

**BUREAU OF ENGRAVING AND PRINTING
NEW CURRENCY PRODUCTION FACILITY**

NCPC SUBMISSION

30 DECEMBER 2020

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ADDITIONAL AVAILABLE DOCUMENTS

Additional project information can be found in the following reports:

BEP 2017 Future Workplace Recommendation Report. Washington, DC: General Services Administration and Interior Architects.

BEP 2018-2022 Strategic Plan

<https://www.moneyfactory.gov/images/2018-2022BEPStrategicPlan-final.pdf>

GAO (2018), Bureau of Engraving and Printing, Options for and Costs of a Future Currency Production Facility: <https://www.gao.gov/products/GAO-18-338>

USACE (2020) Draft EIS:

https://www.nab.usace.army.mil/Portals/63/docs/BEP_EIS_Public_Scoping_Rpt_FEB2020-1.pdf

USACE (2020) Bureau of Engraving and Printing, Traffic Impact Study



Naturally integrated into the historic BARC site, a new home for the Bureau of Engraving and Printing





A state-of-the-art production facility for the development of the most trusted banknote worldwide



Interior view of the new Bureau of Engraving and Printing main production hall

PROJECT OVERVIEW

Description of the Agency and Mission

“The Bureau of Engraving and Printing’s mission is to develop and produce United States currency notes, trusted worldwide. BEP’s vision is to be the world standard securities printer providing its customers and the public with superior products through excellence in manufacturing and innovation.”

-“About the BEP,” Moneyfactory.gov

The Bureau of Engraving and Printing (BEP) is an agency within the United States Department of the Treasury. The BEP’s mission includes manufacturing US currency notes as well as research, development, testing, and evaluation of counterfeit deterrents. The BEP’s operations are also supported by administrative and security functions. The BEP’s DC operations employ approximately 1,600 full-time staff. The BEP currently operates two currency production facilities: (1) the DC Facility; and (2) a facility in Fort Worth, Texas, constructed in 1990.



**Bureau of Engraving and Printing
Washington, D.C.**

Need for New Facility

The Treasury, acting on behalf of the BEP, proposes to construct and operate a new Currency Production Facility at the Beltsville Agricultural Research Center to replace its existing production facility located in downtown Washington, DC. The Washington, DC production facility (DC facility), built in 1914, has been in operation for more than 100 years. This facility has previously undergone focused renovations to support new production technology. However, as BEP's currency production has modernized and added more complex processes and security features, the existing facilities are no longer able to support an efficient, secure, and innovative manufacturing process. The DC facility's fundamental physical characteristics—including its age and its multi-story, multi-wing layout—inhibit the secure, efficient, and flexible production of United States currency. The current layout of the DC facility requires currency paper to travel 1.06 miles over multiple stories from start to finish; in contrast, at the Texas production facility, currency travels .42 miles in a single story.

See 2018 GAO Report, "Options for and Costs of a Future Currency Production Facility," for additional information. <https://www.gao.gov/products/GAO-18-338>

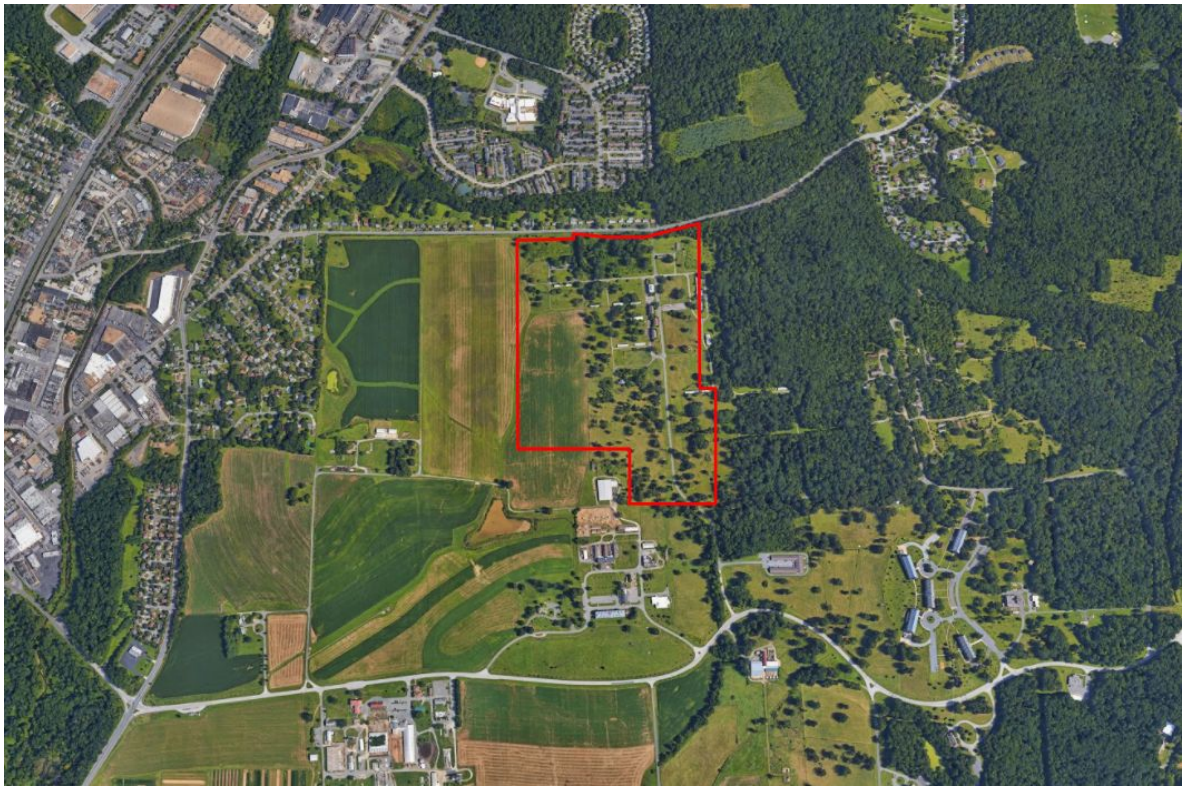
Site Acquisition Information

The new facility is the outcome of the BEP's more than 20-year planning process to address deficiencies at the DC facility and modernize its operations. The BEP considered several modernization options, including renovation of the DC facility and new construction within the National Capital Region. These studies concluded that new construction, as opposed to renovation of the DC facility, would be more cost-effective and would accommodate the necessary security procedures and setbacks. The BEP initially considered multiple sites within the NCR and evaluated them against prerequisite criteria for operating a CPF. The final site screening criteria included:

- Location: The site must be within an approximately 30-mile radius of central Washington, DC (i.e., measured from the Washington Monument), allowing for proximity to BEP's uniquely skilled workforce.
- Accessibility: A major interstate must be accessible within 10 miles of the site to transport currency safely and efficiently. The site must also be reasonably near an international airport for currency transportation by air.
- Availability: The site must be available for Treasury's use within the required timeframe. The federal landowner must be willing to transfer the site to the Treasury or establish a land use agreement.
- Parcel Size: The site must include at least 100 acres of land of suitable configuration to construct the CPF and provide for its security/setback requirements.
- Developability: The site must not be unduly constrained to development due to terrain or other construction or use limitations.

Based on these criteria, the Treasury undertook a robust, logical, and sequential site screening process to narrow the number of alternative sites that would meet project requirements within the National Capital Region (NCR). Six federally owned properties met these criteria and could be acquired at a lower cost in accordance with Federal directives to better manage and reduce Federal real property assets. Of those six, only the BARC site was found to be available with no future uses by the current owner.

In 2018, Congress passed the 2018 Farm Bill (Public Law [PL] 115-334, Title VII, Subtitle D, Section 7412). This bill authorized and directed an interagency land transfer of a portion of BARC from the USDA to the Treasury specifically to construct and operate a CPF, subject to further site suitability evaluation.



Description of the Project Area

The design for the Bureau of Engraving and Printing Currency Production Facility will be integrated into the rolling terrain of the existing agricultural and natural landscape to minimize the building mass and height as viewed from surrounding roads and from the clusters of historic BARC research buildings that make up part of the surrounding community.

Set in the rolling agricultural fields and forests of the historic Beltsville Agricultural Research Center (BARC), the Currency Production Facility (CPF) site is characterized by multiple ecological and cultural resources:

Reforestation Area

A reforestation area (comprising two conservation easements) exists in the northern portion of the CPF site. This area will be impacted by utility work and perimeter fence construction, maintenance, and inspection.

Forest Stands and Specimen Trees

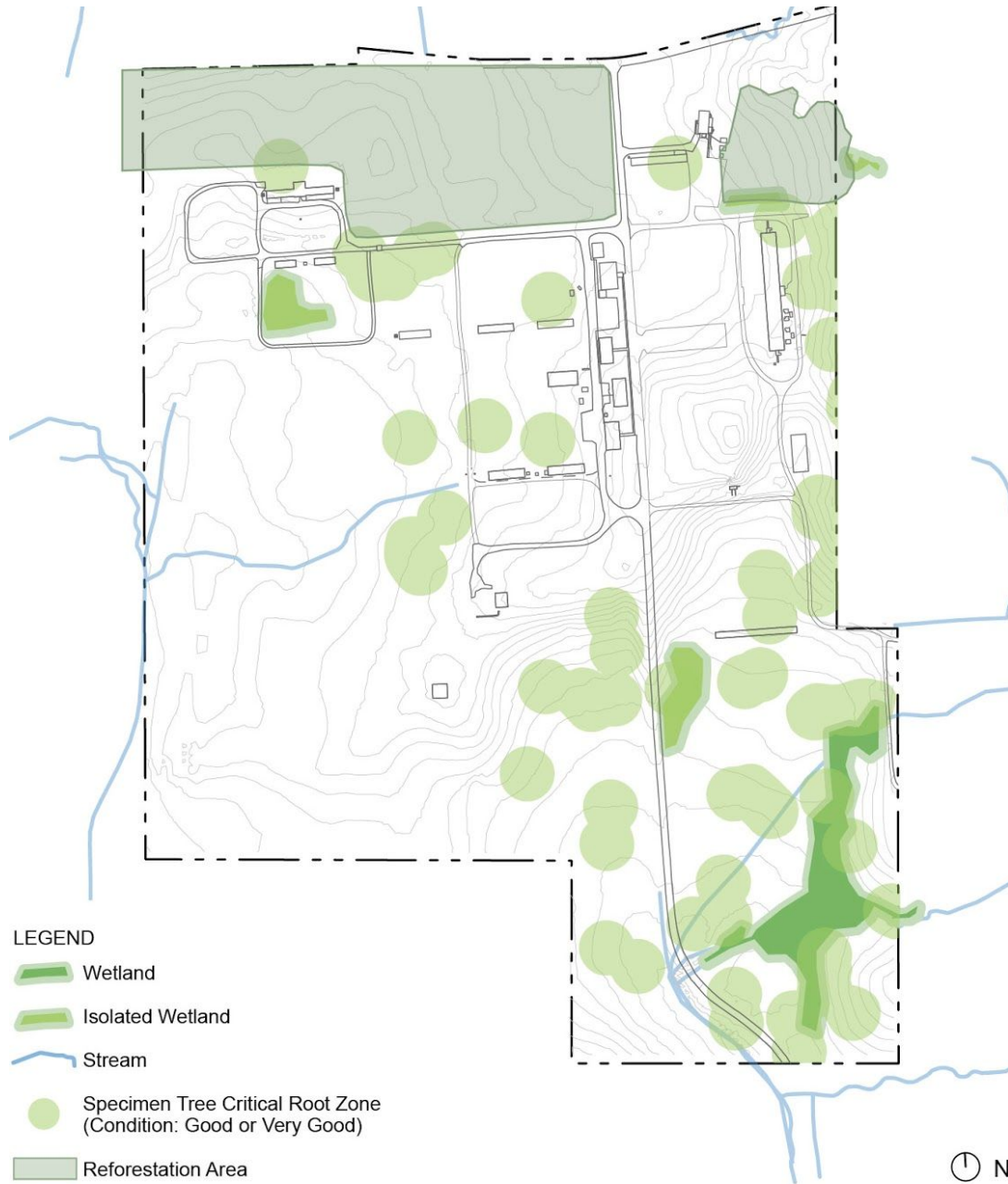
Four delineated forest stands are located along the eastern site boundary, and 149 specimen trees are located throughout the site. The project design team, on behalf of BEP and USACE, submitted the Draft Forest Stand Delineation (FSD) to the Maryland Department of Natural Resources (DNR) on August 20, 2020 and is awaiting formal comments. The Draft Forest Conservation Plan (FCP) will be submitted to Maryland DNR following the completion of the Concept Design phase.

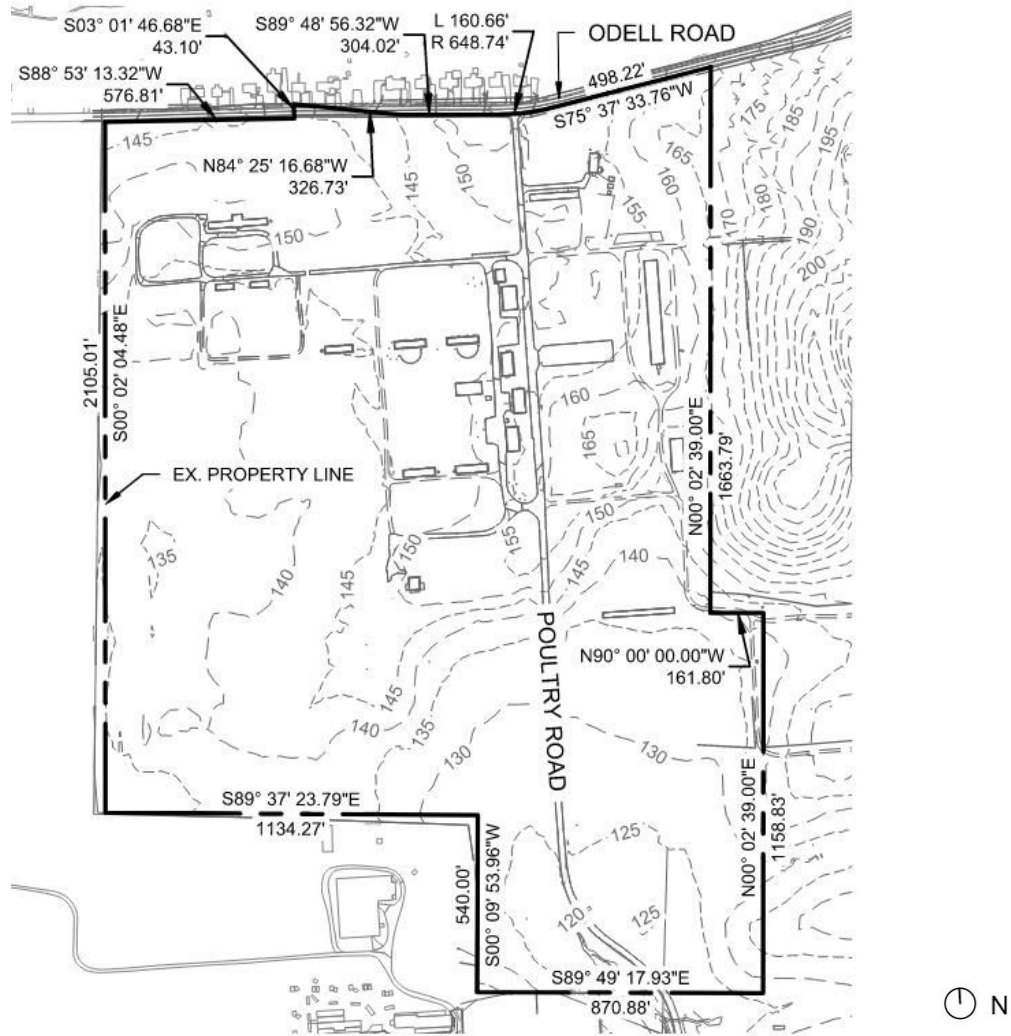
Surface Waters and Wetlands

The CPF site contains one unnamed intermittent stream and four wetlands, two of which are subject to regulation under the Clean Water Act, according to the Jurisdictional Determination dated November 17, 2020. USACE is responsible for direct coordination regarding surface waters and wetlands on the CPF site.

Cultural Resources

The CPF site is located in the 200 Area Cluster within the Central Farm of the BARC Historic District. The area generally reflects a 1934 New Deal-era master plan by Architect Delos Smith and Landscape Architect A.D. Taylor, which included park-like conditions, clipped lawns, formal planting areas, and trees planted on a relaxed grid to shade the poultry houses. Although the site does contain archeological areas, CPF construction will not impact any area eligible for listing on the National Register of Historic Places (NRHP). In addition, none of the buildings on the site were found to be individually significant for listing on the NRHP. The most prominent views of the CPF site are from segments of Powder Mill Road and Odell Road. These views are characterized by BARC facilities, fields, and forests as well as power lines, poles, and a chain-link fence along the site boundary. **A Memorandum of Agreement is in development between USACE, BEP, and the Maryland Historical Trust to minimize impacts to cultural and visual resources.**





Existing Project Grading

The CPF site spans a plateau at approximate elevation +160, which gently rolls down toward a scenic wet meadow at approximate elevation +125. The property is surrounded by gently rolling ridges. A steep slope reaches approximate elevation +165 at the forested eastern property line, and the rise continues to the ridgetop east of the site at approximate elevation +236.

See "Project Information and Drawings" chapter for additional information and photographs of the existing site. See "Environmental and Historic Considerations" chapter for additional information regarding impacts to current site features.



Existing conditions and site boundary

Description of the Proposed Development and Development Alternatives

See “Project Information and Drawings” chapter for detailed information regarding the massing, configuration, and features of the proposed building and site design.

The proposed Currency Production Facility (CPF) will provide the United States Treasury with an advanced, efficient, and secure space for the design and production of United States Currency. The project will consist of a primary building with a footprint of approximately one million square feet and a height of 40-50 feet, along with a series of security access control buildings at the site entrance off Powder Mill Road to the South. The entire project will be designed to harmonize with the surrounding agricultural setting and minimize impact to the surrounding area while supporting a highly efficient, modern, and flexible manufacturing process. As one of BEP’s missions is to educate the public on the security features associated with currency, a Public Tour component will be integrated within the facility. By utilizing a reservation system for access, the public will be able to learn about the production process as well as the history of the BARC site on which the new CPF resides.

The BEP is a hallowed institution with critical national and international significance. The design of the new BEP production facility must therefore reflect the dignified stature and importance of this function. The proposed project is not designed as a utilitarian factory; instead, it is designed in harmony with its environment and in acknowledgement of the federal institution that it represents.

At the outset of the design phase, the BEP project leadership collaboratively developed a series of guiding principles for the design of the new facility:

1. Security

Enhance the quality and effectiveness of security on campus and within the new facility. Design will provide best-in-class protection for manufacturing U.S. currency, its staff, and its visitors.

2. Future-proofing & Flexibility

Fabricate a state-of-the-art facility for the production of U.S. banknotes capable of accommodating rapid changes in printing technologies, processes, security threats, and shifts in future workplace.

3. Health, Wellness, & Safety

Design a new campus that meets production needs while enhancing workplace safety and quality of life for employees. Create a sense of community that embraces the 105-acre BARC site and attracts workforce talent for decades to come.

4. Institutional Identity

Build a discreet but distinctive facility that echoes the stature, security, and innovation of the U.S. bank note. Utilize the site to create a destination that invites visitors to learn about the production and history of US money. Design the building and site to blend in and communicate environmental sustainability to neighbors, visitors, and staff.

5. Operational Efficiency

Construct a high-performing and automated manufacturing facility that tracks the supply chain of materials and products, reduces Work In Progress (WIP), and utilizes building systems that are easily maintainable. Look globally at BEP's production and beyond to shape the most efficient and cost-effective currency manufacturer worldwide.

6. Technology & Process Innovation

Provide innovative solutions to accommodate evolving technology, reduce counterfeiting threats, and protect the environment.

7. Budget Compliance

Ensure lasting value of the project by tracking and calibrating design decisions through every phase.

8. Timeliness & Schedule

Establish rapid delivery of intelligent design that is on time in every phase through to construction.

9. Sustainability & Environment

Respect the agricultural character of the site by minimizing site disturbances, reducing production waste streams, and maximizing green space. Generate sustainable campus-wide strategies to promote energy efficiency while balancing costs.

10. Workforce / Workplace

Promote BEP as a workplace of choice with shared core functions, collaboration spaces, and conferencing areas. Provide workplace and support spaces with daylight and access to nature to attract current and next generation workforce.

Master Plan Alignment

Note: this section has been adapted from the EIS; see full EIS for additional information.

The primary land use regulations and guidance related to the Proposed Action are the Maryland Sustainable Growth and Agricultural Preservation Act, Prince George's County Zoning Ordinance (Prince George's County Code, Subtitle 27, Part 2), the Maryland-National Capital Park and Planning Commission (M-NCPPC) Prince George's 2035 Approved General Plan and Prince George's County Priority Preservation Area Functional Master Plan, and the National Capital Planning Commission (NCPC) Comprehensive Plan for the National Capital. Collectively, these regulations and guidance documents specify permitted land uses and long-term recommendations for future development. Per the US Constitution, state and local agencies cannot regulate land use on or zone federal property. The project team, however, considered the land use and zoning designations and guidance within the ROI as part of the project analysis as well as the results from the site evaluation required as part of the 2018 Farm Bill.

Schedule

Note: this section has been adapted from the EIS; see full EIS for additional information.

The Proposed Action would be implemented over an approximately nine-year period in the following general sequence, which could vary based on contractual requirements:

1. Complete the 100 percent design to meet operational, security, and safety standards, and obtain required regulatory permits (2022)
2. Site preparation activities and demolition of existing buildings (commencing 2021)
3. Construct the facility (2022-2025). Construction would include continuation of site preparation activities; marking and avoiding sensitive environmental resources (with appropriate buffers) to the

extent possible; clearing, grading, leveling, and similar earthwork; and constructing utilities, structures, infrastructure, roadways including the proposed entrance road, and parking areas.
4. Transition personnel and production operations to the completed facility (2025-2029).

Project Cost Estimate

Note: this section has been adapted from the EIS; see full EIS for additional information.

The construction budget is approximately \$800,000,000, which includes appropriation for hard costs and support equipment. Funding and statutory authority and provided by the Agriculture Improvement Act of 2018 (Public Law 115-334, § 7602; 132 Stat. 4490, 4825-26 [2018]) and the 2019 Department of the Treasury Appropriations Act (Public Law 116-6, Division D, Title I, § 127; 133 Stat. 13, 149 [2019])

OUTREACH AND COORDINATION

Public Engagement

Note: this section has been adapted from the EIS; see full EIS for additional information.

The Treasury Department has actively sought public input in its decision-making process. All agencies, organizations, and members of the public that have a potential interest in the Proposed Action have been urged to participate. Throughout this process, the public may obtain information on the status and progress of the Proposed Action and EIS from the project website. Comments may also be posted to the project website directly at <https://www.nab.usace.army.mil/home/bep-replacement-project/>.

The Treasury has been engaging with local government leaders concerning the Proposed Action since 2017, and published a Notice of Intent (NOI) to prepare this EIS in the Federal Register on November 15, 2019. Publication of the NOI initiated a 30-day scoping period during which Treasury solicited comments from the public; federal, state, and local agencies and organizations; and Native American Tribes. The public scoping period generated 415 distinct comments that were addressed in the EIS. Details of this scoping process can be found in the Public Scoping Report.

The Treasury published an NOA of the Draft EIS in the Federal Register on November 6, 2020. The public comment period on the Draft EIS occurred over a 45-day period from November 6, 2020 to December 21, 2020. This included a virtual public meeting held on December 2, 2020. Details of this comment process, as well as a complete electronic copy of the Draft EIS, can be found on the project website.

Coordination with Federal, State, and Local Jurisdictions

The USACE Baltimore District has been the primary coordinating agent for BEP in developing all formal and informal communications with all required Federal, State and local jurisdictions to ascertain that all stakeholder requirements have been heard and addressed appropriately such that the project proceeds in accordance with BEP's schedule.

USACE is collaborating with their designer of record, Capital Currency Team (CCT) in communicating all design intent with all stakeholders to facilitate the design approval process. Milestone meetings conducted between the USACE/BEP/CCT and agencies include:

- 3 December 2019 draft EIS Public Scoping Meeting
- 3 August 2020 - Three Scheme Review with NCPC Staff
- 25 September 2020 - Scheme Selection Review with NCPC Staff
- 4 November 2020 - Maryland Department of the Environment
- 2 December 2020 - EIS Public Meeting
- 4 December 2020 - Section 106 Consulting Parties Meeting (Mitigation Measures Discussion)
 - Maryland Historic Trust
 - NCPC
 - Anacostia Trails
 - MNCPPC

PROJECT INFORMATION AND DRAWINGS

Site Plan

The entire project will be designed to harmonize with the agricultural setting and minimize impact to the surrounding area while supporting a highly efficient, modern, and flexible manufacturing process.

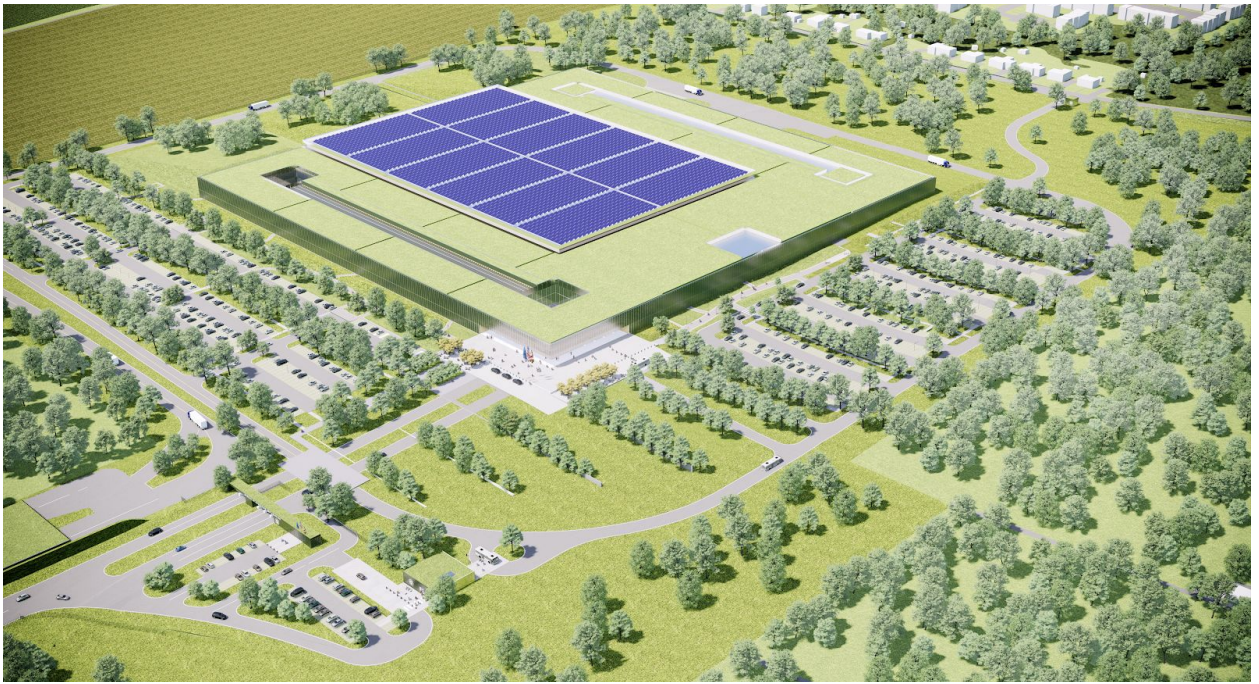
The building and landscape design will respect the scale of the local residential neighborhood to the north of the project along Odell Road, using the existing reforestation area along that edge of the property as a natural visual and acoustical buffer. This site strategy maximizes existing conditions within the building setback to naturally screen the project from the public right of way.

The design team will use a gentle rise in the existing topography to help conceal the entry buildings and main building as viewed from Powder Mill Road. The existing forest, rising along the hillside east of the project site, will be extended westward into the site using naturalistic bands of newly planted trees to create stretches of woodland within the proposed parking areas along the east side of the building. This feature will also be carried into the parking area south of the main building to further shield the facility from the campus perimeter. Indigenous wetland meadow grasses at the southeast corner of the site along Beaver Dam Creek will be planted throughout lowland, wetter areas of the site. Other native grasses will carpet much of the remaining campus landscape, highlighted by clusters of shade trees to recall the existing pastoral landscape.

The cultural history of the “Central Farm” setting will be further reinforced by the site design, which recognizes the importance of BARC as an important historic resource. Vegetated earth berms, rising from the farmlands west of the project site, will help to conceal the building’s western elevation as viewed from Odell, Edmondston and Powder Mill Roads.



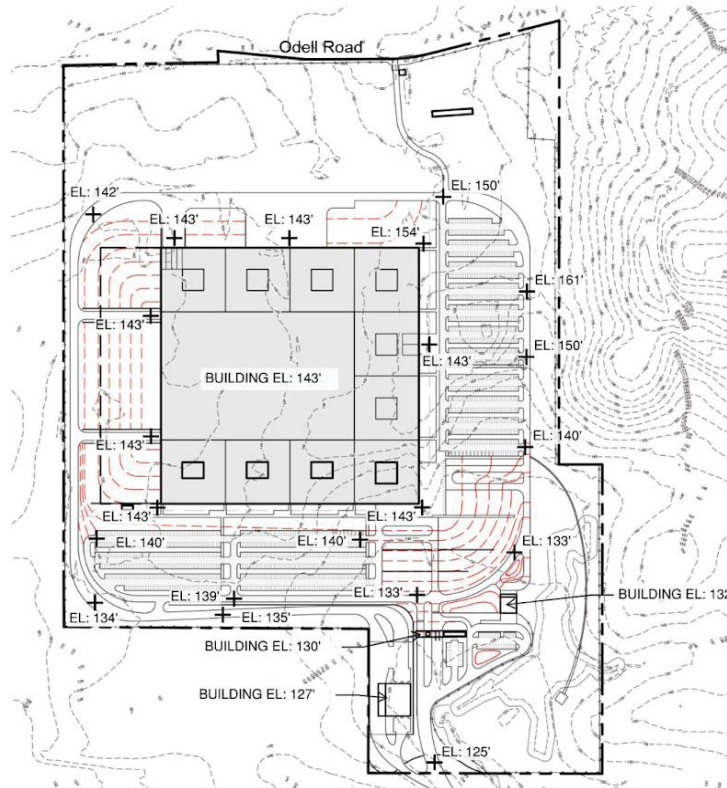
Illustrative site plan



Aerial view from southeast

Topography and major features:

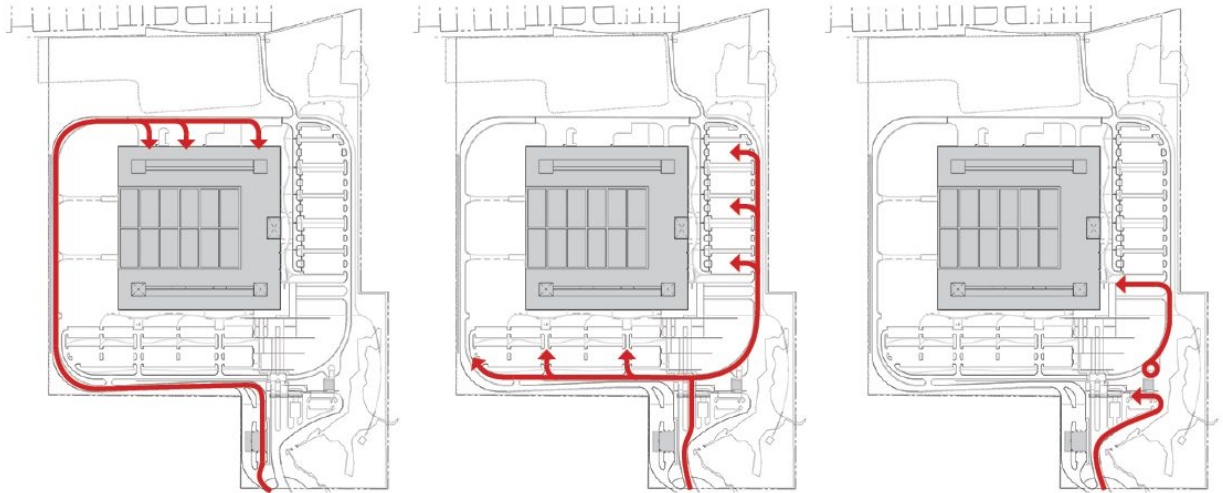
The main building finished floor elevation (FFE) was determined with a main objective to balance the cut and fill excavation volumes while integrating the building within the rolling topography of the site. The main building is set at +143', and the entrance buildings are set between +127' and +132'. All existing site structures, roads, and utilities will be removed.



Proposed topography and building elevations

Site Circulation

As vehicles enter from the south, they will be divided into three streams of traffic: commercial vehicles, staff, and tourists. Trucks and commercial vehicles are routed to the North side of the building, where they can be concealed from public view along Odell Road by the reforestation area. Staff vehicles proceed to parking zones on the east and south sides of the main building, flanking the main building entrance. Tourists park outside of a tour entry pavilion, where they are screened before boarding a shuttle bus to the main building.



Truck Circulation

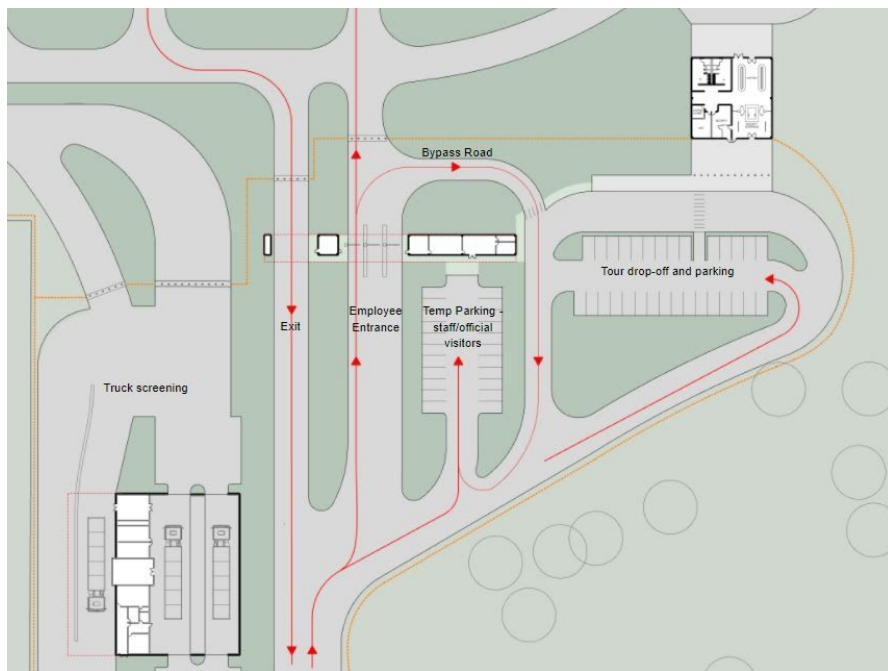
Staff Circulation

Tour Circulation

The access point to Odell Road on the North side of the site will be used for emergencies or special situations, but will not be used on a regular basis. A small guard booth will be provided at this location.

Peripheral buildings

The below image shows pavilions for truck screening (lower-left), employee screening (middle), and visitor screening (top-right). Together, these buildings will process all vehicular traffic to and from the facility.



Screening buildings at site entrance

These buildings are designed in deference to the natural landscape, with green roofs and simple surfaces of metal and glass reflecting the context and harmonizing with the architecture of the main building. The team will evaluate the need for design measures such as patterns on glass and metal surfaces to limit disruptions to birds and local wildlife.



Staff entry pavilion and site approach looking north

The staff entry building contains a PIV badge processing room in order to serve official visitors, contractors, or new employees who require a badge before proceeding to the parking areas. On a day-to-day basis, employees will present their badge and drive straight through the three inbound lift gates. Adjacent security booths will enable constant monitoring of these lanes.



Staff entry pavilion looking northwest

The visitor entry pavilion will contain a security screening area as well as a waiting area for tourists before they board the shuttle to the main facility to begin their tour. This pavilion is designed to maximize visitor views to the wet meadow and natural features in this area. To control the number of tour visitors on the site, advance reservations will be taken and 30 tourist parking spaces will be provided.



Visitor security entry pavilion

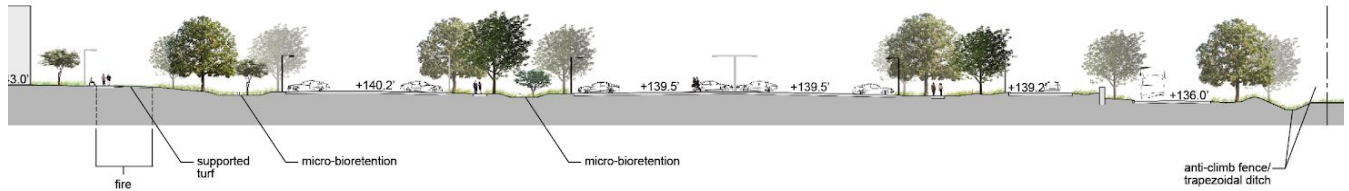
Parking

The use of surface parking further reinforces the guiding principle of integrating the design into the natural landscape. Site parking will consist of no more than 1,234 spaces, including approximately 30 spaces for tour visitors, 20 spaces for official visitors, and 1,184 spaces for staff. Due to the 24-hour demands of the currency production process, this staff parking includes spaces for overlapping periods between manufacturing shifts. In order to minimize the perceived area attributed to parking, staff parking is divided into two zones featuring bands of newly planted trees extending from the forest to the east. These parking zones also incorporate native plantings, trees, and separated walkways to create more intimate pedestrian spaces while integrating sustainable strategies for site stormwater management.

The south parking area features bays of approximately 50 feet for stormwater micro-bioretenion and walkways leading toward the main entrance of the BEP building. Porous paving is incorporated to the extent possible within parking spaces to further support stormwater management initiatives.



South parking area with newly planted tree bands extending the forest throughout the site



Section through southern parking area looking east

Within the eastern parking area, bays of approximately 50 feet host stormwater micro-bioretenation areas and walkways leading toward the BEP building. An additional walkway is provided along the east face of the building to create a pleasant pedestrian pathway toward the main entrance. Narrower bays of approximately 25 feet between the parking blocks provide for additional micro-bioretenation areas as well as shade. In consideration of the project's guiding principles, the design team studied options for multi-story parking; however, surface parking was found to better achieve the project goals with regards to site integration, minimizing viewshed impact, and cost.



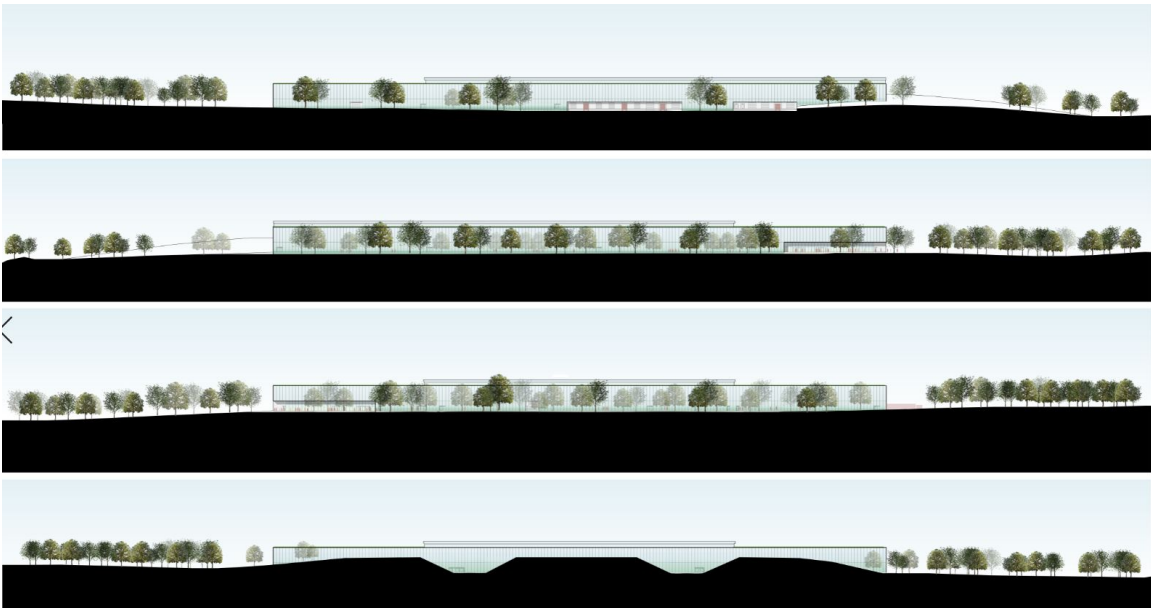
Southern parking area and approach to main building entrance

Main Building

The proposed building presents a simple, low-lying 960' x 960' square form nestled into the rolling landscape of the BARC historic site. The maximum building height is anticipated to be between 40 to 50 feet; however, most portions of the facade will be concealed by the rolling topography in order to help reduce the visual impact from critical viewsheds. The building form is primarily determined by the functional requirements of the interior programs and the efficient flow of goods throughout the site.



Aerial view looking west, showing integration of the site and forest areas



Main building elevations, from top to bottom: North, South, East, West

While the massing is designed to blend into the landscape and minimize disruption of the surrounding environment, the main building entrance at the southeast corner appropriately establishes a federal presence befitting the permanence of the United States Treasury. Visitors and staff enter the site on axis with this entrance, creating a formal procession towards the front door.



Axis of main building entrance looking north

On the south and east sides of the building, landscape and stormwater management features are integrated with the parking areas in order to better harmonize the project with its natural surroundings. The facade of all four sides will consist of metallic panels that create a uniform appearance that reflects the pastoral setting.



Eastern parking area and walkway towards main building entrance looking south

The western boundary of the project contains large landscape berms that help balance cut and fill on the site while also concealing the visual mass of the building as viewed from the western viewsheds. This zone contains an access road for commercial vehicles moving from the site entrance to and from the loading/service areas to the north.



Western access road and berm with indigenous meadow grasses planted surrounding the main building

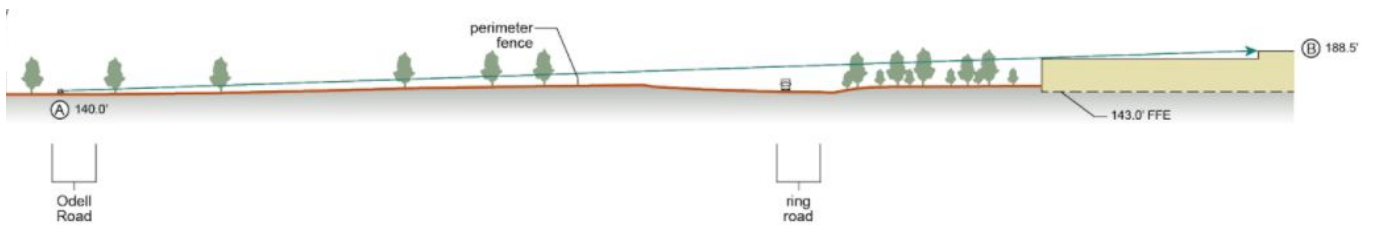
Viewshed Analysis

Following the guiding principle of integrating the new production facility into the natural landscape, the design team endeavored to demonstrate to consulting parties that no visual impact would be attributed to the newly sited building. The following sequence of views illustrates no visual impact of the proposed facility from the adjacent areas identified within the EIS as critical viewsheds. As shown in these images, the building is substantially shielded by the forested areas, sloping topography, and significant setbacks from Odell and Powder Mill roads.



Key plan: see following pages for sections (when applicable) and views from each vantage point

View 1: Odell Road Eastbound



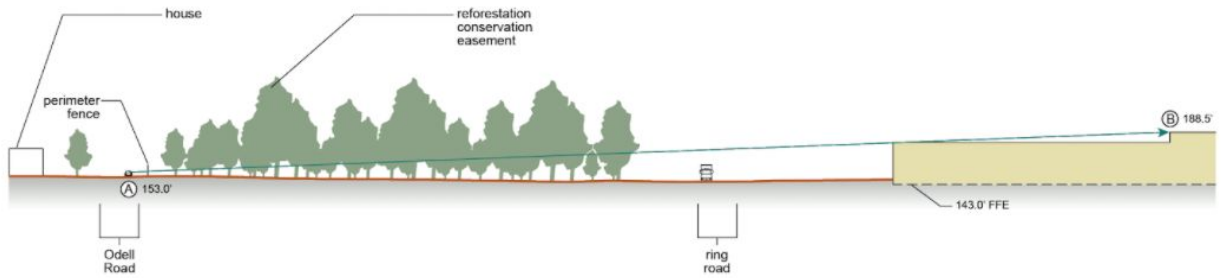


Current Condition



Proposed Facility

View 2: Odell Road North

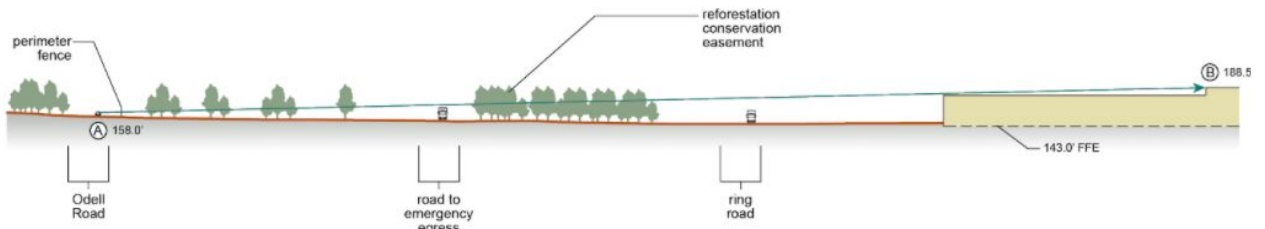


Current Condition



Proposed Facility

View 3: Odell Road Westbound





Current Condition



Proposed Facility

View 4: Powder Mill and Edmonston Road



Current Condition



Proposed Facility

View 5: Powder Mill Road Eastbound

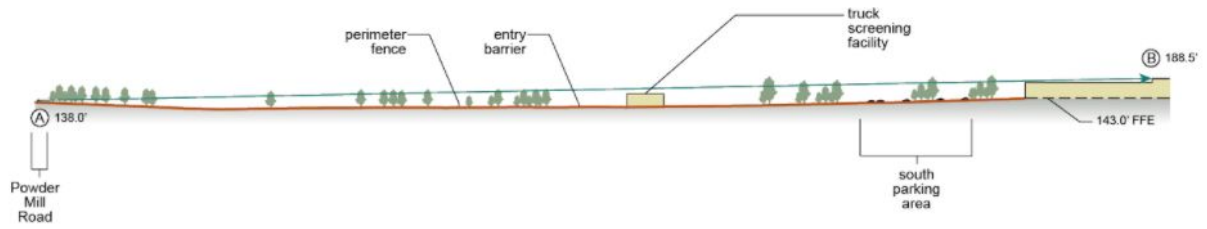


Current Condition



Proposed Facility

View 6: Powder Mill Road Westbound



Current Condition



Proposed Facility

Site Photographs



BARC agricultural landscape



Open meadow with trees



Wet meadow at site entrance



Forest landscape at eastern portion of site



Subtle topography and copse of trees



Existing Building and Artifacts



Reforestation Area



Bird Box and Beekeeping Operation



Aerial view along Poultry Road looking north



Aerial view along Poultry Road looking north

ENVIRONMENTAL AND HISTORICAL CONSIDERATIONS

Historic Preservation

Note: this section is adapted from the EIS; see full EIS for additional information

Archaeological Resources:

Two Phase I archaeological surveys were conducted to identify and evaluate archaeological resources. Of the three potentially eligible sites in the archaeological APE, Treasury conducted Phase II evaluations of two of them that could be adversely affected by the Proposed Action. Based on these Phase II evaluations, Treasury determined, pending concurrence from the MHT, that both of these sites are not eligible for the NRHP. Treasury would avoid any potential impacts to the third potentially eligible site, so no further evaluation is required.

Architectural Resources

The Treasury documented, evaluated, and assessed architectural resources 45 years of age or older (i.e., constructed in 1974 or earlier) located within the architectural history APEs for physical effects (i.e., the Project Site) and for visual effects. Treasury documented each architectural resource of historic age with an MHT DOE form (Treasury, 2020). The Project Site is located within the BARC Historic District, a previously identified 6,582 acre historic property. Within the Project Site (i.e., the architectural history APE for physical effects), 22 buildings and structures are contributing resources to this historic district (see Figure 3.9-2). Most of these buildings have been vacant for decades. No architectural resource individually eligible for listing in the NRHP exists within the Project Site (MHT, 2019).

Finally, the architectural history APE for visual effects includes a portion of the BARC Historic District within which Treasury identified and photographed viewpoints of the character-defining viewsheds and landscape. The BARC Historic District's landscape generally consists of vast open space, cultivated fields, and hundreds of buildings and structures scattered throughout the facility. Contributing elements to the landscape of the BARC Historic District include major paved roads, minor service roads, field and research crops, pasture lands, seasonal ponds, forests, sustainable meadows, other landscape features, and buildings (Dwyer, 1973; PAC Spero & Company, 1998; Farris, 2017). This is representative of the architectural history APE for visual effects for the proposed CPF.

Anticipated Impacts:

As stated in the EIS, construction of the facility would have no impact to one potentially National Register of Historic Places-eligible archaeological site. There would be less-than-significant adverse impacts on previously unknown archaeological sites if discovered during construction; less-than-significant adverse impact from the demolition of 22 contributing resources to the BARC Historic District.

Operation of the facility would cause no impact on archaeological resources. However, there may be significant adverse impact on the visual environment from the demolition of buildings and structures within the BARC Historic District and introduction and operation of the proposed CPF into the previously cohesive landscape.

Mitigation strategies include:

- Plant native and habitat-appropriate trees and vegetation on the Project Site that would limit views of the proposed CPF from portions of the BARC Historic District outside the Project Site, as well as plant additional native and habitat-appropriate trees and vegetation along the northern and western boundary of the Project Site to obscure lines-of-site from these areas.
- Design the proposed CPF by integrating the building into the natural landscape to minimize and eliminate potential adverse impacts to the viewshed.
- Ensure the permanent security fencing around the perimeter of the proposed CPF blends with the natural surroundings to the extent possible and does not present an obtrusive, visually distracting, discordant visual impact within the ROI.

- Develop an exterior lighting plan for the proposed CPF that minimizes off-site light pollution, such as by using directional lighting that focuses light on areas within the Project Site, while still meeting site security requirements.

Additionally, in order to integrate the building with the site, the CCT has sought to minimize the viewshed impact by avoiding roof-mounted mechanical equipment to the greatest extent possible. Instead, the majority of roof area is dedicated to greenery, skylights, maintenance areas, and a photovoltaic array.

Natural Resources

Note: this section is adapted from the EIS; see full EIS for additional information

Anticipated Effect on Water Resources:

Construction: Potentially significant adverse impact on two intermittent streams from diversion and permanent fill; no or negligible adverse impacts on surface waters from erosion and sedimentation; no or negligible adverse impact on stormwater from ground disturbance; less-than-significant adverse impacts on wetlands from permanent fill; less-than-significant adverse impact on groundwater from excavation and potential contaminant mobilization; no adverse impact to the coastal zone.

Operation: Less-than-significant adverse impact on surface water flow from wastewater discharge; no impact to on-site surface water from withdrawals or in-water work; no or negligible adverse impact to stormwater from changes in Project Site hydrology; no impact on wetlands; no impact to groundwater quality; negligible impact on groundwater supply; no adverse impact to the coastal zone.

Anticipated Effect on Biological Resources:

Construction: Less-than-significant adverse impact on forest resources and vegetation from the conversion of vegetated land to developed land; less-than-significant adverse impacts on wildlife from habitat loss and displacement; “may affect” determination for the federally threatened northern long-eared bat (NLEB); no effect on any other federal- or state-listed special status species; less-than-significant adverse impact on migratory birds.

Operation: Negligible adverse impacts to vegetation; less-than-significant adverse impacts on wildlife from changes in ambient noise and light levels; no effect on federal- or state-listed special status species; less-than-significant adverse impact on migratory birds from an increase in ambient noise and light levels and the potential for window strikes.

Anticipated Effect on Geology, Topography, and Soils

Construction: No or negligible adverse impact to soils from vegetation removal and compaction; no impact to geology or topography.

Operation: No or negligible adverse impact from stormwater runoff; no significant impact to designated farmland soils; no impact to geology or topography.

Flooding

Note: this section is adapted from the EIS; see full EIS for additional information

Floodplains: The Project Site is not located within a FEMA-designated 100-year floodplain. Neither construction nor operation of the proposed CPF would impact the quality or function of floodplains.
Chesapeake Bay Critical Area: The Project Site is not located within and would not disturb or affect any Chesapeake Bay Critical Areas (DNR, 2020).

Stormwater Management

The primary design criteria for stormwater management and erosion & sediment control design are described in the Maryland Department of Environment (MDE) Guidelines for State and Federal Projects 2015. For stormwater management, MDE requirements to meet environmental site design (ESD) to the maximum extent practicable (MEP) will be followed. This design methodology developed by MDE will also provide for the site meeting EISA 438 requirements. In order to meet the MDE stormwater management requirements as referenced above, alternative surfaces and micro-scale BMP practices will be incorporated throughout the site, including the following:

Alternative Surfaces

- Green Roof - approximately 50% of the main building roof will be covered with a green roof. The three (3) security access control buildings at the southeastern portion of the site will also be provided with green roofs. It is planned that the green roofs will be the equivalent of 8" thick media (though not necessarily 8" thick) for retention capacity certified through MDE.
- Permeable Pavers - parking spaces throughout the project will be constructed with permeable pavement, likely a permeable unit paver. Parking drive aisle will be constructed of standard bituminous asphalt to limit maintenance requirements. Permeable pavement is only allowed in HSG Soils Type C or better. Since our site has a significant amount of Type D soils, it's likely that a credit for a significant amount of the permeable pavement will not be given (especially on the eastern parking area). However, permeable pavers are provided in all parking stalls in all areas for material consistency.
- Reinforced Grass Paving - in some circumstances where impervious pavement would be used for a seldom-used access drive, a reinforced grass paving unit will be used. This is planned to be used in the fire lane south of the building and potentially for portions of the western seldom-used building access drives and eastern building access zones.

Micro-scale Practices

- Rainwater Harvesting - stormwater runoff from the main building roof will be conveyed to rainwater harvesting cisterns located below-grade outside of the building footprint. Due to the size of the building, two cisterns are planned - one southwest of the building and one northeast of the building. The southwest cistern will transfer its harvested rainwater via a pump and non-potable transfer water line to the northeast cistern. The northeast cistern will pump the harvested rainwater to a treatment unit located within the building or within a vault outside the building (to be determined). The treatment unit will then pump the harvested rainwater to be used inside the building for cooling tower and greywater (flushing toilets) uses.
- Micro-bioretenention - stormwater runoff from various site impervious areas (roads, parking, pedestrian pavements) will drain to various micro-bioretenention areas throughout the site. These are typically located between parking bays or roadway areas. Micro-bioretenention areas will temporarily pond stormwater in their footprint up to a 12" depth before filtering the stormwater through media for infiltration into native soils or (if impermeable soils are at subgrade) to underdrains before being conveyed off-site. Each micro-bioretenention will be provided with an overflow to convey the design 10-year storm.
- Bioswales / Grass swales - bio-swales or grass swales will be provided along various site road ways. These swales will have bottom widths from 4' to 8'. Bioswales will have media and small check dams to slow stormwater runoff and promote infiltration into the native soils.
- Submerged Gravel Wetlands - piped or concentrated (ditch) stormwater runoff flow will enter submerged gravel wetlands at several areas on the perimeter of the site. These practices will have an overflow to a level spreader or piped outfall off-site. Drainage areas to submerged gravel wetlands will be at least one acre.