MOTION:	ANGRY	November 1, 2022
		Regular Meeting
SECOND:	BAILEY	Res. No. 22-508

#### RE: COMPREHENSIVE PLAN AMENDMENT #CPA2021-00004, PW DIGITAL GATEWAY – GAINESVILLE MAGISTERIAL DISTRICT

#### ACTION: APPROVED

**WHEREAS**, a request to initiate an out of turn Comprehensive Plan Amendment was filed with the Planning Office for an area along Pageland Lane requesting to change 27 parcels consisting of approximately ±801.59 acres from AE, Agricultural or Estate, and ER, Environmental Resource, to T/F, Technology / Flex, and was accepted on June 15, 2021; and

**WHEREAS,** on July 20, 2022, the Prince William Board of County Supervisors (Board), via Resolution Number (Res. No.) 21-445, initiated an amendment to the Comprehensive Plan for PW Digital Gateway with an expanded study area for the entire corridor between Route 29 and Sudley Road, in order to review in a more holistic manner (traffic, land use, and environmental concerns); and

**WHEREAS,** the study area was expanded to include approximately ±2,139 acres generally located along Pageland Lane, south of Sudley Road, north of Route 29, east of Conway Robinson Memorial State Park, Heritage Hunt, and Catharpin Valley subdivisions, and west of Manassas National Battlefield Park and Sudley Mountain subdivision; and

**WHEREAS**, the Planning Office published the PW Digital Gateway Comprehensive Plan Amendment on August 15, 2022, which proposes changing the Comprehensive Plan Land Use designation for the study area from AE, Agricultural or Estate, and ER, Environmental Resource, to T/F, Technology / Flex with a T-3 Transect, POS, Parks and Open Space, CRHS, County Registered Historic Site, and an Environmental Resource Overlay; and

**WHEREAS**, the PW Digital Gateway Comprehensive Plan Amendment provides a comprehensive look at the study area, including land use, community design, cultural resources, economic development, green infrastructure, mobility, sustainability, level of service analysis, and implementation plans; and

WHEREAS, on January 27, 2022, and February 3, 2022, the Planning Office held community meetings in which feedback was received on the Comprehensive Plan Amendment #CPA2021-00004, PW Digital Gateway; and

**WHEREAS,** on July 20, 2022, the Planning Office held a public information meeting and Planning Commission Work Session at which the Comprehensive Plan Amendment #CPA2021-00004, PW Digital Gateway, was available for review and input; and

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**WHEREAS,** the Prince William County Planning Commission held a public hearing on September 14, 2022, for Comprehensive Plan Amendment #CPA2021-00004, PW Digital Gateway Plan, and recommended that the Board adopt Comprehensive Plan Amendment #CPA2021-00004, PW Digital Gateway, to include the following recommendations:

- 1. Noise is adequately reduced and /or mitigated;
- 2. Proper measures are taken to address any potential negative environmental issues; and
- 3. Planning staff include the revisions and clarifications requested in Exhibit A attached to the letter to the Planning Commission dated September 9, 2022; and

WHEREAS, the Board believes that public health, safety, and general welfare as well as good planning practices are served by the approval of this Comprehensive Plan Amendment, and it guides and accomplishes a coordinated, adjusted, and harmonious development 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;

**NOW, THEREFORE, BE IT RESOLVED** that the Prince William Board of County Supervisors hereby adopts Comprehensive Plan Amendment #CPA2021-00004, PW Digital Gateway with the following changes:

1. Delete Action Strategy DGM 1.11 and add Action Strategy DGGI 1.12 as recommended by County staff in the staff report:

"DGGI 1.12 - As consistent with DGWS 1.2, strongly encourage the use of closed loop water, or no-water cooling systems, and other water efficient systems to minimize impacts to the County's water resources."

2. Revise Action Strategy DGCD 1.9 as recommended by County staff in the staff report with the following addition to the beginning of staff's recommended language: "County staff should require rezoning and special use permit applicants to provide detailed acoustic tests and studies to ensure accurate evaluation of potential sound impacts from the proposed development to adjacent residences and cultural resources, and to help ensure that any sound impacts are appropriately addressed."

Revised Action Strategy DGCD 1.9 will now read as follows:

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> "DGCD 1.9 – County staff should require rezoning and special use permit applicants to provide detailed acoustic tests and studies to ensure accurate evaluation of potential sound impacts from the proposed development to adjacent residences and cultural resources, and to help ensure that any sound impacts are appropriately addressed. Sound attenuation enclosures or walls around generators and other mechanical equipment, heating and cooling system (including rooftop equipment) should be used where appropriate to minimize noise impacts. Noise levels should not exceed 60 dBA during the daytime hours and 55 dBA during the evening hours when measured at the property boundary of any land planned for CRHS or residential use. Additionally, development proposals should submit a sound study to ensure compliance and condition times for routine testing of generator equipment and backup power systems. The use of renewable energy source is encouraged to further reduce noise impacts."

3. Addition of Action Strategy DGGI 1.13 as recommended by County staff in the staff report with the following addition to the end of staff's recommended language: "Collaborate with UOSA, Fairfax Water, and other relevant stakeholders in the implementation of additional waterway monitoring on these sites."

Revised Action Strategy DGGI 1.13 will now read as follow:

"DGGI 1.13 - Work with the Virginia Department of Environmental Quality (DEQ) to expand their water quality monitoring program to include sites along the Little Bull Run and Lick Branch within the study area to monitor for any changes to the water quality and health of these streams. Collaborate with UOSA, Fairfax Water, and other relevant stakeholders in the implementation of additional waterway monitoring on these sites."

- 4. Addition of Action Strategy DGCR 1.17 as recommended by County staff in the staff report with the following additions to staff's recommended language:
  - After "unmarked burials related to military activity ... " add: "and African American heritage."
  - After "if a rezoning ... " on the second line of staff's proposed language add: "and/or special use permit."

Revised Action Strategy DGCR 1.17 will now read as follows:

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> "DGCR 1.17 - Human Remains - Reinterment. Due to this CPA area exhibiting a high potential for unmarked burials related to military activity and African American heritage, if a rezoning and/or special use permit applicant discovers human remains during cultural resource studies, or during land disturbance activities, the applicant shall comply with all federal and state law regarding the removal and reinterment of those remains to an appropriate location on the property. County staff should require rezoning and special use permit applicants to provide archaeological monitoring to identify remains during initial land disturbance activity."

5. Revise Action Strategy DGCR 1.8 to mirror the alternative language offered by County staff on page 36 of the Staff Report Project Summary and Analysis.

"DGCR 1.8 - Evaluate through Phase II cultural resources studies, with scopes of work approved by the County Archaeologist, the following potential resources: Honeywood Site complex (076-0138; also known as Pageland I); Pageland II complex (076-0137); the Phillips Cemetery; and the Civil War Mass Grave. If warranted, (1) preserve these area(s) in situ (in place), (2) work with any interested property owner to consider transferring these resources to an entity or organization that provides for the long-term preservation of these resources and (3) work with any interested property owner to allow access to the public for interpretive programming."

6. Revise Action Strategy DGGI 1.8 as concurred to by County staff on page 36 of the Staff Report Project Summary and Analysis.

"DGGI 1.8 – Encourage the use of engineering and design solutions that reduce stormwater runoff and help mitigate downstream flooding, to contain pollutants on site and to reduce downstream erosion. Areas of Reforestation and the incorporation of Best Management Practices ("BMP") and/or Low Impact Development ("LID") facilities should be included with rezonings with the goal of reducing the peak flow rate of runoff to "good-forested condition" on development areas, employing LID practices (such as, but not limited to, cisterns, rain gardens, wet ponds, use of storm water for landscaping/irrigation, bioretention facilities, permeable pavers, filtered strips ,tree box filters and other innovative storm water management techniques), along with regional stormwater facilities and other innovative techniques to help achieve these goals."

7. Revise Action Strategy DGM 1.3 to reflect VDOT and County Standards to read as follows:

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> "DGM 1.3 - Primary access to development within the Study Area should be focused on Pageland Lane. Alternative access will be considered during rezoning and/or Special Use Permit (SUP) application process. Alternative access /crossover spacing on Pageland Lane may be considered by the County and Virginia Department of Transportation (VDOT). Access crossovers should be limited to 900 feet minimum but are encouraged to be 1,100 feet to ensure that Pageland remains 45 mph. Intersections, where possible, should be roundabouts and other innovative intersection designs which promote pedestrian and motorist safety, and preclude the use of the corridor as an effective cut-through. Roadway improvements, where possible, should-offer opportunities for interpretive features/amenities such as artillery emplacement or monuments which do not hinder visibility but contribute to the interpretive history of the area. Roundabouts and other similar roadway designs offer a quieter alternative to vehicles starting and stopping at traffic signals with less light pollution for the Battlefield."

8. Revise Action Strategy DGCD 1.10 to read as follows:

"DGCD 1.10 - Substations are encouraged to be located to the interior of proposed development or abutting to the existing high voltage line corridor, when possible, to minimize viewshed impacts. Additionally, substations that are visible to Manassas National Battlefield Park or from surrounding major roadways (Pageland Lane, Sudley Road, Lee Highway) are encouraged to use innovative designs to enhance screening from adjacent non-compatible uses. Up to 10 acres of land east of the electric high voltage power lines in the Southern District may be used for substations."

9. Revise Action Strategy DGCR 1.2 with the following additions:

Replace the last sentence to read as follows: "If a site or sites is determined significant, the first treatment option should be to preserve the resource in place with consideration for access to the public. Site or sites that fall within the following time periods should strongly be considered for in place preservation: Prehistoric Native American Settlement, Early National Period (1790-1829), Antebellum Period (1830-1860), Civil War (1861-1865), Reconstruction and Growth (1866-1916), World War I to World War II (1917-1945), The New Dominion (1946 to the present)."

Revised Action Strategy DGCR 1.2 will now read as follows:

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"DGCR 1.2 - Because of the overall historical and cultural sensitivity of the area, County staff should require rezoning, special use permit, and public facility review applicants to provide a Phase I cultural resource studies with the first submission of their application. If warranted, County staff should require the applicant to conduct a Phase II evaluation during review of the land use application. If a site or sites is determined significant, the first treatment option should be to preserve the resource in place with consideration for access to the public. Site or sites that fall within the following time periods should strongly be considered for in place preservation: Prehistoric Native American Settlement, Early National Period (1790-1829), Antebellum Period (1830-1860), Civil War (1861-1865), Reconstruction and Growth (1866-1916), World War I to World War II (1917-1945), The New Dominion (1946 to the present)."

10. Addition of Action Strategy DGCR 1.18 as follows:

"DGCR 1.18 - County staff should require, where appropriate based on site-specific assessment, rezoning and special use permit applicants to conduct surveys, archaeology and historical research (including oral histories and other methods of historical research) to determine the existence of any cultural or historical resources on the application site related to Jennie Dean or any other history. Based on these surveys, archaeology and historical research, and the recommendations therein, and other relevant information, County staff should work with applicants on appropriate, sitespecific mitigation measures."

11. Addition of Action Strategy DGSU 1.4 as follows:

"DGSU 1.4 - Data center operators are encouraged to purchase clean energy through Power Purchase Agreements (PPAs) or renewable energy certificates (RECs)."

12. Addition of Action Strategy DGSU 1.5 as follows:

"DGSU 1.5 - Encourage the use of less carbon intensive or carbon neutral energy generation for backup generation systems."

13. Addition of Action Strategy DGSU 1.6 as follows:

"DGSU 1.6 - County staff should require rezoning and special use permit applicants to provide detailed environmental impact analyses consistent with existing County policies to ensure accurate evaluation of potential impacts from the proposed development to any environmentally sensitive areas and to help ensure that any water quality impacts are appropriately mitigated. November 1, 2022 Regular Meeting Res. No. 22-508 Page Seven

ATTACHMENT: PW Digital Gateway CPA adopted November 1, 2022.

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

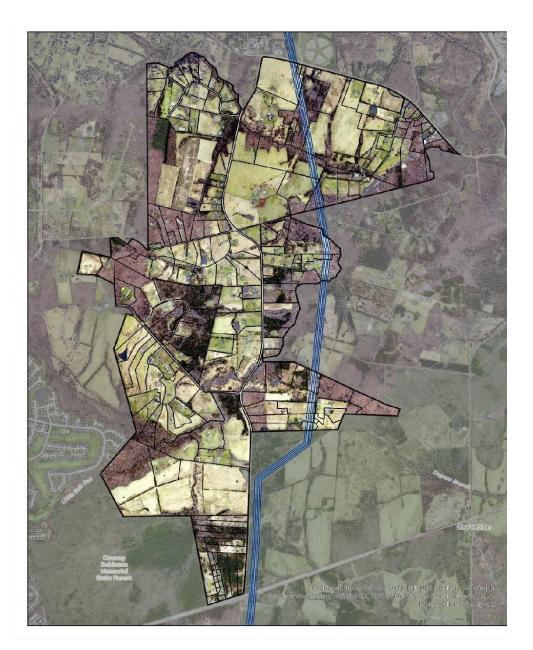
andrea. dden ATTEST:

**Clerk to the Board** 

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# **PW Digital Gateway**



Adopted November 1, 2022

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## INTRODUCTION

#### INTENT

PW Digital Gateway Special Study Area envisions creating a technology corridor along Pageland Lane for the development of data center uses, a defined targeted industry, while preserving and protecting key environmental and cultural resources. The corridor was originally an applicant initiated Comprehensive Plan Amendment for 27 parcels located on both sides of Pageland Lane in four geographic areas south of Sudley Road and approximately one mile north of Route 29. On July 20, 2021, through Res. No. 21-445, the Prince William Board of County Supervisors initiated an amendment to the Comprehensive Plan for PW Digital Gateway 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 to include related impacts on supporting infrastructure and consider alternative comparable land use designation options that meet the needs of the original applicant and the priorities of the Prince William Board of County Supervisors. Additionally, the Prince William Board of County Supervisors also approved an enhanced 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 Rural Area (native plant buffering and sustainability) to preserve as much of the area as possible.

PW Digital Gateway serves as an addition to the Comprehensive Plan and the Policies and Action Strategies contained below represent additions or modifications to the relevant chapters of the Comprehensive Plan to address the unique conditions within the Study Area. Existing Comprehensive Plan components and action strategies remain applicable, but where PW Digital Gateway Study Area conflicts with these policies, the PW Digital Gateway Special Study Area prevails.

#### **STUDY AREA**

In order to establish the boundary of the Study Area staff developed five criteria for consideration of inclusion:

- 1. Original PW Digital Gateway application,
- 2. Board directed expansion to include US Route 29 through VA Route 234,
- 3. Property owner expressed interest,
- 4. Established communities, and
- 5. Existing cultural and environmental resources.

In consideration of the five criteria established above an expanded study area boundary was defined. The proposed Study Area consists of 194 parcels and 2,139 acres between Route 234 and Route 29. The Study Area has also been divided into two districts to better target policy recommendations to identify and address existing conditions.

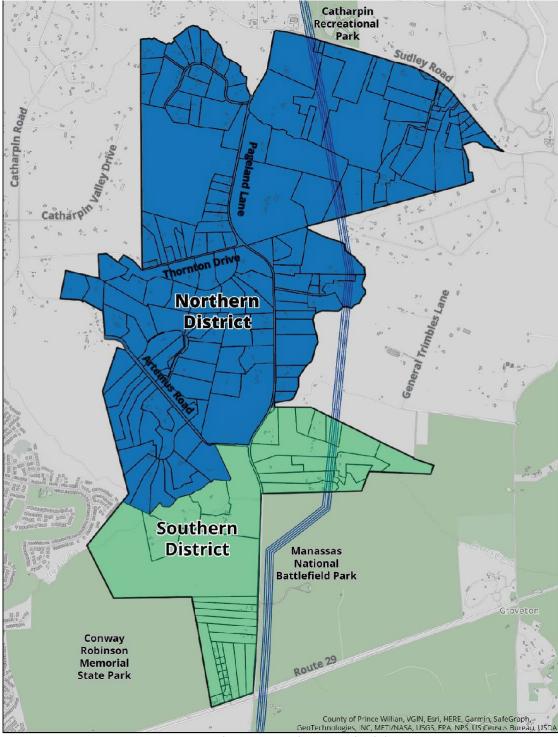


Figure 1: PW Digital Gateway Study Area and Subdistrict Map

Following establishment of the Study Area the Planning Office established Principles of Decision Making to identify the key considerations for the Study Area.

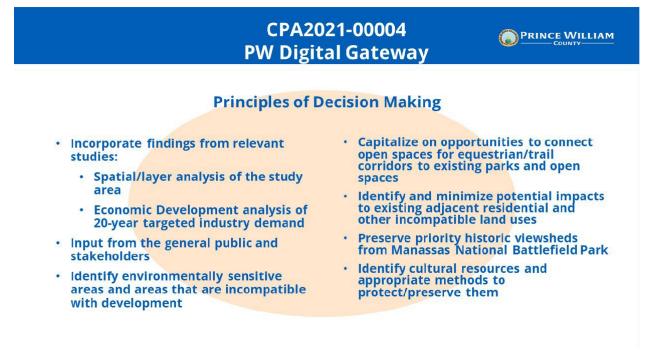


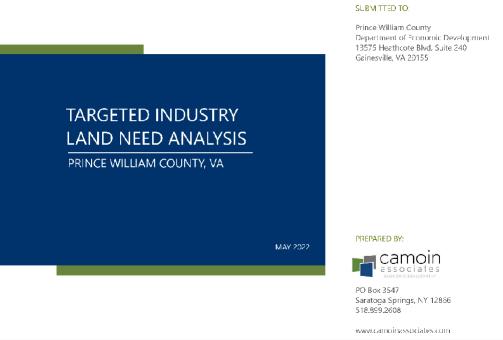
Figure 2: Principles of Decision Making

#### **STAFF ANALYSIS**

**McHarg Analysis** -The spatial/layer analysis also known as a McHarg analysis was developed by the Planning Office and the Department of Information Technology to identify and better understand constraints within the Study Area and ultimately develop a recommendation on the CPA. The concept behind this analysis is that logical conclusions can be drawn by overlaying key layers such as environmental constraints, cultural resources and historic viewsheds, and infrastructure. The interactive map with the layer analysis is posted on the project webpage (<u>www.pwcva.gov/PWDigitalGateway</u>). The direct link to the PW Digital Gateway data analysis map is

https://pwcgov.maps.arcgis.com/apps/webappviewer/index.html?id=37eff925d5c5482588f 42ffd0a3c05cd.

**Targeted Industry Land Need Analysis** - The Department of Economic Development contracted Camoin Associates to prepare a land needs analysis for all Targeted Industries in Prince William County for the next 20 years based on industry projections and past performance. The analysis estimates the aggregated amount of land for all of the Targeted Industries and compares that with the Planning Office's Build Out Analysis to identify any gaps for additional land that may be needed to support the growth of these industries and increase the County's overall commercial tax base.



*Figure 3: Camoin Targeted Industry Land Need Analysis* 

#### **COMMUNITY ENGAGEMENT**

#### Community Meeting - January 27, 2022, and February 3, 2022

The Planning Office hosted an in-person community meeting on the PW Digital Gateway Comprehensive Plan Amendment on Thursday, January 27, 2022, at the Beacon Hall Conference Center on the George Mason University SciTech Campus in Manassas. The open house began at 6:00 PM and was followed by in person public comment time after 7:00 PM. Due to a large number of speakers registered for the January 27, 2022, community meeting, a continuation (virtual only) meeting was scheduled for February 3, 2022. This meeting was planned to allow for virtual public comment for those who signed up to participate virtually prior to January 27, 2022 and had not provided in-person public comment. More information about the public engagements as well as materials from the meeting can be found at www.pwcva.gov/PWDigitalGateway.

#### **Public Comments**

Since Initiation of the Comprehensive Plan Amendment the Planning Office has received

thousands of comments from the general public and other organizations in the form of phone calls, emails, letters, online, and in-person comments. The comments provide range from support to opposition. In evaluation of these comments staff provides the following summary:

The following are key themes which emerged in the comments in opposition to the Comprehensive Plan Amendment:

- 1. Concerns about the environmental impacts of the proposed CPA on the County's wildlife, water table, environmental resources, soils, and stormwater runoff.
- 2. Concerns about impacts on cultural resources by the proposed CPA regarding Civil War history, specifically the Manassas National Battlefield Park, historic viewsheds, the Settlement Community, the Thornton School, cemeteries, and other historically significant features.
- 3. Concerns and opposition to the change of previously agricultural designated land to industrial for the development of data centers.
- 4. Request for additional studies to be conducted to further evaluate the feasibility and potential impact of the proposed development.
- 5. Concerns about impacts to adjacent uses including viewsheds, noise, and pollution.
- 6. Concerns about the long-term viability of data center technology and marketability.
- 7. Concerns about energy and water consumption, and sustainability.
- 8. Concerns about the proposed CPA trigger the need for additional transmission lines.
- 9. Concerns about increased traffic.

The following are key themes which emerged in the comments in support of the Comprehensive Plan Amendment:

- 1. Support of anticipated economic activity generated by data centers, an identified targeted industry.
- 2. Support for the potential increase in commercial tax offering relief to residential tax burden and supporting County Infrastructure and services.
- 3. Support for the location offering access to existing transmission lines, fiber optics, and available land.
- 4. Largely supported by property owners within the Study Area.
- 5. Support for the widening of Pageland Lane to relieve traffic.
- 6. Support for reevaluating the land use as it is no longer "rural."

# LONG RANGE LAND USE

The Long-Range Land Use Chapter of the Comprehensive Plan states the policies and action strategies in support of the County's goal to promote a Countywide pattern of land use that encourages fiscally sound development and achieves a high-quality living environment. The Land Use component of the PW Digital Gateway Special Study Area provides additional policies and action strategies that apply specifically to the Study Area.

The PW Digital Gateway Special Study Area establishes Pageland Lane as a technology corridor promoting opportunities for the expanding data center industry. The Study Area is primarily intended for data center and associated uses. Other industrial uses within the corridor are discouraged.

**DGLU POLICY 1**: Encourage high-quality data center development within the Study Area which meets the densities and intensities outlined in the proposed land use map and achieves the vision of creating a world class technology corridor that promotes economic development while preserving and protecting key environmental and cultural resources.

- **DGLU 1.1** The primary use within the Technology/Flex designated areas of the Study Area are data centers and accessory uses. Non-data center uses should be discouraged and proffered out of development proposals within the Study Area. Heavy industrial uses and those uses which generate higher traffic, such as distribution centers, are strongly discouraged.
- **DGLU 1.2** Require development within the Study Area to follow the intensity and density of development as prescribed in the Technology/Flex designation at the T-3 transect density, as shown in Figure 4, with the following additional considerations:
  - 1. The maximum overall intensity of development within the Study Area should be limited to 27 million gross square feet of building area.
  - 2. Encourage development in the Southern District, closest to Manassas National Battlefield Park and Conway Robinson State Forest to develop at the lower end of the T-3 Transect density.
  - Allow development proposals to include land dedicated as POS, Parks and Open Space, to count towards the gross land area when calculating the floor area ratio of the proposed gross development. ER, Environmental Resource Areas, should be excluded from this calculation.

**DGLU 1.3** Coordinate with the Department of Economic Development to monitor and maintain an inventory of development within the Study Area.

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### Technology/Flex (T/F)



The Technology/Flex classification within PW Digital Gateway consists of Industrial areas provide opportunities for technology uses such as data centers, and accessory uses. Non-data center uses are encouraged to be proffered out of development proposals within the Study Area. Heavy Industrial uses and those which generated higher traffic are strongly discouraged that do not require large outdoor storage or produce nuisances such as noise, dust or vibration.

Primary Uses	Secondary Uses	Implementing Zoning Districts
Data Centers	<ul> <li>Office</li> <li>Retail &amp; Service Commercial (supporting)</li> </ul>	<ul> <li>PBD</li> <li>O(F)</li> <li>M-2</li> </ul>
Target FAR	Building Height	Minimum Open Space
0.23 – 0.57	1-3 Stories*	30%

Figure 4: Technology/Flex Land Use Description

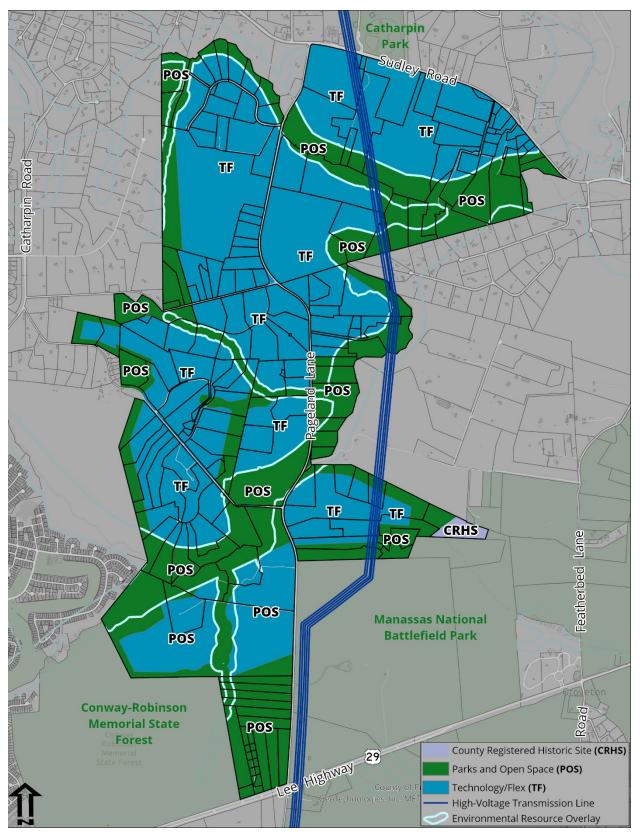


Figure 5: PW Digital Gateway Land Use Plan

# **COMMUNITY DESIGN**

The Comprehensive Plan states the policies and action strategies in support of the County's goal to provide quality development and a quality visual environment throughout Prince William County for residents, businesses, and visitors. The Community Design section of the PW Digital Gateway Special Study Area provides additional policies and action strategies that apply specifically to Study Area.

The PW Digital Gateway Special Study Area establishes Pageland Lane as a technology corridor promoting opportunities for the expanding data center industry. Development within the Study Area should prioritize context sensitive design considerations towards adjacent land uses, historic viewsheds, and natural resources.

Protection of historic viewsheds is important to the economic development of Prince William County, as well as preservation of significant national history. The policies below are necessary to provide these protections and proposed uses need to address these issues as a matter of mitigating the impacts of their proposed uses and structures.

**DGCU: POLICY 1**: Ensure high-quality development within the Study Area that utilizes context sensitive design considerations to ensure development respects existing adjacent uses and historic viewsheds.

- **DGCD 1.1** Require generalized development plans and master zoning plans submitted with applications for rezonings, special use permits, and public facilities to include limits of disturbance, site layouts, colored architectural elevations, and conceptual illustrative and design considerations which show how the proposed development implements context-sensitive design that align with DGCR 1.15 for all structures visible to adjacent cultural designated areas.
- **DGCD 1.2** Require line of sight exhibits for all portions of a development proposal which border adjacent incompatible uses, and historic viewsheds.
- **DGCD 1.3** Encourage site specific designs for buildings that are visible from incompatible uses, the Manassas National Battlefield Park, and the public right-of-way that use innovative design approaches in respect to the building design, screening, and landscaping.
- **DGCD 1.4** Building façade 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 and visible from the Manassas National Battlefield Park where building facades are

encouraged to blend into the surrounding area.

- **DGCD 1.5** Building façades facing and visible from Manassas National Battlefield Park should be non-reflective and earth tone, for example dark green and/or dark brown in color. Other colors may be appropriate 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 and/or other buildings. Alternative paint colors or patterns may be utilized on rooftop screening facing Manassas National Battlefield Park.
- **DGCD 1.6** Encourage design guidelines for landscaping, reforestation, signage and architectural standards for data center sites visible from incompatible uses and public right-of way along 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.
- **DGCD 1.7** All rooftop mechanical equipment should be screened when visible from adjacent cultural, residential, and agricultural designated areas and public rights of way. Ground level mechanical equipment not screened by a principal building topography or vegetation and when visible from adjacent cultural, residential, and agricultural designated areas and public rights of way 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.
- **DGCD 1.8** Require strict conformance with outdoor lighting standards, especially the use of "full cut-off fixtures" for all parking lot and building-mounted lighting.
- **DGCD 1.9** County staff should require rezoning and special use permit applicants to provide detailed acoustic tests and studies to ensure accurate evaluation of potential sound impacts from the proposed development to adjacent residences and cultural resources, and to help ensure that any sound impacts are appropriately addressed. Sound attenuation enclosures or walls around generators and other mechanical equipment, heating and cooling system (including rooftop equipment) should be used where appropriate to minimize noise impacts. Noise levels should not exceed 60 dBA during the daytime hours and 55 dBA during the evening hours when measured at the property boundary of any land planned for CRHS or residential use.

Additionally, development proposals should submit a sound study to ensure compliance and condition times for routine testing of generator equipment and backup power systems. The use of renewable energy source is encouraged to further reduce noise impacts.

DGCD 1.10 Substations are encouraged to be located to the interior of proposed development or abutting to the existing high voltage line corridor, when possible, to minimize viewshed impacts. Additionally, substations that are visible to Manassas National Battlefield Park or from surrounding major roadways (Pageland Lane, Sudley Road, Lee Highway) are encouraged to use innovative designs to enhance screening from adjacent non-compatible uses. Up to 10 acres of land east of the electric high voltage power lines in the Southern District may be used for substations.

# **CULTURAL RESOURCES**

The Comprehensive Plan states the policies and action strategies in support of the County's goal to identify, preserve, and protect Prince William County's significant historical, archaeological, architectural, and other cultural resources including those significant to the County's minority communities, for the benefit of all of the County's residents and visitors. The Cultural Resources section of the PW Digital Gateway Special Study Area provides additional policies and action strategies that apply specifically to the Study Area, in addition to those policies in the Cultural Resources section of the Comprehensive Plan.

The PW Digital Gateway Special Study Area is located northwest of the congressionally designated Manassas National Battlefield Park and contains portions of the Manassas Battlefield Historic District (076-0271) as identified on the National Register of Historic Places. Due to the cultural sensitivity of this area, all development within the PW Digital Gateway Special Study Area should be developed with the utmost sensitivity to cultural resources and historic viewsheds while leveraging opportunities to provide meaningful contributions to preservation and interpretation of the extensive local and national history.

**DGCR POLICY 1**: All development within the PW Digital Gateway Special Study Area should prioritize preservation and protection of existing cultural resources, minimizing impacts to significant historic viewsheds, while leveraging opportunities to provide meaningful contributions to preservation and interpretation of the extensive local and national history.

- **DGCR 1.1** County staff should require rezoning, special use permit, and public facility review applicants to provide detailed viewshed analyses to ensure accurate evaluation of potential visual impacts from the proposed development to significant historic viewsheds and to help ensure that any visual impacts are appropriately addressed. These analyses include, but are not limited to, topographic, LIDAR-assisted line of sight, digital imaging, drone visual horizon tests, augmented reality digital imaging, or other appropriate techniques and technologies determined by County staff, in consultation with Manassas National Battlefield Park. These analyses should identify key observer points, in consultation with the Planning Director or their designee and Manassas National Battlefield Park staff, to use in the viewshed analysis.
- **DGCR 1.2** Because of the overall historical and cultural sensitivity of the area, County staff should require rezoning, special use permit, and public facility review applicants to provide a Phase I cultural resource studies with the first submission of their application. If warranted, County staff should require the applicant to conduct a Phase II evaluation during

review of the land use application. If a site or sites is determined significant, the first treatment option should be to preserve the resource in place with consideration for access to the public. Site or sites that fall within the following time periods should strongly be considered for in place preservation: Prehistoric Native American Settlement, Early National Period (1790-1829), Antebellum Period (1830-1860), Civil War (1861-1865), Reconstruction and Growth (1866-1916), World War I to World War II (1917-1945), The New Dominion (1946 to the present).

- **DGCR 1.3** Encourage property owners within the plan area to curate and donate archaeological collections discovered during development of property in the plan area which are during development of property in the plan area to the County.
- **DGCR 1.4** Encourage property owners within the plan area to curate and donate archaeological collections related to the mission of the Manassas National Battlefield Park ("MNBP") to the MNBP. If MNBP does not accept the donations of such an archaeological collection, encourage the property owner to curate and donate such collection to the County.
- **DGCR 1.5** In the Southern District (shown in Figure 1), building height, including roof top mechanicals and parapets, should be limited to 45' feet, unless a viewshed analysis is provided that shows, at the studied building height, either no impacts to viewsheds from Manassas National Battlefield Park or a mitigated impact to viewsheds from Manassas National Battlefield Park. In the Northern District (shown in Figure 1), building height, including roof top mechanicals and parapets, should be limited to 85' feet, unless a viewshed analysis is provided that shows, at the studied building height, either no impacts to viewsheds from Manassas National Battlefield Park. In the Northern District (shown in Figure 1), building height, including roof top mechanicals and parapets, should be limited to 85' feet, unless a viewshed analysis is provided that shows, at the studied building height, either no impacts to viewsheds from Manassas National Battlefield Park or a mitigated impact to viewsheds from Manassas National Battlefield Park. In other locations in Figure 1, rezoning and special use permit requests should analyze viewsheds from Manassas Battlefield Park for heights of 45' and higher for potential impacts to identified historic viewsheds.
- **DGCR 1.6** Employ internal vegetative buffers (such as between structures), within proposed development outside of MNBP, to soften or mitigate impacts to historic viewsheds.
- **DGCR 1.7** Encourage significant mitigation of viewshed impacts including but not limited to proffered maximum elevations, of all structures, above mean sea level ("AMSL") for all development. Proffered maximum elevations

shall include rooftop mechanical equipment and parapets, parking lot lighting fixtures.

- **DGCR 1.8** Evaluate through Phase II cultural resources studies, with scopes of work approved by the County Archaeologist, the following potential resources: Honeywood Site complex (076-0138; also known as Pageland I); Pageland II complex (076-0137); the Phillips Cemetery; and the Civil War Mass Grave. If warranted, (1) preserve these area(s) in situ (in place), (2) work with any interested property owner to consider transferring these resources to an entity or organization that provides for the long-term preservation of these resources and (3) work with any interested property owner to allow access to the public for interpretive programming.
- **DGCR 1.9** Work with the County Archeologist to develop a detailed history of the antebellum dwelling known as Honeywood (076-0138, Pageland I), which is located on the original Pageland landholdings of the Marsteller family.
- **DGCR 1.10** Where appropriate, encourage the dedication of privately owned land located within the legislative Boundary of Manassas National Battlefield Park to the MNBP.
- **DGCR 1.11** The County should encourage and facilitate the voluntary establishment of preservation easements on private land, by landowners, to protect historic landscapes, viewsheds, historic districts, individual architectural and archaeology sites, and other cultural resources. The County should cultivate private, local, State, and federal partners, including private landowners, to accomplish this task.
- **DGCR 1.12** The County should encourage and facilitate private landowners to voluntarily provide public access and public trails to viewsheds and other cultural resources on private land, such as the Phillips Cemetery.
- **DGCR 1.13** County staff should require rezoning, special use permit, and public facility review applicants to conduct archaeology and historical research (including oral histories and other methods of historical research) to determine the boundaries of the "Settlement" community and Thornton School. Based on this archaeology and historical research, and the recommendations therein, and other relevant information, County staff should work with applicants on appropriate, site-specific mitigation measures.

- **DGCR 1.14** Prepare an interpretative plan that includes elements such as, but not limited to: (i) historical markers and other interpretative media in areas of public access; (ii) a self-guided brochure for the trail system incorporating interpretation of historic resources along the trail; (iii) interpretative kiosks in the two proposed parks in this section of the Comprehensive Plan; and (iv) digital media (including augmented reality). The interpretative plan should be developed in consultation with the Planning Director, or their designee, the County's Office of Historic Preservation, the Manassas National Battlefield Park and shall be submitted within one (1) year of approval of the first rezoning application or at the time of the first site plan and thereafter, each applicable site plan should include those elements of the interpretative plan that are to be implemented by that site plan which are appropriate and consistent with applicable law.
- **DGCR 1.15** Prepare a master landscaping, vegetation, fencing, and signage plan ("Plan"), with phasing and an implementation strategy for this comprehensive plan area. This master landscape plan should be submitted within one (1) year of approval of the first rezoning application for review and approval by the County Archaeologist, and thereafter, each applicable site plan shall include those elements of the plan that are to be implemented by that site plan which are which are appropriate and consistent with applicable law. The intent is to design a Plan that mitigates adverse effects of development on the Manassas National Battlefield Park, Conway Robinson State Forest and the surrounding area; integrates new development with the historic landscape; and integrates new development with proposed parks and open spaces and trails; through a set of context sensitive, design guidelines. The intent is to build a strong, practical, and adaptable framework.
- **DGCR 1.16** Cemeteries located in the plan area should be preserved in place and treated in accord with Section 32-250.110 of the County's Ordinance (Preservation of Existing Cemeteries). However, based on site-specific evaluation, a larger cemetery preservation area may be appropriate to help ensure that a cemetery is protected and improve the transition between the development and each cemetery.
- **DGCR 1.17** Human Remains Reinterment. Due to this CPA area exhibiting a high potential for unmarked burials related to military activity and African American heritage, if a rezoning and/or special use permit applicant discovers human remains during cultural resource studies, or during

land disturbance activities, the applicant shall comply with all federal and state law regarding the removal and reinterment of those remains to an appropriate location on the property. County staff should require rezoning and special use permit applicants to provide archaeological monitoring to identify remains during initial land disturbance activity.

**DGCR 1.18** County staff should require, where appropriate based on site-specific assessment, rezoning and special use permit applicants to conduct surveys, archaeology and historical research (including oral histories and other methods of historical research) to determine the existence of any cultural or historical resources on the application site related to Jennie Dean or any other history. Based on these surveys, archaeology and historical research, and the recommendations therein, and other relevant information, County staff should work with applicants on appropriate, site-specific mitigation measures.

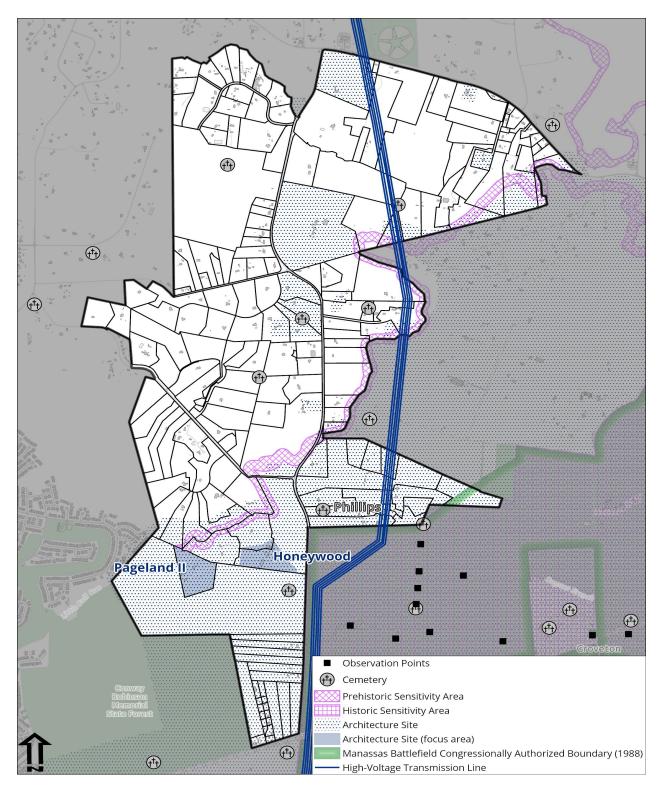


Figure 6: PW Digital Gateway Cultural Resources Map

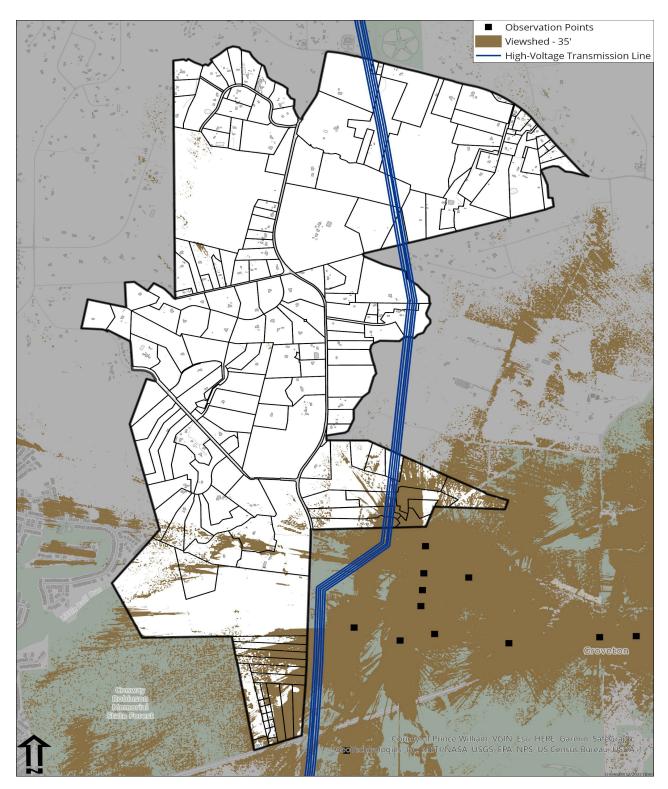


Figure 7: 35' Viewshed Analysis

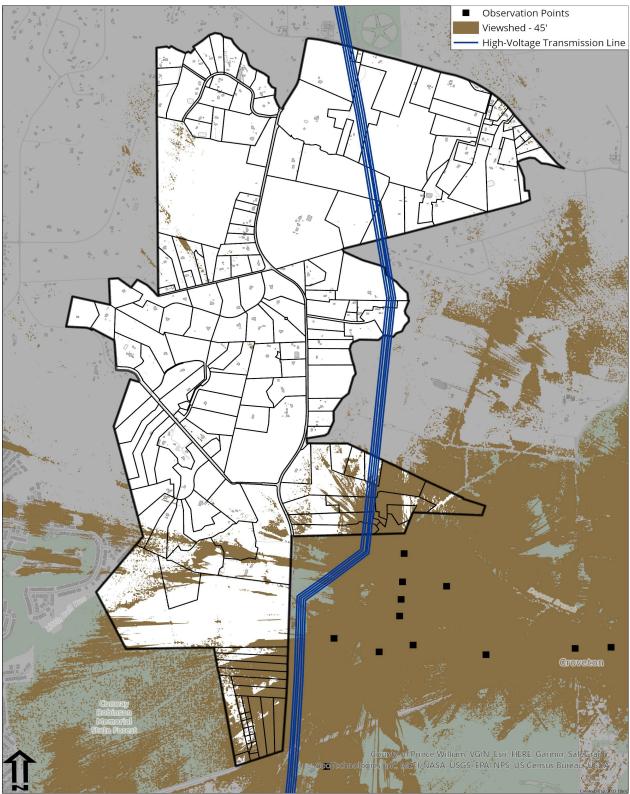


Figure 8: 45' Viewshed Analysis

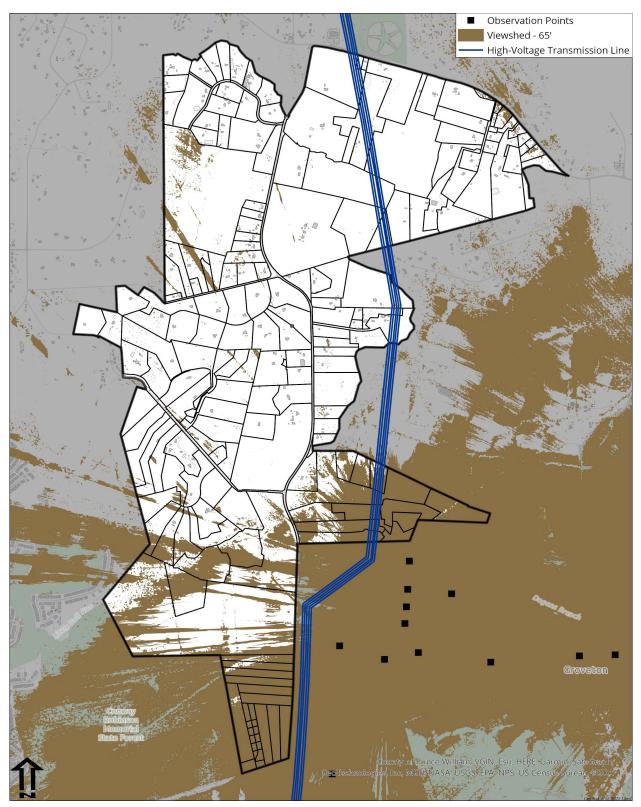


Figure 9: 65' Viewshed Analysis

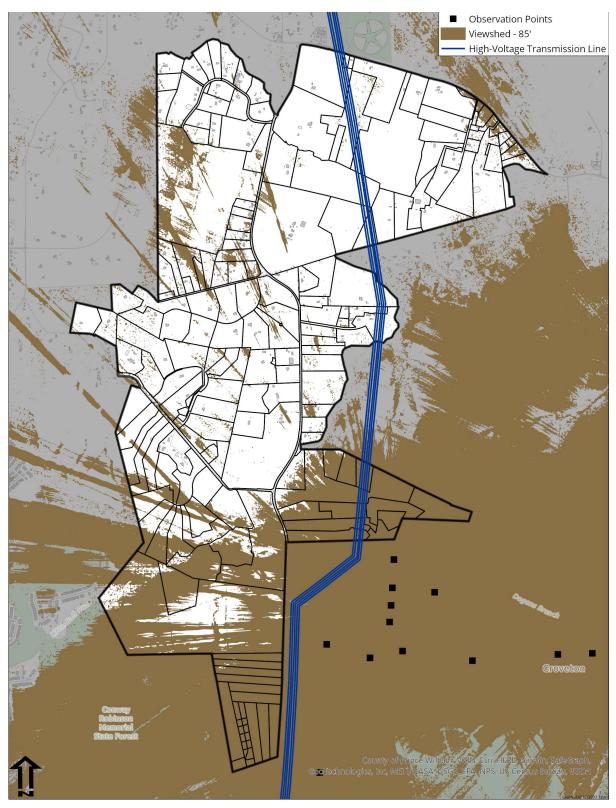


Figure 10: 65' Viewshed Analysis



Figure 11: 95' Viewshed Analysis

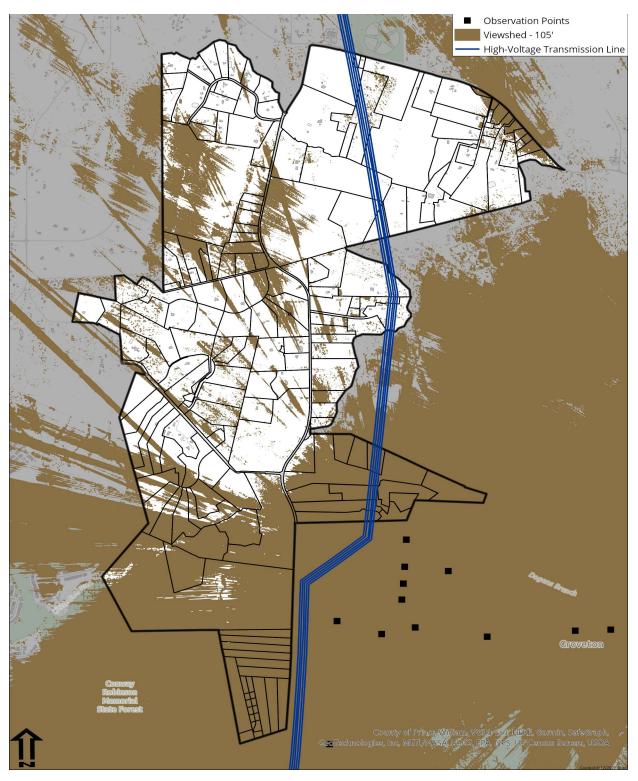


Figure 12: 105' Viewshed Analysis

# ECONOMIC DEVELOPMENT

The Economic Development Chapter of the Comprehensive Plan states the policies and action strategies in support of the County's goal to maintain an economic development climate that will attract and foster the expansion of environmentally sound industries to create quality jobs, diversify the non-residential tax base, and encourage people to live and work in Prince William County. The Economic Development component of the PW Digital Gateway Special Study Area provides additional policies and action strategies that apply specifically to Study Area.

PW Digital Gateway represents a substantial investment with the potential to propel Prince William County as a leader in the Data Center Industry from a regional, national, and global level. This includes a significant increase in the County's commercial tax revenue, expansion of an identified targeted industry identified by the Board of County Supervisors, and opportunity to promote Prince William County as a "high-tech" community.

**DGED Policy 1**: Promote development that furthers enhances economic vitality, creates a range of employment opportunities, and promotes public private partnership for the benefit of the County and residents.

- **DGED 1.1** Increase the commercial tax base by identifying a pipeline of available land to meet future data center industry projections.
- **DGED 1.2** Reduce competition between data centers and distribution facilities, which are both targeted industries, for existing M-1, Heavy Industrial, and M-2, Light Industrial, zoned land by providing additional land for data center development.
- **DGED 1.3** Continue the growth of the information communication technology sector and related small business vendor and contractor businesses.
- **DGED 1.4** Create a range of inclusive job opportunities to increase at place employment for residents with different skills sets, from construction workers, information communication technology related trades, to high-paying technology jobs.
- **DGED 1.5** Encourage Partnership with George Mason University Science and Technology campus to support their Master Plan for creating a Center for Data Center Excellence at the Prince William campus.

- **DGED 1.6** Partner with the Northern Virginia Community College and Prince William County Public Schools to create opportunities for information communication technology related internships and apprenticeships.
- **DGED 1.7** Support public private partnership with data center and tourism industries, the Virginia Department of Conservation and Recreation, and the National Parks Services to maintain and increase programing to ensure visitors have authentic, accurate, and educational experiences.
- **DGED 1.8** Support high design standards that minimize Manassas National Battlefield Park viewshed impact while creating high-end technology office façades towards roadways.
- **DGED 1.9** Where possible, leverage recreational facilities and activities to promote outdoor recreation and complementary industries such as breweries, wineries, and tourism.

## **Tools & Incentives**

Prince William County already offers competitive incentives to attract target industries and businesses to the County. These include competitive tax rates, the Prince William County Economic Development Opportunity Fund and Low Business Tangible Personal Property Tax Rates. While PW Digital Gateway is not currently part of a Targeted Revitalization Zone, HUB Zone or Opportunity Zone, the County can leverage other powerful tools and incentives to encourage and to shape development in the PW Digital Gateway Special Study Area. Assistance in sharing the costs of new and upgraded public infrastructure such as road improvements, water extension, sewer extension, and parks, open space and trails are examples of improvements that the County can facilitate through tax increment financing, business improvement districts, and other programming. Other tools exist and may be options to aid the development of PW Digital Gateway Special Study Area, however the following tools may be available to supporting economic growth within the Special Study Area.

## Available Tools, Incentives, and Programs

#### **Tax Increment Financing**

Tax increment financing ("TIF") is a way to set aside, for a limited period of time, all or part of the presumed increment of new taxes generated by new development, to invest in public improvements. New and improved roads, expanded sewer and water systems, undergrounding of utilities, streetscapes, as well as public parking structures and park space, are some of the potential uses of TIF revenue. Projects can be accomplished on a pay-as-you-go basis or through the issuance of general obligation bonds. Another approach is to create a 'virtual TIF' where the County would participate on a case-by-case basis through diversion or abatement of incremental taxes via a development agreement with private sector partners.

#### **Business Improvement Districts**

The County can establish by ordinance a business improvement district ("BID") in a defined area within which property owners pay an additional tax on real estate in order to fund improvements or services within the district's boundaries. Taxes generated by BIDs can be used for district maintenance, security, capital improvements, marketing and promotion, facilities operation and staffing, and more. The services provided by a BID would be supplemental to those already provided by the County.

#### **Industrial Revenue Bonds**

The County can issue tax-exempt or taxable industrial revenue bonds ("IRBs") on behalf of qualified companies to finance the construction of buildings and related infrastructure (including parking). Examples of qualifying projects are construction of corporate headquarters and facilities for nonprofit corporations, such as trade associations.

#### **Public/Private Partnerships**

The Prince William County Economic Development Department already maintains a host of state and local partnerships to promote cooperative economic development in the County. The complete list can be found here: <u>http://www.pwcecondev.org/state-local-partners</u>

## GoVirginia Support and Grant Programs

Prince William County is part of the GoVirginia Region 7. GO Virginia supports programs to create more high-paying jobs through incentivized regional collaboration between business, education, and government to diversify and strengthen the economy in every region of the Commonwealth. The organization maintains a database of grants programs and administers grants regionally.

## State-Level Grant Programs and Incentives

The Commonwealth of Virginia through the Virginia Economic Development Partnership ("VEDP") offers a catalogue of incentives to promote economic development throughout the commonwealth. These incentives include grants for localities, direct financial assistance

to businesses, tax incentives for businesses, infrastructure support and training programs. The most applicable programs are listed below. The full list is available at: <u>https://www.vedp.org/incentives</u>

### **Discretionary Incentives**

The Commonwealth of Virginia offers an array of discretionary incentives for competitive projects evaluating a Virginia location, providing financial inducements that make good fiscal sense for all parties. Performance-based incentives target the needs of companies as well as the development plans of localities and the Commonwealth.

## Commonwealth's Development Opportunity Fund ("COF")

A discretionary financial incentive established to support projects that create new jobs and investment in accordance with certain criteria established by state legislation. Grants are made to the community and may be used for such things as site acquisition and development; transportation access; public or private utility extension or capacity development; construction or build-out of publicly or privately-owned buildings or training.

#### Infrastructure Assistance

The Virginia Department of Transportation ("VDOT") and the Virginia Department of Rail and Public Transportation ("DRPT") offer several programs to assist localities in providing adequate infrastructure access for industrial and commercial projects. These programs are designed to assist Virginia localities in attracting companies that will create jobs and generate tax revenues within the locality.

#### **Economic Development Access Program**

A state-funded incentive to assist localities in providing adequate road access to new and expanding manufacturing and processing companies, research and development facilities, distribution centers, regional service centers, corporate headquarters, government installations, and other basic employers with at least 51% of the company's revenue generated from outside the Commonwealth. The program is administered by the VDOT.

## Transportation Partnership Opportunity Fund ("TPOF")

Awarded at the discretion of the Governor in the form of grants, revolving loans, or other financial assistance to an agency or local government of the Commonwealth for activities associated with eligible transportation projects. The VDOT administers TPOF. Projects developed with monies from TPOF do not become private property, but rather become or remain public property following completion. The transportation improvements have to be accomplished according to VDOT standards and specifications and have to be maintained by the appropriate public entity pursuant to relevant agreements.

## **GREEN INFRASTRUCTURE**

The Parks, Recreation and Tourism, Open Space, and Environmental Chapters of the Comprehensive Plan state the policies and action strategies in support of the County's goals to preserve, protect, and enhance the significant environmental resources, open space, and opportunities for both passive and active recreation which promote a healthy lifestyle for County residents. The Green Infrastructure component of the PW Digital Gateway Special Study Area provides additional policies and action strategies that apply specifically to the Study Area.

The PW Digital Gateway Special Study Area provides an opportunity to ensure a robust and connected system of greenways, trails, open space, and parks which provide a benefit to the environment, County residents, and local wildlife.

The following three parks are envisioned in Green Infrastructure Map to promote meaningful open space preservation and cultural resource protection:

- Southern Community Park Community-sized park located between Manassas National Battlefield Park and Conway Robinson State Forest Park at the southern entrance to the corridor. The park may allow for both passive and active recreation, including but not limited a southern trailhead providing access to the overall trail network, equestrian facilities, or interactive passive recreation such as orienteering or geocaching. Tree preservation is envisioned adjacent to Conway Robinson State Forest.
- 2. Thornton School Cultural Resource Park A cultural resources type park providing opportunities for the education and preservation of local history including the Thornton School and the "Settlement Community".
- **3.** Natural Cultural Resources Park A cultural resources park which is intended to be primarily preserved in a natural state and allow for opportunities for passive recreation.

The proposed land uses will have an impact on existing wildlife corridors, the uses may be incompatible with adjacent uses and the employment center will need access to open space, trails for pedestrian and bicycle commuting. As such, the policies below provide necessary mitigation of the impacts of the potential uses in this corridor. As a major employment center in the County, which will be home to many employees, it is imperative that proposed development provides adequate incompatible use buffers, open space for employees to access during their workday as well as providing necessary resources for pedestrian and bike commuting as a means of transportation facilities to the proposed developments. Additionally, future development will displace existing wildlife corridors and mitigating the displacement of these corridors is vital to Prince William County.

**DGGI Policy 1**: Prioritize the creation of a connected series of parks and open spaces which allow for a variety of passive and active recreational opportunities in a context sensitive to the existing cultural resources, parks, and communities.

**DGGI 1.1** Establish Protected Open Space that prioritizes the establishment of a substantial amount of public and private protected open space. Protected Open Space should consist of two types of open space aimed specifically at preserving and restoring natural landforms: Natural Open Space as defined in the Zoning Ordinance and Restored Open Space. Restored Open Space consist of previously disturbed areas that will be restored to native forest, wetlands or meadows during development and subsequently protected from further disturbance. Protected Open Space areas should include:

1. Environmental Resource areas which include FEMA floodplain, and FEMA flood Hazard, natural 100-year floodplains as defined by the DCSM, Chesapeake Bay RPAs, wetlands, 25% or greater slopes, areas with 15% or greater slopes in conjunction with soils with severe limitations, areas, of marine clays, public water supply sources, and critically erodible shorelines and streambanks.

- **DGGI 1.2** Utilize qualified third-party Virginia Conservation Easement Act conservation easements to permanently protect public and private natural open space areas.
- **DGGI 1.3** Encourage applicants to provide above minimum requirements for open space with an emphasis on natural open space where they exist and restoration of forest cover where it does not exist. The overall goal of the study area is to achieve 30% natural open space over the entire study area.
- **DGGI 1.4** Establish and protect the wildlife corridors identified in the Green Infrastructure map. These corridors are encouraged to be 500' in width. Where reduced the corridors should be a minimum of 300' in width. Any shifting or relocation of corridors should ensure effective wildlife movement throughout the Study Area. The Little Bull Run wildlife corridor should extend under a new Pageland Lane bridge.
- **DGGI 1.5** Encourage the restoration of previously disturbed areas within the P&OS designation to native forest, wetlands, and/or meadow. Priority should be given to areas which contribute to wildlife corridors or provide screening and buffering to the Manassas National Battlefield Park, Conway Robinson State Forest, and adjacent incompatible uses.

- DGGI 1.6 Buffers along the perimeter of the Study Area should be as shown Figure 11, PW Digital Gateway Green Infrastructure Map. Buffers should prioritize preserving and restoring existing forest and native meadows. Partner with the Planning Office and Manassas National Battlefield Park to identify areas where mitigation of viewshed impacts from development prevail over meadow restoration.
- **DGGI 1.7** Minimize stormwater runoff through the use of Low Impact Development ("LID") design, wet ponds, and other methodologies recommended in current state and local stormwater ordinances. Applicants should 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 combination of best management practices that reduce the post-development phosphorous loads leaving the site beyond the state minimum requirements are encouraged.
- **DGGI 1.8** Encourage the use of engineering and design solutions that reduce stormwater runoff and help mitigate downstream flooding, to contain pollutants on site and to reduce downstream erosion. Areas of Reforestation and the incorporation of Best Management Practices ("BMP") and/or Low Impact Development ("LID") facilities should be included with rezonings with the goal of reducing the peak flow rate of runoff to "good-forested condition" on development areas, employing LID practices (such as, but not limited to, cisterns, rain gardens, wet ponds, use of storm water for landscaping/irrigation, bioretention facilities, permeable pavers, filtered strips ,tree box filters and other innovative storm water management techniques), along with regional stormwater facilities and other innovative techniques to help achieve these goals.
- **DGGI 1.9** Developers should minimize land erosion and siltation 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. Additional erosion control measures, such as the use of the polymer polyacrylamide (PAM) to reduce turbidity, construction phasing, larger sediment basins, and two-layer erosion controls are encouraged as appropriate to site conditions.
- **DGGI 1.10** Adhere to all DCSM requirements for canopy coverage and internal parking lot landscaping.

- **DGGI 1.11** Strongly encourage new development to remove or abandon existing wells and septic systems, per Health Department requirements, to protect the local aquifer.
- **DGGI 1.12** As consistent with DGWS 1.2, strongly encourage the use of closed loop water, or no-water cooling systems, and other water efficient systems to minimize impacts to the County's water resources.
- **DGGI 1.13** Work with the Virginia Department of Environmental Quality ("DEQ") to expand their water quality monitoring program to include sites along the Little Bull Run and Lick Branch within the study area to monitor for any changes to the water quality and health of these streams. Collaborate with UOSA, Fairfax Water, and other relevant stakeholders in the implementation of additional waterway monitoring on these sites.

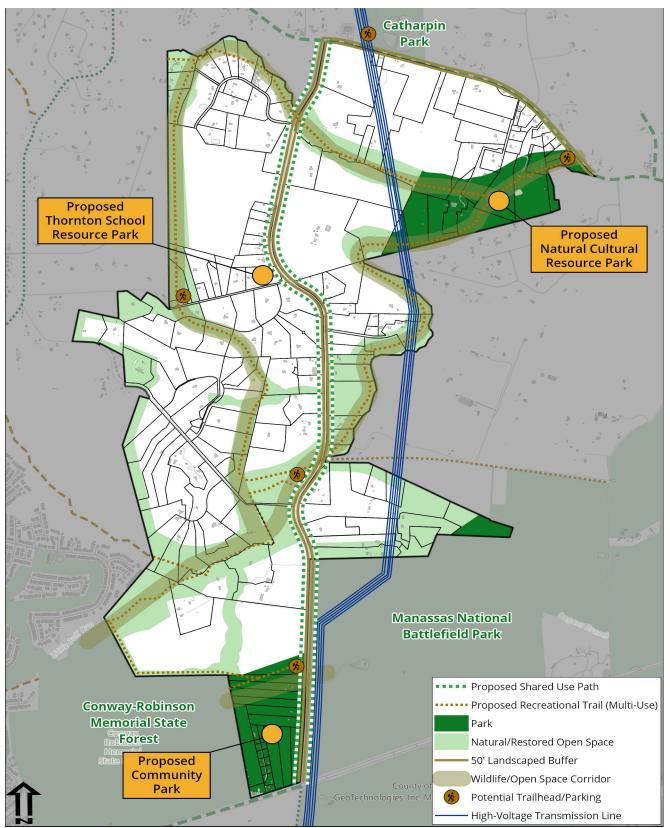


Figure 13: PW Digital Gateway Green Infrastructure Map

# MOBILITY

The Mobility Chapter of the Comprehensive Plan states the policies and action strategies in support of the County's goals to create a multimodal transportation network (including roadways, transit, railroad, airplanes and trails) that allows for the safe and efficient movement of goods and people throughout the County and into surrounding jurisdictions. The Mobility component of the PW Digital Gateway Special Study Area provides additional policies and action strategies that apply specifically to the Study Area.

The PW Digital Gateway Special Study Area includes a robust mobility network that proposes enhancements to the local roadway and trail network. The following policies are provided to meet the needs of the proposed development while supporting the County's goal to reduce through traffic through the Manassas National Battlefield Park, ensure acceptable levels of service, and provide enhanced multimodal connectivity.

As a major employment center of the County, provision of open space and trails is an important mitigation of mobility needs for this corridor. Provision of trails and sidewalks, bike lanes, etc. will help to mitigate the proposed land uses in this corridor and provide for a multi-modal mobility network.

**DGM POLICY 1**: Establish a Multimodal transportation network which enables the safe and efficient movement of people within the Study Area.

- **DGM 1.1** Pageland Lane should be widened to 4 lanes utilizing a modified Minor Arterial cross section (see figure 15) with shared use paths on both sides and a landscaped median utilizing native plant species.
- **DGM 1.2** Coordinate with Manassas National Battlefield Park, Conway Robinson State Forest, and the County Arborist to develop a Comprehensive Landscape Plan utilizing native plants along public rights of way and private road easements and in medians to enhance the streetscape and reduce adverse environmental impacts of roadway improvements. Buffering along Pageland Lane should be a minimum of 50' but is encouraged to be more when appropriate.
- **DGM 1.3** Primary access to development within the Study Area should be focused on Pageland Lane. Alternative access will be considered during rezoning and/or Special Use Permit (SUP) application process. Alternative access /crossover spacing on Pageland Lane may be considered by the County and Virginia Department of Transportation (VDOT). Access crossovers should be limited to 900 feet minimum but are encouraged to be 1,100 feet to ensure that Pageland remains 45 mph. Intersections, where possible, should be roundabouts and other innovative intersection

designs which promote pedestrian and motorist safety, and preclude the use of the corridor as an effective cut through. Roadway improvements, where possible, should-offer opportunities for interpretive features/amenities such as artillery emplacement or monuments which do not hinder visibility but contribute to the interpretive history of the area. Roundabouts and other similar roadway designs offer a quieter alternative to vehicles starting and stopping at traffic signals with less light pollution for the Battlefield.

- **DGM 1.4** Support the goal of Manassas National Battlefield Park to restrict through traffic in the park on Route 29 and Sudley Road.
- **DGM 1.5** Enhance access to cultural and environmental assets through the creation of a robust multimodal trail network, providing connections between and greater access to Conway Robinson State Forest, the Manassas National Battlefield Park, the Catharpin Greenway and Catharpin Park. Trailhead and parking areas should be strategically placed along the system to allow for multiple access points.
- **DGM 1.6** Evaluate new opportunities for pedestrian and equestrian connections to Manassas National Battlefield Park.
- **DGM 1.7** 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 and Uniform Resource Locator ("URL") to provide trail maps, contact information, language translation services, and user guides.
- **DGM 1.8** Encourage creation of a variety of accessible public recreational trail experiences (bicycle, equestrian, nature trails, orienteering, etc.) for a diverse mix of populations (i.e., various age groups, level of mobility, etc.)
- **DGM 1.9** Encourage participation in an "adopt-a-trail" program by data center owners and other private parties.
- **DGM 1.10** Require all buildings to include bike racks, to promote and encourage multimodal access.

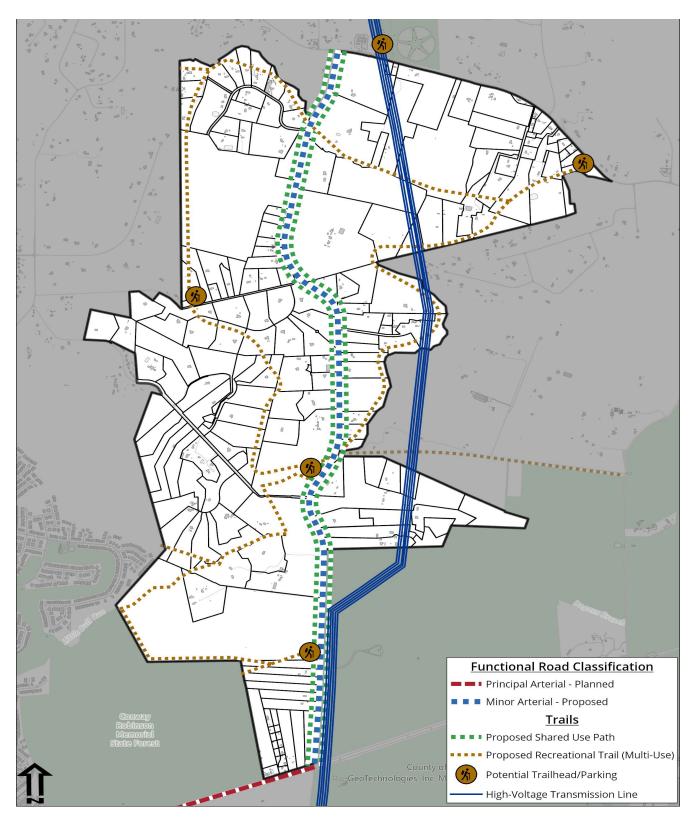


Figure 14: PW Digital Gateway Mobility Map

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#### Pageland Lane Modified Minor Arterial

Pageland Lane is planned as a 4-lane modified Minor Arterial including shared use paths on both sides and a landscaped median with native plantings coordinated with the County Arborist, Manassas National Battlefield Park and Planning Office. Intersections are encouraged to be designed as roundabouts with a design speed of 45 mph.



## WATER AND SEWER

The Sanitary Sewer and Potable Water Chapters of the Comprehensive Plan states the policies and action strategies in support of the County's goals to provide adequate potable water and wastewater treatment in a cost effective and efficient manner. The Water and Sewer component of the PW Digital Gateway Special Study Area provides additional policies and action strategies that apply specifically to Study Area.

The PW Digital Gateway Special Study Area is not currently served by public water and sewer. The following policies are provided to ensure adequate infrastructure is provided to support the proposed development in a cost effective and environmental friend manner.

**DGWS Policy 1**: Plan for the extension of public water and sewer service along Pageland to support the proposed development, ensuring the cost of extension of service and capacity increase needed to support the new development in Study Area are not borne by existing customers.

- **DGWS 1.1** Public water 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. Strongly discourage the use of wells or other groundwater sources to provide water service to data center facilities.
- **DGWS 1.2** Encourage efficient water usage for data center development within the Study Area, such as utilized "closed loop water" or "no water" cooling systems. Encourage development to further minimize water consumption through the use of recycling water.
- **DGWS 1.3** Ensure any water capacity increase need to support the proposed development will be paid for by development fees.
- **DGWS 1.4** Sewer will be provided to the corridor through use of gravity sewer that will be connected to a proposed pump station or stations within the corridor. The pump stations will be connected to the existing sewer system via a proposed force main running south along Pageland Lane to connect to the existing force main(s) at the intersection of Route 29 and Heathcote Boulevard, where they cross Interstate 66 within an existing tunnel. 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. Drain fields should not be used to serve data center development.

- **DGWS 1.5** Continue to coordinate with the Service Authority and Upper Occoquan Service Authority ("UOSA") to plan for any expansion which may be required by the UOSA Plant.
- **DGWS 1.6** Conduct additional planning studies as needed to determine the water and sewer transmission systems needed to serve the proposed development in conjunction with the Service Authority Master Plan.
- **DGWS 1.7** Require the design and construction of infrastructure necessary to serve proposed development to be borne by the proposed development.
- **DGWS 1.8** Strongly encourage new development to remove or abandon existing wells and septic systems, per Health Department requirements, to protect the local aquifer.

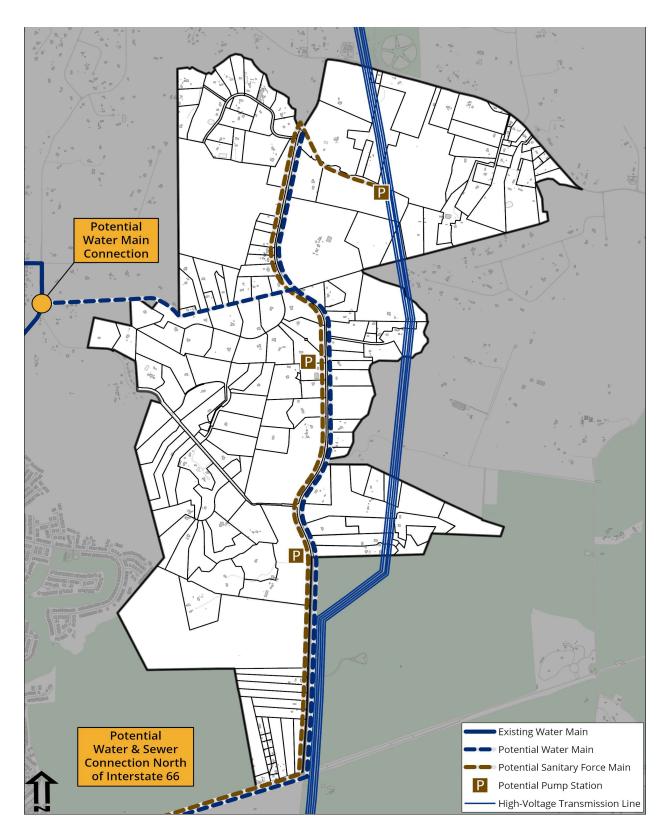


Figure 16: PW Digital Gateway Water & Sewer Map

# SUSTAINABILITY

While there is no Comprehensive Plan chapter focused on sustainability, it has been identified as a focus area in the Prince William County 2021-2024 Strategic Plan. The Sustainability component of the PW Digital Gateway Special Study Area provides additional policies and action strategies that apply specifically to Study Area.

The PW Digital Gateway Special Study Area provides an opportunity to encourage development which provides world-class sustainability initiatives which prioritize the environmental, social, and fiscal impact of development.

The Board has endorsed energy goals which are significant. In order to meet those goals, the below policies are necessary mitigation of the proposed land uses. Proposed development will impact production of greenhouse gasses and the below policies are to provide mitigation of these impacts and will help the County reach the greenhouse gas emission goals endorsed by the Board.

**DGSU POLICY 1**: Encourage development with the Study Area to be a steward of worldclass innovation and sustainability implementing a variety of sustainability initiatives aimed at environmental protection, reducing carbon emissions and energy conservation.

- **DGSU 1.1** Data centers are encouraged to utilize a variety of sustainability initiatives such as:
  - a) Reduce the heat island effect by minimizing impervious areas and providing enhanced landscaping.
  - b) Reduce, control, and treat surface runoff through effective storm water practices that treat the quantity and quality of runoff above minimum standards.
  - c) Onsite renewable energy such as solar power.
  - d) Aeration of water retention using solar power.
  - e) Apply best practices for erosion control.
  - f) Provide electric vehicle ("EV") charging stations in data center employee parking areas to encourage EV use.
  - g) Require the use of LEDs for all interior and exterior lighting.
  - h) Minimize land disturbance.
  - i) Recycle construction material waste.

- j) Incorporate heat reflective roofing.
- k) Use sustainable building materials in the construction of data centers.
- I) Capture and use 100% of reclaimed water for non-potable use.
- m) Trap and reuse heat sources to the maximum extent possible
- n) Incorporate other innovative technologies to reduce power consumption.
- o) Achieve LEED-Core and Shell standards.
- Preparation of a winter management plan (e.g., SaMS toolkit) to minimize the use of sodium and chloride, and to address any impacts of their use.
- **DGSU 1.2** Encourage enhancement of indoor environmental quality ("IEQ") through the maximization of daylighting, ventilation and moisture control, and avoiding materials with high-VOC emissions.
- **DGSU 1.3** 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 and/or the office components are encouraged to purse LEED-Core and/or Shell or other, similar programs related to building design and construction techniques. Equivalency to these standards is an acceptable alternative to actual certification.
- **DGSU 1.4** Data center operators are encouraged to purchase clean energy through Power Purchase Agreements (PPAs) or renewable energy certificates (RECs).
- **DGSU 1.5** Encourage the use of less carbon intensive or carbon neutral energy generation for backup generation systems.
- **DGSU 1.6** County staff should require rezoning and special use permit applicants to provide detailed environmental impact analyses consistent with existing County policies to ensure accurate evaluation of potential impacts from the proposed development to any environmentally sensitive areas and to help ensure that any water quality impacts are appropriately mitigated

# LEVEL OF SERVICE

The proposed development in this Comprehensive Plan Amendment will have significant level of service needs related to transportation, trails, sidewalks, open space, access to services and mitigation of historical and cultural resources. Employment centers are filled with employees who need access to outdoor space for their health, need access to multimodal mobility systems for bike and pedestrian commuting, and the uses must mitigate incompatibilities with buffers.

Within each section of the Study Area specific infrastructure improvements are proposed to meet the needs of the anticipated build-out proposed in the Plan. The Level of Service component provides additional policies to ensure the successful implementation of these infrastructure improvements coincide with development and are equitably provided by each development within the Study Area where appropriate and consistent with applicable law.

The below Policy and Action Strategies are provided to help establish the necessary infrastructure, facilities, and services to meet the needs of the Study Area based on the Level of Service standards identified in the Comprehensive Plan.

**DGLOS Policy**: Require development applications to contribute to the overall infrastructure proposed in the Plan, where appropriate and consistent with applicable law. Contributions may be through the dedication of land, easements, or facilities, and/or monetary contributions relative to the impacts associated with their development project.

- **DGLOS 1.1** Study and identify a method for contribution towards the total acres of parks and open space facilities that promote environmental and cultural resource preservation, and linear miles of trails as identified within the Plan.
- **DGLOS 1.2** Coordinate with Prince William County Service Authority to develop and identify infrastructure and capacity improvements needed to serve the Study Area. Development should provide any cost associated with water and sewer infrastructure and proportional capacity improvements necessary to serve the development.
- **DGLOS 1.3** Explore funding mechanisms to fund the widening of Pageland Lane including but not limited to joint public private partnerships, Transportation Improvement Districts, or state and federal grant programs.
- **DGLOS 1.4** Regularly monitor the adequacy of public facilities throughout the Study Area.

## **IMPLEMENTATION MATRIX**

The intent of this section is to identify actions that will need to be undertaken to implement the plan. The recommendations in this section include the timeframe, policy area, action, and coordinating agencies to address the goals of the plan and are organized into the following areas:

- 1. Land Use
- 2. Community Design
- 3. Cultural Resources
- 4. Economic Development
- 5. Green Infrastructure
- 6. Mobility
- 7. Water and Sewer Infrastructure

The Implementation Matrix identifies the need for the most significant projects associated with an assessment of near-term or longer-term needs and practical implementation schedules. The following timeframe for activation of these activities are identified and organized as follow:

- Short-Term: 0 2 years
- Mid-Term: 2 5 years
- Long-Term: 5 -10+ years
- Ongoing: continuous process

## IMPLEMENTATION PLAN

Timeframe	Policy Section	Action Item	Responsible Party
Ongoing	Land Use	Develop and monitor an inventory of existing and planned development within the Study Area	PWC
Ongoing	Cultural Resources	Coordinate with Manassas National Battlefield Park to identify areas for reforestation/vegetation for enhanced screening	Private Partners/Manassas National Battlefield Park/PWC
Ongoing	Cultural Resources	Coordinate with private landowners to voluntary establish preservation easements on private land to protect historic; architecture, archaeology sites, landscaping, viewsheds, districts and other cultural resources.	Private Partners/Manassas National Battlefield Park/PWC
Ongoing	Cultural Resources	Encourage and facilitate private landowners to voluntarily provide public access and public trails to viewsheds and other cultural resources on private land.	Private Partners/Manassas National Battlefield Park/PWC

Short-Term	Cultural Resources	Develop a detailed history of Honeywood	PWC/Private Partners where appropriate and consistent with applicable law
Short-Term	Cultural Resources	Define the historic boundary of the "Settlement" Community and Thornton School	PWC/Private Partners where appropriate and consistent with applicable law
Short-Term	Cultural Resources	Develop an Interpretative Plan for use throughout the Study Area	PWC/Private Partners where appropriate and consistent with applicable law
Short-Term	Community Design Cultural Resources Green Infrastructure Mobility	Develop a Master Landscaping, Vegetation, Fencing, and Signage Plan	PWC/Private Partners where appropriate and consistent with applicable law

Timeframe	Policy Section	Action Item	Responsible Party
Short-Term	Economic Development	Partner with George Mason University in the creation of a Master Plan for a Center for Data Center Excellence	PWC/George Mason University
Ongoing	Economic Development	Partner with Prince William County Schools to create opportunities for ICT related internships and apprenticeships	PWC/PWCS
Ongoing	Green Infrastructure	Restore disturbed areas to native forest, wetlands, and/or meadows	PWC/Private Partners
Short-Term	Mobility	Create a Comprehensive Landscape Plan for public rights of way and private	PWC/VDOT/Private Partners where appropriate and consistent with applicable law
Long-Term	Mobility	Support Manassas National Battlefield Park's goal to Prohibit commercial truck traffic through the park	PWC/VDOT/Manassas National Battlefield Park
Ongoing	Mobility	Encourage participation in an "adopt-a-trail" program	PWC/Private Partners
Ongoing	Water & Sewer	Coordinate with the Service Authority and Upper Occoquan Service Authority to plan for	PWC/Service Authority/Upper Occoquan Service Authority

Timeframe	Policy Section	Action Item	Responsible Party
		potential expansion to the UOSA Plant	
Short-Term	Water & Sewer	Conduct Additional Studies as needed to determine the optimal water and sewer transmission systems needed to serve the proposed development	PWC/Service Authority
Short-Term	Level of Service	Create a Level of Service standard for parks and open space and trails	PWC/ Private Partners where appropriate and consistent with applicable law

# INFRASTRUCTURE AND FACILITIES

Timeframe	Facility	Description	Coordinating Agency
Short-Term	Pageland Lane	Widen Pageland Lane to four lanes	Private Partners where appropriate and consistent with applicable law /PWC/VDOT
Short-Term	Pageland Lane Intersections	Intersection Improvements along Pageland Lane	Private Partners where appropriate and consistent with applicable law /PWC/VDOT
Short-Term	Pageland Lane Shared Use Paths	Construct shared use paths on both sides of Pageland Lane	Private Partners where appropriate and consistent with applicable law /PWC/VDOT
Short-Term	Catharpin Greenway Extension	Construct the Catharpin Greenway extension recreational trail from Catharpin Greenway to Featherbed Lane	PWC
Short-Term	Conway Robinson/Pageland Lane Recreational Trail	Construct a recreational trail connection between Conway Robinson State Forest and Pageland Lane	PWC
Short-Term	Wildlife/Open Space Corridor Recreational Trail	Construct recreational trails through the wildlife/open space corridors (see Figure 8)	Private Partners where appropriate and consistent with applicable law /PWC

Timeframe	Facility	Description	Coordinating Agency
Short-Term	Trailheads	Construct trailhead facilities at the locations shown on Figure 8	Private Partners where appropriate and consistent with applicable law /PWC
Short-Term	Pageland Lane/Sudley Lane Intersection	Intersection Improvements at Pageland Lane and Sudley Road	Private Partners where appropriate and consistent with applicable law /PWC/VDOT
Short-Term	Sudley Road/Sanders Lane Intersection	Intersection Improvements at Sudley Road and Sanders Lane	Private Partners where appropriate and consistent with applicable law /PWC/VDOT
Short-Term	Pageland Lane Recreational Spur Connections	Create safe bicycle and pedestrian connections to the shared use paths along Pageland Lane	Private Partners where appropriate and consistent with applicable law /PWC/VDOT
Short-Term	Route 29/Pageland Lane Intersection	Intersection Improvements at Route 29 and Pageland Lane	Private Partners where appropriate and consistent with applicable law /PWC/VDOT
Mid-Term	Sudley Road/Gum Springs Intersection	Intersection Improvements at Sudley Road and Gum Springs Road	Private Partners where appropriate and consistent with applicable law /PWC/VDOT

Timeframe	Facility	Description	Coordinating Agency
Mid-Term	Sudley Road/Catharpin Road Intersection	Intersection Improvements at Sudley Road and Catharpin Road	Private Partners where appropriate and consistent with applicable law /PWC/VDOT
Mid-Term	Sudley Road Widening	Sudley Road Widening to four lanes from Catharpin Road to Gum Springs Road	Private Partners where appropriate and consistent with applicable law /PWC/VDOT
Mid-Term	Route 29 Widening	Route 29 Widening to six lanes from Pageland Lane to University Boulevard	Private Partners where appropriate and consistent with applicable law /PWC/VDOT
Long-Term	Sudley Road Widening	Sudley Road Widening to four lanes from Route 15 to Catharpin Road	PWC/VDOT
Long-Term	Manassas Battlefield By-Pass	Construct the Manassas Battlefield By-Pass	PWC/VDOT
Long-Term	Route 29 Alternative	Construct the Route 29 Alternate	PWC/VDOT

Timeframe	Facility	Description	Coordinating Agency
Short-Term	Low Pressure Sewer force main	Construct private low pressure force main system necessary to serve initial phase of development	Private Partners
Mid-Term	Gravity Sewer and Pump Station	Construct gravity sewer system, pump station and force main to serve corridor	Private Partners where appropriate and consistent with applicable law /PWC/PWCSA
Mid-Term	Catharpin Recreational Park Sewer Line	Provide public sewer connection to Catharpin Recreational Park	Private Partners/PWC/PWCSA
Short-Term	Pageland Lane Sewer Line	Extend public water system along Pageland Lane necessary to serve initial phase of development	Private Partners/PWC/PWCSA
Mid-Term	Water Pump Stations	Construct pump(s) and/or storage tank(s) as needed to maintain adequate system pressure	Private Partners where appropriate and consistent with applicable law /PWC/PWCSA
Mid-Term	Water Extensions	Extend water system to northern end of corridor	Private Partners where appropriate and consistent with applicable law /PWC/PWCSA

Timeframe	Facility	Description	Coordinating Agency
Mid-Term	Catharpin Recreational Park Water Line	Provide public water connection to Catharpin Recreational Park	Private Partners/PWC/PWCSA
Short-Term	Southern Community Park	Community-sized park located between Manassas National Battlefield Park and Conway Robinson State Forest the southern entrance to the corridor. The proposed park should allow for both passive and active recreation including but not limited a southern trailhead providing access to the overall trail network, equestrian facilities, or interactive passive recreation such as orienteering or geocaching.	PWC/ Private Partners where appropriate and consistent with applicable law
Medium-Term	Thornton School Cultural Resource Park	A cultural resources type park providing opportunities for the education and preservation of local history including the Thornton School and the "Settlement" Community.	PWC/ Private Partners where appropriate and consistent with applicable law

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Timeframe	Facility	Description	Coordinating Agency
Medium-Term	Natural Cultural Recourses Park	A cultural resources park which is intended to be primarily preserved in a natural state and allow for opportunities for passive recreation.	PWC/ Private Partners where appropriate and consistent with applicable law