

April 21, 2022

The attached packet is provided for review and comment from the following agencies:

Conway Robinson State Park County Archaeologist (DS940) Fire Marshal's Office (DS920) Historical Commission (DS940) Long Range Planning (DS940) Manassas National Battlefield Park PWC Finance Parks and Recreation (EA795) Planning Case Planner Service Authority (SA317) Transportation Department (DS990) VDOT Fairfax (MA290) Watershed Management (DS930)

# RE: CPA2021-00004, PW Digital Gateway MAGISTERIAL DISTRICT: 20 - Gainesville COMPREHENSIVE PLAN AMENDMENT, AMENDMENT WITHOUT REZONING Comprehensive Comprehensive

**REQUEST:** A Comprehensive Plan Amendment to change the Long Range Land Use from AE, Agricultural or Estate and ER, Environmental Resource to Technology / Flex (T/F) with a T-3 Transect create a Digital Corridor and include related impacts on supporting infrastructure and consider alternative comparable land use designation options that meet the needs of the Applicant and the priorities of the Prince WIlliam Board of County Supervisors. The Prince William Board of County Supervisors approved a an amendment to this initiation enhancing the study area to include the entire corridor between Route 29 and Sudley Road in order to review in a holistic manner (traffic, land use, and environmental concerns), look carefully at the areas directly abutting Conway Robinson Memorial State Forest and the Manassas National Battlefield Park, and coordinate the review with the open space corridor concepts of the rura area (native plant buffering and sustainability) to preserve as much of the area as possible. The parcels are zoned A-1, Agricultural and designated AE, Agriculture or Estate and ER, Environmental Resource in the Comprehensive Plan. Some or all parcels in this application and Study Area are located in the Rural Area Boundary and Airport Safety, Domestic Fowl, 100-year Flood Hazard, and Resources Protection Area Overlay Districts. Additionally, some parcels are located in Cemetery Preservation Areas (Phillips, Civil War Graves) and the Silver Lake Dam inundation Zone.

| GPIN(s): 7499- | 70-3896 749  | 99-73-5646 | 7498-94-1180 |
|----------------|--------------|------------|--------------|
| 7498-84-6051   | 7499-82-1020 | 7499-72    | -1255        |
| 7499-51-0789   | 7598-13-2096 | 7498-74    | -6800        |
| 7498-85-7316   | 7498-93-7484 | 7499-81    | -6203        |
| 7499-50-2914   | 7498-85-3325 | 7499-92    | -7290        |
| 7498-51-1835   | 7499-84-1172 | 7499-83    | -4804        |
| 7498-83-6698   | 7498-93-5350 | 7499-62    | -5386        |
| 7498-94-5907   | 7498-42-6117 | 7499-83    | -9783        |
| 7498-83-1842   | 7498-83-1869 | )          |              |

Your comments should:

- 1) address the anticipated impacts of the proposal on the goals, policies and action strategies of the Comprehensive Plan;
- 2) address the anticipated impacts of the proposal on the services of your department;
- 3) address any site specific concerns which are materially relevant to the requested land use decision;
- 4) list minimum development standards which may conflict with the proposed development or require special consideration in the Planning Office's analysis of the proposal.

Your assigned Case Planner is **Bryce Barrett**. Please use **eReview** to submit your comments. Reviewers without eReview access should submit their comments by email to **amedina@pwcva.gov.** 

Your comments should be directed to **Aisha Medina** and received no later than **May 05, 2022**. Your cooperation is appreciated.

The attached packet is provided for information only. No comment is necessary from the following:

SUPERVISOR - PETE K. CANDLAND COMMISSIONER - RICHARD BERRY BOARD CHAIRMAN - ANN B. WHEELER COMMISSIONER AT LARGE - PATTY KUNTZ ACTING PLANNING DIRECTOR - REBECCA HORNER COUNTY ATTORNEY ACTING COUNTY EXECUTIVE - ELIJAH T. JOHNSON PLANNING COMMISSION CHAIRMAN - CYNTHIA MOSES-NEDD



April 8, 2022

Mr. Bryce Barrett Senior Planner Prince William County Planning Office 5 County Complex Court, Suite 210 Prince William, VA 22192

#### Re: 3<sup>rd</sup> Submission of Post-Initiation Materials Comprehensive Plan Amendment CPA #202100004 (PW Digital Gateway Corridor) christopher Project 20143.003

Dear Mr. Barrett:

Please find enclosed the following items:

- A. Special Planning Area Corridor Plan text (with seven (7) map exhibits)
- B. Transportation "Comment and Resolution Sheets" related to the CUBE study
- C. Summary Responses to Staff Comments
- D. Updated/Corrected Written Analysis Narrative and Suggested Plan Policies document

The Special Planning Area Corridor Plan (text and maps) contains not only the Applicant's ideas and proposals, but also those we have received from the National Park Service, the Virginia Department of Forestry, the County Department of Parks, Recreation and Tourism, the County Department of Public Works Watershed Management Division and the County Department of Transportation, as well as from community engagement/public comment. Comments we received from the National Park Service, the Virginia Department of Forestry and County staff has resulted in a draft Long Range Land Use (LRLU) map that proposes the following designations for the 2,133 +/- acre Corridor:

- 43 +/- acres remain AE
- 90 +/- acres replanned to POS (in anticipation of the Commonwealth's future expansion of Conway-Robinson State Forest Park)
- 2,000 +/- acres replanned to TF (to accommodate data centers)
- The ER extended along one stream RPA (to coincide with the recent County 2040 Draft LRLU map)

We thank all those who have provided meaningful and constructive comment. They have assisted in providing the County with a realistic, attainable means to achieve a 35% commercial tax base.

Please distribute as soon as possible to County staff, Planning Commission members and Board of County Supervisor offices for their review and comment.

#### christopher consultants

9900 main street, suite 400, fairfax, va 22031

(p) 703.273.6820 www.christopherconsultants.com Mr. Bryce Barrett April 8, 2022 Page 2

We look forward to continuing to work with you and other County staff, as well as the National Park Service and the Virginia Department of Forestry. We are available for meetings (Zoom or in person) to answer questions or discuss the CPA application. Thank you for your courtesies in this regard.

Sincerely,

以子

Michael S. Kitchen, P.E. Vice President

MSK/dml

cc: Tony Calabrese John L. McBride Mary Ann Ghadban Chad Baird

Enclosures

# Prince William Digital Gateway Special Planning Area Corridor Plan 4/8/2022

#### **Purpose and Vision**

This addition of land to be reserved for employment use as part of the Gainesville Regional Activity Center (through an extension of the I-66 and Route 29 Activity Center) is primarily an economic development initiative that will enable the County to attain a 35% sustainable, diversified commercial tax base and enhance the local economy. Allocating additional land for new data centers (a targeted industry "employment" use) is critical to ensure future economic growth and financial health for Prince William. This will allow the County to compete on a regional and national basis for new high-tech investment, jobs and facilities. Being viewed as a "high-tech County" will not only enhance the local economy and create jobs, it will benefit George Mason University, Northern Virginia Community College and the *Science and Technology Employment Center @ Innovation*.

The Corridor is uniquely suitable for Data Centers. Sites located within one mile of existing high-voltage electric transmission and fiber optic corridors are considered optimal for data centers, because less new infrastructure is needed. The Corridor has large undeveloped parcels with great potential for redevelopment to clustered data center campuses, building upon the other nearby data center campuses within the I-66 and Route 29 Activity Center. Data centers, compared to other types of commercial uses, result in fewer vehicle trips, lower lighting levels and less outdoor noise.

Reserving the Corridor for data center uses will take pressure off commercially-zoned property elsewhere, encouraging their development to other important commercial tax base and employment uses – such as life sciences industry, bio-medical research, industrial flex, industrial and specialized logistics/supply chain facilities. This will diminish the chance the County becomes a "data center only" economy. allowing data centers here will relieve the pressure for data centers elsewhere throughout the County in less suitable locations.

When implemented over an extended period (8-15 years), this Corridor Plan will create a more balanced mix of employment, retail and residential uses in the overall Gainesville Regional Activity Center, in a manner which emphasizes the preservation of abundant open spaces, the establishment of new public outdoor recreation areas, and the context-sensitive siting of data centers, at a transitional lower overall intensity of up to a maximum of 0.30 FAR. This low intensity development level, substantial contiguous acreage available for redevelopment, close proximity to Dominion Virginia Power's high voltage major transmission corridor, and multiple fiber optic availability, all combine to provide a unique opportunity to achieve County objectives related to economic development and County-wide Strategic Plan goals, while at the same time protecting, preserving, and enhancing the natural ecosystem. Without this plan guidance and its

associated implementation, many of the environmental resources within the Corridor will continue to degrade over time. It is unlikely the current development pattern will continue.

Implementation of the recommendations identified herein will establish an interconnected hierarchy of greenway parks, local history community parks, multi-use trails, trail head parking areas, and protected private open space, in a manner which is intended to preserve and enhance the significant environmental and cultural assets found within the Corridor – such as Little Bull Run, Catharpin Creek, Lick Branch, Conway-Robinson State Forest Park and the Manassas National Battlefield Park. The new public parks recommended in this Plan will highlight a variety of cultural and natural resources to be protected, researched, interpreted and open to the public. An extensive multi-use public trail network (including bicycle, pedestrian, orienteering, and equestrian uses) should be established to connect and provide access to new cultural and natural resource parks established pursuant to the recommendations of this plan, generally as shown on Exhibit 1 (Parks, Trails and Protected Open Space).

New non-public uses in the Corridor shall be limited to data centers, at a maximum overall intensity of development of 0.30 FAR for the entire Corridor. Stand-alone office uses are prohibited, although office uses supportive of and accessory or secondary to data centers are permitted when located within a data center building. This lower transitional level of development is approximately 1/3 of that allowed in the Data Center Opportunity Zone Overlay District and 1/2 of that established in the adjacent Gainesville Crossing data center campus (which is located across Route 29 and abuts the Manassas National Battlefield Park). The recommended transition to a lower intensity of development within the Corridor is appropriate, given the close proximity of the Manassas National Battlefield Park, Conway-Robinson State Forest Park and three major tributaries of Bull Run. This lower intensity and the "enhanced practices" recommended herein, are intended to result in (i) lower building heights where warranted to protect viewsheds, (ii) appropriately-sized natural area setbacks from properties abutting the perimeter of the Corridor, and (iii) the preservation of protected public and private open space in natural area corridors and on important historic interpretative sites (including recommended donations of land for: an extension of the Catharpin Greenway Linear Park; an enlargement of the Manassas National Battlefield Park; the establishment of a community park memorializing the minority community history of the "Settlement" and the Thornton Schoolhouse; and, an expansion of Conway-Robinson Forest Park to connect it to the Manassas National Battlefield Park).

This Corridor Plan seeks to shape a new *high-tech* identity for Prince William and to establish a unique *sense of place* in Gainesville, one which harmonizes the importance of both nature and technology.

The design of data centers in the Corridor should be context-sensitive and responsive to adjacent uses and activities. Building heights for individual data centers should be established based on the site's existing and/or proposed topography and vegetation (informed by detailed viewshed studies performed with each site-specific zoning review). Screening techniques such as berming and/or reforestation/preservation of existing forests should be employed in areas where there are viewshed impacts from Manassas National Battlefield Park (to the east), as well as Heritage Hunt and Catharpin Valley (to the west). Where appropriate, height suitability to protect specific viewsheds should be evaluated during rezoning, using LIDAR (Light Detection and

Ranging) technology-assisted line-of-sight analyses, drone vertical horizon visual testing, and Augmented Reality digital imaging or other similar techniques and technologies.

This purpose and vision can only be accomplished if certain key land use and development "enhanced practices" are utilized. These recommended objectives and standards are intended to be in addition to (and not a replacement of) other applicable Comprehensive Plan recommendations and County Ordinance Standards. Proposed rezoning applications to implement this Corridor Plan are encouraged to be creative and will be reviewed for enhanced implementation, proffers and impact mitigation strategies. A heightened emphasis on environmentally sensitive design, including the use of indigenous plants and the preservation of environmental resources is appropriate, in order to ensure that the data centers blend into their natural surroundings.

#### **Planning History of Land within Corridor**

The planning history for the Pageland Lane Corridor is unlike other land in the Rural Area. Prior to 1998, all of the land within the Corridor was designated Semi-Rural Residential (SRR) in the adopted Comprehensive Plan. See <u>Exhibit 2</u> (Pre-1998 LRLU Map). This designation envisioned 1 to 5 acre residential lots (some with public sewer). It did not envision large farms, estates or rural landscapes. The availability of public water and sewer was based upon engineering design rather than one uniform policy decision. None of this land was deemed prime agricultural or forested land. A-1 and SR-5 zoning at the time allowed 1 to 5 acre residences. These are now grandfathered.

Land within the Corridor was not re-designated Agricultural or Residential Estate (AE) until the County-wide residential growth management initiative (sometimes referred to as the "Rural Crescent") was adopted on August 4, 1998. This initiative was based on the 1998 finding that "Sufficient vacant and under-developed land exists outside the Rural Area that the Rural Area is not needed to accommodate further residential growth for the next 20 years." (1998 Comprehensive Plan, Introduction, page 3.) The primary purpose of the 1998 Rural Area Plan change within the corridor was to steer residential growth to existing developed areas. An extension of the Gainesville Activity Center to allow data center uses in the Corridor is not contrary to this purpose of the Rural Area Plan and is neutral to its effectiveness to accomplish that purpose.

By 2008, the National Park Service ("NPS") had coordinated with Dominion Virginia Power to consolidate and upgrade multiple north-south, high voltage lines into one 250 feet wide *major transmission corridor* between the western edge of the Manassas National Battlefield Park and Pageland Lane. That same year, NPS adopted a General Management Plan ("GMP") for the Battlefield Park, which incorporated this major electric transmission corridor. Another element of this GMP was the plan for a *Battlefield By-Pass* road network to reduce the non-park traffic on Va. Routes 29 and 234 through the Battlefield Park. The northern *Battlefield By-Pass* segment upgraded portions of Sudley Road to 4 lanes. The western *Battlefield By-Pass* segment widened Pageland Lane north of Route 29 to 4 lanes. See <u>Exhibit 3</u> (NPS Battlefield Bypass Plan). Later, a southern *Battlefield By-Pass* segment showed an upgrade of Pageland Lane south of Route 29 to 4 lanes and extended it eastward through the Parkridge Center and Battlefield Business Park commercial areas to Fairfax County. All of these road segments remained planned as local roads. By 2012, Prince William, Loudoun, the Virginia Department of Transportation ("VDOT") and the NPS had jointly planned the alignment of a *Bi-County Parkway* ("BCP") in Prince William and Loudoun. This high volume, high speed, limited access *regional roadway* created a 200-foot-wide major transportation corridor parallel to Pageland Lane and nearby the 250-foot-wide Dominion Power major transmission line corridor. VDOT designated this major transportation corridor part of a larger region-serving "*Corridor of Statewide Significance.*" NPS supported the BCP as a replacement of its planned western segment of a *Battlefield By-Pass* as a means to reduce traffic through the Battlefield Park. However, the Bi-County Parkway was removed from the County's Comprehensive Plan in 2016. In March 2022, the County reaffirmed this removal. An absence of north-south road improvements west of the Manassas National Battlefield Park has resulted in a continued significant increase in congestion from commuter and commercial truck traffic within the Battlefield and along Pageland Lane.

The southern *Battlefield By-Pass* segment remains in the Comprehensive Plan and is renamed the *Route 29 Alternate*. The northern and southern *Battlefield By-Pass* segments remain in the County Mobility Plan. The VDOT "Corridor of Statewide Significance" designation remains.

# Long Range Land Use

The Long Range Land Use Map implements a unique purpose and vision for the 2,133 acre Prince William Digital Gateway Special Planning Area. See <u>Exhibit 4</u> (Existing and Proposed LRLU Map). The Environmental Resource ("ER") designated area is expanded along one stream RPA, and will be instrumental in establishing, through rezoning, specific public and private protected natural open space. Most of the land within the Corridor (approximately 2,000 acres) is planned Technology/Flex ("TF"), but with lower intensity levels that are commensurate with the location of natural and cultural resources. Approximately 43 acres remain planned Agricultural Estate (AE) and approximately 90 acres is planned Parks and Open Space (POS), to recognize state, local and private efforts to expand Conway Robinson State Forest. The Rural Area boundary is adjusted to that shown on Exhibit 4.

New non-public uses within the Corridor will be limited to data centers, at a maximum overall intensity of up to 0.30 FAR for the entire Corridor (which includes a limitation of secondary office use to ten percent of overall building floor area). Transects T-3 and T-2 are utilized to guide the transition of intensities within the Corridor to be compatible with nearby natural and cultural resources. The specific location, size and boundaries of voluntarily proffered public parks and conservation easement-protected private open space will be determined through the site-specific conditional zoning process. However, the location, scope and extent of parks, trails and protected open spaces that are determined at rezoning should be in substantial conformance with Exhibit 1 (Parks, Trails and Protected Open Space).

# **Key Policies and Recommendations**

# • <u>Mobility Connections</u>

• <u>Upgrade Pageland Lane within the Corridor</u> to a MA-1 (128 ft. row) 4 lane cross section within the Corridor, intersecting Sudley Road in a manner which will enhance safe vehicular and pedestrian access to Catharpin Park. Improvements to Pageland Lane and

Sudley Road, as well as the construction by others of the Route 29 Alternate, are consistent with the National Park Service plan for a "Battlefield By-Pass" to relieve commuter and commercial truck cut-through traffic in the Manassas National Battlefield Park. These local road improvements are also consistent with County objectives to provide better local north-south local access to relieve the overburdening of nearby rural local collector roads. See <u>Exhibit 5</u> (Mobility Plan) and <u>Exhibit 3</u> (Battlefield By-Pass Plan – with improvements recommended herein highlighted in yellow).

- <u>Preclude Commercial Truck Traffic</u> consideration should be given to precluding through commercial truck traffic on that portion of Sudley Road between Gum Spring Road and the Route 29 Alternate, as well as on that portion of Route 29 within the Manassas National Battlefield Park. Through commercial truck traffic should continue to be precluded from Groveton Road and Featherbed Lane within the Manassas National Battlefield Park.
- <u>Enhance Multimodal Connectivity</u> enhance cultural and environmental assets through the creation of a linear park and multi-purpose trail network, providing connections between and greater access to: Conway-Robinson State Forest, the Manassas National Battlefield Park, the Catharpin Greenway and Catharpin Park. (See <u>Exhibits 1 and 5</u>.)
- <u>Major Shared Use Path</u> establish a 10-foot wide-shared Use Path as a major northsouth trail connection from Catharpin Park on Sudley Road to Route 29 (within the east side of the Pageland Lane Right of Way) in order to provide new non-motorized transportation options. (See <u>Exhibit 5</u>.)
- <u>Connections to MNBP</u> enhance the convenience and number of pedestrian and equestrian connections to Manassas National Battlefield Park.
- <u>Trail Improvements and Safety</u> improve safety and visitor experience along recreational trails through appropriate and consistent trail routes and distance markings and incorporate technology such as Quick Response (QR) codes to provide trail maps, contact information and user guides.
- <u>Uniform Resource Locator</u> provide or facilitate the installation of information codes, such as Uniform Resource Locator (URL) addresses or Quick Response codes (QR), so that information on recreational and active mobility trails can be translated into any language with a smart phone.
- <u>Multi-Modal Options</u> create a variety of accessible recreational trail experiences (bicycle, equestrian, nature trails, orienteering, etc.) for a diverse mix of populations (i.e., various age groups, level of mobility, etc.) in a manner that creates new community amenities.
- Expand equestrian and bicycle trail opportunities include the development of trailhead parking areas as necessary to improve bicycle and equestrian trail use/access within the Corridor and along the Catharpin Greenway. A preferred location for trailhead parking is to expand the proposed Unfinished Railroad Bed Park southward, to encompass some of the land between Conway-Robinson Forest Park and Pageland Lane. (See Exhibit 1.)

# <u>Cultural Resources/Preserving Local History</u>

• <u>Detailed Viewshed Analyses</u> – provide detailed topographic analyses, LIDAR-assisted line of sight analyses, digital imaging, drone visual horizon tests, Augmented Reality

digital imaging or other techniques and technologies during zoning review evaluate potential impacts of data center buildings on important interpretive and trail viewsheds from within the Manassas National Battlefield Park. See <u>Exhibit 6</u> (Cultural Resource Sites Map). A variety of means to mitigate viewshed impacts should be considered, including but not limited to: proffered maximum elevations above mean sea level for data center buildings (including rooftop equipment) and parking lot lighting fixtures; berming; and reforestation/vegetation screens.

- <u>Acknowledgment of historic significance</u> historical markers, interpretive kiosks and protected open space should be used to highlight areas of local historic significance, including the "Settlement" minority community, Thornton School, and historic cemeteries. Cultural Resource Inventories should be performed prior to the commencement of development.
- <u>Add the Manassas National Battlefield Park legislative boundary</u> to the Long-Range Land Use plan map. See <u>Exhibit 4.</u> (Existing and Proposed LRLU Map)
- <u>Honeywood Homestead</u> document and memorialize the antebellum dwelling known as Honeywood, which is located on the original Pageland landholdings of the Marsteller family. If warranted and feasible, preservation of the original antebellum portion of the residence and any historically relevant farm buildings should be considered.

# • Public Open Space/Parks

- <u>Catharpin Greenway</u> provide an extension of the County's planned Catharpin Greenway linear natural habitat park and multi-use (biking, hiking and equestrian) trail network, from the western perimeter of the Corridor at Heritage Hunt, along Little Bull Run to the eastern perimeter of the Corridor, connecting to a new north-south major trail connection along Pageland Lane to Conway-Robinson State Forest Park and to the Manassas National Battlefield Park (through lands owned by the Civil War Battlefield Trust). See Exhibits 1, 4 and 5.
- <u>Encourage an "adopt-a-trail" program</u> be established by data center owners, which could provide a maintenance fund, clean up and advocacy for County recreational trails with the Corridor.
- <u>Manassas National Battlefield Park</u> encourage the expansion of the Manassas National Battlefield Park to its current legislative boundary.
- <u>The "Settlement" Community and Thornton School</u> establish a community level park to memorialize this minority community history.
- <u>The Unfinished Railroad Bed Trailhead and Orienteering Park</u> establish local park facilities and an enlargement of Conway-Robinson State Forest Park at the southern entrance to the Corridor, as shown on Exhibit 1. Encourage tree preservation and forest restoration as a unifying feature of this park, especially along Route 29 and Pageland Lane.

# • <u>Protect the Environment</u>

 <u>Protected Open Spaces</u> – prioritize the establishment of a substantial amount of public and private protected open space (containing forest and other natural areas, sensitive Environmental Resources and habitat corridors) primarily along the Little Bull Run, Lick Branch and Catharpin Creek stream valleys (which may include adjoining bluffs, contiguous steep slopes with highly erodible soils, connected wetlands and riparian forests).

- <u>Prioritize the restoration of any Environmental Resource ("ER") and riparian forested</u> <u>areas during development</u> within protected open space areas, such as those disrupted or impaired by the establishment of three nearby large golf course communities that outfall to Little Bull Run. Development should utilize or coordinate with County or State reforestation programs wherever practical.
- <u>Primary RPA, Floodplain, Creeks, Streams</u> make a priority the perimeter buffering of existing RPAs and flood plains of Little Bull Run, Lick Branch and Catharpin Creek, beyond what current standards require.
- <u>Native Plantings along Roadways</u> where appropriate, utilize, to the extent possible, native plant species in landscaping along public and private road rights of way and in medians to enhance the streetscape and reduce adverse environmental impacts of roadway improvements.
- <u>Maintain and protect wildlife corridors</u> along the portions of Little Bull Run, Catharpin Creek and Lick Branch that are within the Corridor. The Little Bull Run wildlife corridor should extend under a new Pageland Lane bridge.
- <u>Virginia Conservation Easement Act</u> utilize qualified third-party Virginia Conservation Easement Act conservation easements to permanently protect public and private natural open space areas.
- <u>LIDs, Minimize stormwater runoff</u> through the use of Low Impact Development ("LID") design, wet ponds, and other methodologies recommended in current state and local stormwater ordinances. Address water quality through the use of enhanced Low Impact Development practices, such as cisterns, permeable pavement and rain gardens. Low Impact Development and other measures which reduce post-development phosphorous off-site pollutant loads are encouraged.
- <u>Minimize land erosion and siltation</u> during construction by providing enhanced erosion control measures beyond what current standards require (in areas meriting special attention, i.e., close to environmentally sensitive areas, such as along stream valleys, wetlands, and steep slopes).
- <u>Energy Efficiency</u> encourage data center buildings to meet energy efficiency design and operation standards, such as the Design PUE (Power Utilization Effectiveness) or Green Globes. Individual data center buildings are encouraged to purse LEED-Core and Shell or other, similar programs related to building design and construction techniques.
- <u>Provide electric vehicle ("EV") charging stations</u> in data center employee parking areas to encourage EV use.
- <u>DCSM requirements</u> for canopy coverage and internal parking lot landscaping should be met, except that plantings may be concentrated to further enhance buffer and viewshed protection areas if requested by the Manassas National Battlefield Superintendent.
- <u>20% Natural Open Space</u> wherever it is possible and practical, encourage a minimum of 20% natural open space, as defined in the Zoning Ordinance, within the land area of individual zoning approvals, emphasizing the preservation of existing forest cover and other natural resources where they exist and restoration of forest cover where it does not exist.

• <u>Protect the local aquifer</u> – in order to reduce impact to the aquifer, new development should remove or abandon existing wells and septic systems, per Health Department requirements.

# Water and Sewer

- The Corridor will be served with public water and sewer, which will be extended from existing facilities along Route 29 as shown on <u>Exhibit 7</u> (Water and Sewer Map):
  - <u>Water</u> will be extended north along Pageland Lane from an existing main along Route 29. If determined necessary by PWCSA, the waterline may be looped back into the existing system via a connection to the existing waterline along Catharpin Road. No wells or other groundwater sources should be used to provide water service to data center facilities. Existing wells within the Corridor should be removed or abandoned per Health Department requirements.
  - <u>Sewer</u> will be provided to the data centers through use of a PWCSA gravity sewer that will be connected to a proposed pump station or stations located within the Corridor. The pump station(s) will be connected to the existing PWCSA sewer system via a proposed force main running south along Pageland Lane to connect to existing PWCSA force main(s) at the intersection of Route 29 and Heathcote Boulevard. As an alternative to the gravity sewer/pump station/force main concept, a low pressure force main system may be considered if such a system can provide the necessary capacity and is approved by PWCSA. No private septic systems will be used to serve data center development. All existing septic systems should be removed or abandoned per Health Department requirements.
  - To reduce public water and sewer consumption, encourage closed-loop or other cooling systems that minimize water consumption. If refrigerant or water is used for cooling in radiator type systems, it should be maintained in a separated, sealed line and only opened for a controlled recycling process.

# • Community Design

- <u>Encourage unified design guidelines</u> for landscaping, reforestation, signage and architectural standards for data center sites visible from Pageland Lane. These guidelines should recognize, complement and reflect the nearby historic and natural resources in a manner which creates a unique *sense of place*.
- <u>Building façades facing Manassas National Battlefield Park</u> should be nonreflective and earth tone, dark green or dark brown in color. The Planning Director may approve other colors provided a rezoning Applicant demonstrates the other color(s) will facilitate the ability for the building façade to blend into the horizon or tree line or will be screened by other topography or other buildings. Alternative paint colors or patterns may be utilized on rooftop screening facing Manassas National Battlefield Park.
- <u>Screening</u> in order to minimize visibility from adjacent public roads and adjacent properties, all rooftop mechanical equipment should be screened. Ground level mechanical equipment not screened by a principal building, topography or vegetation should be screened by a visually solid fence, screen wall or panel, or

other visually solid screen that is constructed with materials and colors compatible with those used in the exterior construction of the principal building.

- <u>Architectural treatments</u> the use of architectural treatments such as variations in building materials, patterns, and texture, and other design elements are recommended to provide visual interest. These treatments are not recommended for portions of buildings facing the Manassas National Battlefield Park.
- <u>Building roofs</u> should be non-reflective and a color that will help the roof to blend into the horizon or landscape.
- <u>Lighting</u> strict conformance with outdoor lighting standards, especially the use of "full cut-off fixtures" for all parking lot and building mounted lighting, is critical to enhance the character and context of the Manassas National Battlefield Park and Conway-Robinson State Forest Park.

# LIST OF EXHIBITS

- 1. Parks, Trails and Protected Open Space
- 2. Pre-1998 LRLU Map
- 3. NPS Battlefield By-Pass Plan
- 4. Existing and Proposed LRLU Map
- 5. Mobility Plan
- 6. Cultural Resource Sites Map
- 7. Water and Sewer Map

#5206367v9

| MOTION: | ANGRY  | July 20, 2021      |
|---------|--|--------------------|
|         |  | Regular Meeting    |
| SECOND: | BAILEY   | Res. No. 21-445    |
| RE:     | INITIATE COMPREHENSIVE PLAN AMENDMENT #CPA2021<br>GATEWAY – GAINESVILLE MAGISTERIAL DISTRICT | -00004, PW DIGITAL |

ACTION: APPROVED

**WHEREAS,** under Section 15.2-2229 of the Virginia Code, the Prince William Board of County Supervisors (Board) may consider amendments to the Comprehensive Plan; and

**WHEREAS**, an application for an amendment to the Comprehensive Plan was received to change the Long Range Land Use designation for approximately ±801.59 acres (Property) from Agricultural or Estate (AE) and Environmental Resource (ER) to Technology / Flex (TF) with a T-3 Transect. The parcels are grouped into four (4) separate geographical areas located on both the east and west side of Pageland Lane, south of State Route 234 and north of State Route 29. The request includes 27 GPINs: 7498-83-1869, 7498-83-1842, 7498-93-5350, 7498-93-7484, 7498-94-5907, 7498-83-6698, 7498-74-6800, 7498-42-6117, 7498-51-1835, 7499-81-6203, 7499-82-1020, 7499-70-3896, 7499-73-5646, 7499-83-4804, 7499-83-9783, 7499-92-7290, 7499-84-1172, 7499-62-5386, 7499-50-2914, 7499-51-0789, 7499-72-1255, 7498-84-605, 7498-85-3325, 7498-85-7316, 7498-94-1180, 7598-13-2096, and 7498-74-3579; and

**WHEREAS,** initiation allows for a more detailed analysis of the requested use and impact on Prince William County; and

**WHEREAS,** the initiation is for a targeted industry use as identified by the Board to support a robust economy; and

**WHEREAS,** this request aligns and compliments the initiation of the Data Center Opportunity Zone Overlay District by the by the Board on May 18, 2021; and

**WHEREAS,** initiation would provide an opportunity to align decisions regarding technology and connectivity options with the Technology and Connectivity Chapter; and

**WHEREAS,** County staff recommends that the Board initiate this comprehensive plan amendment; and

**WHEREAS**, the Board finds that initiation of the comprehensive plan amendment guides and accomplishes a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity, and general welfare of the inhabitants, including the elderly and persons with disabilities;

July 20, 2021 Regular Meeting Res. No. 21-445 Page Two

**NOW, THEREFORE, BE IT RESOLVED** that the Prince William Board of County Supervisors hereby initiates an amendment to the Comprehensive Plan of the Property described above from AE, Agricultural or Estate and ER, Environmental Resource to Technology / Flex (T/F) with a T-3 Transect to include related impacts on supporting infrastructure and consider alternative comparable land use designation options that meet the needs of the Applicant and the priorities of the Prince William Board of County Supervisors;

**BE IT FURTHER RESOLVED** that a friendly amendment was made and approved to enhance the study area to include the entire corridor between Route 29 and Sudley Road in order to review in a more holistic manner (traffic, land use, and environmental concerns), look carefully at the areas directly abutting Conway Robinson Memorial State Forest and the Manassas National Battlefield Park, and coordinate the review with the open space corridor concepts of the rural area (native plant buffering and sustainability) to preserve as much of the area as possible.

#### Votes:

Ayes: Angry, Bailey, Boddye, Franklin, Wheeler Nays: Candland, Lawson, Vega Absent from Vote: None Absent from Meeting: None

**For Information:** Planning Director

Mary Ann Ghadban, Authorized Agent 5389 Pageland Lane Gainesville, VA 20155

andrea ATTEST:

Clerk to the Board

# **Summary Responses to Staff Comments**

Staff and Outside Agency comments primarily concerned (1) watershed and aquifer protection; (2) viewshed protection for Manassas National Battlefield Park (MNBP) and Heritage Hunt; and (3) Open Space protection (including an extension of the Catharpin Greenway Park and Conway-Robinson State Forest).

# 1. Watershed and Aquifer Protection

- The proposed Plan text seeks to harmonize and integrate high-tech employment uses with environmental sustainability, in a manner which creates a new standard for commercial development. Thirteen specific objectives, standards and "enhanced practices" are proposed, many of which were staff suggestions.
- A majority of the PW Digital Gateway corridor is or was used for agricultural purposes. This land is covered with grasses, which produce more runoff than forested areas. There are no stormwater controls because of by-right zoning. Federal, state and county stormwater regulations triggered by rezonings and site plans to allow data centers, will require controls to reduce stormwater runoff quantities to a level assuming that the predevelopment site condition is forested. This means that the pack post-development data center stormwater runoff to the streams will be <u>less</u> than what the unregulated peak runoff is today from the grasslands. These same regulations require use of the "energy balance" method in determining peak post-development runoff. This will result in the data center post-development peak runoff being even less, which will further reduce stream erosion downstream.
- In addition to quantity controls, rezonings and site plans will require stormwater quality controls to reduce nutrient runoff (primarily phosphorus, but also nitrogen) into the streams. Today's agricultural and residential uses generate a large amount of nutrient runoff from fertilizer and manure, but <u>no</u> controls are required. Data centers will actually reduce downstream nutrient pollution.
- To reduce stream degradation and silt migration, the proposed Plan text recommends that development stay away from the RPAs and steep slopes adjacent to the streams and provide above-Ordinance redundant erosion control devices during construction at the perimeter of the site. In addition, reforesting some of the land that is currently fallow farm fields is strongly encouraged in the Plan.

# 2. <u>Viewshed Protection</u>

Five LIDAR assisted sight-line studies are attached as Exhibit A. Seven balloon test Summaries are attached as Exhibit B. Portions of the 2010 American Battlefield Protection Program (ABPP) Viewshed Study are attached as Exhibit C.

# MNBP

Thirteen key interpretive locations within the Battlefield and the nearby NPS trails were evaluated to determine potential adverse viewshed impacts. LIDAR assisted sight-line studies, County topography mapping, balloon tests (performed April 2021), and the American Battlefield Protection Program's 2010 MNBP Viewshed Plan Study (the "ABPP Study"), were reviewed to determine where adverse viewshed impacts could likely arise in future site-specific rezoning applications. The proposed Corridor Plan text recommends the following at rezoning: an in-depth analysis of key viewsheds and the avoidance of adverse impacts through the mitigation measures described on pages 2 and 5 of the proposed Corridor Plan text.

Three areas within the Corridor appear likely to have the viewshed impact that are difficult to mitigate: (i) 90 acres south of the Unfinished Railroad (between Brawner Farm and the Conway-Robinson State Forest), (ii) the 9+ acre eastern portion that lies within the legislative boundary of MNBP, and (iii) the western ridgeline of the Snyder property. All three of these areas are proposed in the Plan to not be developed and to remain open space. The ABPP Study indicates that all other land within the Corridor appears to have limited or no visibility to the thirteen MNBP interpretive locations and the NPS trails. The Ghadban/Utterback property east of the High Voltage Line corridor is the most visible area; however, balloon tests and LIDAR assisted sight-line studies indicate that measures such as reforestation, berms and limiting building heights (including rooftop parapets, screens and equipment) to no more than 40 feet can preserve MNBP priority viewsheds. Of course, this would need to be proven by more detailed analyses at the time of rezoning. The attached LIDAR assisted sight-line studies show that 1, 2 and 3 floor data center buildings can be sited on the Snyder and Ghadban parcels without adversely affecting MNBP viewsheds.

For reference, the heights of data center buildings (including parapets and rooftop equipment/screens) are generally as follows:

- 1 Floor 35-40 feet
- 2 Floor 65-70 feet
- 3 Floor 95 feet

Four sight-line studies from MNBP are summarized below:

| Ex. A1 | Brawner House to Snyder<br>Property:                         | East of the RPA, the groundlevel is 70-90 feet<br>below the tree horizon. West of the RPA, the<br>ground level is 90-100+ feet below the tree<br>horizon. |
|--------|--|---|
| Ex. A2 | Brawner House Artillery Line to Snyder Property:             | East of the RPA the groundlevel is 65-70 feet below the tree horizon.   |
| Ex. A3 | Brawner House Artillery Line<br>to Ghadban/Utterback east of | Forested berms at the southern property line<br>would screen 40+ feet from the groundlevel.   |

|        | HV Towers (excluding the eastern-most 9+ acres):                 |   |
|--------|--|---|
| Ex. A4 | Brawner House Artillery Line<br>to Ghadban west of HV<br>Towers: | The groundlevel is 60-75 feet below the tree horizon. |

# Heritage Hunt

The one sight-line study from inside Heritage Hunt is summarized below.

| - | 1 to the Snyder7the ridge line:1 | The groundlevel is 70-100+ feet below the tree horizon. |
|---|----------------------------------|---|
|---|----------------------------------|---|

# 3. **Open Space Protection**

Publicly accessible Open Space will be increased by over 400 acres. Details of the new public parkland are found in the recommendations and "enhanced practices" outlined on pages 2, 4 and 6 of the Plan. Hiking, biking and equestrian trails will be extended by more than 9 miles, as outlined on pages 2, 4, 5 and 6 of the Plan. Major open space protection recommendations and "enhanced practices" are found on pages 2, 3, 4, 6 and 7 of the Plan.

#5217799v5

# Written Analysis Narrative and Suggested Plan Policies PW Digital Gateway Corridor CPA #2021-00004 Revised 4/8/2022

#### I. <u>Introduction and Summary</u>

Adoption of this Plan Amendment (CPA #2021-00004) will amend both the text and Long-Range Land Use Map classifications (FROM Agricultural or Estate (AE) + Environmental Resource (ER) TO Technology/Flex (T/F – Transects 2 and 3) + Agricultural or Estate (AE) + Parks and Open Space (POS) + Environmental Resource (ER)) on approximately 2,133 acres located in western Prince William along Pageland Lane (the "Corridor"), as shown on the separate Application "Brochure Sheet 8." Most of the Corridor will be removed from the Rural Area and added to the "Development Area" by an adjustment to the Rural Area Boundary. This Plan Amendment was initiated by resolution of the Prince William Board of County Supervisors ("BOCS") during its July 20, 2021 meeting. The BOCS Resolution is attached as <u>Exhibit A</u>.

The vicinity of the land subject to this CPA is shown on Brochure Sheet 1. Approved nearby development and uses are shown on Brochure Sheet 3 and described in the *Area Characteristics* section herein. Photographs of land within the Corridor are shown on Brochure Sheets numbered 4 and 5. The existing topography and other natural features of land within the Corridor are shown on Brochure Sheet 7 and described in a separate *Description of Environmental Resources* (prepared by Christopher Consultants).

These Long Range Land Use Map and Plan text amendments (the "CPA") seek to make available, subject to rezoning, a significant amount of additional land for new data center facilities (with ancillary and secondary use offices not to exceed 10% of the overall FAR). Data centers are a *Targeted Industry* commercial tax base use, which is a critical component of the County's adopted *Strategic Plan* and *Economic Development Program*. Approval of this CPA is a significant *Economic Development Initiative*, that is needed now because the supply of data center planned and zoned land is quickly being outpaced by increasing demand in Prince William. Reclassifying the Corridor to allow this commercial "employment" use is critical to ensure future economic growth and vitality for Prince William. Concentrating new additional data centers within the Corridor will allow well-suited Industrial and Employment planned land located elsewhere to remain available for a diversity of other commercial tax base and employment uses - like light industrial, flex commercial and specialized logistics/supply chain facilities. This will prevent a "data center only" economy.

The data center *Targeted Industry* use envisioned by this CPA will be limited to an overall floor area ratio ("FAR") not to exceed 0.30, because of the Corridor's proximity to the Manassas National Battlefield Park to the east and low density rural uses to the northwest. This maximum FAR is significantly lower than the 0.60 maximum FAR recently approved for the adjacent Gainesville Crossing Data Center Campus (located across Route 29) and the 1.0 maximum FAR allowed within the Data Center Opportunity Zone Overlay District (located across I-66). Individual

sites within the Corridor may be rezoned at higher or lower FARs than 0.30, so long as the cumulative average within the Corridor remains no more than a 0.30 FAR. Individual site FARs will be guided by Transect designations. Building heights will range between 1-2 floors proximate to the Manassas National Battlefield Park and the Heritage Hunt Community to the west, and shall be no greater than three (3) floors elsewhere in the Corridor. The maximum height of buildings (including parapets, rooftop equipment and screens) will be determined at the time of each rezoning by site-specific LIDAR assisted line of sight analyses, digital imaging, as well as vertical horizon drone testing, so as to minimize their visibility to eight key locations within the Manassas National Battlefield Park and to abutting homes within Heritage Hunt.

Pageland Lane within the Corridor will be upgraded to a four-lane divided Parkway, with a major north-south pedestrian/bicycle trail on its east side. This upgrade will be phased over an extended period, to coincide with the timing and location of new data center clusters. This upgrade will reduce and consolidate access locations along Pageland Lane, thereby helping to relieve the current traffic congestion. After the establishment of data centers within the Corridor and completion of the Pageland Lane upgrade, consideration should be given to prohibiting heavy commercial through-truck traffic on Sudley Road between Route 29 and Gum Springs Road.

Specific Plan text amendments are needed. These Plan text amendments establish action strategies and criteria to ensure protection of the natural environment, viewsheds and historic cultural assets. These amendments are intended to ensure that appropriate and context-sensitive: (i) building design, non-reflective colors and materials, height and setbacks; (ii) berming and other visual screening; (iii) reforestation & preservation of existing forest open space corridors; and (iv) Manassas National Battlefield Park and Heritage Hunt viewshed protection measures, are all addressed in the site-specific rezonings that will be necessary to establish new data center *Targeted Industry* uses within the Corridor.

It is proposed that the Data Center Opportunity Zone Overlay District <u>not</u> be expanded to include this Corridor, so that site-specific, conditional zonings will be required and vetted through the public review process for this unique area and unique economic development opportunity This will ensure proffered conformance with Plan text guidance. Rezonings will provide proffered conditions in order to meet Plan text criteria and to mitigate site-specific impacts. The FAR allowed by this CPA is significantly lower than that allowed in the zoning text amendment (ZTA) study. This Comprehensive Plan Amendment (CPA), by design and BOCS direction, is separate and distinct from the County's Zoning Text Amendment (ZTA) of the Data Center Opportunity Zone Overlay District.

Over an extended period of time, this CPA may result in the phased establishment of up to approximately 26 million square feet of data center building GFA, appropriately and carefully distributed over 2,000 acres. Because of a substantially reduced maximum overall FAR of 0.30 and three (3) floor height limitation: (1) the data center buildings will be able to be set back from RPA and other sensitive natural area corridors, so they can be preserved as protected open space and (2) extensive berming and reforestation/preservation of existing forest can be employed to preserve viewsheds from (i) Manassas National Battlefield Park (to the east), (ii) Heritage Hunt (to the west), and (iii) Sudley Road (to the north). This *Economic Development Initiative* seeks to replace up to 750 existing and future homes with the most County tax revenue positive commercial use – data centers. Data Centers require little in County services. Loudoun County claims that, for every \$10 in tax revenue paid, data centers use only 50 cents in County services! After build-out in 2040, between 500 and 700 Million (in today's dollars) will be paid each year to Prince William in Real Estate and Computer Personal Property taxes by data centers (depending on what tax rates will be imposed). Most importantly, data centers will become an important driver of overall economic growth in Prince William. Approval of the CPA will enable and incentivize approximately \$30 Billion dollars in private capital to be invested in Prince William instead of in other jurisdictions. Thousands of prevailing wage and union construction jobs will be added to the local Prince William job market over each of the next 5-20 years, along with thousands of high salary tech jobs.

A change from Agricultural or Estate to Technology/Flex (Data Center) uses is appropriate for 2,000 acres within the Corridor, is supported by the owners of the land within the Corridor and will result in a transformative increase in the financial resources available each year to the County. This CPA to provide Data Center opportunities, with its change in the alignment of the Rural Area Boundary, is warranted by significant public benefit.

A May 2021 memo to the Board of County Supervisors from Ms. Winn addressing the availability of land for data centers, acknowledges that based on numerous criteria to measure market viable sites and the fact that most data center projects use 100 acres or more of contiguous land, only two remaining parcels within the existing Data Center Opportunity Zone Overlay District would meet the criteria of being market viable and at least 100 acres of contiguous land.

The Data Center Opportunity Zone Overlay District is not proposed to be expanded to include the Corridor, so that site-specific conditional zonings will be required and vetted through the public review process. Rezonings will provide proffered conditions in order to not only meet Plan text criteria, but also mitigate site-specific impacts. The FAR allowed in Data Center Opportunity Zone Overlay District, is not appropriate for the Corridor.

One of the most important aspects to the lifelong farmers/stakeholders/residents is their initiative creates an opportunity to significantly lower the residential tax burden while providing overwhelming and sustained public benefits through for the next 15-20+ years to support families, neighbors, and future generations of citizens in a way that will likely never be seen again in Prince William. The County's own, independent consultant (BAE Urban Economics estimated 1,700 prevailing wage and union construction jobs will be needed for each 250,000 square feet data center constructed in Prince William. With 26 million square feet of data centers planned 15+ years within this Digital Gateway Corridor, tens of thousands of construction, contracting, labor and employment opportunities will be created in Prince William.

According to the Loudoun County Economic Development Authority, with its existing base of 27 million square feet of data centers, Loudoun will receive over **\$580 million dollars per year** in annual tax revenue. Prince William is uniquely well positioned to capitalize on the readily available power and fiber optic infrastructure that already exists to replicate the Loudoun model of financial success. Prince William can, within the foreseeable future, dramatically increase its commercial tax base through a clean energy, high-tech, incredibly tax positive, low traffic and truck generating industry that wants to locate within the Corridor.

In addition to the noteworthy data center ecosystem that would result, this initiative will be an important driver of overall economic growth throughout Prince William by attracting other investment and industries, as has been documented in Loudoun (<u>Data Center Alley - Loudoun</u> <u>County Economic Development, VA</u>). Approval of the CPA will allow for nearly <u>\$30 billion</u> <u>dollars</u> in private capital to be invested in Prince William for construction of these data centers alone. Prince William's economic consultant notes that a typical, 250,000 data center results in a minimum of \$275,000,000 (per data center) – resulting in \$30 billion in basic construction expenditures over the next 15-20 years. By way of comparison, Amazon's HQ2 headquarters in Arlington, Virginia is estimated to bring about 25,000 jobs and \$2.5 billion over the next decade.

# II. <u>Area Characteristics – Background and History</u>

The Corridor includes a diverse set of stakeholders, including lifelong farmers/residents of Pageland Lane whose families have owned land for 40 - 150 years, long before the 1998 AE Plan classification was established. Thirty years ago, Pageland Lane was a farming community, and the Brawner Farm was the Davis Tract. Eventually it was purchased and added to the Manassas National Battlefield Park (MNBP). The Dominion High Voltage lines originally consisted of an intermittent pole here and there. In 2008 this changed. All of the electric transmission lines were moved to the edge of the Brawner farm along Pageland Lane and the lines were expanded and upgraded to become part of Dominion's East Coast Backbone High Voltage Transmission Line corridor, which now primarily serve Loudoun and Fairfax. These multiple, high voltage lines and their towers are shown in the photographs on Brochure Sheets 4 and 5.

The following points highlight current conditions:

- <u>Dominion Towers & Facilities</u> A major Dominion sub-station is located not far to the north of the Corridor, as shown on Brochure Sheet 3. The Corridor is bisected for its entire length by Dominion's East Coast Backbone Transmission Lines, which intrude on farms and residential yards. The 250-foot wide right-of-way corridor powers Loudoun County's 27+ million square feet of existing data centers. The towers consist of (3) 500 KV; (2) 230KV; (1) 110 KV lines, rising 75 and 150-feet high. They not only can lower property values, they also can compromise human and farm animal health. The Coalition to Save Prince William County stated when they fought to keep 100-foot 230 KV line out of their backyards at Thunder Oaks, "transmission towers not only damage the "ruralness" of an area, but they also damage property values, lives, and increase the odds for illness."
- <u>South</u> Across Route 29 and immediately to the south is Gainesville Crossing, that was approved in December 2019 to allow for up to 3 million square feet of mostly data center use east of University Blvd. This data center campus is now actively under construction (see Brochure Sheet 5). An expanded commuter parking lot (up to 2,079 parking spaces by the end of 2022) and several retail pad sites (including a Sheetz to be delivered in the

4<sup>th</sup> quarter of 2022) will soon be completed west of University Blvd. The Gainesville Crossing data center campus is located at the corner of Pageland Lane and Route 29, at the edge of the Rural Area and the Manassas National Battlefield Park (See Brochure Sheets 3, 5 and 6).

- <u>North</u> To the north of the Corridor is Gum Springs Road, which connects to Loudoun's Luck Stone Quarry and the South Riding Planned community. Loudoun's Comprehensive Plan calls for increasing high-density development and an expansion of extractive industry (quarry) uses on Gum Springs Road.
- <u>West</u> To the west is Heritage Hunt and the Heathcoate Blvd. corridor, a suburban residential, retail and commercial mixed-use planned community, which is served by public water and sewer. This land was once the Marsh Farm. A small section of Heritage Hunt abuts the corridor to the north of Conway-Robinson State Forest, as shown on Brochure Sheets 3, 7 and 8.
- <u>Within the Corridor</u> Land within the Corridor is primarily zoned A-1 (minimum 10 acre lots), with some SR-5 zoning (minimum 5 acre lots) also being present. The lots range in size from under 1 acre to over 100 acres. The smaller lots are lawfully nonconforming due to either having been grandfathered (established before the current minimum lot sizes were established) or having been family subdivisions. Current zoning, grandfathered small lots, and family subdivisions could result in up to 750 homes being established by 2040.
- <u>Southeast</u> Bordering the Corridor to the southeast is Conway-Robinson State Forest.
- <u>Southwest</u> To the southwest is the Brawner Farm portion of the Manassas National Battlefield Park, which is marred by the 250-foot wide right of way and 150 ft high transmission towers of the Dominion Transmission line corridor.
- <u>Columbia Gas line</u> A Columbia Gas east coast main transmission line cuts across the Corridor and is located on the northern boundary lines of the Ghadban/Underwood land. An additional natural gas transmission line is located in the SE corner of Ghadban/Battlefield Brawner farm, continuing through the Brawner Farm and through Pageland Farm. These are shown on Brochure Sheet 4.
- <u>Cell Towers</u> Two cell towers (allowed up to 150 feet in height) are located on the southern border between the Ghadban/Underwood properties.
- <u>Pageland Lane Transformation</u> Pageland Lane is a two-lane secondary road that has become a much-traveled commuter corridor, with backups sometimes one-mile long at the Sudley Road and Route 29 intersections during peak commuting to jobs in Loudoun and Fairfax Counties. This roadway is also a heavily used alternative truck route for commercial, construction and quarry traffic between Loudoun and Prince William

Counties which now cuts through the Manassas National Battlefield Park. A right turn lane and a traffic signal is funded for the intersection of Sudley Road and Pageland Lane. Construction is scheduled to begin in 2022. Due to the existing heavy commuter and truck traffic, Pageland Lane will soon have a traffic signal at both the northern and southern ends of the Corridor.

• <u>Commuter Parking</u> - The largest commuter parking lot in Western Prince William (2,500 parking spaces) is located only a quarter mile from the intersection of Pageland and Route 29. It's near the edge of the planned Rural Area, Conway-Robinson State Forest, and near the Manassas National Battlefield Park.

Landowners within the Corridor have experienced first-hand the negative impacts that have resulted from the transformation of a wholly rural environment to the present-day situation of high voltage transmission lines that feed data centers and nearby high density residential/commercial development to the north in Loudoun and to the south in Prince William. The Pageland Lane Corridor is no longer rural. It is stuck between a rock (Luck Quarry on Gum Springs Road) and a hard place (Gainesville commuter parking lot), carrying heavy traffic from nearby commercial, industrial and higher-density residential development (Heritage Hunt and South Riding). The two-lane Pageland Lane now serves primarily non-rural uses and experiences non-rural traffic volume.

# III. Land Use – Data Centers are well-suited for the Corridor

Data Centers are a *Targeted Industry* that is critical to attaining and sustaining the goal of a 35% commercial tax base. But where should additional data centers be located? What makes land suitable for them?

The Corridor is uniquely well suited for Data Centers:

- Land within the Corridor will utilize an <u>existing</u> high voltage electric multiple line corridor that has capacity to serve new data center facilities in the Corridor.
- Land within the Corridor will utilize <u>existing</u> multi-carrier fiber on Pageland Lane that is easily expandable to add new carriers. The Corridor has abundant fiber options available. It is suitable for data center facilities from a high-speed connectivity standpoint. With multiple options available for Metro, Long Haul and Dark Fiber, data center users within the Corridor will range from Retail to Wholesale Colocation to Build-to-Suit or a Power-based shell. The objectives of carrier-neutrality and having the ability to access multiple carriers can easily be met within the Corridor.
- Public water and sewer are available by extension from nearby facilities within the Gainesville Crossing data center campus. The Corridor will be remapped by extending the contiguous "Development Area" through a realignment of the Rural Area Boundary.
- The Corridor is <u>not</u> well suited for a new mixed-use, walkable community. Therefore, data center uses at this location will not reduce the amount of land better suited elsewhere in the County for new mixed-use, walkable communities.

- The Corridor is <u>not</u> served by current or planned public transit. Areas served by public transit are better suited for uses other than data centers, which do not that depend upon or support such transit.
- The Corridor is <u>not</u> well suited for distribution and fulfillment centers or other specialized supply chain companies. Data center uses at this location will reduce the demand to use other land within the Data Center or Fulfillment Center Overlay zones, which is better suited for new distribution and fulfillment centers and other logistics uses. Much of the M-1 zoned land along the Prince William Parkway and Wellington Road, which is planned for "employment," is now being purchased by Data Center uses. Innovation Park is selling more and more of its R&D land to data center uses. If these trends continue, a majority of the remaining land intended and needed for these other important "Employment" uses will be absorbed by data center users.
- The Corridor is in an area of the County where light pollution above the horizon is discouraged. Data Centers emit low levels of light above the horizon.
- The land within the Corridor is extremely attractive to, and suitable for, Information Communications Technologies (ICT) companies. <u>Prince William County needs to strategically re-plan so that additional land appropriate for new data centers can be made available where both high-tension power lines and multiple fiber conduits are already in place.</u>
- The Corridor provides opportunities to invest approximately \$30 Billion dollars in private capital and to create 3,024 permanent technology jobs, in a manner which utilizes the conditional zoning process to (i) preserve environmental features (like stream valleys and mature forests) and (ii) to mitigate or avoid impacts to the Battlefield and Heritage Hunt.
- The power line and fiber infrastructure that exists within the Corridor is a vivid example of an uneven landscape within the broad Rural Area. A stark contrast exists between properties in the Corridor, which are impacted by High Voltage transmission lines, shallow depth fiber conduit infrastructure and a heavily congested two-lane road, versus other portions of the Rural Area, which retain the bucolic environment and limitless farming potential that was a foundational characteristic associated with Rural Area designation 23 years ago.

# IV. <u>Consistency with the Adopted Comprehensive Plan Chapters, Countywide</u> <u>Economic Development Initiatives and the Strategic Plan</u>

# A. Strategic Plan and Economic Impact

The adopted 2017-2020 Prince William County Strategic Plan outlines five strategic goal areas: Robust Economy, Mobility, Wellbeing, Safe and Secure Community, and Quality Education and Workforce Development.

Data Center Campuses create an economic development and jobs growth Ecosystem. Data centers provide a significant influx of tax revenue that would substantially help Prince William County meet other *Strategic Plan* goals. For example, in Loudoun, the date center ecosystem has

resulted in 3,500 technology companies and 10,000 technology jobs being located within the county. To prepare young adults to thrive in the workforce of the future, the size of the PW Digital Gateway Corridor ecosystem provides an extraordinary, unprecedented opportunity to collaborate with GMU and NOVA to train Prince William students to excel at these stable, high wage jobs within Prince William. Providing Prince William youth with the tools and knowledge be confident and successful in a competitive technology workforce will be one of the greatest achievements and benefits to this initiative.

Loudoun County next year is projected to receive almost <u>\$700 Million in annual tax</u> <u>revenue</u> because of their long-range planning to allow data centers along existing transmission lines. Using this example, 26 Million square feet of data centers operating at buildout (2040) in the Corridor would result in between \$500 - \$700 Million in tax revenue to Prince William each year thereafter (in today's dollars) from data centers (depending in future tax rates).

# B. <u>Robust Economy</u>

The adopted 2017-2020 Prince William County Strategic Plan includes the goal of creating and sustaining a robust economy, and notes that "in all actions of the Board, strong consideration should be given to make certain they foster a diverse local economy that creates a culture of innovation and achieves more quality jobs, economic opportunities and an expanded commercial tax base."

Approval of this CPA will have a significant and unprecedented positive impact upon the local Prince William economy. Extrapolating directly from the *Economic Impact Analysis* prepared by the County's data center consultant, yields the following stunning statistics:

- \$30 Billion dollars in private capital (not including computer equipment) will be invested in the Corridor by buildout.
- 3,024 permanent high-paying high-tech jobs will have been created in Prince William by buildout.
- 1,700 design and construction contractor and union jobs will be created for each 250,000 SF of data center building under construction.

Data centers in Prince William County and surrounding jurisdictions like Loudoun County have generated hundreds of millions of dollars in annual tax revenue, a significant portion of which can support public schools, key capital improvements, and other high priority initiatives to enhance the quality of life such as public health programs, community services and programs for currently under-served communities. A stream of high-quality jobs is created from construction through operation of the data center facilities, which further enhances the local economy in both direct and indirect ways. <u>The Strategic Plan specifically confirms that particular attention should be directed to</u> growing targeted industry businesses (including data centers) by County initiatives and other actions. This CPA is such an initiative.

# V. <u>The Comprehensive Plan Chapters</u>

# **Technology and Connectivity Chapter**

This CPA is consistent with the recommendations and Action Strategies of this chapter. "Data storage is a critical infrastructure component in the 21<sup>st</sup> Century digital economy. As more businesses locate in Prince William County, their ability to securely store and manage their data will be a key success factor. Companies, institutions, and governments worldwide are shifting their data storage needs to 'The Cloud'. Rather than owning the servers where their data resides, they rent that storage. As 'The Cloud' grows virtually and physically, new types of data centers, of varying shapes and sizes, will be needed that provide greater flexibility in more locations". (p6 Adopted 11/26/19).

Action Strategy TC16 states the County should "promote and encourage 5G technology infrastructure in and around major facilities, population centers, small area plan project areas, and County attractions including but not limited to: Innovation Park, Small Area Plan project areas, Jiffy Lube Live Amphitheater, Potomac Mills Mall, Manassas National Battlefield Park, Prince William Forest Park, Hylton Performing Arts Center, County historic sites, County Parks, and County facilities/schools." In order to meet this goal, planning for additional data centers now is critical to ensure the demand to move data faster for individual consumers and various businesses and industries can be met and keep pace with the global acceleration to 5G wireless network technology and beyond.

Action Strategy TC13 recommends the County "promote a competitive environment to ensure that multiple companies can provide robust, redundant cellular/wireless and fiber-optic infrastructure to ensure reliable communications for public safety responsiveness and other functions."

The existing Prince William Data Center Opportunity Zone Overlay District has run very low and is virtually out of viable land options. Economic Development Director Christina Winn has stated, "I think it's fair to say that a continued move towards cloud computing, in addition to a growth in remote work during the pandemic, has fueled a demand for the bandwidth our data centers help provide... we have had to turn away data centers due to lack of land."

The logical and strategic designation of new areas that can accommodate data centers support directly the Information and Communications Technology ("ICT") needs of our residents and businesses, as described in and called for under the Technology and Connectivity Chapter of the Comprehensive Plan. Data Centers, a critical Targeted Industry, are necessary to fulfill the County's long-standing goal of strengthening and expanding the reliability of ICT systems. Data Centers create and increase the capacity to embrace new technologies and generate highly educated, specialized work forces, all critical to Prince William's economic success. It only requires 0.17 milliseconds for digital information to reach Ashburn from PW Digital Gateway, using existing fiber optic capabilities.

# Land Use Chapter

The CPA will remove the Corridor from the 1998 Rural Area Plan designation and policies. It will not change the designations or policies of any other Rural Area land outside of the Corridor.

#### **Community Design Chapter**

New data center buildings should look like offices when viewed from Pageland Lane, but not be visible from the periphery of the Corridor. Context driven design guidelines will be established in the Plan text, to be applied to specific data center developments in site specific rezoning applications.

These guidelines are as follows:

- Encourage building placement, design features and site design techniques that consider the building's context in a manner that relates positively to other buildings and features, such as historic and cultural resources, environmental and topographical features of the surrounding area.
- Encourage enhanced buffering and screening areas where appropriate, with techniques that may include forested buffers and dense landscaping, berms with a natural appearance, building orientation, and building heights that are sensitive to surrounding uses.
- Building heights should be evaluated in a manner that prevents impacts to viewsheds and visibility from nearby residential uses and the Manassas National Battlefield Park.
- Screening of outdoor mechanical equipment is encouraged to minimize visibility from adjacent public roadways, abutting residential properties and the Manassas National Battlefield Park.
- Building facades facing Manassas National Battlefield Park, that could be visible from key historical interpretation locations shown on Brochure sheets 9 and 10 should be non-reflective and typically earth toned in color. Other colors may be considered if it will facilitate the ability for the building facade to blend into the topography or tree horizon.

#### Architecture

On these portions of buildings that are visible from a public roadway, Architectural elements should include features that enhance the appearance and exterior ambiance of these larger buildings, such as but not limited to:

- the use of facade modulation and articulation to break up building mass and define architectural character.
- The use of horizontal and vertical planes on building facades to break up the mass of a large structure and to create visual interest.
- Changes in building material, pattern, texture or color, introduction of glass, steel, geometric and other interesting, diverse patterns.
- The use of accent colors, windows or other design elements that increase transparency and provide visual interest.
- Incorporate building and site design measures that break up building mass, with techniques that may include more significant setbacks, tapering or transitioning of building heights, additional tree planting, setbacks, or landscaping.

# Cultural Resources Chapter

There are at least five nineteenth and early twentieth century cemeteries remaining within the Corridor (See Brochure Sheets 9 and 10). Because conditional zoning will be required to establish data center uses, archeological and historical studies will be required for each rezoning submission. Where warranted, Proffered Conditions will be voluntarily offered by rezoning applicants in order to document, preserve and protect, as well as mitigate further adverse impacts to cemeteries. These cemeteries are not protected under the current Comprehensive Plan or the current zoning. None are accessible to the public.

The Corridor is adjacent to the Manassas National Battlefield Park, which is listed on the National Register of Historic Places and the Virginia Landmarks Register. There are 13 historically significant locations within the Park, whose viewsheds should be protected. While most of the Corridor is clearly not within any viewshed of these 13 locations due to distance, vegetation and topography, all conditional zoning applications within the Corridor to establish data center uses, should provide archeological studies, as well as site-specific balloon testing, viewshed sight-line studies or digital massing studies to evaluate site specific viewshed impacts. Proffered development conditions to protect and preserve these important historical viewsheds may be required in some site-specific instances. For example, the nearby Westview 66 and Gainesville Crossing Data Center conditional zonings in 2019, proffered mature forest preservation, reforestation and maximum building height limitations (expressed as an average mean height

above sea level elevation). Other viewshed protection techniques will include forested berms, building orientation and connected, contiguous open space corridors of indigenous vegetation.

#### **Economic Development Chapter**

Prince William County commissioned an in-depth *Targeted Industry Study* to identify industry targets to bring into Prince William, and to assess the workforce demand and needs characteristics within those targets. The Targeted Industry Study findings identify five clusters to expand throughout the county. These five clusters include Advanced Manufacturing, Federal Government Contracting, Healthcare, Information Communications Technology (ICT), Life Sciences and Logistics. Data Centers are an important part of the ICT cluster.

Encouraging and allowing more data centers to be established will finally enable Prince William to be known and recognized as a leading "high-tech" County. The benefits of being known as a leading "high-tech" local economy will extend throughout all of Prince William, its schools, its community colleges and the George Mason University Prince William Campus.

#### The Loudoun Example

Loudoun County now has approximately 26 million square feet of operational data centers and will <u>collect over \$600 million in annual taxes</u> from its "data center alley". This revenue covers a significant portion of the County government's entire budget apart from schools. Loudoun County's residential property tax rate was lowered in 2021 and again in 2022 – intranet reducing services or delaying major CIP projects. Loudoun data centers employ 3,000+ people and supports 10,000+ jobs created (not including construction) within their ecosystem. Approximately 3,500 technology companies are housed within Loudoun. Loudoun County is able to use the huge income streams to fund everything from great schools to transportation projects, and has reduced the real estate tax for its residents.

Diversifying the County's non-residential tax base is and has been one of the major objectives of Prince William for decades. There are very few alternative sources of tax revenue that are more fiscally positive (and concurrently require the minimum of expenditures for services – roads, schools, parks and recreation, libraries, public health and public safety) than data centers.

# Environment Chapter

The *Environment Resource* Long Range Land Use Plan Map classification will not change, except to extend one stream RPA. There is no additional Plan Chapter text necessary for the implementation of this CPA; however, consideration should be given to adding new County-wide Plan text regarding data centers, as follows:

Data Center Green Technologies and Overall Sustainability Measures. Concerted efforts should be made to be creative and forward-thinking with regard to the use of state-of-the-art green

technologies in order to minimize environmental impacts. Strategies and technological innovations that address sustainability and energy usage challenges should be utilized, whenever possible. Some examples are efforts to use hydrogen fuel cells, batteries, and solar power, for site generated auxiliary power. These produce no limited-to-no carbon dioxide emissions, no air pollutants, and are quiet. Green certifications are likely to be more commonplace as a way to measure sustainability efforts and assure stakeholders of energy efficiency throughout the life cycle of the data center facility.

Significant research and progress has been made to reduce water usage, reduce overall power consumption and increase efficiency. These efforts will only accelerate and improve over time, as addressing sustainability and energy consumption are major priorities for the data center industry. New data centers in Prince William should utilize the most advanced state-of-the-art technology and practices to reduce water and energy usage. For example, water used in water-assisted cooling chillers should be within a "closed-loop system," which significantly reduces the volume of water and sanitary sewer capacity needed.

Sustainable building and site design is recommended to the extent practicable. Examples of sustainable building and site design measures include:

- Resource and energy-efficient designs and materials.
- Water conservation and reuse though "closed-loop" cooling systems which require very little water replenishment.
- Rain gardens.
- Water cisterns.
- Environmentally friendly construction practices.
- Preservation or restoration of existing, on-site significant environmental resources.
- Designing and constructing buildings to use energy and water resources efficiently.
- Environmentally sensitive siting of buildings.
- Special consideration to the preservation of forests as a way to provide buffers and screening, to preserve natural features and to reduce carbon emissions.

# Safe and Secure Community (Police, Fire and Rescue) Chapter

Data Centers utilize state-of-the-art secure facilities, with no public access. As such, there are few incidents which will require police or rescue responses. Data centers also utilize state-of-the-art, high level fire suppression systems and have relatively low levels of human occupancy. Therefore, fire and rescue response requests will be low. The extension of public water and fire hydrants throughout the Corridor will provide enhanced and more efficient fire suppression capabilities closer to rural areas and the planned fire station on Sudley Road (see, Plan Chapter figure 2: Existing and potential F&R Facilities). The road improvements associated with changes to the transportation plan will widen Pageland Lane to four lanes. This will facilitate quicker and more reliable police, fire and rescue response times.

# **Open Space Chapter**

New Plan Chapter text is recommended to protect and restore the robust natural ecosystem and open spaces of the Corridor. This is accomplished by recommending a connected system of contiguous forest land, a main 4 mile north-south pedestrian and bicycle path, and the preservation of open spaces that protect, complement, and enhance the local area's environmental assets (Large areas of wooded vegetation, Chesapeake Bay RPA, streams, Conway-Robinson State Forest and the Battlefield Park). The provision of peripheral buffer areas around the Corridor will be critical in supporting appropriate transitions between existing and proposed land uses. The Plan text Amendment will establish strategies that emphasize protection of the natural environment and cultural assets such as the Manassas National Battlefield Park and Conway-Robinson State Forest. Within open spaces or natural areas, consideration should be given to incorporating elements or features that reflect, educate, or commemorate the area's rich history. Consideration should be given to establishing and funding, through data center tax revenues, a Purchase of Development Rights (PDR) program for Prince William.

# **Potable Water Chapter**

The CPA will remove the Corridor from the Rural Area; therefore, no change is proposed to existing Plan Chapter text or PWCSA policies.

#### Sewer Chapter

The CPA will remove the Corridor from the Rural Area; therefore, no change is proposed to existing Plan Chapter text or PWCSA policies.

# **Transportation Chapter**

Approval of this CPA will result in that portion of Pageland Lane within the Corridor to be reclassified to a four lane divided roadway and a major north-south shared use trail to be added on the Trails Plan (on the east side of Pageland Lane from Catharpin Park south to connect to the trail planned along Route 29 (see Brochure Sheet 6). Access points to Pageland Lane within the Corridor will be reduced and consolidated as the data centers develop. After the establishment of

data centers within the Corridor and completion of the Pageland Lane upgrade, consideration should be given to prohibiting through commercial truck traffic on Sudley Road between Route 29 and Gum Springs Road.

# VI. <u>Conclusion</u>

The Data Center Opportunity Zone Overlay District should not be expanded to include the Corridor, so that site-specific conditional zonings will be required and vetted through the public review process and so that Specific Plan guidance can be approved for the Corridor. Rezonings will provide proffered conditions in order to not only meet Plan text criteria, but also mitigate site-specific impacts. The FAR proposed by the CPA is significantly lower than that allowed in the ZTA study of the Data Center Opportunity Zone Overlay District.

Economic Development Director Christina Winn has stated, "*I think it's fair to say that a continued move towards cloud computing, in addition to a growth in remote work during the pandemic, has fueled a demand for the bandwidth our data centers help provide...we have had to turn away data centers due to lack of land.*" A May 2021 memo from Ms. Winn acknowledges that based on numerous criteria to measure market viable sites and the fact that most data center inquires comprise 100 acres or more of contiguous land, only two remaining parcels within the existing Data Center Opportunity Zone Overlay District meet the criteria of being market viable and at least 100 acres of contiguous land.

One of the most important aspects to the lifelong farmers/stakeholders/residents is their initiative <u>creates an opportunity to significantly lower the residential tax burden while providing</u> <u>overwhelming and sustained public benefits through at least the next 25 years</u> to support families, neighbors, and future generations of citizens in a way that will likely never be seen again in Prince William. Thousands of <u>prevailing wage and union construction jobs will be added to the local</u> Prince William job market for **each of the next 15-20 years**.

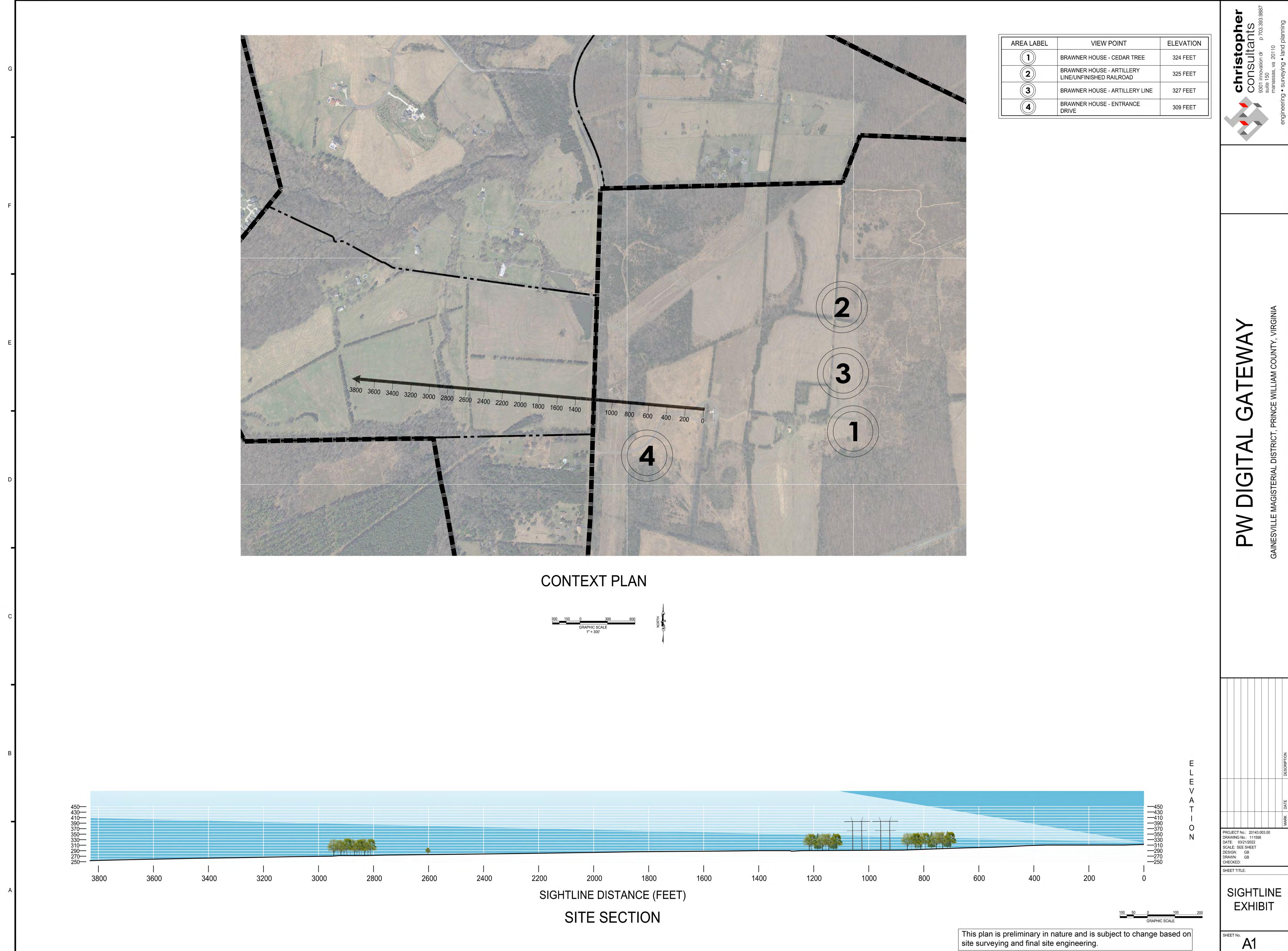
After build-out in 2040, approximately \$500 - \$700 Million in Prince William taxes will be paid annually by data centers. In addition to the extensive data center ecosystem that would benefit local education and jobs, this initiative will be an important driver of overall economic growth throughout Prince William by attracting other investment and industries. Being known as having a "high-tech" economy has an effect. Approval of the CPA will allow for nearly <u>\$30 billion dollars</u> in private capital to be invested in Prince William over the next 15+ years. By way of comparison, Amazon's HQ2 headquarters in Arlington, Virginia is estimated to bring about 25,000 jobs and \$2.5 billion over the next decade.

In order to move forward as an economically competitive and thriving, diverse County, there must be recognition that population growth will continue to support new jobs in Northern Virginia. The County must support this continued growth by increasing the number of local jobs within Prince William, enhance local economic development opportunities, ensure high quality schools, colleges and recreation opportunities, and address housing availability and affordability. This CPA seeks to take advantage of the infrastructure and data center market trends <u>already in place</u> to create a major fiscal victory for Prince William County. This will enable the advancement

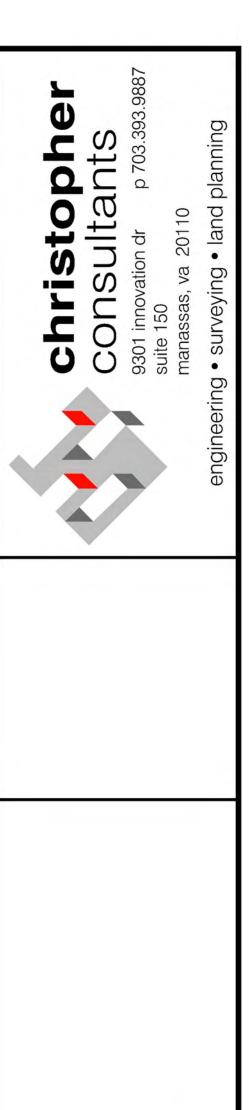
of many long-term strategic goals that are critical to sustaining and enhancing the well-being and quality of life for our residents. Economic development is a primary means for maintaining a high quality of life and expanded opportunities for all Prince William County citizens.

Approval of this CPA will be a significant step for the County in reaching a sustainable 35% commercial tax base. The demand for additional data center facilities is real. Prince William should take advantage of this opportunity Approval of this CPA will serve as <u>the Economic Development Initiative</u> in Prince William that finally achieves the major fiscal priority of establishing and sustaining a meaningful, sustainable commercial tax base every year. \$30 Billion dollars in new private capital investment (not including computer equipment) in the Prince William economy is a historic number and will help pivot Prince William to one of the wealthiest counties (not just the second largest county) in the Commonwealth.

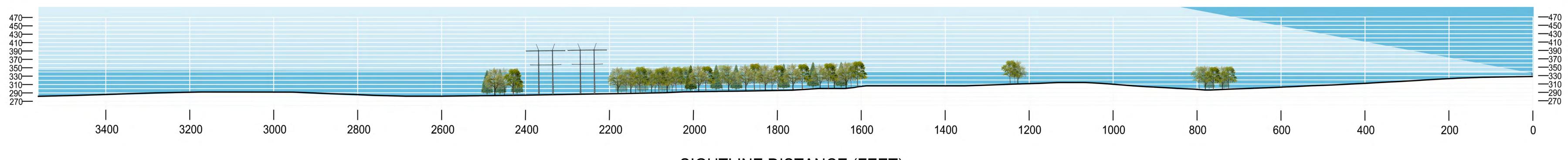
#5218924v1



| REA LABEL | VIEW POINT  | ELEVATION |
|-----------|---|-----------|
|           | BRAWNER HOUSE - CEDAR TREE                            | 324 FEET  |
| 2         | BRAWNER HOUSE - ARTILLERY<br>LINE/UNFINISHED RAILROAD | 325 FEET  |
| 3         | BRAWNER HOUSE - ARTILLERY LINE                        | 327 FEET  |
| 4         | BRAWNER HOUSE - ENTRANCE<br>DRIVE                     | 309 FEET  |
|           |   |           |



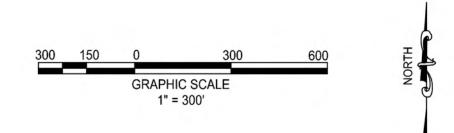




# SITE SECTION

43\00300\EXHIBITS\111598 National Park Sightlines\FINAL SIGHTLINE EXHIBIT.dwg, 4/8/2022 11:17:38 AM, DWG To PDF.pc3

# SIGHTLINE DISTANCE (FEET)



# CONTEXT PLAN

GRAPHIC SCALE 1" = 100' This plan is preliminary in nature and is subject to change based on site surveying and final site engineering.

| AREA LABEL | VIEW POINT  | ELEVATION |
|------------|---|-----------|
| 1          | BRAWNER HOUSE - CEDAR TREE                            | 324 FEET  |
| 2          | BRAWNER HOUSE - ARTILLERY<br>LINE/UNFINISHED RAILROAD | 325 FEET  |
| 3          | BRAWNER HOUSE - ARTILLERY LINE                        | 327 FEET  |
| 4          | BRAWNER HOUSE - ENTRANCE<br>DRIVE                     | 309 FEET  |



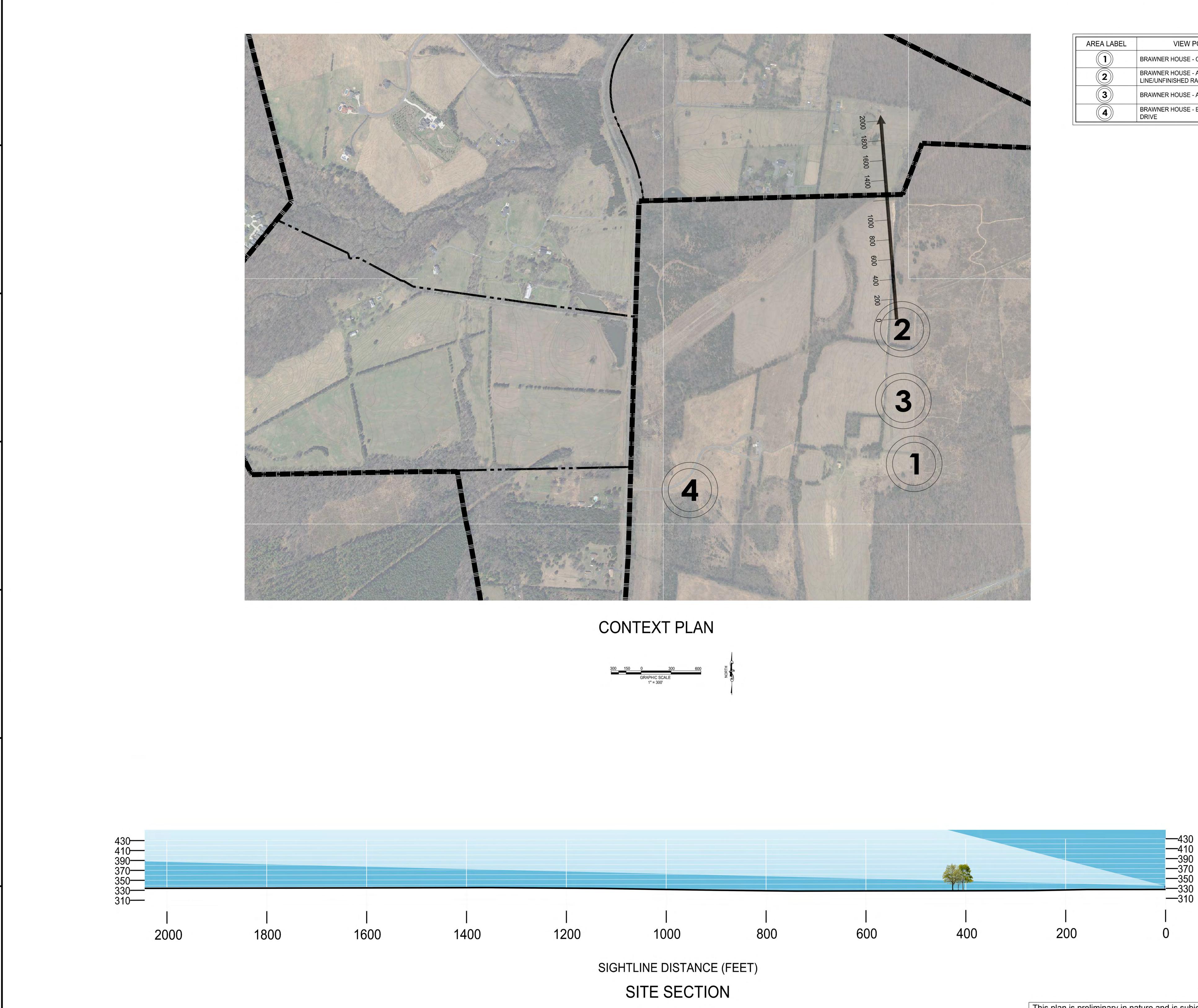


SHEET TITLE:

SIGHTLINE

EXHIBIT

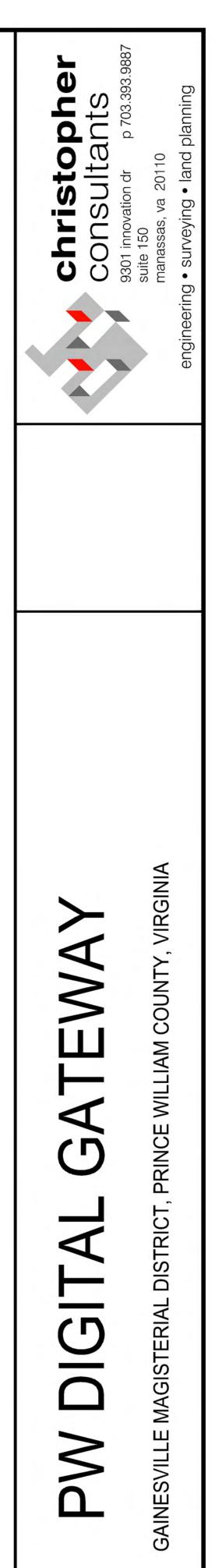
SHEET NO.

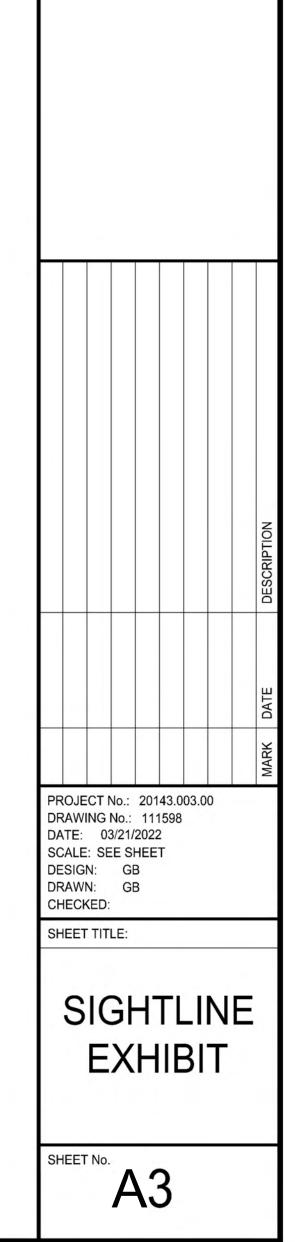


20143\00300\EXHIBITS\111598 National Park Sightlines\FINAL SIGHTLINE EXHIBIT.dwg, 4/8/2022 11:17:07 AM, DWG To PDF.pc3

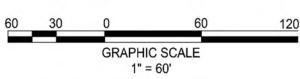


| REA LABEL | VIEW POINT  | ELEVATION |
|-----------|---|-----------|
|           | BRAWNER HOUSE - CEDAR TREE                            | 324 FEET  |
| 2         | BRAWNER HOUSE - ARTILLERY<br>LINE/UNFINISHED RAILROAD | 325 FEET  |
| 3         | BRAWNER HOUSE - ARTILLERY LINE                        | 327 FEET  |
| 4         | BRAWNER HOUSE - ENTRANCE<br>DRIVE                     | 309 FEET  |
|           |   |           |





Е O N

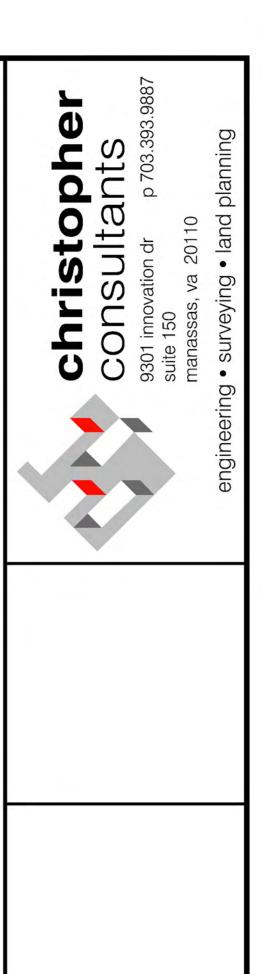


This plan is preliminary in nature and is subject to change based on site surveying and final site engineering.



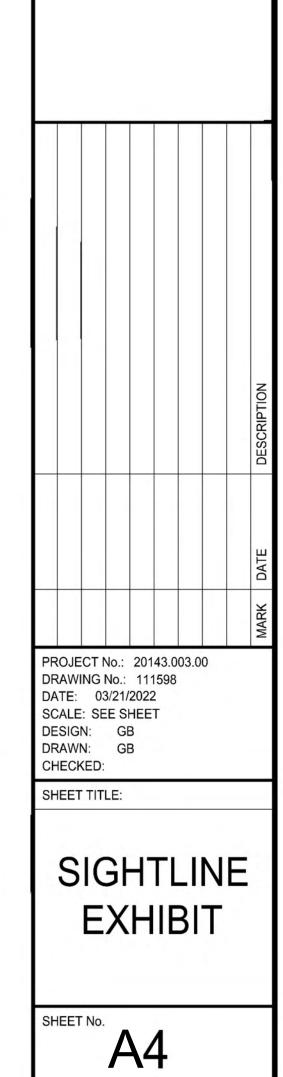
GRAPHIC SCALE 1" = 85' This plan is preliminary in nature and is subject to change based on site surveying and final site engineering.

| REA LABEL | VIEW POINT  | ELEVATION |
|-----------|---|-----------|
|           | BRAWNER HOUSE - CEDAR TREE                            | 324 FEET  |
| 2         | BRAWNER HOUSE - ARTILLERY<br>LINE/UNFINISHED RAILROAD | 325 FEET  |
| 3         | BRAWNER HOUSE - ARTILLERY LINE                        | 327 FEET  |
| 4         | BRAWNER HOUSE - ENTRANCE<br>DRIVE                     | 309 FEET  |

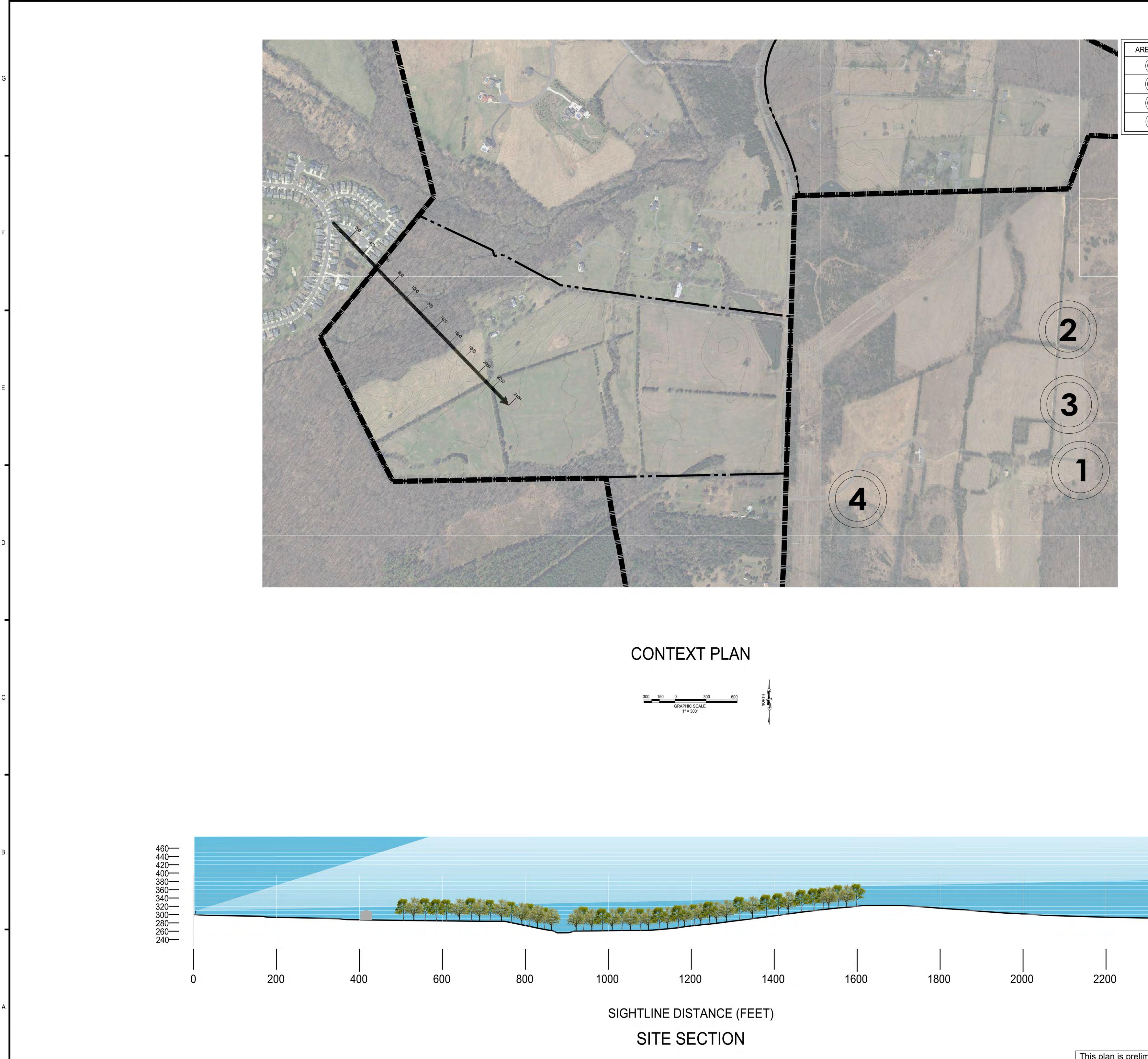




# ш C Ū $\leq$



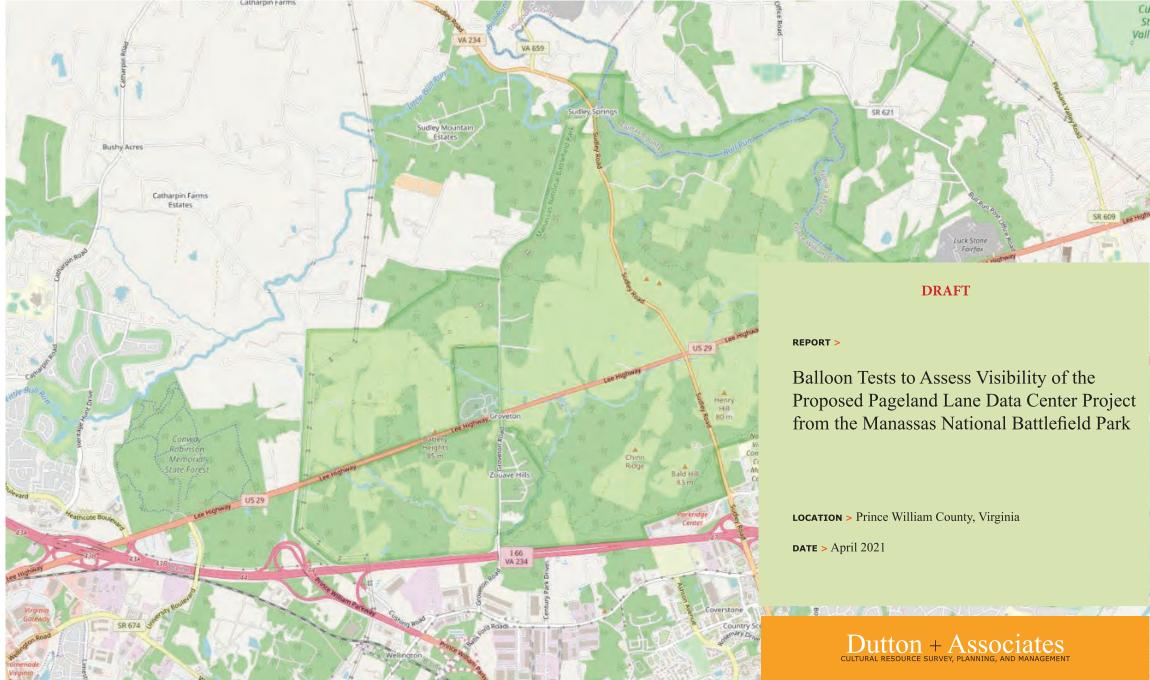




| <i>—</i> 460 Е   |
|--|
|  |
| PV DIGITAL GATEWAY<br>GANESVILLE MAGISTERIAL DISTRICT, PRINCE WILLIAM COUNTY, VIRGINIA |

This plan is preliminary in nature and is subject to change based on site surveying and final site engineering.

GRAPHIC SCALE 1" = 75' SHEET NO.





PW DIGITAL GATEWAY GAINESVILLE MAGISTERIAL DISTRICT PRINCE WILLIAM COUNTY, VIRGINIA

DESIGN:GB DRAWN: GB CHECKED:

DATE: 4/8/2022 SCALE:

SHEET: EXHIBIT B

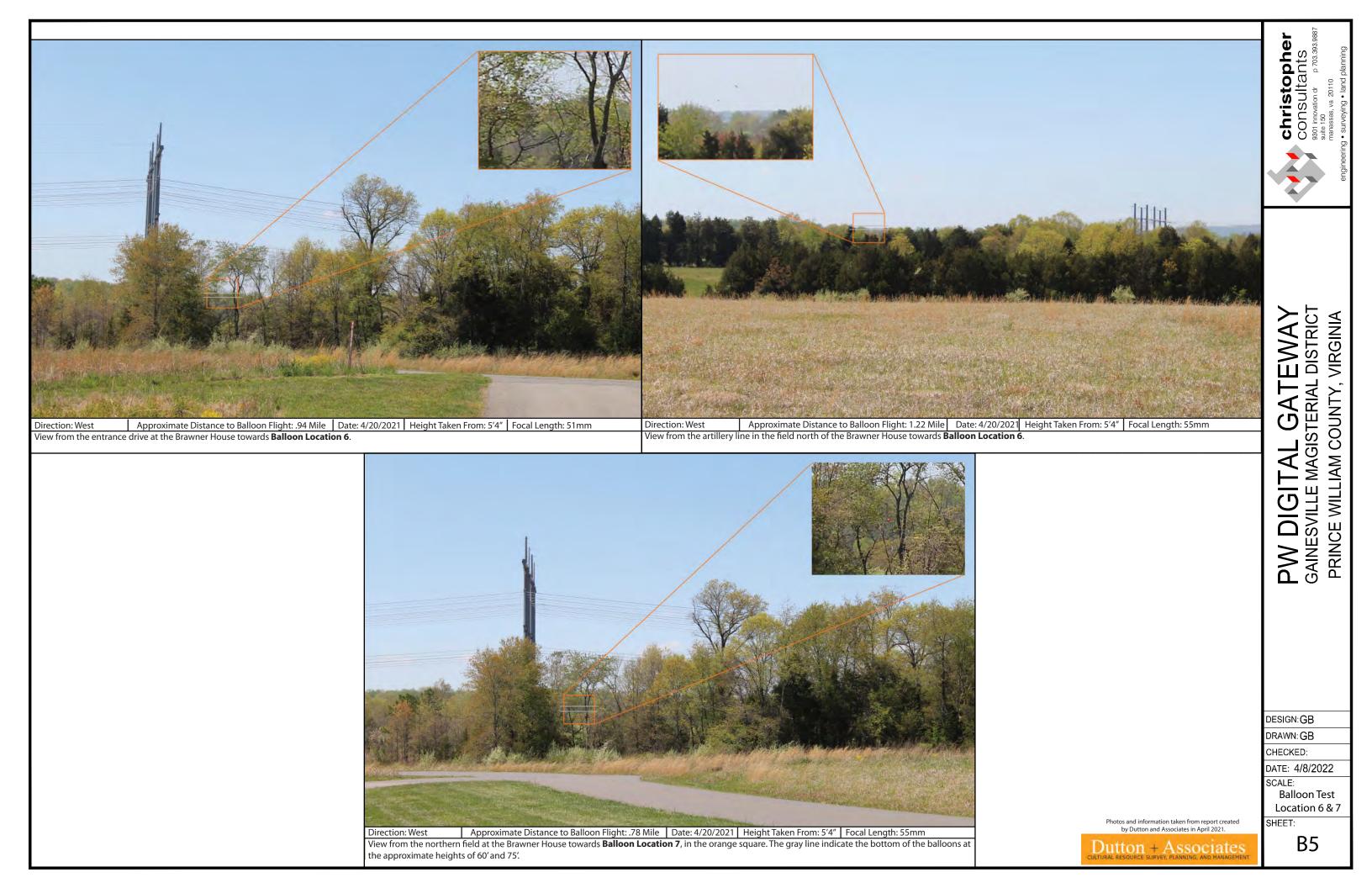












# Draft

# 7. CONCLUSIONS

In April 2021, MaryAnn Ghadban contracted D+A to complete a balloon flight test in regards to Manassas National Battlefield Park (MNBP). The balloon flights were conducted in an effort to document and better understand potential visibilitys to MNBP as a result of proposed construction of the Pageland Lane Data Center on parcels adjacent to the park. At the beginning of the flights, MNBP employees visited viewshed anchor points farther east, such as the visitor's center at Henry Hill to determine if Balloon Location 1, the flight farthest east, was visible. The fact that it was not visible from this location, even at heights higher than

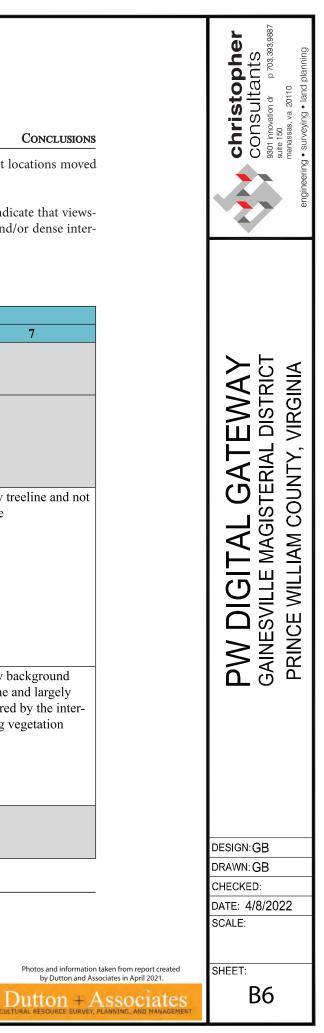
75 feet, helped identify the points that were visited during the balloon flights. As the flight locations moved west, the focus of points visited also moved west.

The following table summarizes the results of these balloon flights. Cells that are grayed indicate that viewshed locations that were not visited during particular flights due to distance, topography, and/or dense intervening vegetation.

| Viewneint                        | General Views towards Study  | Balloon Location       |   |  |   |   |  |                                   |  |  |  |  |  |  |
|----------------------------------|--|------------------------|---|--|---|---|--|-----------------------------------|--|--|--|--|--|--|
| Viewpoint                        | Area   | 1                      | 2   | 3  | 4   | 5   | 6  | 7                                 |  |  |  |  |  |  |
| Brawner House,<br>Cedar Tree     | Mature trees, fields, existing trans-<br>mission line with associated struc-<br>tures, and the Brawner House | Visible above treeline | Obscured by intervening vegetation  | 7  |   | Obscured by interven-<br>ing vegetation   |  |                                   |  |  |  |  |  |  |
| -                                | A field, mature trees and existing<br>transmission line with associated<br>structures                        | Visible above treeline | Slightly above treeline,<br>though partially ob-<br>scured by intervening<br>mature trees and trans-<br>mission line structures | Intermittently visible<br>below treeline and ex-<br>isting transmission line |   |   |  |                                   |  |  |  |  |  |  |
| Brawner House,<br>Artillery Line | A field, mature trees and existing<br>transmission line with associated<br>structures                        |                        |   |  | Below treeline and not<br>visible   | Below treeline and not visible  | 60' balloon level with<br>treeline in the back-<br>ground and partially<br>obscured by inter-<br>vening mature trees.<br>75' balloon above the<br>treeline in the back-<br>ground and slightly<br>obscrued by interven-<br>ing mature trees. | Below treeline and not<br>visible |  |  |  |  |  |  |
| Brawner House,<br>Entrance Drive | Mature trees, small field, existing<br>transmission line with associated<br>structures and Pageland Lane     |                        |   |  | 75' balloon level with<br>the existing transmis-<br>sion line and partially<br>obscured by intervenin<br>vegetation. 60' ob-<br>scured by intervening<br>vegetation | Below the treeline and<br>transmission line and<br>largely obscured be<br>gintervening vegetation | 75' balloon level with<br>the treeline in the back-<br>ground and 60' balloon<br>below the treeline in<br>the background; both<br>partially to largely ob-<br>scured by intervening<br>vegetation  | treeline and largely              |  |  |  |  |  |  |
| Canon Ridge                      | Fields, mature trees, and existing<br>transmission line with associated<br>structures                        |                        |   |  |   | Obscured by interven-<br>ing vegetation   |  |                                   |  |  |  |  |  |  |

# Table 7-1: Summary of balloon flight views.

# CONCLUSIONS



Photos and information taken from report created by Dutton and Associates in April 2021.

# Draft

| Viewpoint       | General Views towards Study                              | Balloon Location  |   |   |   |   |   |  |  |  |  |  |  |  |
|-----------------|--|---|---|---|---|---|---|--|--|--|--|--|--|--|
| viewpoint       | Area   | 1   | 2 | 3 | 4 | 5 | 6 |  |  |  |  |  |  |  |
| Stuart's Hill   | A field, wooded land, Route 29, and<br>the Brawner House | 175' balloon visible and<br>nearly level with back-<br>ground treeline. 60'<br>balloon below back-<br>ground treeline and<br>visible slightly above<br>foreground treeline. |   |   |   |   |   |  |  |  |  |  |  |  |
| Battery Heights | Mature trees and fields                                  | 75' below treeline and<br>partially obscured. 60'<br>below treeline and ob-<br>scured by intervening<br>vegetation.   |   |   |   |   |   |  |  |  |  |  |  |  |
| Deep Cut        | Fields and mature forest                                 | Below treeline and<br>largely obscured by<br>vegetation   |   |   |   |   |   |  |  |  |  |  |  |  |



| DESIGN.GD |  |
|-----------|--|
| DRAWN: GB |  |
|           |  |

CHECKED:

DATE: 4/8/2022 SCALE:

B7

SHEET:

Conclusions

| - |
|---|
| 7 |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |

Photos and information taken from report created by Dutton and Associates in April 2021.



**Manassas Battlefields Viewshed Plan** 

# **THE PLAN**

Prepared for

**Prince William County** 

Prepared by

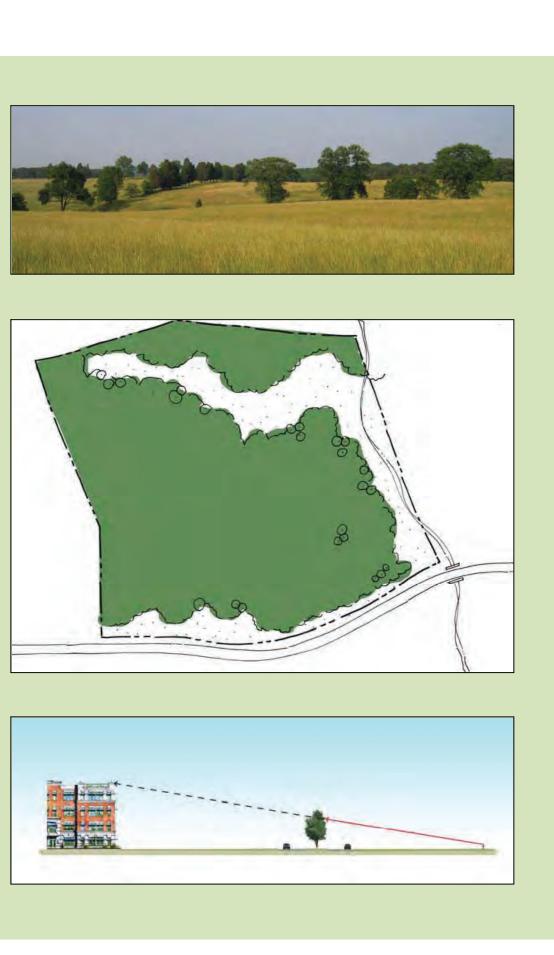
The Walker Collaborative With

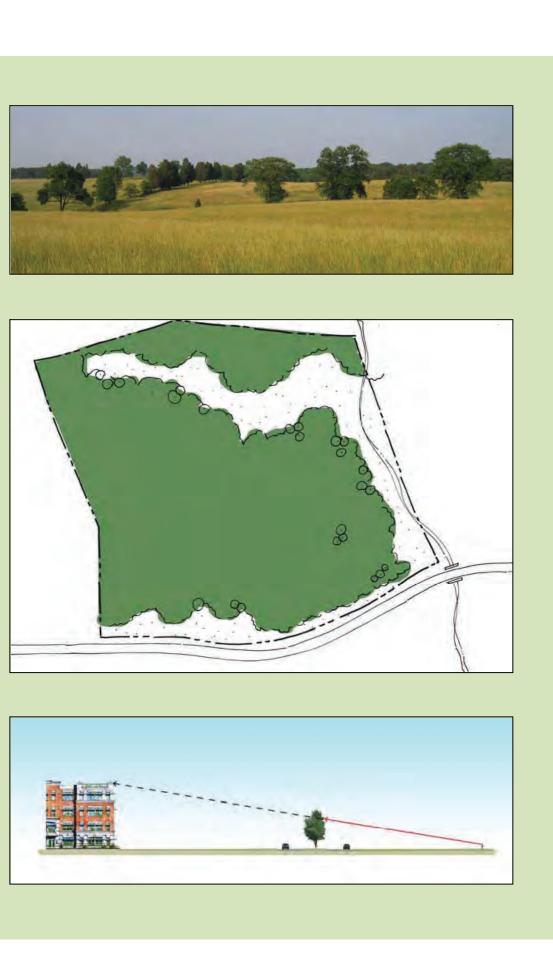
History Associates, Inc. Land Planning & Design Associates

**Revised – May 28, 2009** 

ABPP Grant No. GA-2255-06-007 Prince William County Contract No. 71312NO0



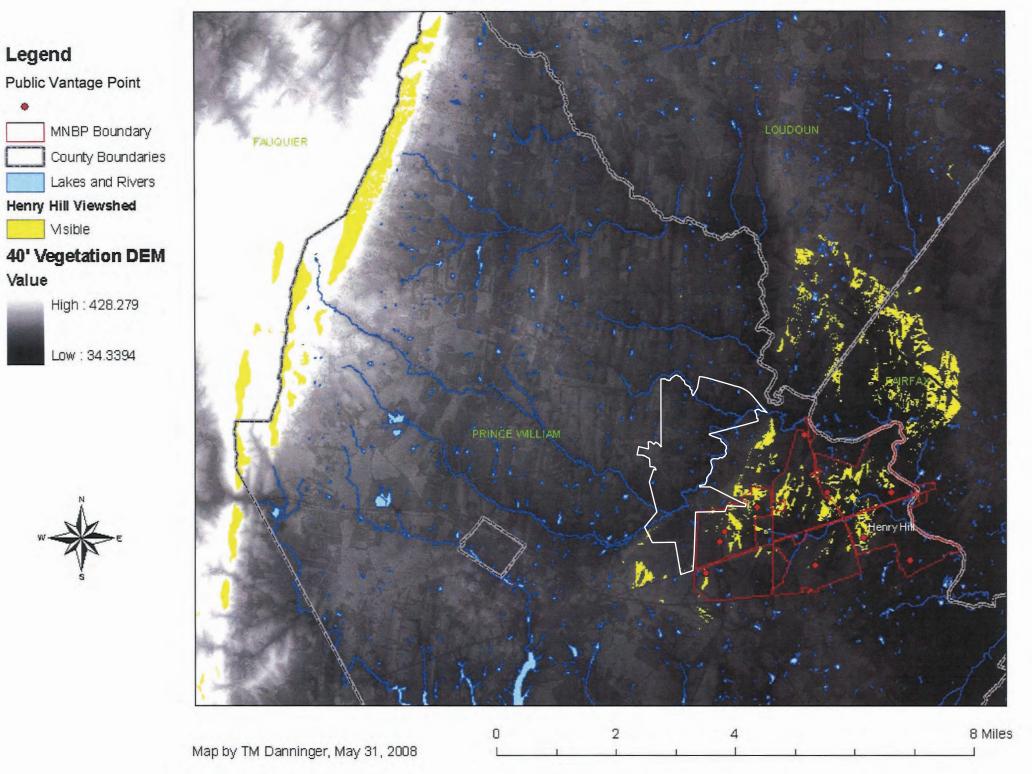


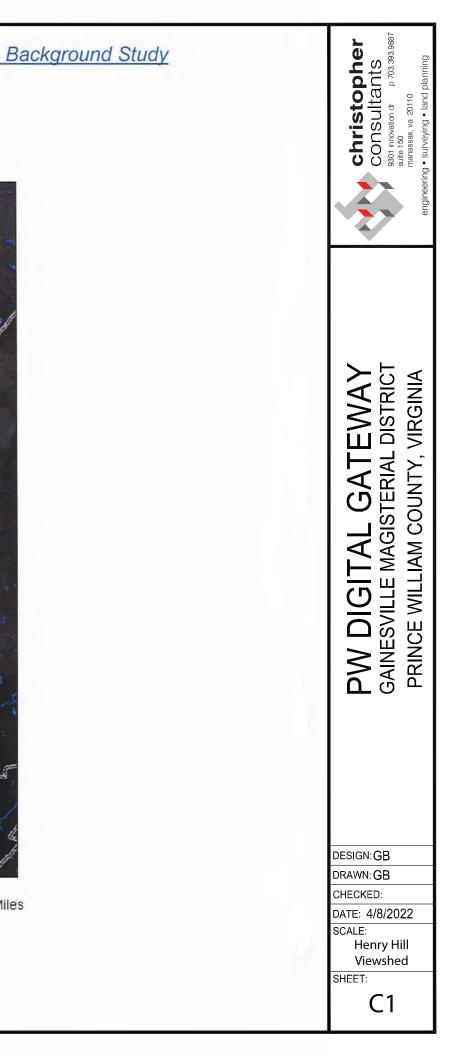




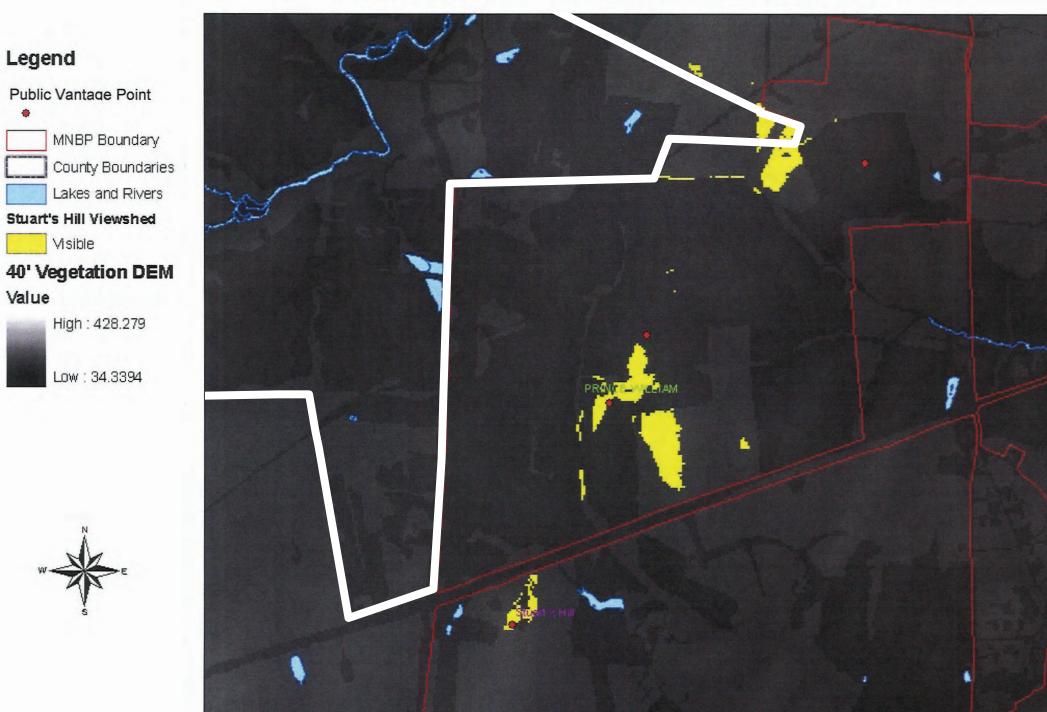
Value







Value



# 40' Vegetation Viewshed - Stuart's Hill

Map by TM Danninger, May 31, 2008

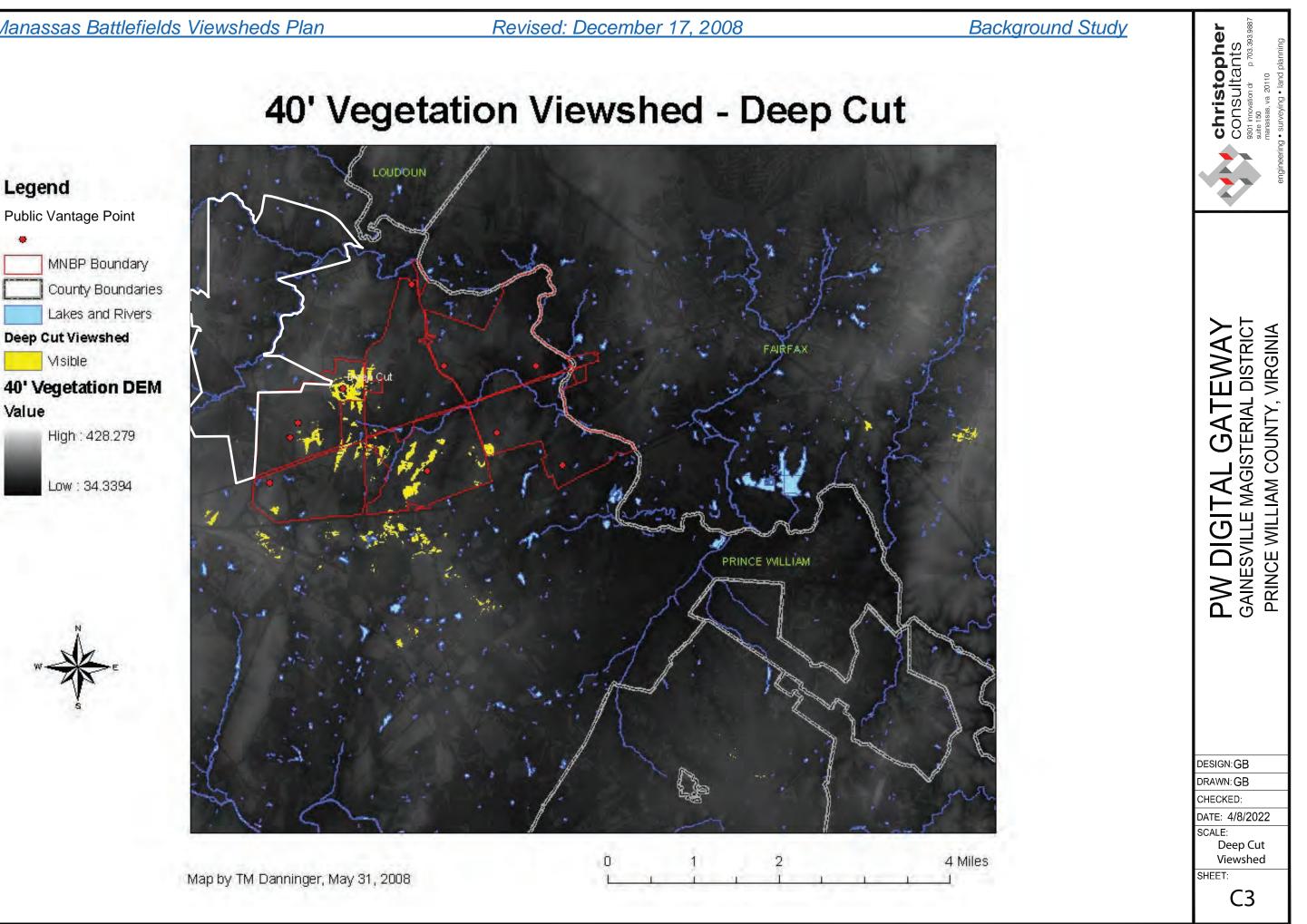
| 0 |   | 0.25 |   | 0.5 |   |   |   | 1 Mil |
|---|---|------|---|-----|---|---|---|-------|
| L | 1 | 1    | 1 | 1   | 1 | 1 | 1 |       |



Legend

Visible

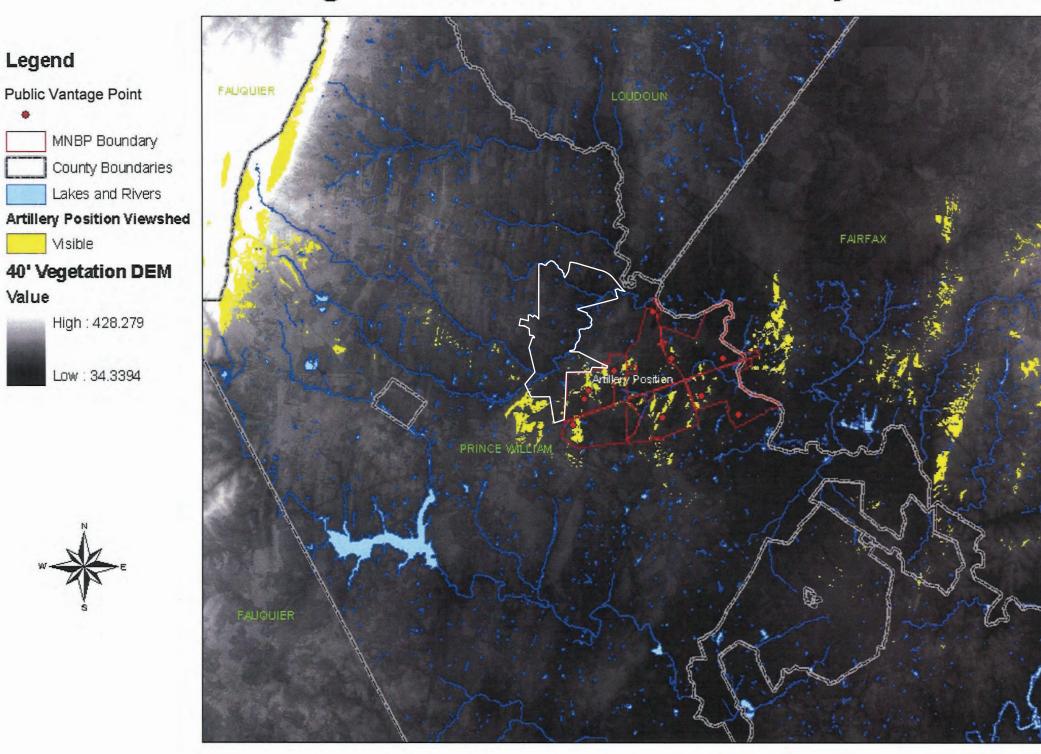
Value



0

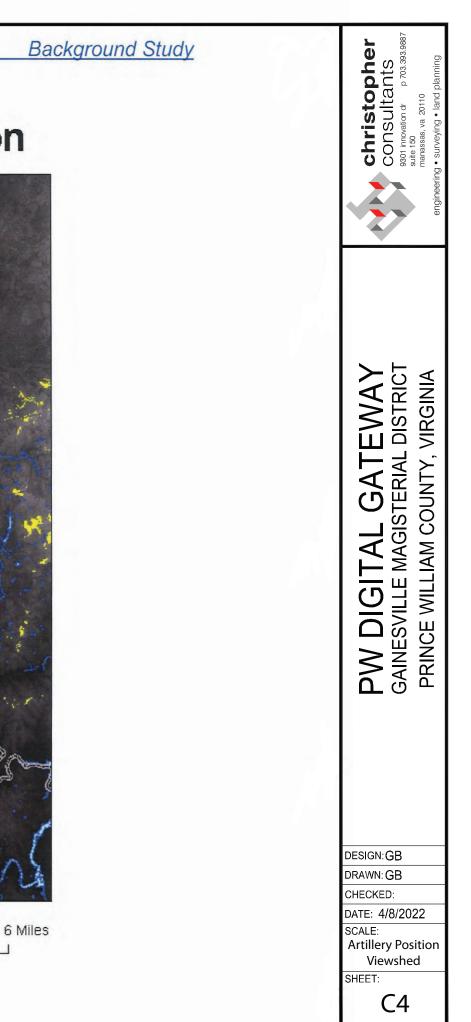
1.5

3

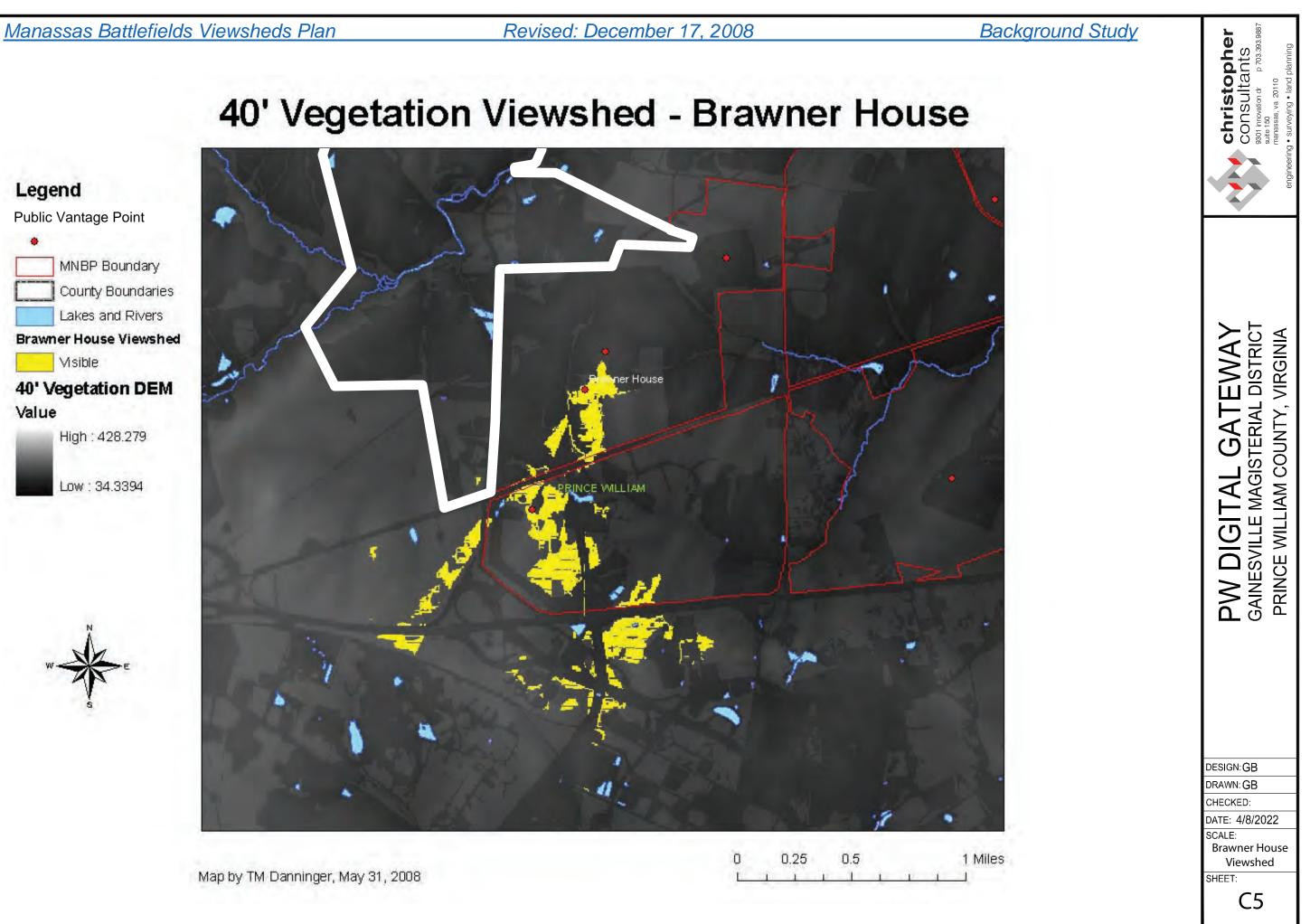


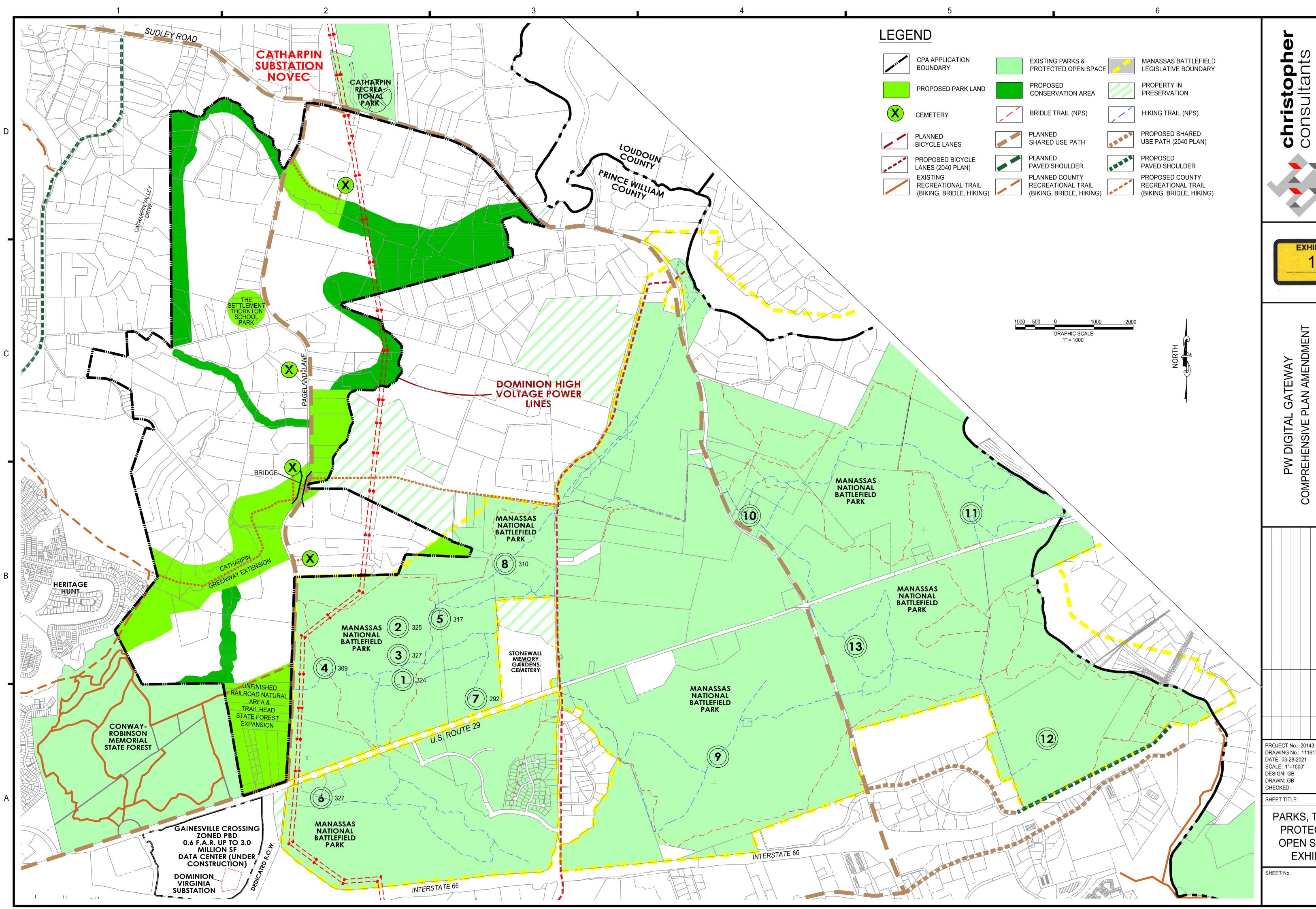
# 40' Vegetation Viewshed - Artillery Position

Map by TM Danninger, May 30, 2008



Value





P:\Projects\20143\00300\EXHIBITS\111637 Trail Exhibit\TRAILS EXHIBIT.dwg, 4/6/2022 6:26:04 PM, DWG To PDF - FLAT.pc3

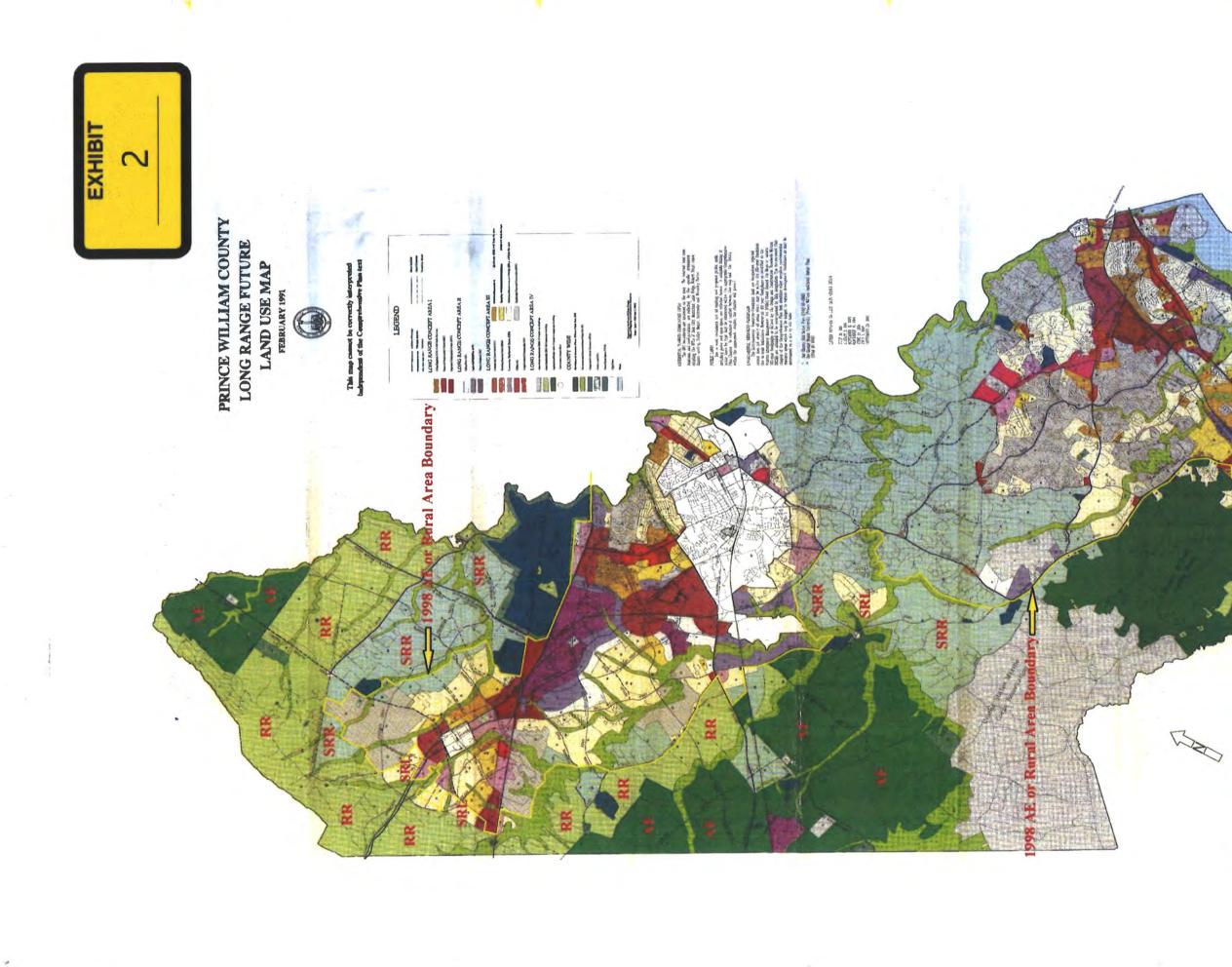


| 5    |  |
|------|--|
| GEND |  |
|      |  |

0 10 201 đ /a innc 150 930 suite EXHIBIT ENSIVE PLAN AMENDMENT #CPA2021-00004 GAINESVILLE MAGISTERIAL DISTRICT PRINCE WILLIAM COUNTY, VIRGINIA REH COMPI <u>9</u> E PROJECT No.: 20143.003.00 DRAWING No.: 111617

03

PARKS, TRAILS, PROTECTED OPEN SPACE EXHIBIT



.

Land Uses Permitted in the Current Rural Area Prior to 1998:

-

AE (±30,000 Acres) Agricultural/Estate, 10 Ac. Lots Allowed, Sewer Prohibite RR (±27,000 Acres) Rural Residential, 5 Ac. Lots Allowed, Sewer Prohibited. SRR (±18,000 Acres) Semi-Rural Residential, 1 Ac. Lots and Public Sewer Allowed. SRL (±2,000 Acres) Suburban Residential-Low, 1/4 Ac. Lots and Public Sewer Allowed.

| TEGEND | InterationProverge Anterials Manual Anterials Manual Anterials Manual Anterials Patresians Patresians TorenCity Streets | CONCEPT AREA I | Urbans Regional (UTI) 45-30 Under Per Anto | Regional Employeeant Canter (RBC) | Baglanal Commonial Contex (RCC) | LONG RANGE CONCEPT AREA II | OMbalfler (OF) | Laght Instruction(Place, (LVP) | Heary Indential (AU) | LONG RANGE CONCEPT AREA III | Community Commercial (CC) Subarban Residential-High Danshy (SRH) 8-15 Units Per Anno | Restring Regional Mail (BRM) 4-5 Units Per Acce | Community Employment Center (CBC) Schurben Residential-Low Density (SRL) 1-4 Units Per Acro | Office (U) Residential Planned Community (EPC) | Meighborhood Commanded (NC) | LONG RANGE CONCEPT AREA IV | Some R qual Reacheatial (SBR) 5-1 actes per divelling | Ranel Residuation (RR) 10-5 acros per tavelling | Agricochemit/Extende (AB) 10 acress or larger per dwylling | Convenience Rotali (RC) | COUNTY WIDE | Environmental Resource-Prince Withing Forest Paris (DB) | Environmental Resource-Fibod Pisla (ER-JP) | Designated Cultural Resource (DCR) | Public Land (TL) | Findes(Dyess Space (PIOS) | City/Town | Webse | Pergared by the Prince William County<br>Office of Mapping and Information Resources | Scale 1 inch = 3000 feet (1,3000) |
|--------|---|----------------|--|-----------------------------------|---------------------------------|----------------------------|----------------|--------------------------------|----------------------|-----------------------------|--|---|---|--|-----------------------------|----------------------------|---|---|--|-------------------------|-------------|---|--|------------------------------------|------------------|---------------------------|-----------|-------|--|-----------------------------------|
|        |   | -              | No.  | XXX<br>XXX                        |                                 | 1                          |                |                                |                      |                             |  |   |   |  |                             |                            |   |   |  | 0                       |             | 0   |  |                                    |                  |                           | -         |       |  |                                   |

11.

1



1

RESIDENTIAL PLANNED COMMUNITIES (RPCs) The RPC boundaries are indicated on the map. The internal land uses, locations, and configurations are reflected by the specific ordinances adopting the RPCs of Date City, Montclair, Lake Ridge, Robert Trent Jones, Rippon Landing, Sudley Manor, Saybrooke and Waverley Farms.

# PUBLIC LANDS

Due to scale limitations, not all existing and proposed public lands, including parks and open space, are reflected herron. A complete listing of public lands by type may be referenced within the appropriate Comprehensive Plan Chapter. In instances of conflict between this map and the listing within the appropriate chapter, the chapter will prevail.

# ENVIRONMENTAL RESOURCES-FLOODPLAIN

The Environmental Resources-Floodplain land use designation depicted hereon does not identify all areas which may be within the 100-year floodplain due to scale limitations. However, all 100 year. flood plains as identified in the Proteral Ernergency Management Act (FEMA) Flood flazard Use Maps or natural Proteral Ernergency Management Act (FEMA) Flood flazard Use Maps or natural foll-year floodplains as defined by the Design and Construction Standards Manual (DC-W) are intended to be encompassed by this designation. The Environment Plan chapter of the Comprehensive Plan text identifies other sensitive environmental resource areas which may be subject to various development limitations as may be determined on a site by site basis

# \* #

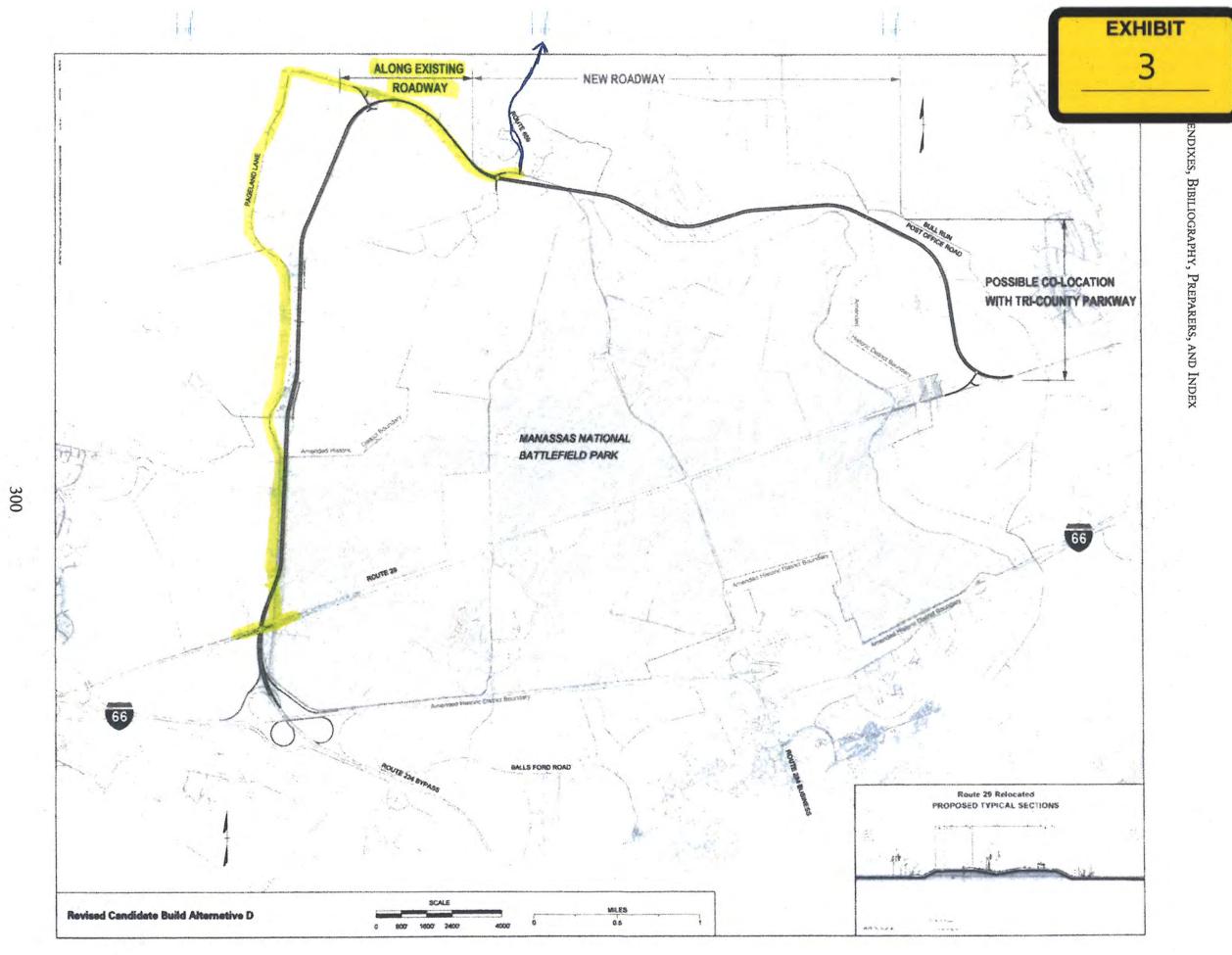
See Cherry Hill Sector Plan (CPAF 93-0003) See George Mason University (Prince Wilham Institute) Sector Plan (CPAF 92 0006)

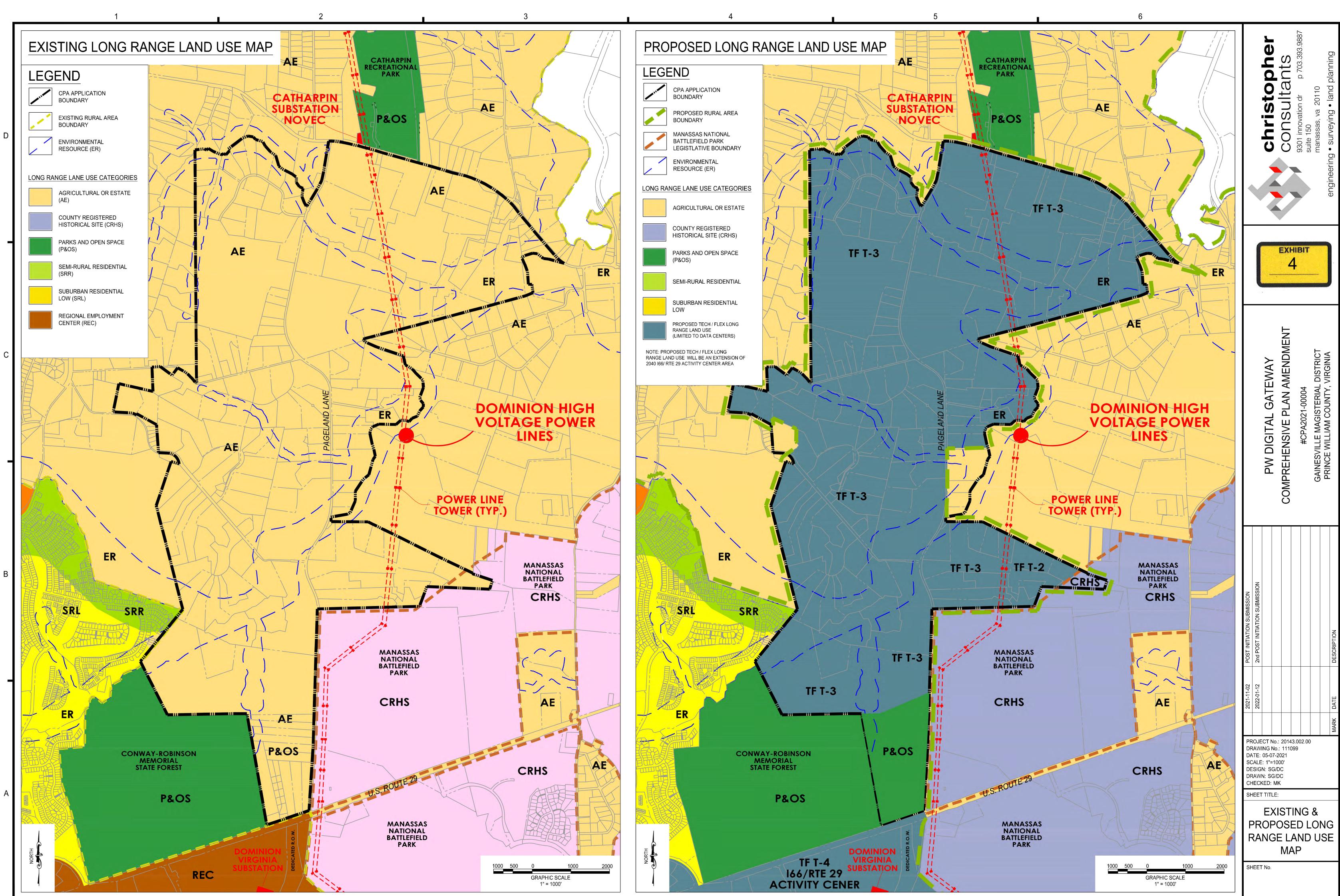
LATEST REVISION ON LAST DATE SHOWN BELOW

JULY 16, 1991 AUGUST 6, 1991 NOVEMBER 16, 1990 NOVEMBER 16, 1990 JUNE 19, 1995 JULY 1, 1996 SEPTEMBER 25, 1996

#

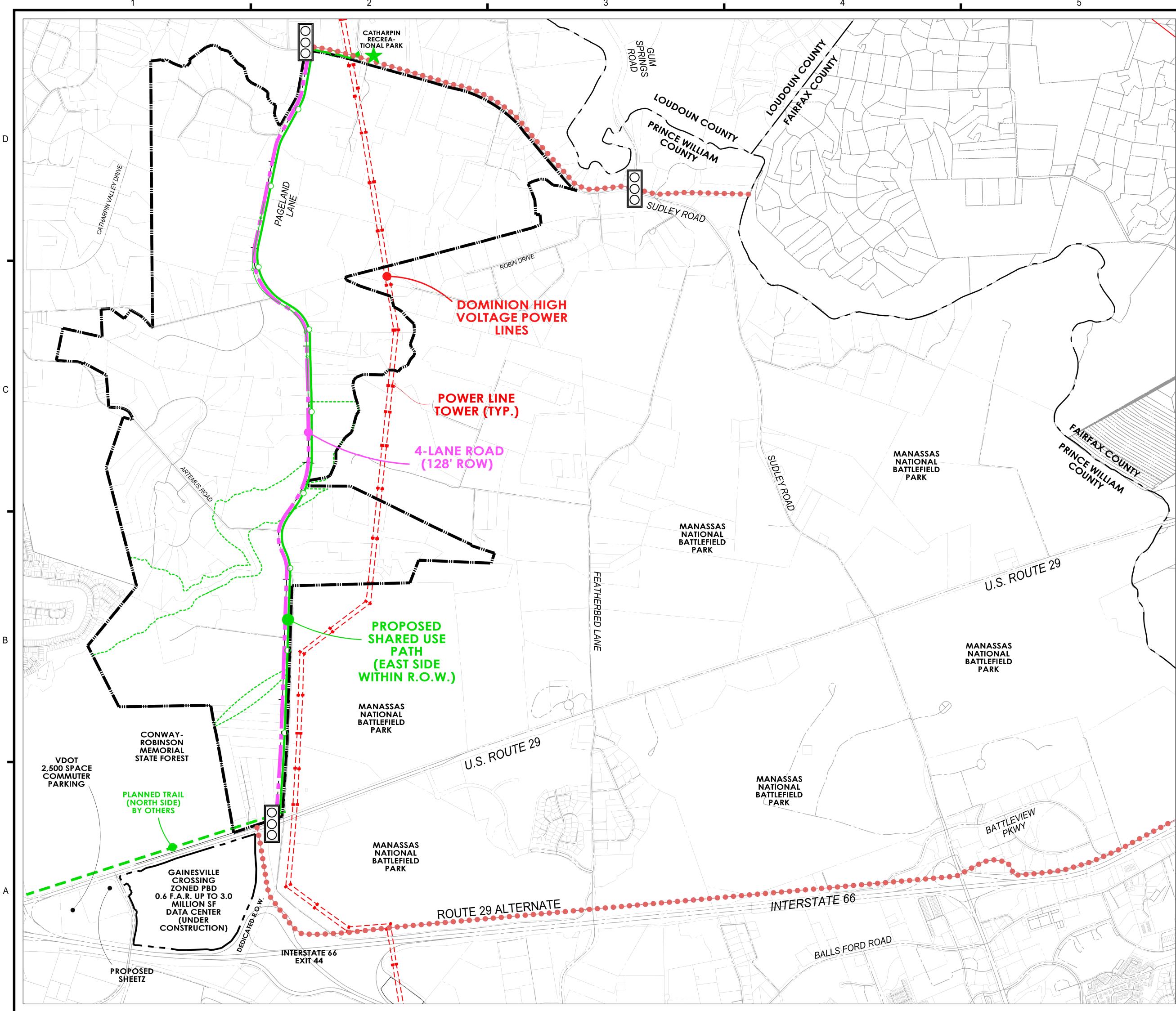


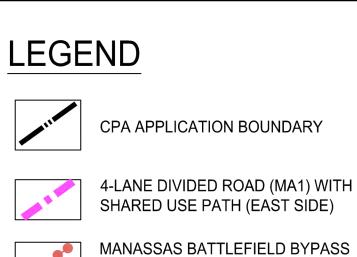


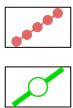


cts/20143\00300\EXHIBITS\Revised CPA Exhibits\8 EXISTING & PROPOSED LONG RANGE LAND USE MAP.dwg, 4/6/2022 5:56:33 PM, DWG To PDF.pc3









NORTH





EXTENSION



PROPOSED SHARED USE PATH (EAST SIDE WITHIN R.O.W.) PLANNED TRAIL (NORTH SIDE) BY OTHERS CATHARPIN GREENWAY

(4-LANES NORTH AND SOUTH)

UNFINISHED RAILROAD PARK AND TRAILHEAD

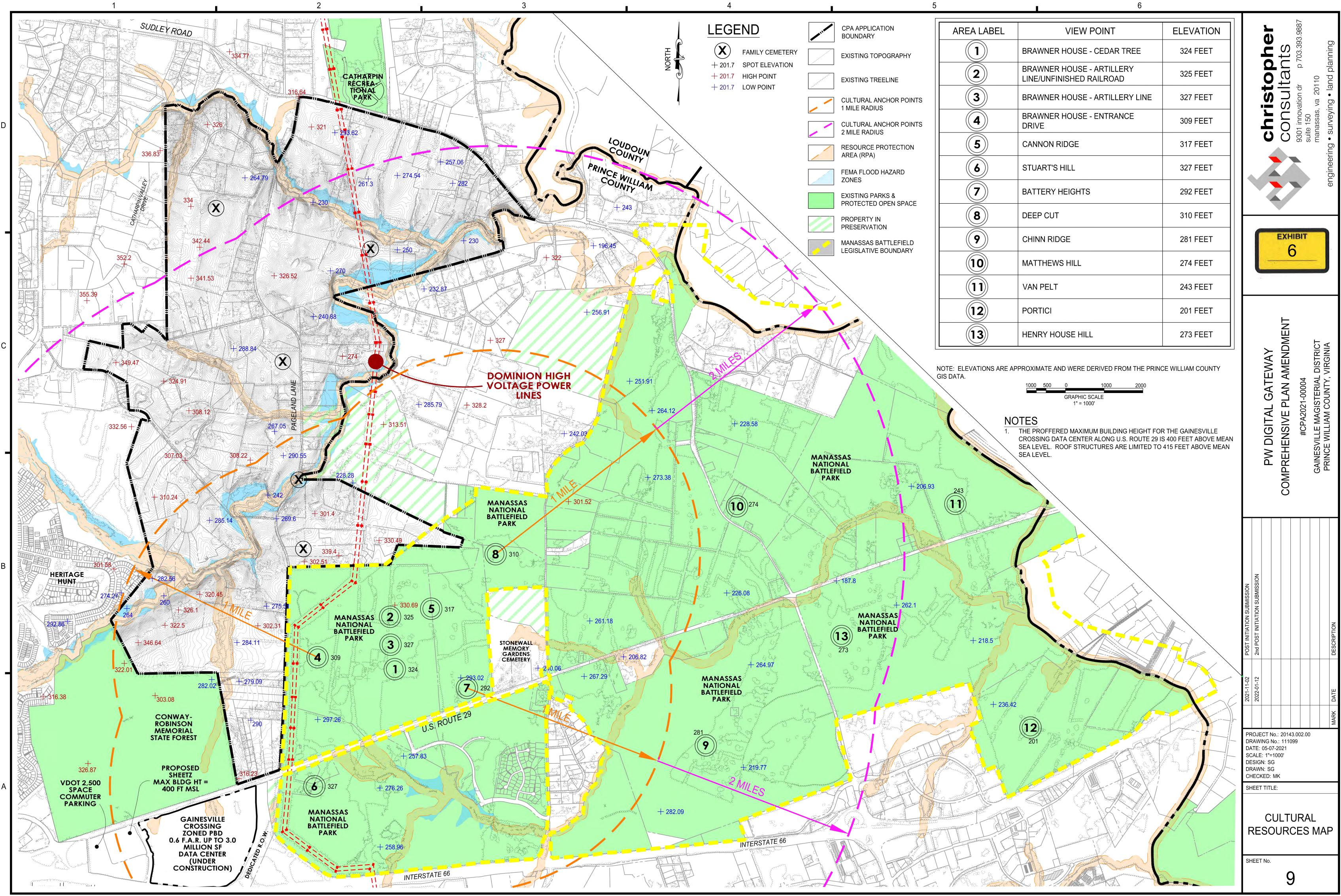
FINAL LOCATION OF PATHWAY CROSSING OF SUDLEY ROAD TO BE DETERMINED

- TRAFFIC LIGHT • A TRAFFIC LIGHT IS CURRENT LOCATED AT THE INTERSECTION OF PAGELAND LANE AND U.S. ROUTE 29.
- A TRAFFIC LIGHT & RIGHT TURN LANE HAS
   BEEN APPROVED AND FUNDED FOR THE INTERSECTION OF PAGELAND LANE AND SUDLEY ROAD.
- A TRAFFIC LIGHT IS CURRENTLY AT THE INTERSECTION OF SUDLEY ROAD AND GUM SPRINGS ROAD.

| 1000 | 500 | 0      | 1000    | 2000 |
|------|-----|--------|---------|------|
|      |     |        |         |      |
|      |     | GRAPHI | C SCALE |      |
|      |     | 1" = 1 | 1000'   |      |

|   | •                                     |   | christopher  |                              | consultants                  | 0301 innovation dr n 703 303 088 |                | manassas, va 20110               |                                 | engineening • surveying • land planning |
|---|---------------------------------------|---|--|------------------------------|------------------------------|----------------------------------|----------------|----------------------------------|---------------------------------|---|
| G |                                       |   | 2  | ł                            | EXI                          | -IIE<br>5                        | UT             |                                  |                                 |   |
|   |                                       |   | PW DIGITAL GATEWAY   |                              | COMPREHENSIVE PLAN AMENDMENT |                                  | #CPA2021-00004 | GAINESVILLE MAGISTERIAL DISTRICT | PRINCE WILLIAM COUNTY, VIRGINIA |   |
|   | 2021-11-02 POST INITIATION SUBMISSION | 2022-01-12 2nd POST INITIATION SUBMISSION |  |                              |                              |                                  |                |                                  |                                 | DESCRIPTION                             |
|   | 2021-                                 | 2022-                                     |  |                              |                              |                                  |                |                                  |                                 | MARK DATE                               |
|   | DR<br>DA<br>SC<br>DE<br>DR<br>CH      | ATE:<br>CALE<br>SIG<br>RAW                | :CT N<br>ING I<br>05-0<br>:: 1"=<br>N: S(<br>N: S(<br>KED:<br>TITI | 7-20<br>:100<br>G<br>G<br>MK | 111(<br>)21<br>0'            | 13.00<br>099                     | 02.00          |                                  |                                 |   |
|   |                                       |   |  |                              | )B<br>TV                     |                                  | _              |                                  |                                 |   |

SHEET No.



| AREA LABEL | VIEW POINT  | ELEVATION |
|------------|---|-----------|
|            | BRAWNER HOUSE - CEDAR TREE                            | 324 FEET  |
| 2          | BRAWNER HOUSE - ARTILLERY<br>LINE/UNFINISHED RAILROAD | 325 FEET  |
| 3          | BRAWNER HOUSE - ARTILLERY LINE                        | 327 FEET  |
| 4          | BRAWNER HOUSE - ENTRANCE<br>DRIVE                     | 309 FEET  |
| 5          | CANNON RIDGE  | 317 FEET  |
| 6          | STUART'S HILL   | 327 FEET  |
| 7          | BATTERY HEIGHTS                                       | 292 FEET  |
| 8          | DEEP CUT  | 310 FEET  |
| 9          | CHINN RIDGE   | 281 FEET  |
| 10         | MATTHEWS HILL   | 274 FEET  |
|            | VAN PELT  | 243 FEET  |
| 12         | PORTICI   | 201 FEET  |
| 13         | HENRY HOUSE HILL                                      | 273 FEET  |

