of the commercial availability for the pursued energy generation technology by that vendor (e.g., commercially available, first-of-a-kind deployment, final design, preliminary design, etc.). If an energy generation technology or vendor has not yet been selected for the Project, the Offeror(s) should describe the proposed process and timeline for the selection of the energy generation technology and vendor.

Applicable to Site Area A Only: In addition to the above, the proposal shall describe any aspects of the proposed effort that will have the effect of incubating and/or scaling new technologies or approaches to AI, data centers, and/or energy technologies. Proposals for Site A should describe ways in which proximity to ORNL can enable or enhance the innovation potential and economic impact of the envisioned development.

4.4.2 Project Plan

Offeror(s) shall provide a description of the proposed plan for executing the Project, including a description of the following elements.

- a. **Project Approach:** A description of the planned approach for executing the proposed Project, to include the total anticipated project cost. Offeror(s) should include a description of the resources anticipated for the conduct of the Project and which resources and materials will be sourced domestically or abroad. Offeror(s) should identify any anticipated shortcoming within the anticipated supply chain for the Project which could delay their deployment.
- b. **Schedule:** A notional execution schedule should be included, showing sufficient maturity and resilience for a major construction project at an initial phase of development. The proposed schedule should include the anticipated durations for the (1) development, (2) construction, and (3) initial operations periods for the Project, for both the AI data center and energy generation infrastructure proposed, as appropriate. DOE expects that Offeror(s) will demonstrate an aggressive, yet achievable, timeline to successfully deploy the proposed projects, with the anticipated timeframes for the AI data center including six to 18 months for development, one to two years for construction, and 10 or more years for operations, and the anticipated timeframes for the energy generation infrastructure being in alignment with the commercial best practices for the technology proposed. For Integrated AI Data Center and Energy Projects, Offeror(s) should demonstrate that the energy generation infrastructure will be available concurrently with commencement of operations of the AI data center. For Phased Integrated AI Data Center and Energy Projects, Offeror(s) should articulate a viable and robust strategy for powering the data center facility in the initial phases.
- c. **Milestones:** The Offeror(s) should include a list of key milestones for the proposed Project, which could be used to track the progress of the Project. If the Offeror(s) has any gating criteria that need to be achieved prior to progressing beyond a certain point in the Project, these should be described.
- d. **Construction Plan:** The Offeror(s) should provide a description of each step of the proposed Project construction process. Elements of the Construction Plan could include: fully

sourced or cited material and energy balance, including system simulation for processes, using industry standard software; unique equipment requirements; rights or licenses necessary to use processes proposed and acquisition status; project cost analysis including analysis based on minimum design specifications coupled to process flow diagrams and cost estimates; project management plan and use of tools, such as Gantt charts, Monte-Carlo and other variance analysis, resource-based scheduling, or other methods to assess and track progress; and contingency plans to address cost overruns and schedule slippage.

e. **Regulatory Approvals/Licensing Strategy:** The Offeror(s) should describe the Project's approach to acquiring all necessary federal, state, and local permits for the Project, to include meeting CERCLA, NEPA and NHPA requirements, as well as any licensing required for the proposed energy generation technology. Offeror(s) pursuing the deployment of a nuclear reactor may pursue licensing either through DOE authorization or the Nuclear Regulatory Commission (NRC), depending on the Project's specifics. The proposal must explicitly state which licensing authority the Offeror(s) intends to utilize for regulatory approval of the nuclear reactor and why. To the extent applicable, Offeror(s) should also describe their approach to filing with the Committee on Foreign Investment in the United States (CFIUS) if the Project, or any part of the Project or transaction related to the Project, could be subject to CFIUS jurisdiction as described in Title 31, CFR, Part 800 and Title 31, CFR, Part 802. Offeror(s) should explain the status of any relevant existing or planned CFIUS filing to include timelines and outcomes, as applicable.

f. **Security Plan:** Offeror(s) are required to submit a proposed Security Plan to mitigate potential cyber, physical, supply chain, and other security risks associated with the Project. As part of the Government's evaluation of Proposals, DOE may contact the Offeror(s) and/or proposed Project team members for additional information about the proposed Security Plan. The Government anticipates working with Selectee(s) after selections are made to refine the proposed Security Plan. The Government anticipates that the final Security Plan will be tailored to both the scope of activities proposed by Offeror(s) and the security needs of the site, based on existing standards. Selected Projects are subject to ongoing security reviews and monitoring during the life of the lease. In the event a security risk is identified, DOE may require additional risk mitigation measures, potentially to include amending the Security Plan. If significant risks are identified and cannot be sufficiently mitigated, DOE may elect to eliminate the Offeror(s) from consideration or terminate the lease.

g. **Power and Compute Efficiency:** For proposals that include AI data center infrastructure, the Offeror(s) should describe its approach to process maximal AI inference and/or training workloads for the proposed cooling and power load, discussing any relevant compute technologies and hardware or software innovations it plans to deploy. The project plan should describe how it intends to achieve efficient power delivery and responsive power control at the rack, server, and chip level, and it should address how power management impacts the resultant cooling needs of AI infrastructure. The project plan should describe frequency of updates for power and compute equipment. The project plan should describe a waste heat use/reuse plan, if applicable, including identifying any end users or partners.

h. **Energy Reliability:** The Offeror(s) must include a detailed plan for ensuring the continuous energy generation and backup power for the duration of the Project. This plan should specify the sources of energy, redundancy measures, and contingency protocols to maintain uninterrupted operations. The proposal must clearly articulate the proposed approach to acquire all necessary power until new generation is put into operation.

i. **Utilities:** The project plan should detail all utilities essential for successful execution, including but not limited to domestic water, sanitary sewer, electrical power, and telecommunications. Offeror(s) will specify whether they intend to connect to existing site utility

infrastructure, such as the site's domestic water or sanitary sewer systems, or if alternative provisions, like portable water sources or independent waste management, will be necessary. The plan will outline the proposed methods for securing each required utility, including any necessary permits, connections, or service agreements, and will address coordination efforts with site management to ensure timely and compliant utility access.

j. **Interconnection:** In the event the proposed Project requires a connection to the grid, the Offeror(s) should describe its proposed approach to do so. This should include the Project's plan for obtaining the necessary approvals and meeting any regulatory requirements for the interconnection, as well as the infrastructure improvements required to make the interconnection, if needed. Offeror(s) should include any interconnection pre-application information provided by the utility. This could include a preliminary indication of available capacity at nearby substations or distribution/transmission lines, general feasibility, and any anticipated system upgrades.

k. **Grid Integration and Capital Efficiency:** Offeror(s) are encouraged to consider the use of technologies and operational strategies that result in flexible electricity consumption of the AI data center in order to provide services to the local electricity grid (e.g., emergency demand reduction), make efficient use of existing or new electricity generation and distribution equipment, and minimize the broader impacts of the AI data center on local electricity costs. Additionally, if curtailment is required or agreed upon pursuant to local regulations or the utility interconnection agreement, a description of how that curtailment will be achieved should be included.

l. **Subscription and Offtake Agreements:** Offeror(s) should include a description of how the proposed AI data center and energy generation infrastructure will be used and by whom, including the Federal Government and the length of subscription/offtake compared to the anticipated lifetime for the AI data center and energy generation infrastructure. If the anticipated subscription/offtake for the energy generation infrastructure does not match the expected output either at initial operation or during anytime in the lifetime, a plan should be included on how new subscription/offtake will be obtained or an explanation be provided as to why the lack of subscription/offtake will not significantly affect the economics of the Project over its lifetime. Additionally, the applicant should provide a mitigation plan if a planned off-taker leaves the Project.

m. **Water Efficiency:** The Offeror(s) should describe how it will incorporate water efficiency measures into each stage of the Project, including for the proposed cooling system, IT equipment, and any energy infrastructure. The project plan should acknowledge any identified limits on water availability at the site and describe its plans for achieving Project goals while adhering to those limits. The project plan should consider average annual water availability, address Project viability during periods of drought, and assess water efficiency based on both site and source (including water consumption in the production of electricity on or offsite) consumption.

n. **Community Impact:** The Offeror(s) should describe its planned local outreach and engagement around the potential deployment of the AI data center and energy generation infrastructure on the DOE Site, to obtain any indications of local sentiment and to assess what risks to Project execution will need to be managed. Offeror(s) should describe how their proposal and/or teaming arrangements provide meaningful and/or substantial involvement of and/or benefits to one or more of these areas.

o. **Workforce Plan:** The Offeror(s) should describe its proposed plans for conducting a workforce needs assessment of the local workforce conditions and availability; identifying local education, workforce development, community-based, and labor entities that have the ability to recruit, train, and/or support the necessary workforce efforts for each phase of the project plan

(see Appendix G for list of potential workforce considerations); and estimating the number of temporary and permanent jobs created from the Project (e.g., constructions, operations). DOE encourages Offeror(s) to partner with State Workforce Agencies to conduct a gap analysis to identify the local labor supply needed to meet the labor demands.

p. Mitigation: The Offeror(s) should describe its proposed approach to mitigating adverse impacts resulting from the construction, operation, and decommissioning of the Project (see Appendix F for a list of potential adverse impacts). The Offeror(s)' approach to addressing adverse impacts should be clearly identified in the proposal as a "Mitigation Plan" and describe how the Offeror(s) proposes to sequentially apply an avoid, mitigate, compensate framework to each identified adverse impact.

q. Risk Management: The Offeror(s) should include a description of the team's proposed approach to identify, analyze, track, and respond to perceived or realized risks associated with the proposed Project. Project risk events are uncertain future events that, if realized, could impact the success of the Project. At a minimum, include the initial identification of significant technical, management, Project acceptance or opposition, workforce availability, and other resource issues that have the potential to impede Project progress and strategies to minimize impacts from those issues.

4.4.3 Return to the Government

a. Offeror(s) shall document their proposed consideration to be provided to the Government in exchange for the Lease Agreement interest in the Property. The proposed consideration will address the objectives set forth in Section 1.0. Consideration should be specified for the three Project periods: development, construction, and initial operation. The proposed consideration shall be substantiated with relevant empirical and quantitative data and analysis to include:

- i. Current real estate market conditions for similarly situated property; and
- ii. Consideration of all relevant facts and circumstances that may influence the proposed consideration.

b. Subject to statutory authority to accept in-kind consideration, the Government may consider other forms of consideration (e.g., in-kind contributions, shared infrastructure access, co-location services, etc.). If the Offeror(s)' Mitigation Plan relies on compensatory mitigation elsewhere on the DOE Site to address unmitigated adverse impacts, the Offeror(s) should also discuss how in-kind consideration will support those compensatory mitigation activities. The Offeror(s) may also propose environmental and ecological enhancement projects elsewhere on the DOE Site as a form of in-kind consideration.

c. Offeror(s) may discuss the possibility and implications of entering into a data or power services agreement with DOE; providing computational resources to DOE or DOE-affiliated researchers; other relevant collaboration. Any such agreements are subject to statutory authority to accept in-kind consideration or will be contracted separately from any realty agreements entered into pursuant to this RFP. However, the proposed Project must be viable without any Direct data services agreement, resource sharing agreement, financial contribution by DOE or any direct financial contribution from DOE.

d. Should an Offeror(s) plan to pursue LPO financing for any portion of the Project, the Offeror(s) should identify how the proposed consideration above is in compliance with LPO's denial of double benefit rule.

4.4.4 Organizational Structure, Experience, and Past Performance

a. The Offeror(s) shall provide a narrative detailing its corporate organizational structure, including legal form of ownership and management. Within the project team, the Offeror(s) should describe the key individual personnel with responsibility for implementing the Project, to include roles and responsibilities, expertise, and percentage time commitment. If the Offeror(s) is teaming with one or more business organizations for any portion of the Project, then it shall provide a narrative detailing:

- i. What each team member is responsible for performing.
- ii. The extent to which the team has worked together in the past.
- iii. The role each team member had in the completion of projects presented as evidence of capability for Section 4.4.4.b.
- iv. Legal form of ownership and management of each team member.
- v. Expressly identify the team member organization that will be accountable and responsible for Project financing, development, construction, performance, operation, management, and sustainment, for both the AI data center and energy generation infrastructure aspects of the Project, as applicable. Identify the key management personnel and legal counsel designated and authorized to represent the Offeror(s) in all negotiations with the Government, and throughout the transaction execution and financial closing process.
- vi. The governance structure between the team members, to include any mechanisms or provisions that exist within the team structure or agreements to ensure successful deployment should there be changes in team composition, such as a team member leaving or a new team member joining, or if a significant change in an offtake agreement should occur.

b. The Offeror(s) shall provide a narrative describing its experience managing and executing projects similar in scope, magnitude, and complexity to the proposed Project, including experience in data center development, large-scale and energy infrastructure, construction management, state or Federal NEPA and other permitting, and projects on government-controlled land. If the Offeror(s) cannot demonstrate experience with AI data centers or energy generation technology or deployment model, they may describe projects that demonstrate recent comparable experience. Use Appendix E (Past Performance Reference Information Form) to give information on at least one and no more than three reference projects, either in progress or completed within the past five years, that are similar in scope, magnitude, and complexity to the proposed Project. Each project form is limited to ten (10) pages. The submittal shall provide details explaining the financing, design, construction, management, and operation of those projects, stating specifically how the Offeror(s) accomplished them. If another party accomplished them, name the party. Also include the location, cost, project capacity, schedule, safety performance, and any relevant offtake or service agreements. If the reference projects were not completed within the past five years, provide the company's safety performance statistics for the past five years.

c. Offeror(s) should include an email and telephone number for a relevant point of contact from the customer for each project submitted. The point of contact should be able to provide specifics on requirements and performance of the most recent and relevant work submitted as referenced in this section.

4.4.5 Financial Capability

- a. The Offeror(s) shall demonstrate a clear and credible financial strategy for the proposed Project, encompassing all phases from initial development through decommissioning. This strategy should address securing necessary capital, managing financial risks, and ensuring long-term financial sustainability of the AI data center and energy generation infrastructure facilities, as applicable. The strategy should include the anticipated sources of funding and a breakdown of debt and equity levels at each Project phase (i.e., design, licensing, construction, and operation), as well as address how cost-overruns will be managed within the Project, should they occur. The Offeror(s) should include a proposed capitalization table showing the existing and proposed legal entities involved in the ownership, funding, and development of the Project and the anticipated capital commitments from each. Capital commitments should detail the timing, amount of funding, and any conditions associated with capital injections.
- b. The Offeror(s) should discuss the anticipated economic competitiveness of the energy (electricity and/or steam) to be produced by the Project and how this compares to the anticipated price range for energy in the region(s) surrounding the DOE Site. If the technology selected for the energy generation infrastructure provides additional attributes that may not be reflected in its anticipated price point, the attributes relevant to the Project should be discussed.
- c. The Government may require Offeror(s) to provide evidence of bonding capacity to fulfill the decommissioning bonding requirement and show how the bond amount(s) are derived. In the event that an alternative to bonding is being proposed, the Offeror(s) may provide information on the alternative and explain how it better protects the Government's interests versus a surety bond.
- d. The Offeror(s) shall provide evidence of sufficient funds or financing to support the proposed Lease Agreement and Project, including permitting, engineering, design, construction, and operation and maintenance of the Project throughout the proposed term of the Lease Agreement. This could include, but is not limited to, a corporate parent guarantee, letter of credit facility or similar documentation.
- e. The Offeror(s) shall provide Financial Statements complete with notes and accompanied by an auditor's assertion of accuracy or reviewed by Certified Public Accountant for the most recent two years, and other documentation, including that of any equity contributors, to demonstrate the Offeror(s)' financial strength. Financial statements must have been audited in accordance with Generally Accepted Accounting Principles.
- f. If any financial statements or submitted information note any litigation, disputes, claims, Uniform Commercial Code (UCC) filings or similar circumstances, the Offeror(s) shall provide the status of each matter in full detail.

5.0 BASIS OF OFFEROR(S) SELECTION

5.1 SELECTION PROCESS

- a. The Government will rank and select the proposed Projects that provide the combined highest performance expectations and confidence to the Government based upon an integrated and cumulative assessment of all the factors, as listed in Table 1 of Section 4 above: Factor 1 (Project Description), Factor 2 (Project Plan), Factor 3 (Return to the Government), Factor 4 (Organizational Structure and Experience), and Factor 5 (Financial Capability).
- b. The Government may also consider the following program policy factors in determining which proposal(s) to select for subsequent negotiations:
 - i. The degree to which the proposed Project supports the joint deployment of AI data center and energy generation infrastructure or energy infrastructure projects that have a clear demand for offtake.
 - ii. The degree to which the proposed Project represents a desired geographic distribution of awarded Projects.
 - iii. The degree to which the proposed Project plans to use domestic entities or component and/or services from the domestic supply chain, to complete the Project.
 - iv. The degree to which the proposed Project supports the Site's mission(s) through accessibility to computer capabilities and power to service the immediate area(s).
- c. The Government may conduct a "down-select" at any time during the evaluation process. The Government may choose whether or not to notify Offeror(s) that a "down-select" has occurred. The decision to exclude an Offeror(s) through this process does not obligate DOE to solicit or consider revised proposals from eliminated Offeror(s), nor does it require entering into negotiations with remaining Offeror(s).

5.1.1 Project Description

The Government will evaluate the Offeror(s)' submitted Project Description, the anticipated addition in capability or capacity for AI data center or energy generation (as applicable), the technologies proposed, and the land area requested. The technical and conceptual narrative and submitted information will be evaluated for clarity, feasibility, and compliance with the requirements of this RFP, the Lease Agreement Objectives listed in Section 1, the General Lease Agreement Requirements in Section 3, and any applicable requirements, authorities, and constraints. The proposed technology and Project description will be evaluated for an understanding of the Lease Agreement process, probability of realizing Project expectations, and compliance with the enabling statute and applicable laws. Additional consideration will be given to Projects that demonstrate understanding of the interdependencies of compute, cooling, and power delivery/control technologies and propose a holistic approach to deploy sets of complementary technologies given the characteristics of the Site and market conditions. Additional consideration may be given to Projects that propose new integrated AI data center infrastructure jointly with new energy generation.

5.1.2 Project Plan

- a. The Government will evaluate the Offeror(s)' submitted narrative describing their plan for the development, construction, interconnection (transmission), operation, and

decommissioning for the proposed Project, inclusive of descriptions and plans for real estate agreements; interconnection; transmission availability; regulatory compliance (e.g., NEPA and NHPA, CFIUS); permitting and licensing; milestone schedule; site improvements; utilities; environmental protection and mitigation; energy, water, and compute efficiency; AI workload performance; holistic consideration of compute, cooling, and power delivery/control technologies; use/reuse of waste heat; property management; operations and maintenance; offtake; risk management; workforce planning, training, and safety; emergency services; and security. The submitted narrative and information will be evaluated for completeness, reasonableness, understanding of the Lease Agreement objectives, clarity, feasibility, and compliance with the requirements of this RFP, and will be evaluated for compatibility with mission operations and potential risks, and the Government's assessment of best use of the Property, also considering Project impact(s) on the local environment and natural resources, surrounding communities, local government, and governmental authorities.

b. The Government will evaluate the Offeror(s)' recommended agreements and business arrangements with the Government to assess the level of confidence in achieving a timely Lease Agreement execution, and Project completion.

c. The Government will evaluate the proposed integrated Project Plan and schedule for recognition and consideration of major milestones, duration of critical activities, and overall demonstration and understanding needed to execute and sustain the proposed Project.

d. The Government will evaluate the inclusion and sequencing of financing and relevant service and user agreements needed for development, construction, and operation of the Project for reasonableness.

e. The Government will evaluate the Offeror(s)' proposed approach to interact with Government and other stakeholders and assess the level of confidence in commencing and efficiently executing the Project.

5.1.3 Return to the Government

The Government will evaluate the Offeror(s)' proposed rental consideration for the three Lease Agreement periods: development, construction, and initial operations, as well as the feasibility of the consideration should the Offeror(s) intend to acquire financing from LPO. The Government will also evaluate the reasonableness of the supporting analysis provided.

5.1.4 Organizational Structure, Experience, and Past Performance

a. The Government will evaluate the Offeror(s)' proposed project team (to include its management and key personnel), organization, and qualifications to develop, construct, and operate a successful, long-term Project, including a mutually beneficial relationship with the Government within the constraints and requirements of the RFP. The Government will review the submitted recent and relevant projects for similarity to Offeror(s)' proposed plan and Lease Agreement processes and assess the level of confidence in the Offeror(s)' plan and demonstrated experience and success performing similar projects.

b. The Government will evaluate whether Offeror(s)' submitted response clearly demonstrates both an understanding of what efforts are required to deliver high-performance AI data center and/or energy generation infrastructure in general and more specifically delivering these facility(ies). The Government will also evaluate whether Offeror(s)' submitted response demonstrates an understanding and willingness to comply with security requirements necessary for development on the DOE Site.

5.1.5 Financial Capability

The Government will evaluate whether the Offeror(s)' strategy and capability for financing the proposed Project (inclusive of decommissioning bond) clearly supports the Project concept and is consistent with accepted commercial practices for similar projects. Additional consideration may be given to Offeror(s) with advantageous financial attributes, to include committed financing or an advanced stage of capital raising.

5.2 EVALUATION

- a. Offeror(s) are encouraged to be innovative and to make proposals they believe will exceed the requirements of this RFP.
- b. The Government will evaluate Offeror(s)' responses to each Factor for Consideration explained in Section 4.4 above to determine whether said response meets or exceeds the RFP requirements.
- c. The Government will evaluate risk by assessing the likelihood that the Offeror(s) will be able to satisfy the requirements of this RFP or will be able to carry out its Lease Agreement and Project as proposed. Conversely, the Government will consider an approach to be high risk if there is a substantial likelihood that the Offeror(s) will be unable to satisfy the requirements of this RFP or carry out its Project as proposed.
- d. The Government reserves the right to down-select and exclude any Offeror(s) whose proposal presents a substantial or unacceptable risk in any Factor for Consideration.

6.0 NEGOTIATIONS

6.1 STRATEGY

a. Lease Agreement negotiations shall commence after the Government completes the evaluation and ranking of the submitted proposals and provides written notice to those Offeror(s) who the Government determined provided proposals that are best-suited to achieve the goal of rapidly developing AI data center capacity to meet commercial market needs and of generation to power data center capacity. The Government desires to complete negotiations with the Offeror(s) within ninety (90) days of the close of the RFP response period (the “Negotiation Period”) and will periodically assess the progress of these negotiations to determine if negotiations will be terminated or if they will continue and the Negotiation Period will be extended. In the event the Government desires, in its sole and absolute discretion, to extend the Negotiation Period it will do so in writing provided to the Offeror(s) at least one business day prior to expiration of the Negotiation Period. During the Negotiation Period, the Offeror(s) will work in good faith with the Government to negotiate terms and conditions of the Lease Agreement and any other agreements and documents that may be necessary or required for executing the Lease Agreement with the Offeror(s).

b. Upon commencement of the Negotiation Period, the Government will provide a form non-binding term sheet for the Offeror(s) to complete consistent with and reflecting the response it submitted to this RFP. This non-binding term sheet will be negotiated and, if mutually agreed to, it shall be executed by the Offeror(s) and the Government and used to guide negotiations of the Lease Agreement and other necessary agreements or documents.

c. If at any time during the Negotiation Period, the Government determines (in its sole and absolute discretion) that negotiations are not satisfactorily progressing, the Government has the right to terminate negotiations with the Offeror(s). Upon the expiration of the Negotiation Period, negotiations with the Offeror(s) shall automatically terminate without any further action required by the Government and the Government may cancel the RFP.

6.2 LEGAL DOCUMENTATION

a. To execute the Project, certain legal agreements and transaction documents will be necessary or required. The Offeror(s) shall prepare and provide all agreements, documents, and information requested by the Government that are reasonably necessary or otherwise required to execute the Project.

b. In addition to a Lease Agreement, there may also be a need for easements and/or agreements, all of which will be required to be captured in the term sheet and negotiated during the Negotiation Period.

7.0 NOTIFICATION AND REPORTING REQUIREMENTS

Notification, deliverables, and other reporting requirements will be defined in the finalized Lease Agreement.

Appendix A Depiction of the Property and Encumbrances

Site Area A: AI Data Center

The land area proposed for lease (Figure 1a and 1b) is located in Bethel Valley in the southwestern portion of the Oak Ridge Reservation (ORR). Bethel Valley is the site of the main plant of the Oak Ridge National Laboratory (ORNL). The Site Area provides a total of approximately 95 +/- acres located at the intersection of Bethel Valley Road and TN Highway 95, in the City of Oak Ridge immediately west of ORNL. Incorporated within the 95 +/- acres are two parcels, one consisting of approximately 73 acres (northeast corner of intersection) and approximately 22 acres (northwest corner of intersection).

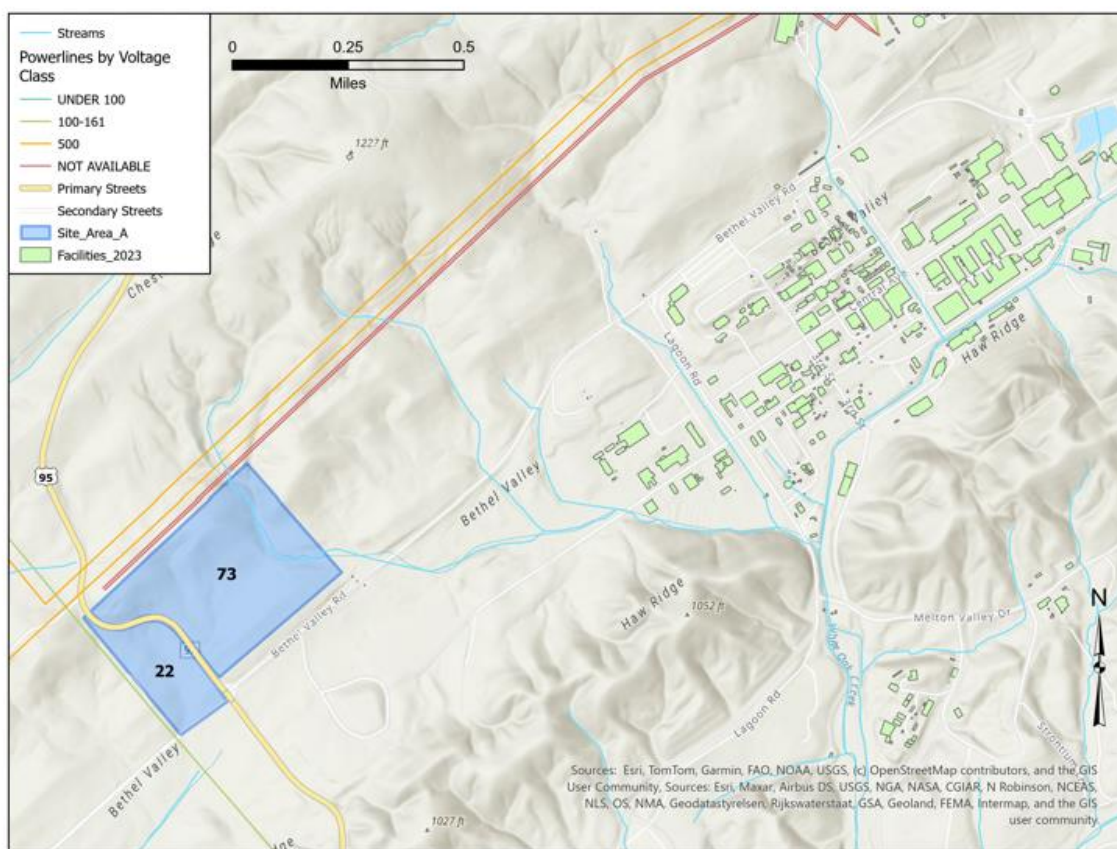


Figure 1a. Site Area A Map



Figure 1b. Site Area A Map

ORNL was built in 1943 as a pilot plant for demonstrating production and separation of plutonium. Since then, ORNL has evolved from a laboratory almost wholly dedicated to nuclear technology, research, and development to one of the largest national laboratories in the United States. ORNL now includes extensive multidisciplinary efforts in nuclear and non-nuclear technologies and sciences.

Environmental Assessments of DOE property located at ORNL have been completed in 2008 [Environmental Assessment for the Oak Ridge Science and Technology Project at the Oak Ridge National Laboratory, Oak Ridge, Tennessee (DOE/EA-1575), Environmental Assessment for the Oak Ridge National Laboratory Modernization Initiative, Oak Ridge, Tennessee (DOE/EA-1618), and Environmental Assessment Construction and Operation of the Stable Isotope Production and Research Center, Oak Ridge National Laboratory, Oak Ridge, Tennessee (DOE/EA-2136)], which provide information on the socioeconomics and available utilities for the area. The Environmental Assessments also provide general information on soil conditions and geology and hydrology of the general area of the Property.

General information for the environmental conditions for the Oak Ridge Reservation (ORR) including the ORNL can be found in the Annual Site Environmental Report (ASER) for the ORR located at <https://doeic.science.energy.gov/asr/ASER2023/index.html>. This document includes information on climate, population, cultural and historic resources, wildlife and threatened and endangered species, air quality monitoring, water quality monitoring, and applicable environmental compliance programs. The Oak Ridge Reservation Natural Resource Damage Assessment: Restoration and Compensation Determination Plan/Environmental Assessment (DOE 2022) provides examples of threatened, endangered and species of special concern for the ORR which may be viewed at <https://doeic.science.energy.gov/uploads/A.0106.037.0028.pdf>.

Population data for Roane County and adjacent counties of Anderson, Knox and Loudon, which comprise the region-of-influence for socioeconomic resources, is provided in DOE/EA-2136 and is shown in Table 1 below.

Table 1. Population data for 2000 to 2030 (projected)

	2000	2010	2019	Projected 2030	Percent Change 2000 - 2019	Percent Change 2019 - 2030
Anderson County	71,330	75,129	76,061	79,454	6.6%	4.5%
Knox County	382,032	432,226	461,104	513,318	20.7%	11.3%
Loudon County	39,086	48,556	52,340	60,311	33.9%	15.2%
Roane County	51,910	54,181	53,075	53,111	2.2%	0.1%
Tennessee	5,689,283	6,346,105	6,709,356	7,393,069	17.9%	10.2%
United States	281,421,906	308,745,538	324,697,795	355,101,000	15.4%	9.4%

Source: DOE/EA-2136.

The first inhabitants in the ORR area were Native Americans that had occupied the area for at least 10,000 years and whose descendants, the Cherokee, Shawnee and Creek, inhabited the area when European settlers arrived in the late 1700s. Early European settlers founded four small communities named Elza, Robertsville, Wheat, and Scarborough and by the early 1940s, a thousand families inhabited the area. These families were forced to sell their homes and lands to the government in 1942, which subsequently designated the area as part of the Manhattan Project.

Rich prehistoric and historic cultural resources remain from the area's diverse settlers. Archaeological studies have identified more than 44 known prehistoric sites through evidence of former structures and artifacts, such as burial mounds, ceramics, knives, and arrowheads. ORR also contains 254 historic pre-World War II structures e.g., cabins, log barns), 32 cemeteries, and several historically significant structures from the Manhattan Project era (Fielder 1974).

Much of the proposed Property lies within the boundaries of the Record of Decision for Interim Actions in Bethel Valley, Oak Ridge, Tennessee, DOE/OR/01-1862&D4 (2002) which is available at <https://www.epa.gov/superfund/search-superfund-decision-documents>. The future land use for the area of the Property proposed in the Interim Record of Decision (IROD) is Unrestricted Use (Figure 2).

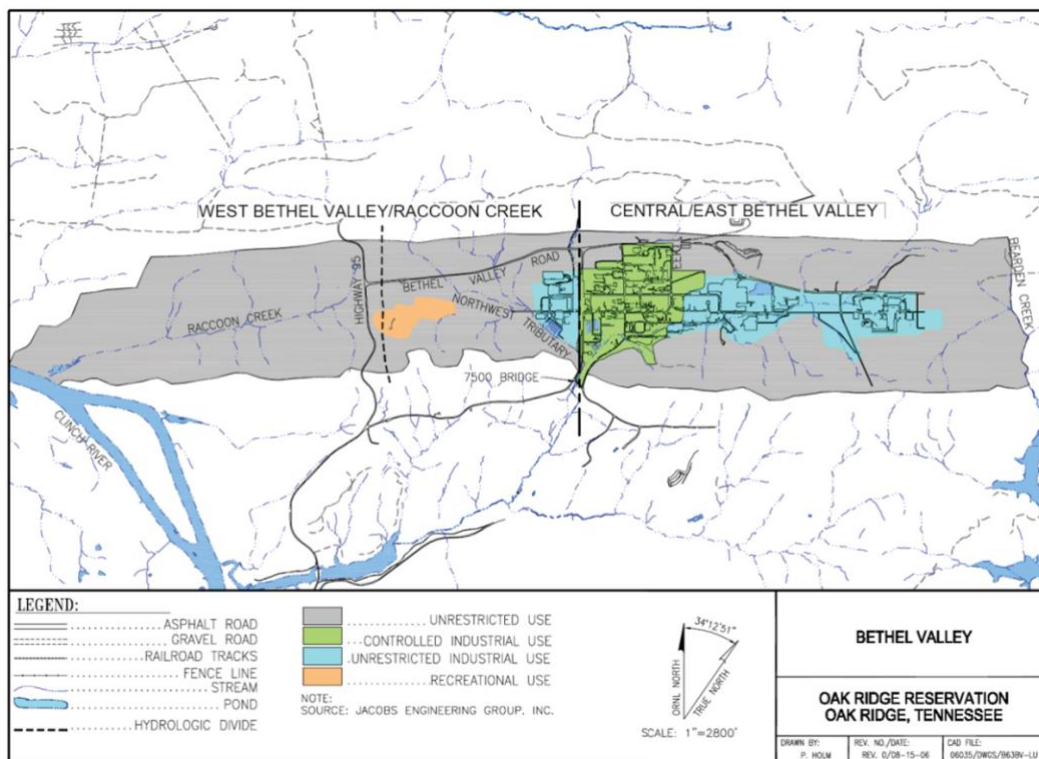


Figure 2. Land Use Area Proposed in the IROD

Wetlands have been identified within the proposed Property, specifically on the 22-acre portion of the Site as indicated in Figure 3.

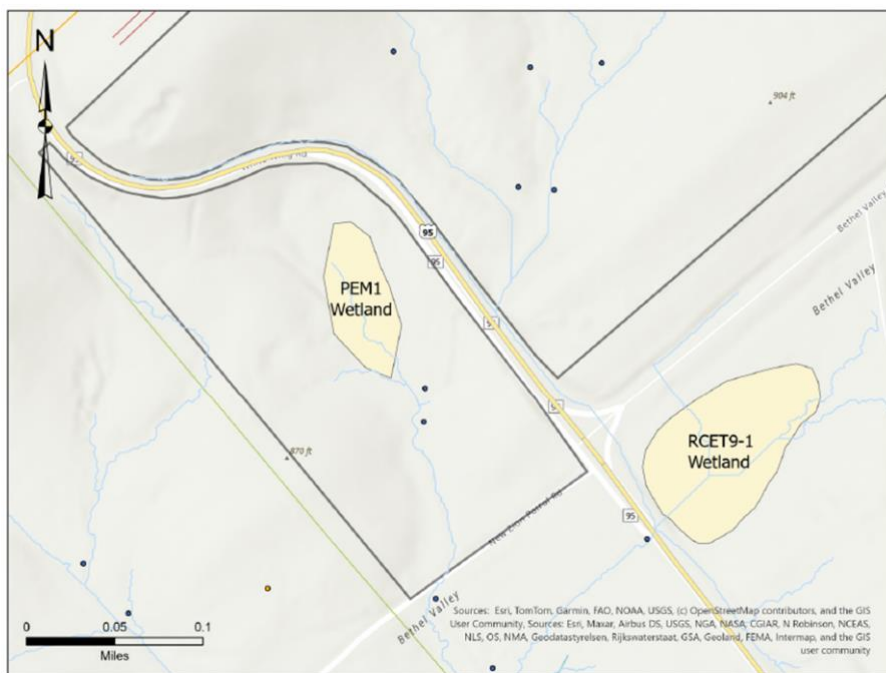


Figure 3. Wetlands

The vascular plants and animals found on the ORR are listed in Oak Ridge Reservation Physical Characteristics and Natural Resources (DOE 2006). Federal and State listed Threatened and Endangered species can be obtained from the U.S. Fish and Wildlife Service and the Tennessee Wildlife Resources Agency.

Bethel Valley is underlain by interbedded shale, siltstone, and limestone bedrock of the Chickamauga Group, with the Knox Group dolostone formations underlying Chestnut Ridge to the north and sandstones of the Rome Formation forming Haw Ridge to the south.

The Chickamauga Supergroup formations, from youngest to oldest, are described below.

The Fleanor Shale is a thick accumulation (245 to 260 feet [ft]) of maroon, calcareous, and shaley siltstone with numerous light-gray limestone beds. Vertical burrows and general bioturbation are common. The lowermost and uppermost portions of the Fleanor consist of thick, olive-gray, calcareous siltstone that characterizes the unit.

The Rockdell Formation is a thick section of limestone overlying the Fleanor. The Rockdell is 260 to 280 ft thick and underlies the continuous low ridge near the middle of Bethel Valley. The lower portion of the Rockdell contains light-gray calcarenite, dark-gray calcareous siltstone, fossiliferous nodular limestone, and birds eye micritic limestone. Small chert nodules are common, and evidence of vertical burrowing has been observed. The lower lithology grades upward to dense calcarenite, which contains subordinate amounts of birdseye micrite and nodular limestone. The common occurrence of bedded and nodular chert is distinctive of the upper portion of this formation.

The Benbolt Formation is a relatively heterogeneous formation that is 360 to 380 ft thick. The Benbolt consists of thick interbeds of fossiliferous nodular limestone; unfossiliferous, amorphous micrite within a dark-gray siltstone matrix; dark-gray siltstone; and unfossiliferous calcarenite. A pale buff color is characteristic of weathered Benbolt rock fragments that are seen in vegetatively barren areas.

The Bowen Formation is a maroon unit that overlies the lower thick limestone of the Benbolt and is a reliable marker for field and subsurface correlations. The Bowen is 16 to 30 ft thick and consists of maroon calcareous and shaley siltstone and thin beds of light-gray to olive-gray limestone and argillaceous limestone. Vertical and horizontal burrows are evident throughout the unit.

The Witten Formation, which is 345 to 360 ft thick, consists of interbedded nodular limestone; calcarenite; amorphous, thin-bedded limestone and siltstone; and wavy limestone. Extensively bioturbated beds and beds with numerous bryozoa are distinctive of the upper part of the Witten Formation.

The Moccasin Formation has been largely removed by the Copper Creek fault and is not fully represented on the ORR. The Moccasin Formation consists of olive- to light-gray and pale-maroon calcareous siltstone interbedded with light-gray, fine-grained limestone. The upper 79 ft of the Moccasin Formation have been described as interbedded maroon-gray, calcareous siltstone; gray to maroon-gray, shaley limestone; and maroon mudstone (Haase et al., 1985).

Bedrock structure is important because it strongly influences the occurrence and movement of groundwater. Prominent fracture sets observed in rock core from Bethel Valley are bedding plane partings and joints. Bedding plane partings are the most abundant fracture features because most of the formations consist of thin-bedded limestone/shale interbeds. The more limestone-rich formations, such as the Rockdell and Witten formations, contain thicker limestone beds that tend to fracture in the strike set

and dip-set orientations. Cavities have been reported in drilling logs from the Central Campus area especially from boreholes drilled into the Rockdell Formation.

The Knox Group rocks in the area of the Property include the Mascot Dolomite and the Kingsport Formation. These formations are generally composed of a fine- to medium-grained, variegated (gray, pink, and green) crystalline dolomite. Nodular and bedded variegated jasperoidal chert is common, and several 5 to 15 ft thick limestone and dolomitic limestone interbeds also occur. It is typically described on boring logs as fine- to medium-grained, light olive-gray to light gray and dusky-red to gray, and locally mottled with weak red. It is strong to very strong, moderately to thickly bedded, fresh, with few irregular chert nodules and chert beds with coarse dolomite crystals (gray to gray-brown). Trace healed/filled fractures with indurated clay mineral fill (dark reddish-brown) are noted. Dolomite-healed fractures throughout, trace fossils, trace dolomite-filled pits and vugs (separate/non-touching), stylolites, and weak (delayed) to no reaction to hydrochloric acid (HCl), which signifies relatively low calcium carbonate content, are observed in various boring logs. A thin (less than 1.0 ft) olive gray chert and dolomite-cemented fine- to coarse-grained quartz sandstone with fine gravel-sized rounded chert clasts is also noted.

Limestone interbeds typically consist of gray limestone to dolomitic limestone (micrite) that is strong, laminated to very thinly- and moderately-bedded, locally nodular, slightly-weathered to fresh, and partially dolomitized with dolomite crystals as matrix and along laminations and bedding. Stylolites, trace chert nodules (reddish-brown), healed fractures with calcite/dolomite throughout, trace to few dolomite and calcite filled pits and vugs (separate/non-touching, few open with calcite/dolomite lining), and trace scattered quartz sand grains, and weak to strong HCl reaction is observed.

The Chickamauga Group formations exhibit substantial variation in hydraulic conductivities, primarily because of varying degrees of fracturing and conduit flow in the carbonate (karst) units. In addition, the near-surface soils throughout much of ORNL main plant area has been altered by an extensive underground industrial support system of pipelines, tank farms, and building basements. Both the hydrogeologic characteristics (e.g., differing lithologies and variable fractures and karst conduits) and the man-made features (e.g., underground utilities and basement sumps) have resulted in some known and some unknown preferential flowpaths for contaminant transport.

The residuum formed over bedrock is composed primarily of unconsolidated clay and silt with some isolated bedrock fragments. This medium has a primary permeability consisting of interconnected, intergranular voids and a secondary permeability composed of relict geologic structures retained in the residuum after the bedrock has weathered as well as voids left after roots and other organic materials have decayed. Groundwater movement via the primary system is likely to be slowed by the tortuous intergranular connections. Movement in the secondary system can be expected to be faster, given the continuity of the larger openings. In spite of the relative rates of movement, the primary system's greater total volume of interconnected void space probably represents the majority of the regolith's storage capacity.

The weathered upper surface of the Chickamauga probably exhibits an abrupt and significant decrease in hydraulic conductivity when compared to the hydraulic conductivity of the residuum. The decrease in hydraulic conductivity is likely to produce saturated conditions at the interface between the two media. Under the influence of local gradients and increased elevation head from the continued infiltration of vadose water, the saturated zone may extend laterally, resulting in an important flow zone at the soil-bedrock interface. This zone is potentially the principal transport mode for groundwater in the residuum but it may be altogether absent where there is a high degree of hydraulic connection between the residuum and bedrock groundwater regimes. The bedrock aquifer is composed primarily of limestone

containing clay and shale partings, this lithology is interbedded with calcareous siltstone and shale. Both lithologies generally have tightly bonded matrixes which allow very little intergranular porosity. However, a moderately well-developed secondary permeability system provides for significant transmission of ground water within the bedrock. Principles of structural geology are useful in predicting the types of features that form the secondary permeability system. The Chickamauga, being predominantly limestone, is not as flexible as adjacent shale units. When stressed the Chickamauga is likely to behave in a brittle manner and develop fractures. Because the Chickamauga forms the footwall of the Copper Creek fault in this terrane it is reasonable to expect the occurrence of orthogonal joint sets oriented about 60° to 120° to the direction of principal force. In response to unloading tensions, bedding planes exposed at the upper bedrock surface part to form the beginnings of down-dip flow paths subject to solutional enlargement.

Both the Knox and Chickamauga formations, which are predominantly carbonate units, are subject to solution weathering. The result is an irregular bedrock surface that contains solutionally enlarged features (joints and bedding planes). In general, the purer the limestone the greater is the tendency for solution activity. The Chickamauga Formation contains some relatively pure limestone sequences, but overall, it is moderately silty and argillaceous, factors which tend to impede the chemical weathering of certain strata but also contribute to stratabound groundwater movement in the more pure limestone units.

The soil in Bethel Valley is generally classified as either Colbert Series or Upshur Series silty clay loams based on the Soil Survey for Roane County (USDA 1942). Soil thicknesses generally range from 0 to 30 ft over the area. Colbert surface soil is described as heavy silt loam or silty clay loam. The subsoil is tough, tenacious, sticky, plastic clay, or silty clay. This subsoil layer rests on bedrock in many areas, or elsewhere there is an intervening layer of similar material, but it is noticeably mottled in only gray and green. External drainage is generally good, but internal drainage is rather poor due to the heavy plastic and impervious character of the subsoil. Soil of the Upshur Series is characterized by heavy texture and shallowness over bedrock. The Upshur silty clay loam has a friable silty clay loam surface soil. The subsoil consists of tight, sticky, plastic clay or silty clay. The subsoil layer generally rests on partly disintegrated shaley limestone. Surface drainage is usually good, but internal drainage is somewhat limited (USDA 1942). Soil of the Roane Series occupies strips of bottomland along the streams. The most conspicuous character of this soil is a semi-cemented layer of angular chert fragments occurring from 15 to 30 in. below the surface. This soil is fairly well drained and has a moderate content of organic matter and a rather low water-holding capacity.

The soils derived from the Chickamauga Foundation limestone contain a mixture of kaolinitic and illitic minerals with some units probably having a significant amount of montmorillonitic clay minerals. Drill logs from piezometers installed in and around SWSA 3 describe the soils as reddish to medium brown or gray clay. The drill logs further note some degree of plasticity and variable silt and gravel components, with soil depths ranging from about 6 ft to approximately 30 ft. Generally, illitic and vermiculitic clay minerals are more efficient in fixation of potassium and other comparable ions into less available positions than are the kaolinitic minerals. The total amount of fixation will depend on such factors as available surface area (as opposed to area available only through solid state diffusion) and on the thickness of the soil column.

The conceptual model for contaminant transport in Bethel Valley, provides a general framework of contaminant distribution and the principal contaminant source areas. The full delineation of the nature and extent of groundwater contamination is incomplete in many areas of the ORR, especially in defining deep flow pathways and contaminant transport at depth. The three agencies of the Federal Facility Agreement will continue to work together in the future to identify projects that improve the understanding of groundwater flow pathways and contaminant migration based on a continually refined groundwater

strategy. The final groundwater decision will be made after source control actions are complete, their effectiveness is monitored, and additional characterization data is collected.

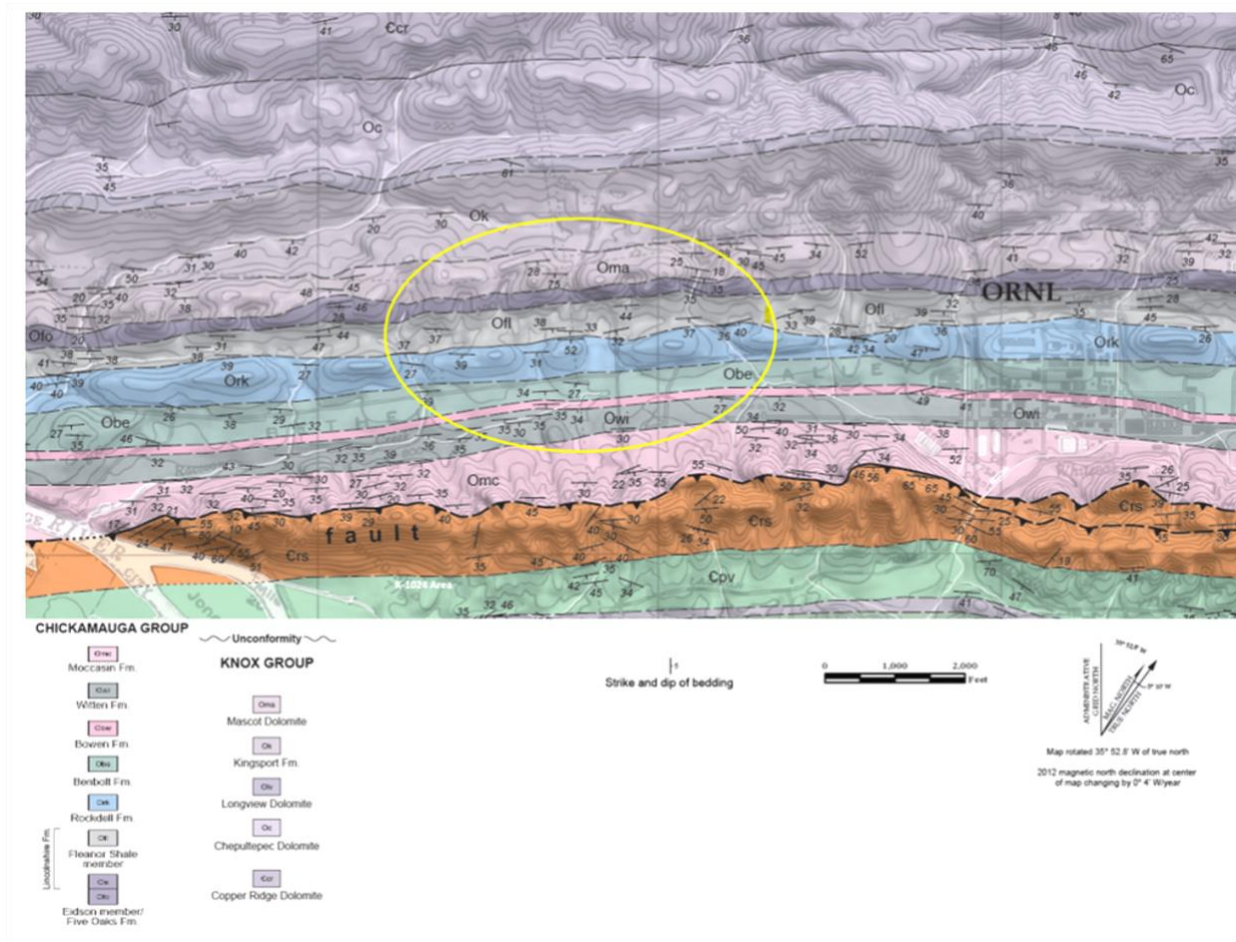


Figure 4. Bedrock Geology of the Site Area.

Groundwater monitoring wells for characterization of groundwater occurrence and water quality have been installed in the vicinity of the proposed Property. Figure 6 shows the locations of the existing monitoring wells in the vicinity of the property. In West Bethel Valley, the combination of leachate from buried waste trenches in SWSA 3 along with leachates from contaminated materials in the former Contractor's Landfill, and unprotected contaminated materials stored on the surface of SWSA 3 infiltrated to groundwater. Because of these contaminant sources lying on the watershed and groundwater divide between NWT and Raccoon Creek, contaminants that leached to groundwater have migrated through fracture/conduit flow both eastward and westward to discharge to the Northwest Tributary and Raccoon Creek (Figure 5). Multiple points of contaminant influx to both streams result from the relatively large contaminant source area. The depth and lateral extent of plume migration beneath west Bethel Valley have not been fully defined. Figure 4 provides the current plume conditions at SWSA 3. Groundwater discharging to these surface water bodies, therefore, contaminated the surface water, albeit at decreasing concentrations over time and since remediation of the contaminant source area. The human health and ecological risk assessments conducted in support of the Bethel Valley Interim Actions ROD did not identify human health or ecological risk levels in groundwater, surface water, or sediment in West Bethel Valley (the NWT area) or the Raccoon Creek area for future land use scenarios (DOE/OR/01-1862&D4). Ongoing monitoring of surface water and groundwater in the area are conducted to confirm conditions,

monitor contaminant trends in the area, and to evaluate the effectiveness of RAs conducted at the solid waste management units.

During FY 2011-2012, the West Bethel Valley Solid Waste Management Units were hydrologically isolated consistent with the Bethel Valley ROD requirements. Post-remediation remedy performance demonstrates that, although a few wells have not yet attained remedy goals, the contaminant levels in groundwater and surface water (DOE/OR/01-2707&D2) have decreased significantly. In West Bethel Valley, rainfall and seasonal surface water infiltration through buried wastes in SWSA 3 and adjacent landfills leached soluble contaminants into the shallow groundwater, which are transported toward both Raccoon Creek to the southwest and the NWT to the northeast (Figure 5). The major contaminant of concern in West Bethel Valley is 90Sr, although concentrations of 90Sr in Raccoon Creek are below the target risk range.

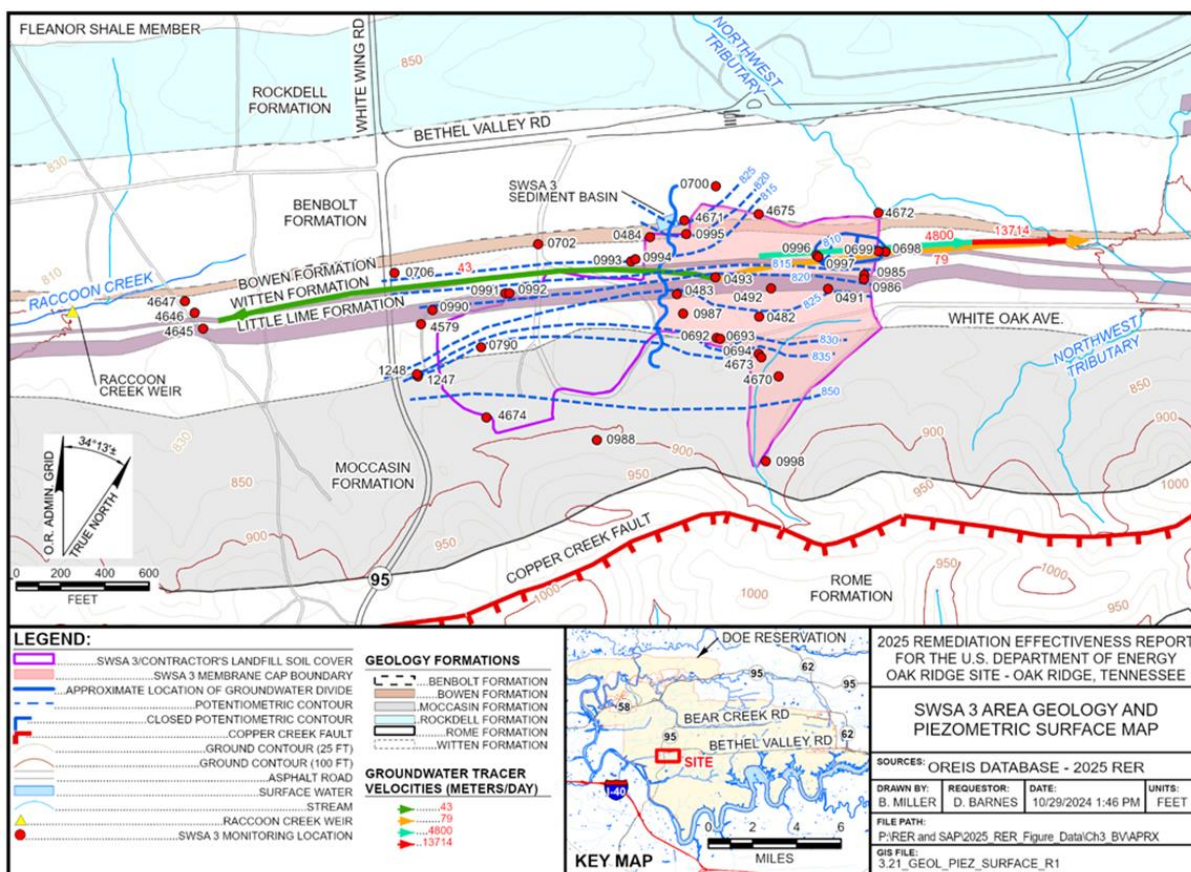


Figure 5. SWSA 3 Area Geology and Piezometric Surface Map

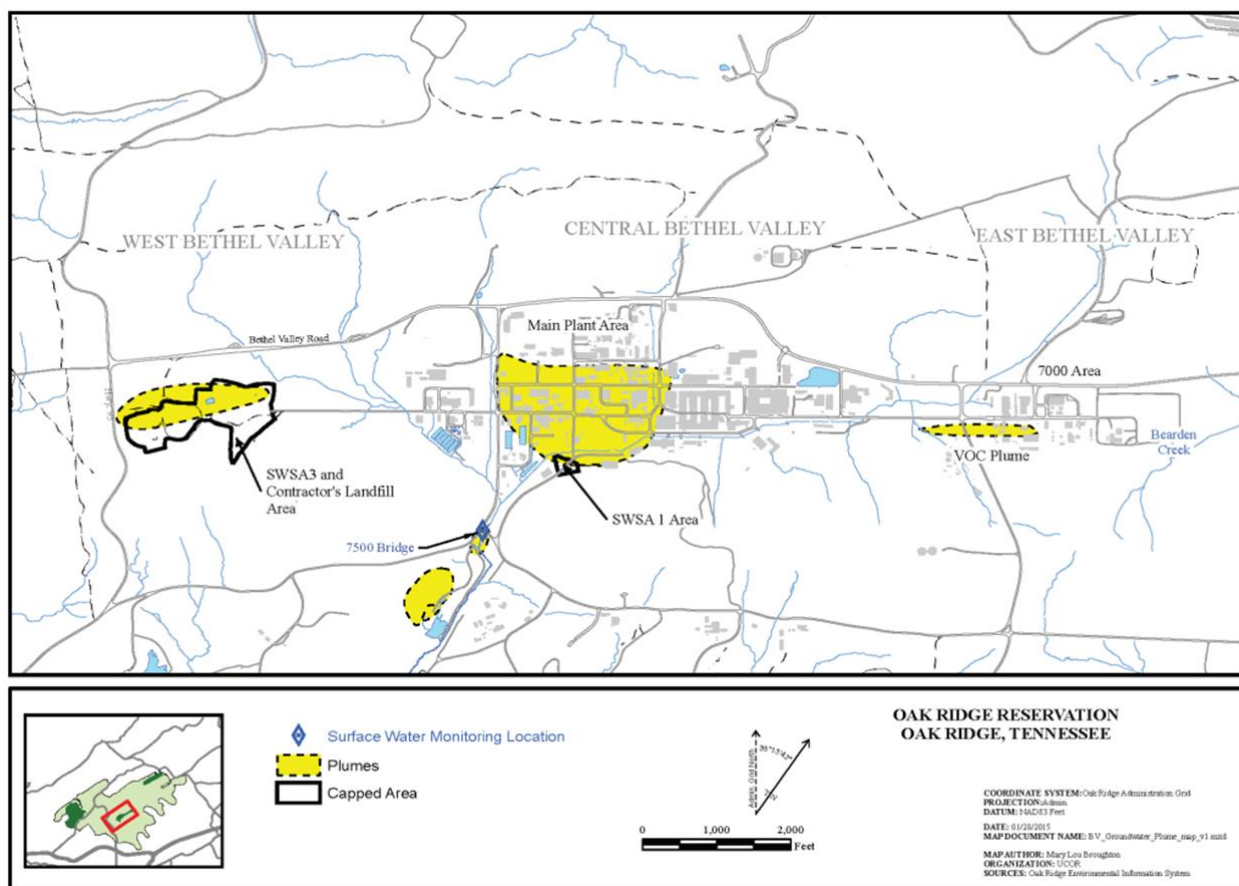


Figure 6. Groundwater Plumes in Bethel Valley.

The DOE Oak Ridge Reservation is located in Seismic Zone 2 of the United States. The site lies in the Southern Appalachian Seismo-Tectonic province, which is characterized by a series of northeast- to southwest-trending folds and thrust faults in Paleozoic rocks. The region has been the source of continuing minor seismic activity; however, no correlation between seismic events and known tectonic structures has been confirmed. A review of pertinent literature has indicated no reports of earthquake activity or surface rupturing associated with any of the faults within the site vicinity, and the possibility of these events is considered extremely unlikely.

Although the Oak Ridge area experiences a moderate level of seismic activity, no incidence of surface deformation has been documented. Earthquakes of the types that occur within the region are common throughout the world. The shocks are of normal focus—40 to 50 km (25 to 30 miles) deep. It is highly improbable that a shock of major intensity will occur in the Oak Ridge area for several thousand years. Forces from more seismically active areas will probably be dissipated by distance.

Two studies were performed during FY 1973 by professional seismic-evaluation organizations to determine seismic factors at the former Oak Ridge Gaseous Diffusion Plant. Two levels of seismic events were defined: a design earthquake and a maximum earthquake. The design earthquake is that event for which a 50% probability of occurrence is expected once in 50 years. The maximum earthquake is that event which a 16% probability of occurrence is predicted once in 50 years. These predictions are based on studies of the seismic histories and geologic structures of the region surrounding the plant site. Table 1 contains a summary of the seismic characteristics associated with the plant site which would also be

applicable to the total DOE reservation. Values for peak horizontal ground accelerations and a range of modified Mercalli intensities are listed.

Table 1. Predicted Seismic Characteristics

Maximum earthquake	
Peak acceleration, % <i>g</i>	15
Intensity (MM) ¹	VI - VIII
Richter magnitude ²	4.7
Design earthquake	
Peak acceleration, % <i>g</i>	6
Intensity (MM) ¹	V - VII
Richter magnitude ²	3.0

¹Modified Mercalli Intensity dependent on foundation condition.

²Will produce accelerations near the epicenter approximating those given.

Additional information on seismic conditions and evaluations in the general Bethel Valley area can be found in the Clinch River Nuclear Site Early Site Permit Application Part 2, Site Safety Analysis Report, available through the Nuclear Regulatory Commission.

The Oak Ridge Reservation lies within the watershed of the Tennessee River, having the advantage of being included in the area under TVA flood control. As a flood-control dam, Norris Dam, on the Clinch River upstream from the reservation, considerably reduces the Clinch River drainage area applicable to the reservation, and, through controlled discharge in time of flood, it greatly reduces potential flooding downstream. Controlled discharges at Melton Hill Dam adjacent to the reservation at Clinch River mile 23 and at Watts Bar Dam on the Tennessee River downstream from the reservation also reduce the potential for flooding. Since the Oak Ridge area was acquired by the government in 1942, only minor flooding problems have occurred. These have basically been confirmed to flooding within the urban area of the City of Oak Ridge, which is no longer under government control, and to some flooding of roads and low areas adjacent to the East Fork Poplar Creek and Clinch River within the ORR. Virtually no damage to plant facilities has occurred.

Melton Hill Dam has approximately 50 ft head and creates a reservoir that extends 44 miles upstream. The dam was completed in 1963 and provides power production (72 MW), navigation, recreation, some low-flow regulation, but little flood protection; Melton Hill Reservoir has a useful controlled storage of 3.2×10^4 acre-ft, about 2% that of Norris Reservoir. Melton Hill Reservoir forms the eastern and southern boundaries of the ORR. Normal pool elevation is 790 ft, and it is possible to lower the water level to about 754 ft. Watts Bar Dam on the Tennessee River creates backwaters on the Clinch that extends to Melton Hill Dam, forming the southwestern and western boundaries of DOE property. The dam has a head of 112 ft and 72 MW of generating capacity. TVA completed the Watts Bar Dam in 1942 and maintains pool elevation between 740 and 741 ft from mid-April through September and fall and winter water levels between 735 to 737 ft.

Flow in the Clinch River is highly regulated by releases from Norris Dam and Melton Hill Dam. Surface water flows are measured by TVA at both dams. Except during periods of heavy rainfall, discharge from Melton Hill results mostly from power generation. Two turbines exist in the Melton Hill powerhouse. At Melton Hill, power is typically generated to help meet peak loads. Depending on the season and the availability of water, power may be generated during mid-morning, the afternoon, or early evening. Therefore, the Clinch River below Melton Hill typically has periods of zero flow followed by one or more

hours of flow at 10,000 to 20,000 cubic ft per second. The pulsatory flow pattern in the lower Clinch River affects the flow of tributaries. Under certain operating conditions at Watts Bar, Fort Loudon, and Melton Hill dams, flow reversals can occur in the Clinch River.

The ORR is located in Anderson and Roane Counties in Air Quality Control Region 207 (East Tennessee–Southeastern Virginia). EPA has designated Anderson County as a basic nonattainment area for the 8-h O₃ standard, as part of the larger Knoxville 8-h basic O₃ nonattainment area that encompasses several counties, and for PM_{2.5}. For all other criteria pollutants for which EPA has made attainment designations, existing air quality in the greater Knoxville and Oak Ridge area is in attainment as defined by National Ambient Air Quality Standards (NAAQS).

Utilities are generally available for the Property, including electricity, natural gas, water and sewer. Electricity in the vicinity of the Property is distributed by City of Oak Ridge and provided by TVA (Figure 7). The Property contains 500 kV overhead lines above the north end of the property and 161 kV lines within the western end of the Property. Public water and sanitary sewer service is provided by the City of Oak Ridge (<https://www.oakridgetn.gov/207/Public-Works>). Natural gas is provided by the Oak Ridge Utility District (<https://orud.org/orud-service-area/>).

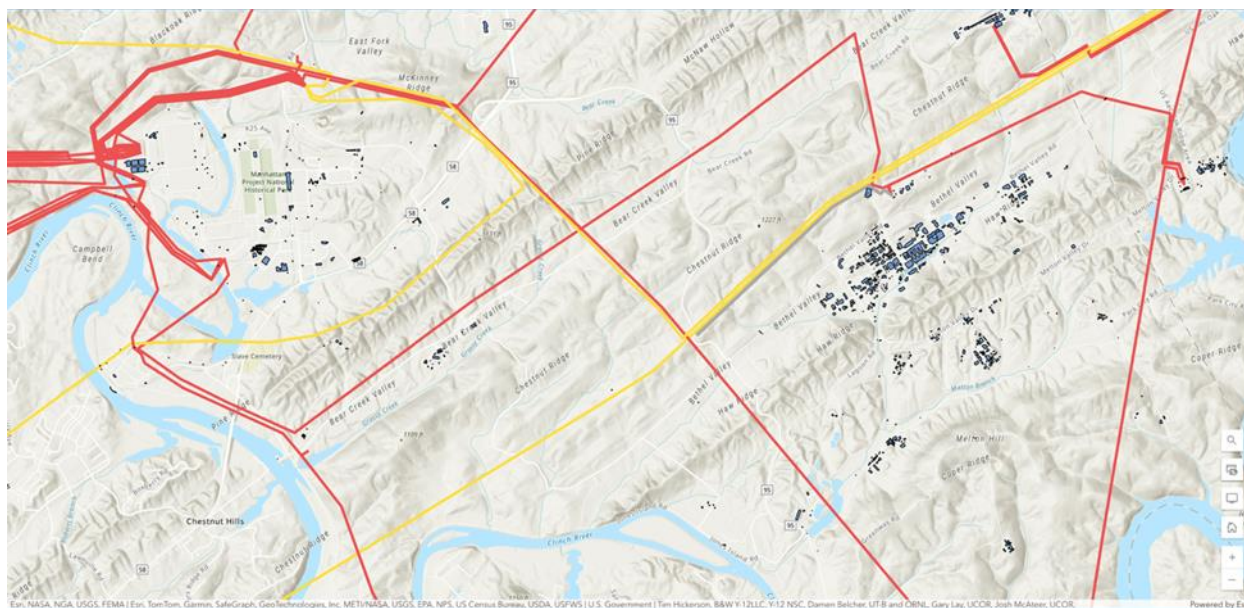


Figure 7. Electrical Power Distribution

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Site Area B: AI Data Center and/or Energy Generation Infrastructure Facilities

Formerly known as the Oak Ridge Gaseous Diffusion Plant and the K-25 site, ETTP began operations during World War II as part of the Manhattan Project. The original mission was to produce enriched uranium for use in atomic weapons. The plant produced enriched uranium for the commercial nuclear power industry from 1945–1985, with uranium production terminating in 1987.

The land area proposed for lease (Figure 1) includes the footprint of the former Building K-25 (Figure 2) and surrounding property. Building K-25 started operation in 1945 for isotopic enrichment of uranium by gaseous diffusion to meet national defense requirements of World War II. Demolition of Building K-25 was completed in 2013, and the concrete slab remains (Figure 3).

The National Historic Preservation (NHP) K-25 Footprint (approximately 83 acres) is subject to historical interpretation arising out of both a bill establishing the area as part of the Manhattan Project National Historical Park and a set of agreements between DOE and the National Park Service, State Historic Preservation Office, and other consulting parties. These documents currently restrict development on the K-25 Footprint, although the parties can amend the agreements to allow development that can assist in improving public understanding of the Manhattan Project and its legacy.

The additional land available (up to 67 acres) provides a buffer around much of the NHP Footprint up to Poplar Creek on the north and west boundaries and excludes DOE waste areas to the northwest and east sides (Figure 1). The additional property has been used for vehicular circulation, staging, and outdoor storage activities.

The Property is located in the center of what is now called Heritage Center (Figure 4), a brownfield industrial park where DOE has completed regulatory cleanup of the land in order to transfer property for beneficial reuse. Several businesses are operating on site or under construction, with a recent influx of new nuclear industry. The Property has shared access to State Road 327 (Blair Road) and SR 58 (Oak Ridge Turnpike), and Heritage Center is located 5 miles east of Interstate Highway I-40. Greater surrounding uses within one mile include residential and permanent wildlife management areas, including the 3,000-acre Black Oak Ridge Conservation Easement (BORCE) created by DOE in 2005 to settle natural resource damages resulting from the history of release or threatened release of hazardous substances from DOE's Oak Ridge Reservation.

A FONSI for the conveyance (lease, easement, and/or title transfer) of DOE property located at the ETTP and surrounding area (approximately 1,800 acres) for mixed use economic development, which covers the proposed property, was completed in 2011 [*Environmental Assessment, Transfer of Land and Facilities within the East Tennessee Technology Park and Surrounding Area, Oak Ridge, Tennessee* (DOE/EA-1640)] and can be found here: <https://doeic.science.energy.gov/uploads/E.0505.037.1310.pdf>.

Socioeconomic data for the region is provided in the EA for transfer of land at ETTP (DOE 2011) and in the Kairos Environmental Report (Kairos 2021). Detailed information for wildlife and threatened and endangered species can also be obtained from the EA (DOE 2011) and Kairos (2021). Historic and cultural resources are described in detail in the Draft Environmental Impact Statement for the Construction Permit for the Kairos Hermes Test Reactor [U.S. Nuclear Regulatory Agency (NRC) 2022].

Additional information can be found in the Environmental Assessments (EAs) prepared for the transfer of land and facilities at ETTP (DOE 2011) and the former Oak Ridge Airport site (FAA 2023). The Construction Permit Application submitted to the Nuclear Regulatory Agency (NRC) by Kairos Power, LLC for the Hermes Reactor, located on the west side of Poplar Creek (Figure 1), also provides site-

specific environmental information and includes the draft Environmental Assessment and Environmental Impact Statement, and the Environmental Report for the project. These documents are available through the NRC ([Nuclear Regulatory Commission](#)).

General information for the environmental conditions for the Oak Ridge Reservation (ORR) including the ETTP can be found in the Annual Site Environmental Report for the ORR [[Oak Ridge Reservation Annual Site Environmental Report](#)]. This document includes information on climate, population, cultural and historic resources, wildlife and threatened and endangered species, air quality monitoring, water quality monitoring, and applicable environmental compliance programs.

GIS data can be found on the Oak Ridge Environmental Information System (OREIS) website. Here, you can view, print, and download statistical and informational reports for various datasets, as well as view geospatial datasets. Link to the OREIS website here: [OREIS Home page](#)

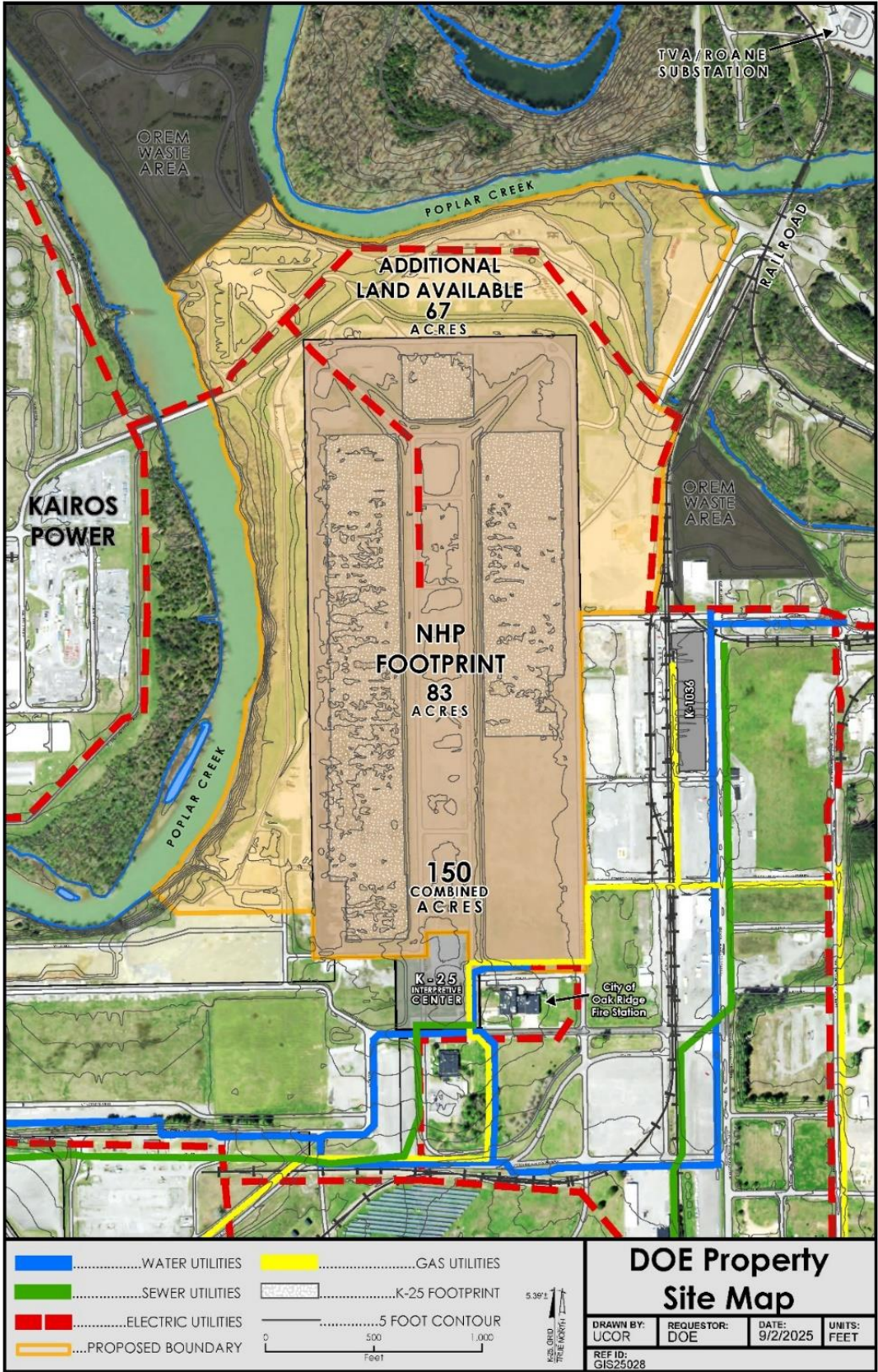


Figure 1. Proposed DOE Property for lease.



Figure 2. Building K 25, looking southwest, circa 2005.



Figure 3. Building K-25 Slab, Looking North, circa 2015.

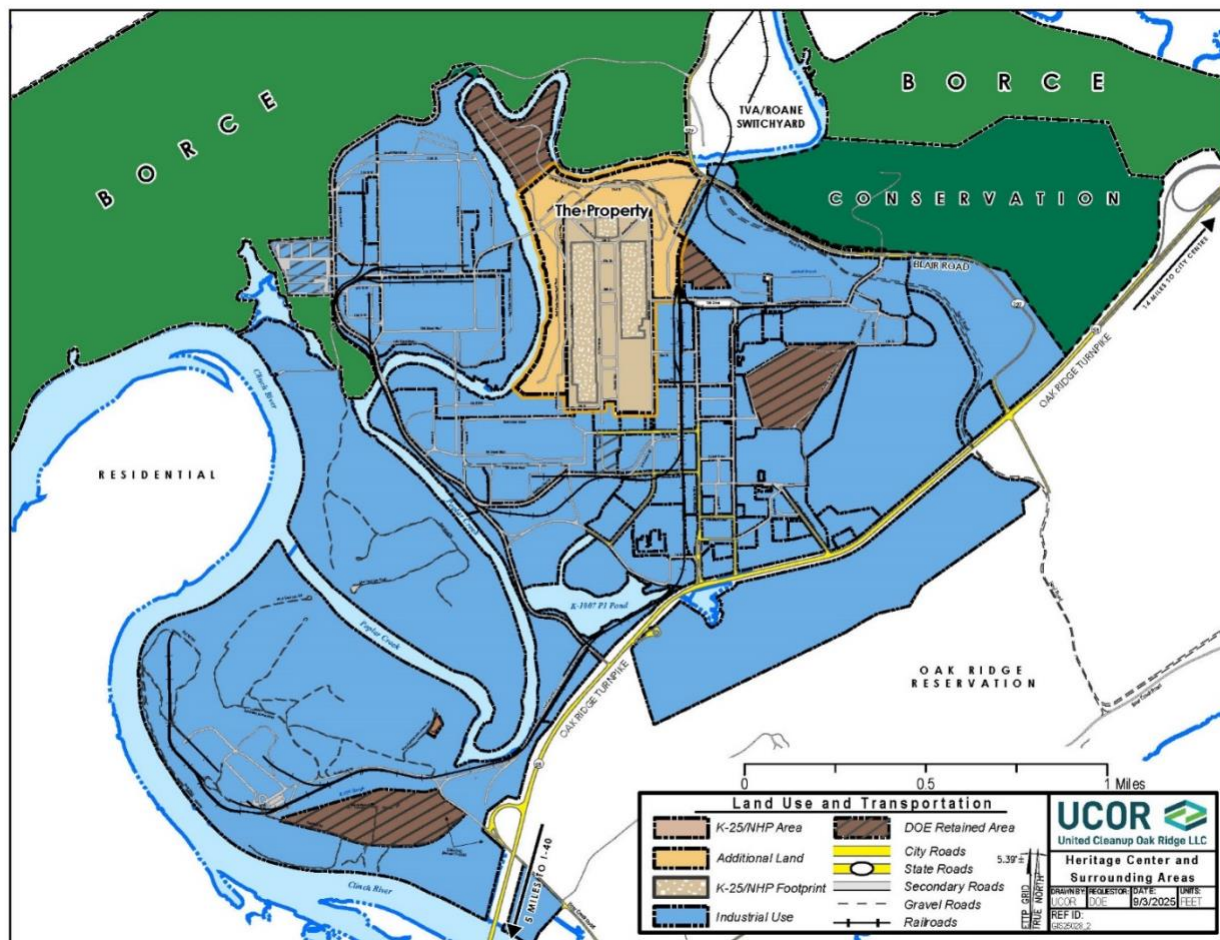


Figure 4. Heritage Center and Surrounding Areas.

Poplar Creek, which borders the north and west sides of the proposed property, enters the north side of the ETTP and flows approximately 5.5 miles through the site, from the upstream confluence of the east and west forks of Poplar Creek to the confluence with the Clinch River. The portion of Poplar Creek adjacent to and extending upstream of the Property is impounded by the Watts Bar Reservoir dam. At high pool stage, Poplar Creek is up to 290 ft wide, with water depths ranging up to 23 ft (bottom elevation = 718 ft Above Mean Sea Level [AMSL]). Tributary streams to Poplar Creek at the ETTP include Mitchell Branch, which flows through the northeastern portion of the proposed property to discharge to Poplar Creek.

Clinch River flow rates are regulated by the TVA through operations at downstream Watts Bar and upstream Melton Hill Dams. Consequently, stage elevations fluctuate daily, weekly, and seasonally in response to TVA operations. Fluctuations of up to 5 ft may occur in both the Clinch River and Poplar Creek. Additionally, as a result of power generation schedules at the two dams, there are periods during the day when river flow can reverse upstream.

Some areas of the Property lie within the existing 100-year and 500-year floodplains (approximate elevations of 755 and 760 ft AMSL, respectively) for Poplar Creek. The floodplains extend up the Mitchell Branch drainage area within the northeastern corner of the Property (Figure 5).

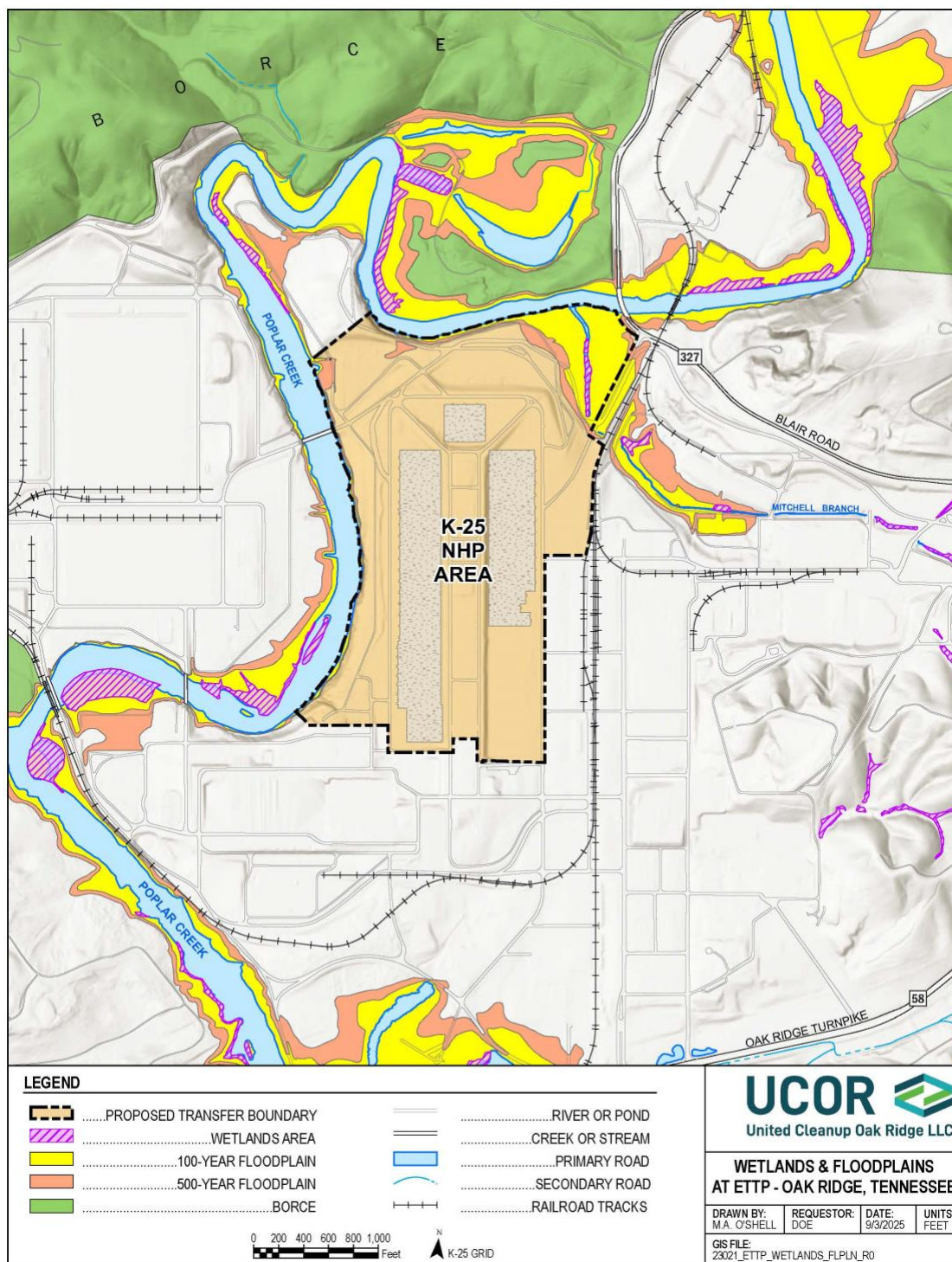


Figure 5. Floodplains and Wetlands in the Vicinity of the Property.

Groundwater at ETPP occurs both in the unsaturated zone as transient, shallow subsurface storm-flow and within the deeper saturated zone. An unsaturated zone of variable thickness separates the storm-flow zone and water table. Adjacent to surface water features, the water table is found at shallow depths, and the unsaturated zone is thin. Along the high topographic areas, the unsaturated zone is thick, and the water table often lies at considerable depth (25 to 50 ft deep). In low-lying areas in which the water table occurs

near the surface, the storm-flow and saturated zones are indistinguishable. Figure 6 is a generalized schematic showing the relationship between the storm-flow zone, water table, and unsaturated (vadose) and saturated zones.

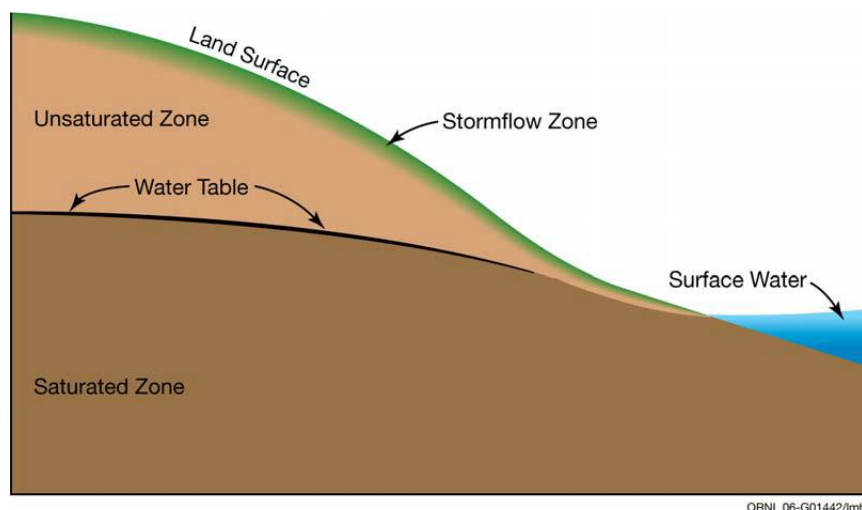


Figure 6. Relationship Between Storm-flow Zone, Water Table, and Unsaturated and Saturated Zones.

A potentiometric map showing average water level elevations for the combined unconsolidated zone and bedrock is provided in Figure 7. This figure shows that the general direction of groundwater flow on the Property is toward the surface water bodies including Poplar Creek and Mitchell Branch.

Groundwater monitoring wells for characterization of groundwater occurrence and water quality have been installed within the proposed property. Figure 8 shows the locations of the existing monitoring wells in the vicinity of the property. The monitoring wells range in depth from 25 ft below ground surface (bgs) to 124 ft bgs. Drilling records and monitoring well completion information can be provided on request.

Groundwater plumes containing volatile organic compounds and the radionuclide Technetium-99 have been identified under a portion of the property (Figure 9). The conceptual site model for the K-1024 building area, formally located between the east and west wings of the K-25 building, is described in the Interim Record of Decision for Groundwater in the Main Plant Area of the ETTP (DOE 2024). Land Use Restrictions are in place that prevent access and/or use of groundwater and residential use. Any structure built shall have an appropriate vapor mitigation installed with an approved operation and maintenance plan.

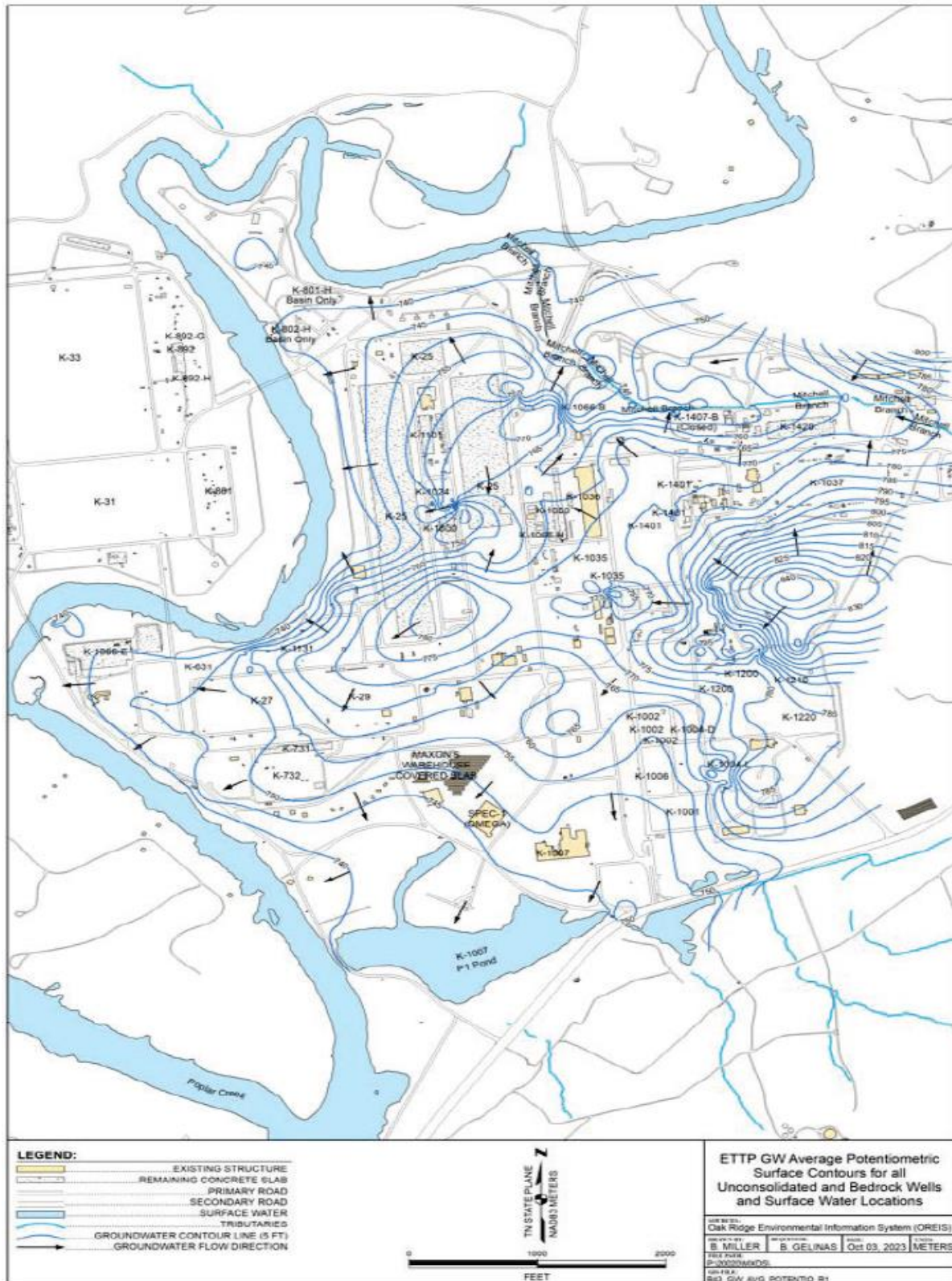


Figure 7. Potentiometric Map of Heritage Center



Figure 8. Groundwater Monitoring Wells in Vicinity of the Property.

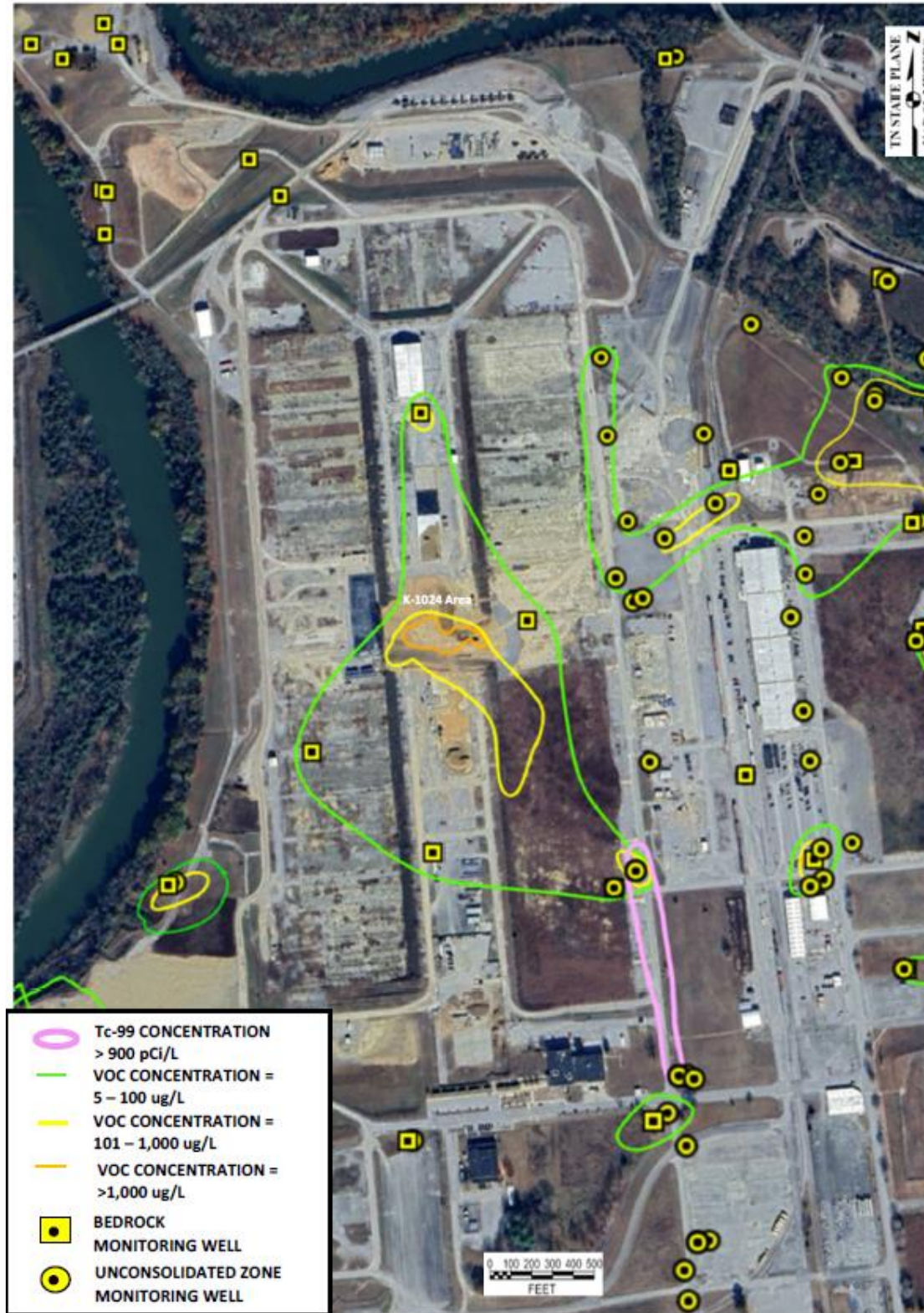


Figure 9. Groundwater Plumes in the Vicinity of the Property.

The geology within the Main Plant Area of the ETPP is complex, reflecting lithologic diversity (carbonate and clastics) and structural complexity at different scales, all of which have been overprinted by karst solution processes to varying degrees (Figure 10). The ETPP site is situated on the trailing edge of the Kingston thrust sheet adjacent to the Whiteoak Mountain Fault and is underlain by bedrock that can be broadly classed as either carbonate (Cambro-Ordovician Knox Group and Ordovician Chickamauga Supergroup) or clastic (Cambrian Rome Formation and Silurian Rockwood Formation). Bedrock is largely mantled by a veneer of unconsolidated overburden ranging up to 70 ft thick in the western portion near Poplar Creek. Saprolite, produced from the in-place weathering of bedrock, may be included in the unconsolidated overburden materials. Cut and fill performed during construction led to buried channels and relict sinkholes and removal of elevated areas to produce the relatively flat topography of the Property. Although bedrock is exposed along much of the shoreline and bottom of the Clinch River, sediment accumulations are quite thick (up to several meters) along some stretches of Poplar Creek. However, bedrock is exposed in outcrops along much of the Poplar Creek shoreline.

Chickamauga Supergroup carbonates underlie the area of the Property. The Chickamauga Supergroup is composed primarily of limestone although there are also distinct calcareous shale beds, mud-rich limestones, and thin mud seams and stringers within the Chickamauga. These argillaceous limestones and calcareous shale within several of the Chickamauga formations, such as in the Pond Springs Formation, Ridley Limestone (Ls), Carters Ls, and Hermitage Formation appear to have the least well developed fractures and often serve as fracture termination points for the fractures developed in the adjacent, cleaner limestones (Lemiszki 1994).

Because of their lack of fracturing, these lithologies can potentially constrict flow along the more intensely fractured limestone intervals, creating stratabound flow conditions. Key potential stratabound flow zones could include: (a) along the basal Hermitage Formation calcareous shale zone; (b) along the metabentonites that occur in the middle of the Carters Ls; (c) along the bed-parallel chert lenses in the massive micritic limestones within the middle of the Pond Springs Formation; (d) along the calcareous shales in the middle of the Ridley Ls; and (e) along the Knox-Chickamauga unconformity.

The structural geology within the ETPP includes macroscopic folds and faults as well as mesoscopic fractures, folds, and faults (Lemiszki 2005). Major faults in the study area include the aforementioned Whiteoak Mountain Fault and the K-25 Fault.

The K-25 Fault (Figure 10), which dips to the northeast, places differing rock types in proximity in the northeastern portion of the ETPP and cuts across the northeast-trending bedrock to the west of the fault (Lemiszki 1995).

Although many of the fractures observed in outcrop are healed or calcite filled, bedding-strike parallel fractures sets appear to reflect a higher percentage of open fractures. The preferential weathering of this set suggests its importance in controlling groundwater flow paths parallel to the valley and ridge topography.

It is important to note both Poplar Creek and the Clinch River transect bedding strike and, consequently, intersect countless shallow, bedding-strike parallel flow paths—including fractures, solutionally widened fractures and cavities, and potential stratabound flow intervals—providing avenues for groundwater discharge to Poplar Creek and the Clinch River.

Geotechnical investigation information is limited for the Property. However, some historical geotechnical investigation reports are available. Figure 11 shows the areas with available historical geotechnical investigations completed in the vicinity of the Property. These documents can be obtained on request from DOE.

Remediation of soil contamination at ETPP is documented in the Phased Construction Completion Reports (PCCRs) prepared following completion of characterization and remediation, if necessary. The area of the Property is included in Zone 2 of the ETPP. The ROD for Zone 2 Soils requires soil exceeding established remediation levels, including concrete, to be excavated down to 10 ft bgs to attain unrestricted industrial use and to remove potential sources of groundwater contamination down to bedrock or groundwater or until remediation is complete. Exposure Units (EUs) were established for Zone 2 to facilitate the characterization and remediation of soils. The Property occupies EUs Z2-21, -21, and -22. The additional property includes EUs Z2-17, -18, and -19 and a portion of EU Z2-25.

The PCCRs document the soils characterization data and any remediation completed on the EUs included in the Property and additional property. The PCCRs for EUs Z2-17, -18, -19, and -25 (DOE 2022, 2023a and 2023b) have been completed and approved by the U.S. Environmental Protection Agency Region 4 and the Tennessee Department of Environment and Conservation. These PCCRs can be obtained from the DOE Information Center ([DOE Information Center](#)). The PCCR documenting the soils characterization and remediation for EUs Z2-20, -21, and -22 is still in process. Design and construction of site infrastructure shall be completed with close consultation with DOE to minimize mobilization and exposure to contamination.

Potential geologic hazards within 5 miles of the site include faults and sinkholes. Thrust faults in the region are inactive with the last significant movement occurring nearly 200 million years ago. The seismology of the area is summarized in the Hermes Non-Power Environmental Report (Kairos 2021). The region is a relatively active seismic zone of low to moderate intensity with no anticipated catastrophic release of energy (DOE 2011).

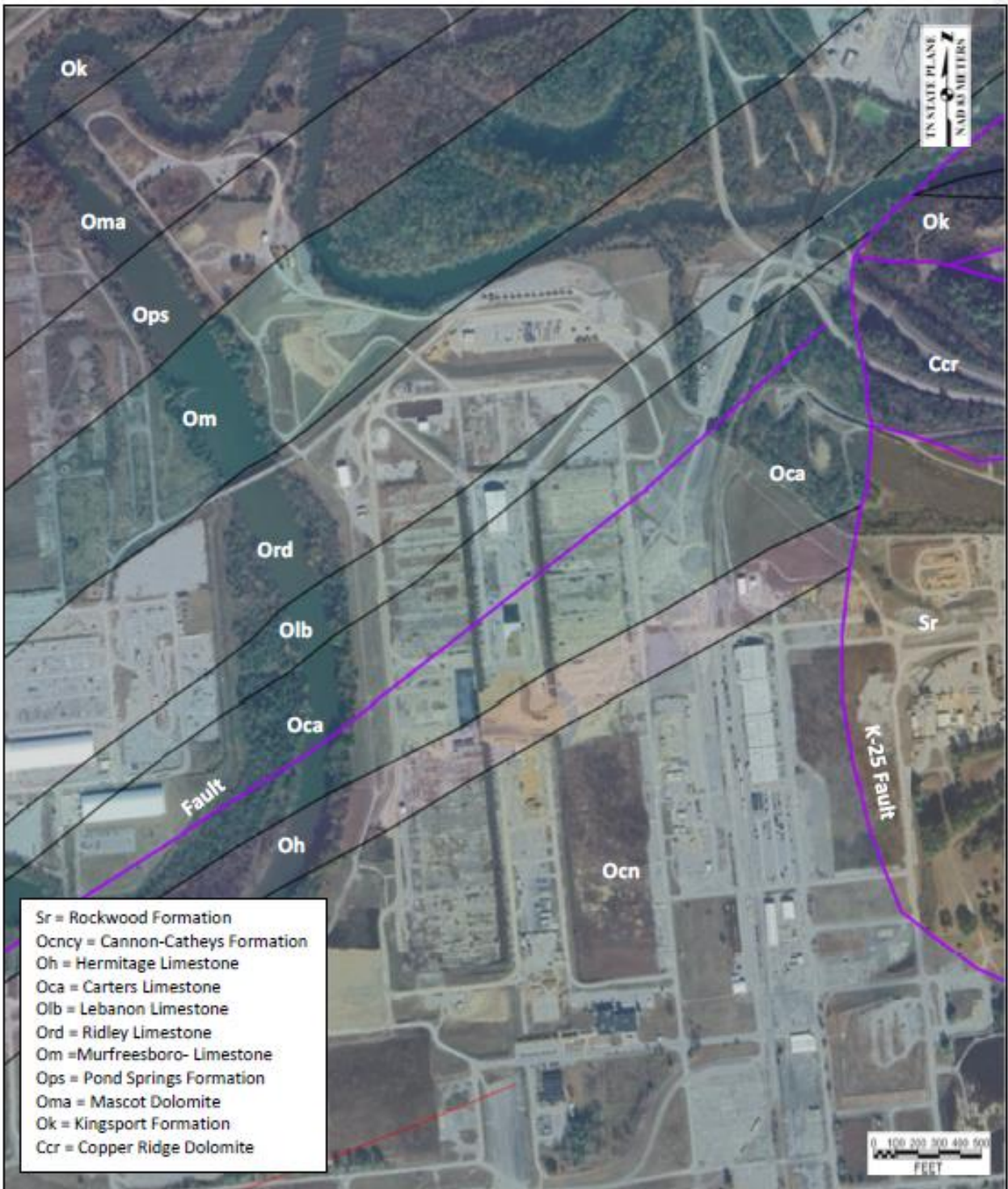


Figure 10. Geology of the Property.

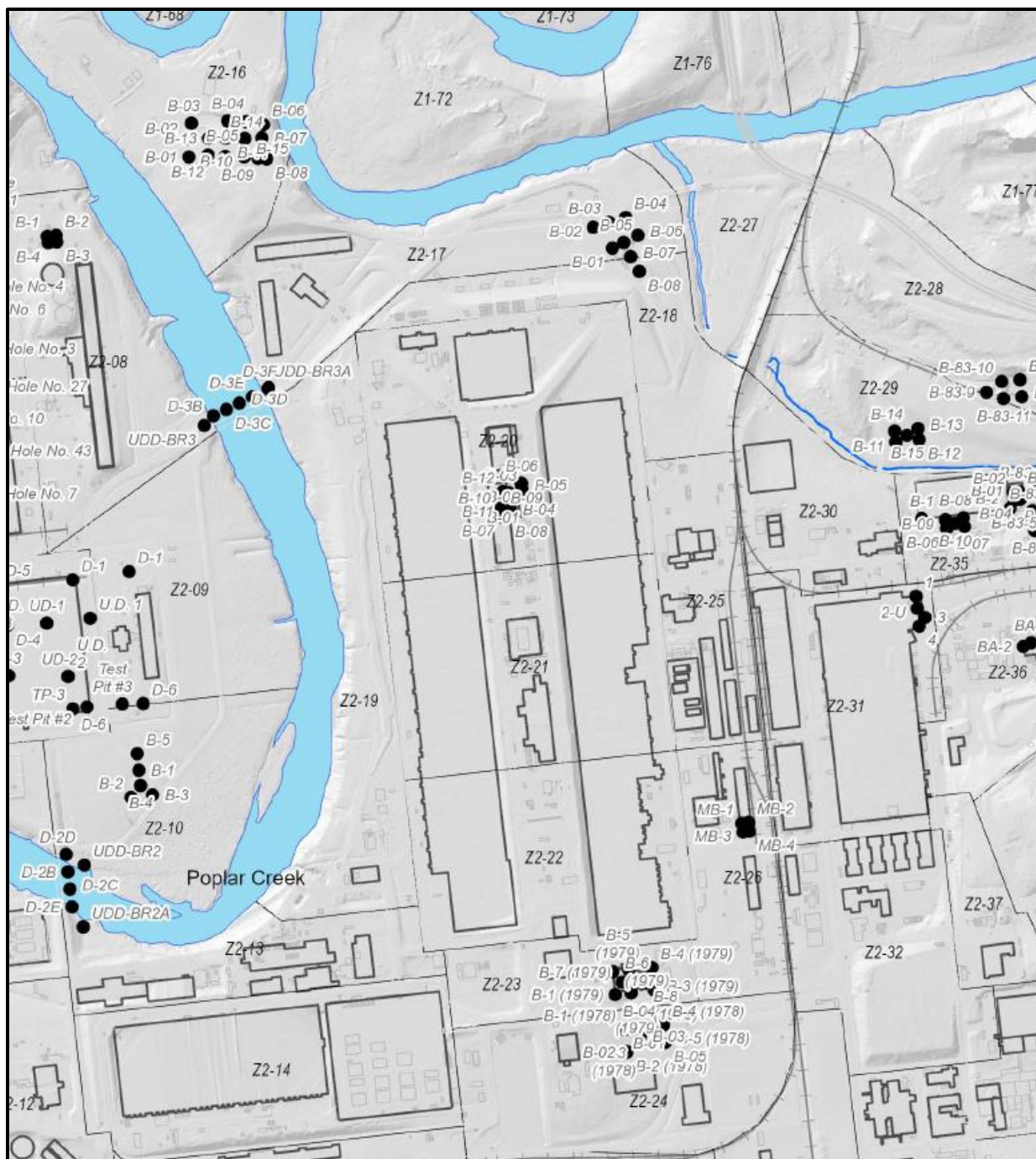


Figure 11. Location of geotechnical borings from historical reports.

The ORR is located in Anderson and Roane Counties in Air Quality Control Region 207 (East Tennessee–Southeastern Virginia). EPA has designated Anderson County as a basic nonattainment area for the 8-h O_3 standard, as part of the larger Knoxville 8-h basic O_3 nonattainment area that encompasses several counties, and for $PM_{2.5}$. For all other criteria pollutants for which EPA has made attainment designations, existing air quality in the greater Knoxville and Oak Ridge area is in attainment as defined by NAAQS.

Utilities available for the Property include electricity, natural gas, water and sewer, and fiber optic connectivity (see Figure 1). Electricity to the Property is distributed by the City of Oak Ridge Utility Business Office (UBO) by contract with TVA. The Property contains overhead lines at the north end of the property, with major TVA transmission lines crossing Heritage Center nearby. Existing and future capacity shall be determined through partnership with these entities. Public water and sanitary sewer service is available from the south end and east of the property, provided by the City of Oak Ridge. Natural gas is available and provided by the Oak Ridge Utility District. Fiber optic connectivity is also available.

The 2012 Memorandum of Agreement (MOA) for the undertaking involving historic properties located at the Oak Ridge K-25 Site, in compliance with the National Historic Preservation Act (NHPA), and the resulting 2012 Final Mitigation Plan can be found on the DOE Information Center - <https://doeic.science.energy.gov/>. Figure 12 shows the Equipment Building that was designed to replicate the K-25 building façade.

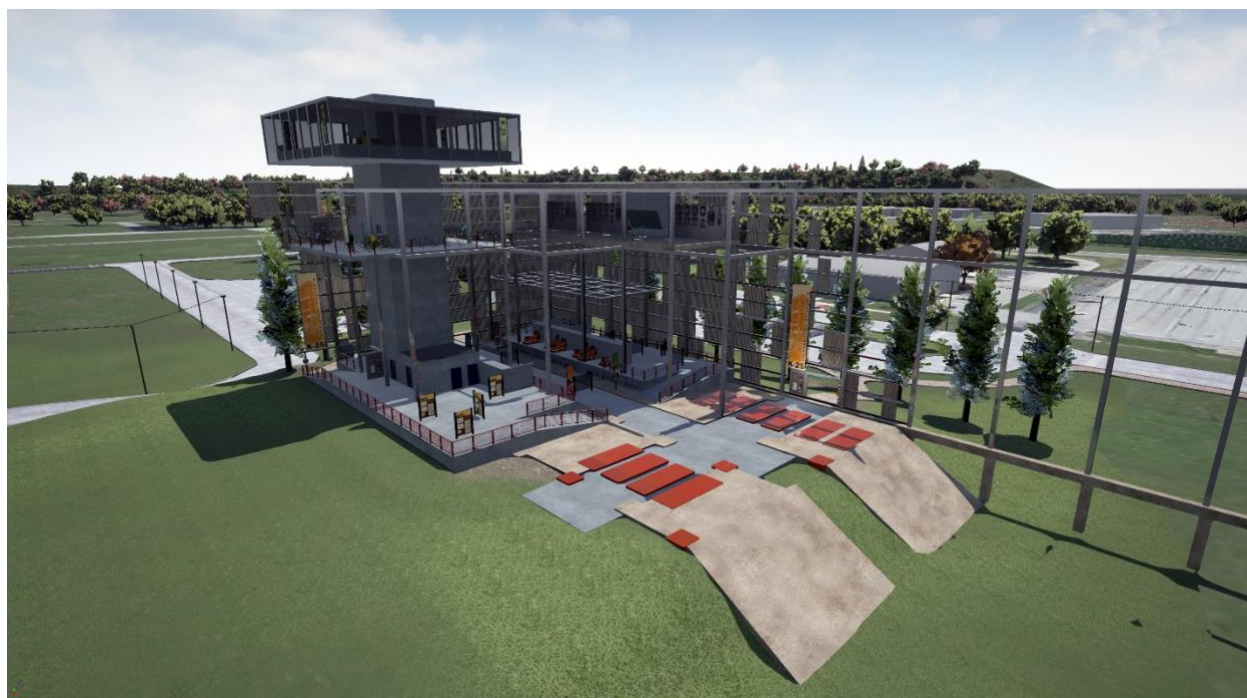


Figure 12. Rendering of conceptual Equipment Building (NHPA 2012 MOA).

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U.S. Department of Energy, 2023a. *Phased Construction Completion Report for Exposure Unit Z2-19 in Zone 2, East Tennessee Technology Park, Oak Ridge, Tennessee*. U.S. Department of Energy, Oak Ridge Office of Environmental Management.

U.S. Department of Energy, 2023b. *Addendum 1 (EU Z2-18) to the Fiscal Year 2009 Phased Construction Completion Report for Zone 2 Exposure Units 11, 12, 17, 18, 29, and 38 at East Tennessee Technology Park, Oak Ridge, Tennessee*. U.S. Department of Energy, Oak Ridge Office of Environmental Management.

U.S. Nuclear Regulatory Agency, 2022. *Environmental Impact Statement for the Construction Permit for the Kairos Hermes Test Reactor*, NUREG-2263, U.S. Nuclear Regulatory Agency, Office of Nuclear Material Safety and Safeguards.

2012 MOA. *Memorandum of Agreement among the U.S. Department of Energy, Oak Ridge Office of Environmental Management, Department of Energy Federal Preservation Officer, the Tennessee State Historic Preservation Office, the Advisory Council on Historic Preservation, the City of Oak Ridge, Tennessee, and the East Tennessee Preservation Alliance, Pursuant to 36 CFR Part 800.6(b)(2) for Decommissioning and Demolition of the K-25 Site and Interpretation of the East Tennessee Technology Park, on the Oak Ridge Reservation, Roane County, Tennessee*. Amended in 2019 and 2021.

2012 MOA. *Final Mitigation Plan. Site Interpretation East Tennessee Technology Park*. U.S. Department of Energy, Oak Ridge Office of Environmental Management.

Appendix B Insurance Requirements

Provided at time of selection.

Appendix C Possible Mandatory Clauses

The Offeror(s) may be required to incorporate the clauses in this Appendix into the transaction documents, depending on the specifics of the final negotiated terms and conditions of the Project.

AGREEMENT NOT TO INTERFERE WITH DOE’S WORK

Selectee(s)’ access, operations, and activities shall be conducted in a manner that will not materially interfere with DOE or its contractors’ operations in Oak Ridge, TN. Minor foreseeable impacts, such as increases in traffic on the site are anticipated and are exempted from this provision. DOE and Selectee(s) shall cooperate to reasonably modify Lease Agreement activities to avoid or minimize impacts on DOE’s operations. Selectee(s) also agrees, upon DOE’s request, to cooperate with DOE to make reasonable modifications to Lease Agreement/Project activities to accommodate new, or changes to existing, DOE facilities, programs, projects, or activities.

ANTI-KICKBACK PROCEDURES

(a) Definitions.

“Kickback,” as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to the Selectee, Selectee(s)’ employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with the Lease Agreement or associated agreements for this solicitation or in connection with a subcontract relating to the Lease Agreement or primary agreements.

“Person,” as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

“Prime contract,” as used in this clause, means a Lease Agreement or associated agreements entered into by the United States.

“Subcontract,” as used in this clause, means a contract or contractual action entered into by the Selectee(s) or a subcontractor of the Selectee(s) for the purpose of obtaining supplies, materials, equipment, or services of any kind.

“Subcontractor,” as used in this clause, (1) means any person, other than the Selectee, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind to the Selectee(s) or a subcontract the Selectee(s) enters into in connection with the Lease Agreement or associated agreements, and (2) includes any person who offers to furnish or furnishes general supplies to the Selectee(s) or a higher tier subcontractor.

“Subcontractor employee,” as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) 41 U.S.C. chapter 87, Kickbacks, prohibits any person from—

- (1) Providing or attempting to provide or offering to provide any kickback.
- (2) Soliciting, accepting, or attempting to accept any kickback; or
- (3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime contractor to the United States or in the contract price charged by a subcontractor to a prime contractor or higher tier subcontractor.

(c) Additional requirements

- (1) The Selectee(s) shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.
- (2) When the Selectee(s) has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Selectee(s) shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Attorney General.
- (3) The Selectee(s) shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.
- (4) The Real Estate Contracting Officer may:
 - (i) offset the amount of the kickback against any moneys owed by the United States under the Lease Agreement and/or
 - (ii) direct that the Selectee(s) withhold from sums owed a subcontractor under the Lease Agreement the amount of the kickback.
 - (iii) may order that moneys withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those moneys under subdivision (c)(4)(i) of this clause. In either case, the Selectee(s) shall notify the Government when the moneys are withheld.
- (5) The Selectee(s) agrees to incorporate the substance of this clause, including subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this Lease Agreement.

WAGE RATE REQUIREMENTS (CONSTRUCTION), FORMERLY KNOWN AS THE DAVIS-BACON ACT

The “Davis-Bacon Act” may apply to projects awarded under this RFP. Accordingly, if applicable, all laborers and mechanics employed by the Selectee(s), subrecipients, contractors or subcontractors in the performance of construction, alteration, or repair work assisted in whole or in part under this RFP shall be paid wages at rates not less than those prevailing on similar projects in the locality, as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code commonly referred to as the “Davis-Bacon Act” (DBA).

DISPUTES CONCERNING LABOR STANDARDS

The United States Department of Labor has set forth in Title 29 CFR, Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this agreement. Disputes within the meaning of this clause include disputes between the Selectee(s) (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

CERTIFICATION OF ELIGIBILITY

(a) By entering into this agreement, the Selectee(s) certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor’s firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b)(2) or Title 29, CFR, Part 5.12(a)(1).

(b) No part of this Lease Agreement shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of 40 U.S.C. 3144(b)(2) or Title 29, CFR, Part 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

LEASE AGREEMENT RESTORATION OF PROJECT SITE:

Upon termination, expiration, revocation, or relinquishment of this Lease Agreement, the Selectee(s) shall, at no cost to DOE and to the reasonable satisfaction of DOE, vacate the premises, demolish or remove all or a portion of, as designated by DOE, structures or improvements located on the premises, abandon, vacate or remove utilities or other infrastructure from the premises, restore the premises and surrender the premises to DOE in the condition it existed on the date the Lease Agreement was executed, unless DOE, at its sole discretion and subject to applicable law, elects to retain all or a portion of the Lease Agreement improvements located on the premises, without compensation to the Selectee(s). In coordination with the DOE Site Office, Selectee(s) shall be responsible for conducting a baseline survey of the site in accordance with accepted standards and methods and consisting of vegetation mapping, wildlife and habitat assessments, and soil and hydrology profiles including contaminants. Selectee(s) shall give the DOE Site Office a copy of the baseline survey prior to commencement of improvements at the site. Selectee(s) shall retain copies of the baseline survey in its records for the duration of the Lease. Upon expiration or earlier termination of the Lease, Selectee(s) shall consult with the DOE Site Office to identify an appropriate reference plot(s) elsewhere on DOE property to serve as a benchmark for restoration of the site to include terrestrial and aquatic (lotic, riparian, and wetland) features of the type impacted by improvements. The DOE Site Office shall establish reasonable restoration objectives, standards, and metrics for restoration completion and the duration of monitoring and adaptive management to achieve restoration targets, which is typically more than five years depending on the ecosystem type and the impacts to it. Additionally, the Selectee(s) shall be responsible for any

remediation costs and/or other costs associated with returning the premises to the condition it existed on the date the Lease Agreement was executed. The Selectee(s) shall remove all waste generated by the Project/Lease Agreement and will remain responsible for the ultimate treatment and disposal of any waste generated by the Selectee. In the event that any item or part of the premises or facilities shall require repair, rebuilding, or replacement resulting from loss or damage, the Selectee(s) shall promptly give notice to DOE and, to the extent of its liability, shall, upon demand, either compensate DOE for such loss or damage or shall rebuild, replace, or repair the item or items of the premises or facilities lost or damaged as DOE may elect. In the event the Selectee(s) shall have effected any repair, rebuilding, or replacement as required herein, DOE shall direct payment to the Selectee(s) of so much of the proceeds of any insurance carried by the Selectee(s) and made available to DOE on account of loss or damage to any item or part of the premises or facilities as may be necessary to enable the Selectee(s) to effect such repair, rebuilding, or replacement. In the event the Selectee(s) shall not have been required to affect such repair, rebuilding, or replacement and the insurance proceeds allocable to the loss or damage which has created the need for such repair, rebuilding, or replacement have been paid to the Selectee, the Selectee(s) shall promptly refund to DOE the amount of such proceeds.

CULTURAL RESOURCES, WILDLIFE, AND LAND AREAS:

(a) Selectee(s) shall exercise reasonable care in the preservation of native vegetation and in the protection of wildlife on the site. If vegetation must be removed, the disturbed soils shall be re-vegetated or stabilized as appropriate. Selectee(s) shall maintain an effective invasive plant species management program. Selectee(s) shall develop and implement a wildfire management plan that is consistent with the integrated site-wide Wildfire Management Plan required by DOE Order 420.1C. Selectee(s) shall assess and mitigate ignition risks through all Project phases.

(b) Selectee(s) and its Authorized Personnel shall cooperate with DOE to manage cultural resources, including but not limited to antiquities and historic properties on the site in accordance with the National Historic Preservation Act, 54 U.S.C. § 300101 et seq., and other applicable laws and regulations. Antiquities include, but are not limited to, Indian graves, campsites, relics, and artifacts. DOE may conduct or require Selectee(s) to conduct a cultural resources survey prior to ground disturbance activities. Whenever cultural resources are discovered, Selectee(s) shall notify DOE as soon as possible and protect the affected area and material from further disturbance until receiving both DOE approval and direction to proceed, which DOE shall provide as expeditiously as feasible. Any required mitigation will be at the expense of Selectee.

RESEARCH, TECHNOLOGY AND ECONOMIC SECURITY

No Entity of Concern as defined in [Section 10114 of Public Law 117-167 \(42 USC 18912\)](#) may participate in the Project.

The Project is subject to an ongoing RTES risk review and monitoring to identify potential risks of undue foreign influence. As part of the review, DOE may require the Selectee(s) and/or Project team members for additional information to inform the review.

DOE may share information regarding the risks identified as part of the RTES due diligence review process or monitoring with other Federal agencies.

In the event an RTES risk is identified, DOE may require risk mitigation measures, including but not limited to, requiring that an individual or entity not participate in the Project. If significant risks are identified and cannot be sufficiently mitigated, DOE may terminate the lease or easement.

DOE's decision regarding a due diligence review is not appealable.

The Selectee(s) and Project team members must make reasonable efforts to ensure that DOE has up to date Transparency of Foreign Connections disclosures. If circumstances change which impact the accuracy of the disclosures, the Selectee(s) must submit updated disclosures to DOE within fifteen (15) business days of learning of the changed circumstances. The updated disclosure must be provided to rtesinfo@hq.doe.gov.

The Selectee(s) must provide DOE with advance notice of the following events, as they relate to the Selectee, Project partners, or Project.

1. Change in ownership or control of the Selectee(s) or team members that increases foreign ownership related to a foreign country of concern.
2. Any new or pending parent company, joint venture, or subsidiary, of entity that is based in or receives funding from any foreign country of concern;
3. Any new or pending contractual or financial obligation or other agreement specific to a business arrangement, or joint venture-like arrangement with an entity based in, or funded by, any foreign country of concern;
4. Any new or pending venture capital or institutional investment by an entity that has a general partner or other individual holding a leadership role who has a foreign affiliation with any foreign country of concern;
5. Any new or pending technology licensing or intellectual property sales or transfers to a foreign country of concern where the underlying technology is in the same technology area as the Project;
6. Any new or pending foreign business entity, offshore entity, or entity outside the United States that is based in, or funded by, any foreign country of concern;
7. Any changes to the Selectee(s) or Project partners' board of directors, including additions to the number of directors and the identity of new directors. Each notification shall include a complete up-to-date list of all directors (and board observers), including their full name, shareholder affiliation, date of appointment, voting rights, citizenship, duration of term, as well as a description of observer rights as applicable;
8. Any new or pending indebtedness, liabilities, or obligations to an entity based in, or funded by, any foreign country of concern (whether the Selectee(s) or Project partner is borrower, surety, guarantor, or other);
9. Any of the following changes to the equipment proposed for use on the Project:
 - i. Unmanned aircraft, control, and communication components originally made or manufactured in a foreign country of concern (including relabeled or rebranded equipment).
 - ii. Coded equipment where the source code is written in a foreign country of concern.
 - iii. Equipment from a foreign country of concern that will be connected to the internet or other remote communication system.
 - iv. Any entity from a foreign country of concern that will have physical or remote access to any part of the equipment used on the Project after delivery.

DOE may require mitigation to address increased risks of undue foreign influence or if the risks cannot be sufficiently mitigated, DOE may terminate the lease or easement.

Appendix D Offeror(s) Cover Page

OFFEROR(s)' COVER PAGE
Request for Qualifications

OFFEROR:

(Name of Company)

(Point of Contact)

(Street Address)

(Telephone Number)

(City, State and Zip Code)

(Fax Number)

(Electronic Mail Address)

Authorized representative and signatory for Offeror:

Print Name

Title

Date

Appendix E Past Performance Reference Information Form

Provide requested information of the most recent and relevant work completed or in progress by the Offeror(s) of projects that are similar in scope and scale to the Offeror's proposed Project (no more than 3 examples). Completed Form limited to three pages per reference project.

Past Performance Reference Information Form

Past Performance Reference Information Form

1. Name of Offeror Submitting Proposal:	
2. Reference Project Client Point of Contact:	Name: Title: Telephone: Email: Address:
3. Project Location:	
4. Project Generation Type (e.g., Solar, Wind, etc.):	
5. Land (acres):	
6. Project Nameplate Capacity and Generation:	
7. Project Start and End Date (Specify Construction Period and Operation Period):	
8. Project Description:	
9. Describe design, construction, management, and operation of the Project:	
10. Describe the financing for the Project:	
11. Cost of the Project:	
12. Describe off-take agreements for the Project:	
13. Describe Offeror's specific role and activities in the Project (specifically state how the Offeror(s) accomplished them directly or if they were	

Past Performance Reference Information Form

accomplished by another party, list the name of said other party):	
14. Complexity of work Company performed on Reference Project:	
15. Describe Safety Performance (For the reference project, the Offeror(s) shall identify Occupational Safety and Health Administration (OSHA) safety statistics [e.g., Days Away, Restricted, or Transferred (DART) cases and Total Recordable Cases (TRC)], as well as any significant worker safety and health incidents. If similar projects are not within the last 5 years, provide DART and TRC rates for the company within the last 5 years):	
Note: The Offeror(s) may amend the format for the Appendix, Past Performance Reference Information Form, as long as the exact information, font and size, and page limitations are followed. Also, the information contained in the Offeror's submitted forms shall be consistent with the information contained in other sections of their proposal.	

Appendix F Potential Adverse Impacts

- Increased energy consumption, including potential increased costs to surrounding community/residential customers, grid harmonic issues, and decreased grid stability
- Increased water consumption, water overuse, source disruption and resource depletion
- Water quality issues, including wastewater discharge impacts
- Increased pollution impacts to sensitive populations nearby
- Radiation impacts and radiological risk perception among public
- Thermal pollution, particularly of water
- Land use intensity changes, particularly in and around existing residential and agricultural land
- Habitat disruption, modification, and fragmentation and other threats to wildlife
- Increased wildfire ignition risk, especially from construction activities
- Changes to subsurface hydrology
- Reduced soil quality and soil compaction
- Loss of recreational value
- Light pollution
- Noise pollution
- Negative visual impacts
- Waste generation and management (including ongoing electronics waste)
- Cultural and historical resource impacts
- Damage to relationships with local communities and Tribes, including infringement on a Tribe's legal right to their traditional ways of life
- Short term negative impacts from construction activities, including air and water pollution, dust production, noise or light pollution, traffic, and strain on other local infrastructure, such as road usage, fire department, and emergency services.

Appendix G Workforce Considerations

Below is a sample list of workforce considerations that could be addressed in the Workforce Plan. Sites should identify which workforce considerations should be addressed in the requested Workforce Plan and should add any relevant considerations not listed here.

- Workforce Size and Composition:
 - Project the number of temporary and permanent jobs to be created.
 - Determine the occupations, skill sets, and number of personnel required for each role and their skill sets.
 - Identify opportunities for hiring local workers, especially if using modular/pre-fabricated data center technology.
- Local Workforce Conditions and availability, such as:
 - Conduct a needs assessment to identify the number of available skilled workers for occupations related to both construction and maintenance.
 - Clearly identify training capacity, including but not excluded to, instructors, equipment, and facilities.
 - List the Registered Apprenticeship Programs, pre-apprenticeship programs, and other workforce pipelines.
 - Understand the wraparound services and local infrastructure, including but not excluded to, emergency/first responder services, transportation, road maintenance, childcare, housing stock.
 - Explore the regional landscape of competing workforce demands from other infrastructure and supply chain projects.
- Opportunities for Partnership:
 - Identify local governments (town, county, etc.), workforce agencies and local workforce boards, economic development agencies, land grants and university extensions, community and technical colleges, school boards, labor organizations, and other training providers to address workforce needs.
 - Access DOE national laboratories to address workforce gaps; developing curricula and training programs tailored to project skillsets.
- Recruitment and Retention:
 - Establish strategies for attracting qualified candidates and retaining existing employees.
 - Establish partnerships with academic institutions, nonprofit entities, and other organizations with expertise in AI and computer science education to collaboratively develop online educational resources focused on teaching K-12 students foundational AI literacy and critical thinking skills.

Site Offices can work with the Selectee(s) during the lease and or easement negotiation to identify additional considerations not covered in the initial Workforce Plan. Site Offices may also recommend additional workforce planning measures if the workforce activities proposed in the Mitigation Plan and Risk Management Plan are inadequate.

Appendix H Denial of Double Benefit

Applicable Law

- (1) Section 5.0141(d) of the OBBBA sets out the statutory framework of the restriction related to DOE's authority to guarantee loans under Title 17 of the Energy Policy Act of 2005:
- (2) Denial of double benefit. Except as provided in paragraph (3), none of the amounts made available under this section for loan guarantees shall be available for commitments to guarantee loans for any projects under which funds, personnel, or property (tangible or intangible) of any Federal agency, instrumentality, personnel, or affiliated entity are expected to be used (directly or indirectly) through acquisitions, contracts, demonstrations, exchanges, grants, incentives, leases, procurements, sales, other transaction authority, or other arrangements to support the project or to obtain goods or services from the project.
- (3) Exception. Paragraph (2) shall not preclude the use of the loan guarantee authority provided under this section for commitments to guarantee loans for--
 - (A) projects benefitting from otherwise allowable Federal tax benefits;
 - (B) projects benefitting from being located on Federal land pursuant to a lease or right-of-way agreement for which all consideration for all uses is--
 - (i) paid exclusively in cash;
 - (ii) deposited in the Treasury as offsetting receipts; and
 - (iii) equal to the fair market value;
 - (C) projects benefitting from the Federal insurance program under section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210); or
 - (D) electric generation projects using transmission facilities owned or operated by a Federal Power Marketing Administration or the TVA that have been authorized, approved, and financed independent of the project receiving the guarantee.

LPO's Application of the Federal Support Restriction

Generally, DOE cannot finance projects that are expected to benefit from certain other forms of federal support, including grants, cooperative agreements, or other loan guarantees from federal agencies or entities. The federal support restriction exists to ensure that an LPO loan is not repaid using other federal dollars. Federal support that pre-dates an LPO loan or that impacts an aspect of the project that is fully separate from the LPO loan may not trigger federal support restrictions.

Companies or projects that have previously benefitted from federal support but no longer do (e.g., have exhausted the grant or repaid the loan in question) will not encounter federal support restrictions. If a company or project currently benefits from federal support, the applicant should evaluate whether this federal support impacts the same project or phases of a project for which the applicant is seeking LPO financing. The expectation of federal support should be assessed at the time of the loan guarantee conditional commitment. The mere possibility of federal support at the time of conditional commitment is insufficient to trigger the restriction.

LPO's underwriting process requires confirmation that the project is not dependent upon future federal spending for its viability and ability to repay a guaranteed loan. The federal support restriction is not intended to bar all federal funds that may be traced to a Title 17-supported project or loan application. For the restriction to apply, the support or purchase must be directed clearly to the project, as distinct from more generalized objectives, such as an ordinary course purchase of goods or services from commercial counterparties in market-based arms' length transactions. LPO works with applicants to conduct a fact-specific analysis to determine the applicability of the denial of double benefit rule for particular projects.

Appendix I Draft of Ground Lease – Site Area A

The purpose of this appendix is to provide insight as to the terms and conditions of the Ground Lease Agreement for Site Area A.