National Park Service
U.S. Department of the Interior

Visual Resource Protection Plan

Monocacy National Battlefield

September 2016



Visual Resource Protection Plan

Monocacy National Battlefield

Frederick, Maryland



Prepared by:

AECOM

U.S. Department of the Interior • National Park Service • National Capital Region • Washington, DC

2016

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U.S. Department of the Interior

National Park Service

Resource Stewardship and Science

Washington, DC

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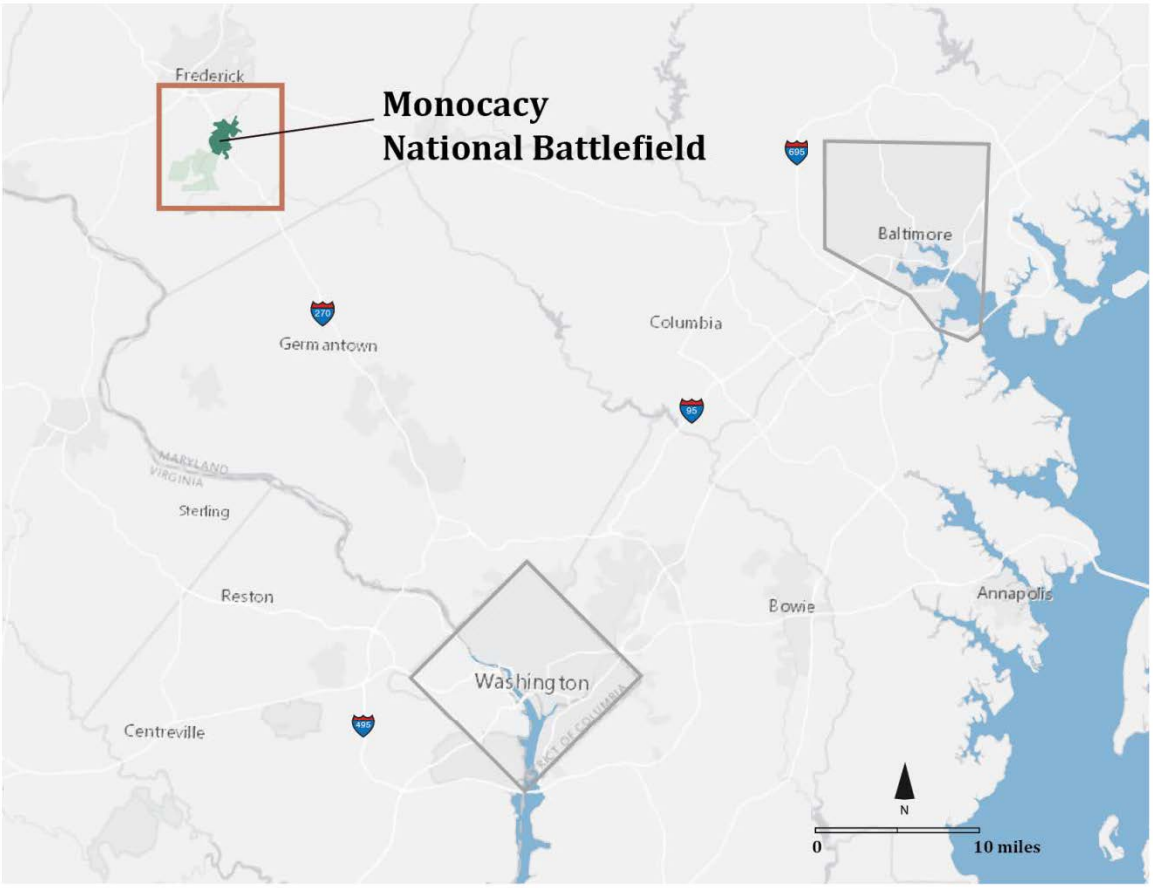
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1. Introduction

Monocacy National Battlefield is located in Frederick County, Maryland in the heavily populated Baltimore–Washington metropolitan area (**Figure 1**). The 1,647-acre National Park Service (NPS)-managed area of the Civil War battlefield lies in an unincorporated area approximately three miles south of the center of Frederick, the largest city in Frederick County, and the second largest city in Maryland. Although this area of the county is rapidly developing, the national battlefield is remarkably free of intrusive elements except for Interstate Highway 270 (I-270) which essentially bisects the park.

Figure 1: Location of Monocacy National Battlefield



Approximately two miles of the Monocacy River runs through the national battlefield. The CSX Railroad (Baltimore & Ohio during the Civil War) also extends through the park, paralleling the Monocacy River and Bush Creek. Historic Urbana Pike (Maryland Highway 355) runs north–south through the eastern part of the park.

At Monocacy National Battlefield, lands under NPS jurisdiction encompass most of the landscape associated with the Civil War Battle of Monocacy (1864). Six farmsteads that existed during the battle still stand within the park and essentially retain their Civil War era landscape character. In

the surrounding agricultural landscape, fencelines and field patterns remain similar; crops have gradually changed over the years from small grains to hay and corn, but the historic character of the landscape remains remarkably intact. Forested areas, primarily in mixed deciduous woodland, include Brooks Hill and lands along the Monocacy River and Bush Creek. These form a buffer against noise and visual intrusions associated with development outside the park boundary.

This document identifies and evaluates the priority viewsheds that are important elements of the historic character of the park, describes potential challenges to protecting those viewsheds, and describes methods to minimize the impact of those potential challenges to the integrity of these viewsheds.

1.1. Project Purpose and Need

In 2011, the NPS issued its Call to Action, a document that outlines the vision for the NPS's second century. The Call to Action seeks to connect people to parks, advance the NPS's education mission, preserve America's special places, and enhance professional and organizational excellence. Monocacy National Battlefield offers opportunities to highlight an important event in both local and national history and enhance economic opportunities in the community. In order to accomplish these goals, Monocacy National Battlefield seeks to partner with local, state, and federal stakeholders to protect the viewsheds that are integral to the park.

The Battle of Monocacy and its battlefield landscape continue to have a profound influence on the character of the communities that surround it. The rural countryside that comprises the historic battlefield retains the cultural landscape much as it existed 150 years ago. The battlefield and its surroundings have enabled residents and visitors alike to truly appreciate and understand the significance of the Battle of Monocacy and its importance within the larger context of the Civil War. However, much of the land surrounding the battlefield is vulnerable to changes from future development. Today, escalating growth in the region is a tangible threat to the setting and historical interpretation of the battlefield.

Among the most pressing issues that have the potential to affect the park's landscape context is the proposed construction of a waste treatment anaerobic digester at a water treatment facility across the Monocacy River from the National Battlefield. ln addition, county officials are considering rezoning a parcel of land adjacent to the park's northern boundary as "residential," and a local developer has already begun studying the feasibility of constructing mid-rise (3- and 4-story) apartment buildings on this site. In addition, both Monocacy National Battlefield and the National Historic Landmark (NHL), which cover much of the same area but whose boundaries are different, are under increasing pressure from state and local transportation projects, including the proposed future widening of I-270 as well as replacement of the Rt. 355/CSX bridge. All of these projects would result in significant adverse impacts to the battlefield, as well as a loss of battlefield land. Because the Monocacy National Battlefield and NHL are within a rapidly suburbanizing area, visual encroachments such as these are likely to continue and even accelerate in the coming years. Park management is taking steps now to identify and evaluate critical visual resources, and begin developing strategies for protecting and preserving them. The identification and assessment of critical scenic resources related to the Battle of Monocacy, as well as strategies to protect these

resources, is an essential step in the long-term preservation and protection of Monocacy National Battlefield and the NHL.

The surrounding lands are an important aspect of Monocacy National Battlefield. As historic farmland located in the Maryland Piedmont, the National Battlefield's rolling topography and agricultural cultivation allow park visitors to view large areas of land outside the park boundary. Development within and around the park can impair the scenic vistas that are valuable to the visitor's experience. These open vistas provide visitors with the opportunity to gain a perspective of what the soldiers and citizens who inhabited the battlefield area saw and experienced. Maintaining appropriate and compatible uses of the surrounding lands is essential to ensure the visitor experience is protected in the future. A Visual Resources Protection Plan (VRPP) is needed to provide strategies and priorities for protection within and outside the park's boundaries.

This collaborative plan, developed with input from a variety of state and county government officials and representatives of conservation and historic preservation organizations, is intended to be the first step in the development of partnerships between Monocacy National Battlefield and its adjacent public and private landowners. This partnership would ensure the continued preservation of the battlefield and its historic setting.

1.2. Planning Process and Methodology

1.2.1. Planning Process

The NPS has undertaken this VRPP for Monocacy National Battlefield in order to protect the historic viewsheds that impart the battlefield's historic significance; it is a follow up to it is a follow-up to the NPS project that identified and evaluated critical visual resources of Monocacy National Battlefield and determined park sightlines. This document, called *Enjoy the View – Visual Resources Inventory Report* and included in Appendix A, provides component provides a comprehensive inventory of all significant views and viewpoints within the National Battlefield. Subsequently, the NPS analyzed and assessed the visual resources of the battlefield. This process numerically quantified the relative scenic quality and view importance from all of the previously identified views and viewpoints. Each view was assigned an individual "Scenic Inventory Value." Based on this analysis, a relative scenic quality and view importance hierarchy was established (refer to Section 1.2.2. Methodology).

Once the viewsheds and their relative quality and importance were established, the NPS identified potential changes to viewsheds. NPS contacted numerous stakeholders to identify data sources and help identify projects that could affect the viewsheds. NPS contacted the Maryland State Highway Administration (SHA), Frederick County Community Development Division, Frederick County Department of Planning and Development, Frederick County Division of Utilities and Solid Waste Management, Frederick County Department of Transportation, Tourism Council of Frederick County, Maryland Historical Trust, Frederick, Monocacy Scenic River Citizens Advisory Board National Parks Conservation Association, Heart of the Civil War Heritage Area, Journey Through Hallowed Ground Heritage Area, and the Civil War Trust to participate. These stakeholders provided input on how to best represent potential encroachments or alterations to the viewsheds.

In addition, NPS reviewed its planned projects within the park to identify potential changes to viewsheds.

Geographic information system (GIS) mapping was used to illustrate the most important potential challenges to viewshed protection. The mapping showed what areas would be visible from various vantage points within the battlefield. Furthermore, visual simulations were prepared for selected viewsheds to show what changes could occur as a result of planned or potential future projects. This analysis of potential future conditions was distributed to stakeholders in order to elicit their comments and refine the results.

Finally, viewshed management strategies were identified for areas within and beyond the park boundaries. Numerous best management strategies were reviewed related to location, design, and vegetation for new and expanded park facilities, including trails and parking lots. Beyond the park boundaries, preservation activities require partnering with outside stakeholder organizations. These are described in Section 5 of this report.

1.2.2. Methodology

The visual resource inventory focused on identifying key attributes of the scenic views at Monocacy National Battlefield. The inventory was completed according to the nationally-accepted methodology of the Scenery Conservation System (SCS) developed by NPS for assessing visual resources. The unit of inventory in SCS is "a view" consisting of the viewpoint, the viewed landscape, and potential viewers, e.g., park visitors. The inventory system consists of both fieldwork associated with view description and scenic quality ratings, and an office-based process for assigning importance values to the views.

Scenic quality assessments were conducted in the field on September 10, 2014. For each view, the field inventory process collected descriptive data and assessed scenic quality according to standard criteria. The process included photo documentation, written descriptive information about the viewpoint and viewed landscape, and the scenic quality rating for each view. Scenic quality ratings were determined through group discussions resulting in a single scenic quality value for the view. The rating was based on scores from three scenic quality factors: landscape character integrity, vividness, and visual harmony. Scenic quality ratings fell into five classes: from A to E based on how high they scored. Class A views had the highest scenic quality and Class E the lowest.

The view importance rating defined NPS and visitor values for the view and also identified key descriptive information about the viewpoint and viewed landscape that helped inform the rating process. The Importance evaluation of each viewpoint was conducted at Monocacy National Battlefield on September 29, 2014. Importance of a view involved assessments of the following factors: viewpoint importance, viewed landscape importance, and viewer concern. Each factor was assessed by a team of NPS staff from Monocacy National Battlefield and Catoctin Mountain Park, and included natural resources, cultural resources, interpretation, facilities, and law enforcement specialists. Cultural landscape staff from the NPS National Capital Regional Office and volunteers also participated. This effort resulted in a single view importance rating for the view. View

importance ratings fell into five classes: from 1 to 5 based on how high they score. Class 1 views had the highest view importance and Class 5 the lowest.

The Scenic Quality and View Importance ratings were combined to determine a Scenic Inventory Value (SIV) for each view. The SIV was determined using a matrix that consolidates the 25 potential combinations of Scenic Quality and View Importance into five values ranging from Very Low to Very High. The SIV is the value for the view that will be recorded in the SCS geospatial database.

The Monocacy National Battlefield survey team selected 24 views for the visual resource inventory to inform internal view management objectives and external view conservation goals. The selection process was based on the following general criteria:

a) Critical inventory priorities (Priority A) include views that are considered most important to the visitor experience or where there an immediate threat to the view from a proposed project or land management or development decisions.

b) Moderate inventory priorities (Priority B) include views that are less important to the visitor experience or where there is limited potential for land management or development to affect the view.

c) Low inventory priorities (Priority C) include views that are somewhat protected from intrusions; views that may already have visual intrusions; or views that are unimportant to the visitor experience.

Once completed, a GIS model was created to identify locations that were visible from the priority A viewpoints. The model then compared those areas with the maximum building height to determine which points and parcels would be visible from priority viewpoints. Similarly, visual simulations were created for numerous viewsheds to approximate potential changes due to activities within and beyond the park. The views shown in **Figure 2** and listed in **Table 1** were determined to be high inventory priority viewsheds; note, viewpoints determined to be Priority A viewpoints are marked by an asterisk. The initial results of this analysis are included in *the Enjoy the View- Visual Resources Inventory Report* in Appendix A.

Additionally, maps illustrating the visibility of various locations in and around Monocacy National Battlefield are shown in **Figure 3** and **Figure 4**. Figure 3 illustrates the points inside and outside the battlefield that can be seen from the priority viewpoints, while Figure 4 illustrates the parcels outside the battlefield boundary that can be seen from the same viewpoints. Maps illustrating visible points and parcels from specific viewpoints are included in Appendix B.

Initially, the methodology included only maps illustrating the visible points inside and outside the battlefield. This approach provided an indication of extent of the viewshed. However, when developing strategies to preserve the viewshed, these would likely be undertaken on a parcel-by-parcel basis. As a result, NPS determined that it would also be appropriate to identify the parcels beyond the battlefield boundary to understand the extent of potential protection strategies.

Table 1: Viewpoints and Challenges from outside the Park Boundary

Viewpoint Number	Cardinal Direction Facing	Challenge
1*	East	I-270 not visible from viewpoint as depicted by inventory photographs, but could be during winter.
2	Northwest	Increased industrial and commercial development could create more urban intrusions in background.
6	West-northwest	Widening of I-270.
8*	Northeast	Widening of I-270.
9*	West-southwest	Western border outside boundary zoned agricultural; light industrial zoning and uses beyond agricultural zone, and available for potential development.
10*	Southeast	Widening of I-270. Raising MD 355 roadway bed over CSX tracks. Light Industrial zoning to far west, available for potential development.
11	East	Potential low-density residential development.
12*	South- southwest	Potential for MARC TOD re-zoning and development. Potential new industrial and commercial development. Raising MD 355 roadway bed over CSX tracks.
15*	West-southwest	I-270 widening, but currently no visual intrusions beyond tree lines.
19	West	None. Although viewshed appears to be limited to internal, Blue Ridge Mountains in distance part of geographic context. Potential for cell/other towers be seen from location.
21	Northwest	Widening of I-270. Telephone poles and wires visible in low-density residential area.
24*	Northeast	Development of low-density residential uses.

*Viewpoints determined to be Priority A viewpoints

Figure 2: Monocacy National Battlefield Viewpoints and Viewsheds

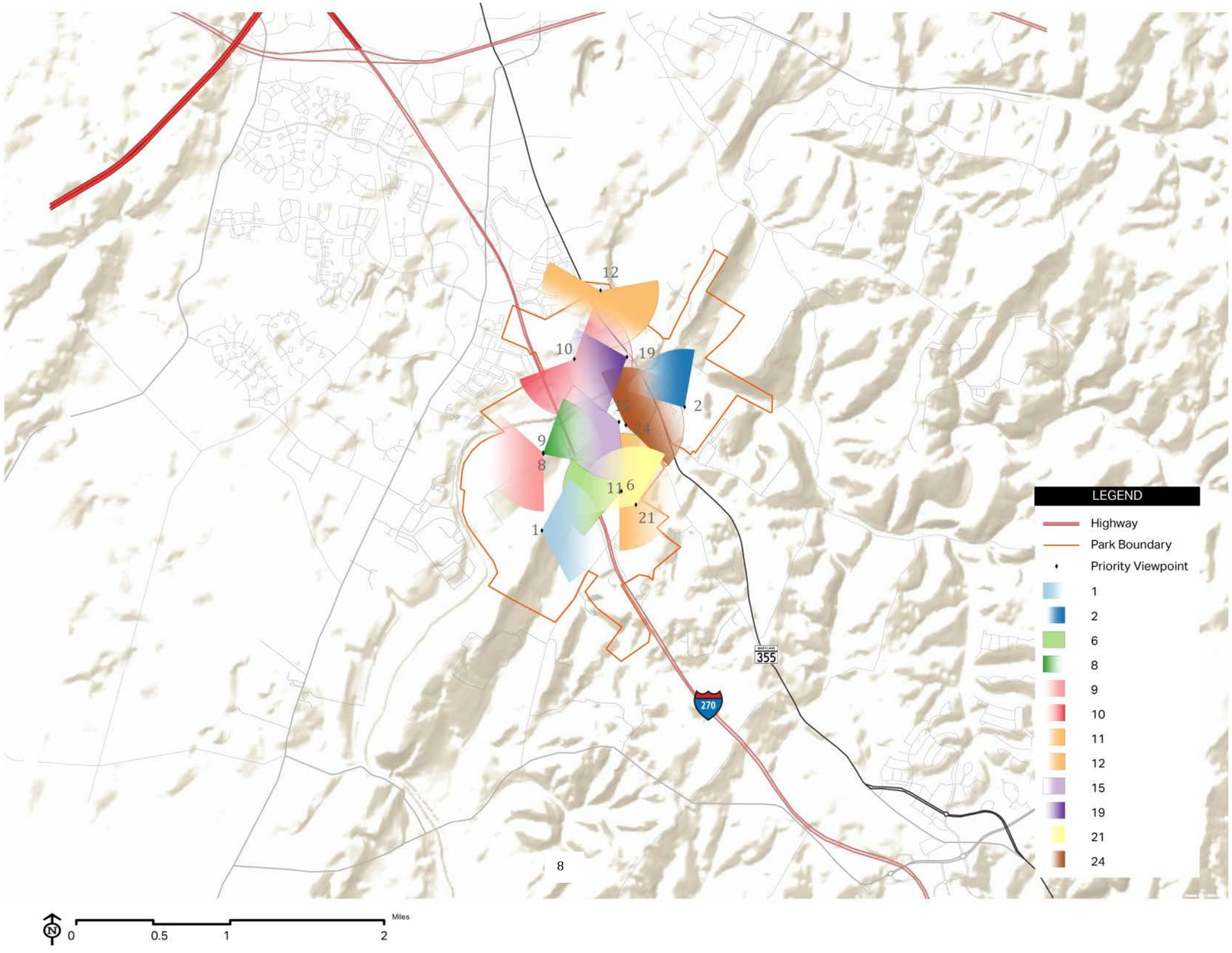


Figure 3: Points Visible from Park Viewpoints

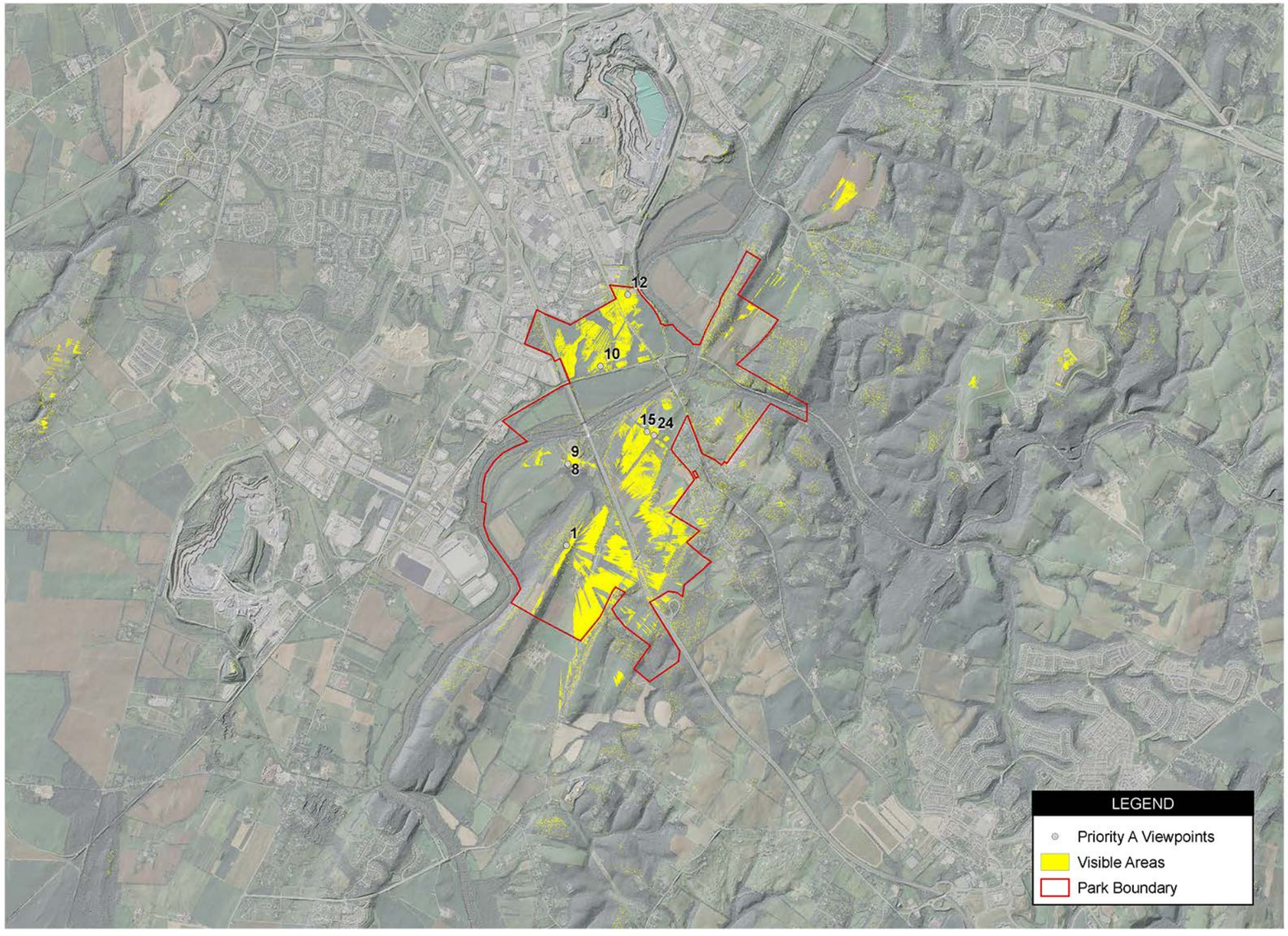
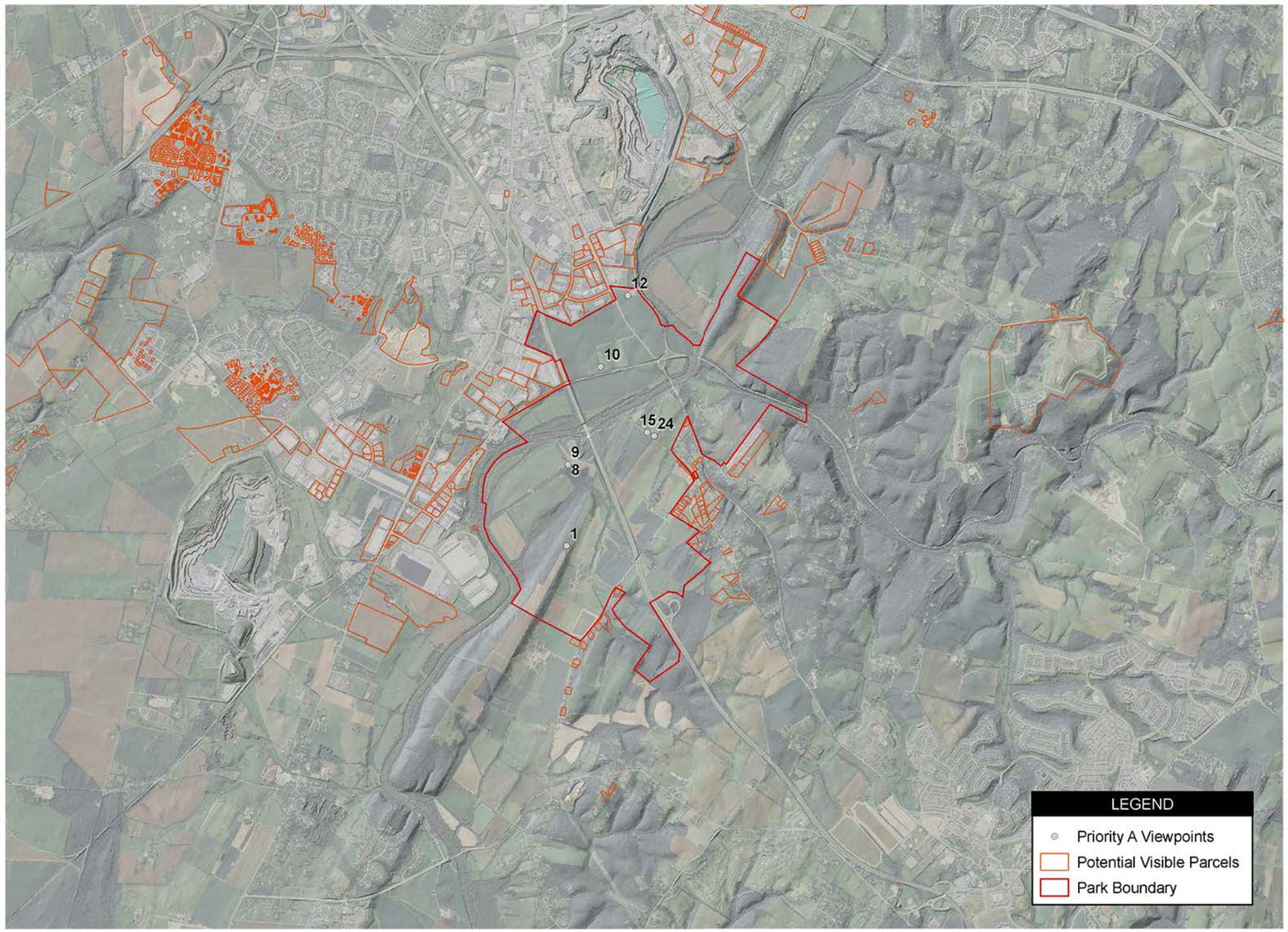


Figure 4: Parcels Visible from Park Viewpoints



Potential Visible Parcels (Viewpoint 1, 8&9, 10, 12, 15&24)
Zoning Maximum Height Scenario

2. History and Significance of Monocacy National Battlefield

American Indians have been present in the Monocacy National Battlefield area since the earliest human occupation of North America. European explorers and traders may have arrived in the Maryland Piedmont region as early as 1715. However, one battle of the Civil War defined the area's significance and potentially the history of the United States.

2.1. The Civil War, 1861–1865

By the mid-19th century, Frederick, Maryland was a prosperous community. Major highways leading to Washington and Baltimore converged there, and the Baltimore & Ohio (B&O) Railroad passed nearby. This transportation corridor not only contributed to the development of the area, but it also became a target for Union and Confederate armies throughout the Civil War because it facilitated movement of troops and supplies. The six farms that now lie within Monocacy National Battlefield were directly affected by these actions.

In 1862, Union and Confederate armies used the Georgetown Pike as a major route for troop movement. To protect the junction, the B&O Railroad authorized the construction of two blockhouses: one south of the railroad tracks near the turnpike bridge and one north of the railroad, just east of the river. Soldiers from the 14th New Jersey Regiment established an encampment nearby on the north side of the railroad tracks. Camp Hooker, as it became known, housed between 800 and 1,000 soldiers. It consisted of quarters for field and line officers, tents for enlisted men, ten cookhouses, two guardhouses, a commissary, and a stable.

Although no above-ground evidence remains, the footprint of Camp Hooker has been identified archeologically. Soldiers from that encampment also constructed earthworks on the high ground north and east of the railroad, above the junction. These consisted of a gun battery, rifle pits, and a powder magazine, the remains of which are still extant in the national battlefield's Civil War defenses area.

During the September 1862 Maryland Campaign, which culminated in the Battle of Antietam, Confederate Gen. Robert E. Lee and his forces camped on the Best Farm. It was there that Lee wrote Special Order 191, which detailed his plans to divide his army and capture Harpers Ferry. A few days later, Union troops set up camp in the area previously occupied by their counterparts and discovered a lost copy of the special order. The plans were soon revealed to Union Gen. George B. McClellan, who hastened his pace to encounter the Confederates at nearby South Mountain and Antietam.

As Union troops moved through the area in late June 1863, before the Battle of Gettysburg, Gen. Winfield Scott Hancock made the Thomas House his headquarters for three days. Once again, the Best Farm was a site for soldier encampments.

In 1864, the farms surrounding Monocacy Junction became the focal point in a delaying action that would later become known as "the battle that saved Washington." When judged by its

consequences, rather than its size, the Battle of Monocacy ranks among the important battles of the Civil War. On July 9, 15,000 Confederate forces under the command of Lt. Gen. Jubal Early clashed with 5,800 Union forces under Maj. Gen. Lew Wallace.

Jubal Early's invasion in the summer of 1864 was the third and final time the South tried to bring the war into the North. The opportunity arose when Lt. Gen. Ulysses S. Grant moved most of the Union troops defending the nation's capital to Petersburg, Virginia. Seizing the opportunity, General Lee devised a bold and daring invasion with four objectives: first, to clear the lower Shenandoah Valley of Union Forces; second, to divert Union forces away from Lee's army at Petersburg, Virginia; third, to threaten Washington, D.C., or possibly to capture it in an attempt to deal a death blow to the sagging Union support; and fourth, to reduce the chances of reelection for President Abraham Lincoln.

On June 13, Jubal Early moved west from Petersburg. Union Gen. David Hunter retreated into West Virginia after he was defeated in battle at both Lynchburg and Lexington, Virginia. The path through the Shenandoah Valley to Washington was virtually undefended. After reorganizing his army at Staunton, Virginia, and preparing it for a fast march, Early proceeded north, arriving at Harper's Ferry on the Fourth of July.

Agents along the B&O Railroad had been tracking Early's army and reporting to the railroad president, John Garrett, in Baltimore. Garrett notified Secretary of War Edwin Stanton, in Washington, many times of the developing emergency. Grant responded that Early was in front of him at Petersburg, Virginia, and that no large force was moving in the valley.

By July 3, Garrett, frustrated by the slow response from the administration in Washington and from Grant, turned to Lew Wallace, Commander of the 8th Army Corps and the Middle Military Department. Acting on his own accord, Wallace gathered all available forces, approximately 2,800 mostly new recruits and 100-days men. They proceeded west to Monocacy Junction to prepare for a possible engagement with Confederate forces.

Part of Wallace's force, under the command of Gen. Erastus Tyler, was sent north to Jug Bridge along the National Pike. Tyler's orders were to hold the approach across the Monocacy River. The rest of the command was concentrated at Monocacy Junction.

Late on July 5, after several Confederate deserters reported that Early was on the move, Grant realized something was wrong. Although he was not convinced of the severity of the situation, he ordered the 3rd Division of the 6th Army Corps under the command of Brig. Gen. James Ricketts to move north.

On July 7 and 8, in the mountain passes and on the outskirts of Frederick, Wallace's troops skirmished heavily with the advancing Confederate forces. Wallace had three objectives: first, to make the Confederates disclose their strength; second, to make them disclose their objective (Washington, D.C., or Baltimore); and third, if their goal was to seize Washington, as he suspected, to delay them long enough to enable reinforcements to reach the defenses of the nation's capital.

Wallace received welcome assistance when Ricketts's veteran division arrived by train on July 8. Upon learning of the impending situation Ricketts put himself and his troops at Wallace's disposal. The veterans were placed along the road to Washington, where it was suspected that the main attack would come.

On the morning of July 9, Confederate Gen. Stephen Ramseur's division encountered Union forces on the Georgetown Pike at Monocacy Junction. Realizing that a direct frontal assault across the Monocacy River at the junction would be too costly, Early sent Gen. John McCausland and his cavalry to find an alternate crossing so that they could outflank the Union line.

McCausland's troops crossed the river at the Worthington Ford, a mile downstream from Monocacy Junction, and encountered Ricketts's veteran division, which had repositioned to the left to meet the new assault. When they clashed at a fence separating the Worthington and Thomas farms, the Confederate cavalry was driven back. The Confederates regrouped, and around 2:30 p.m. they attempted to flank the left of the Union line. This time they succeeded in pushing the Union soldiers from the Thomas House. However, Union forces counterattacked and drove the Confederates from the field of battle.

As the Confederate second attack was taking place, Maj. Gen. John Gordon was ordered to cross the river with his infantry division and form up. He initiated a three-pronged attack along the entire Union line with Brigadier Generals Terry, York, and Evans. Some of the heaviest fighting of the day occurred in this part of the battle. At roughly 4:30 p.m., Wallace's troops were pushed back and forced to retreat toward Baltimore, leaving behind roughly 1,300 men killed, wounded, and missing. Although beaten militarily, they had succeeded in holding their position all day against superior numbers. The Confederates spent the night on the field of battle before resuming their march to Washington. The battle cost the Confederates a day in time and about 900 men killed, wounded, and missing.

By the time Jubal Early's forces reached Washington on July 11, reinforcements from Petersburg had begun to arrive in the capital. However, soldiers were exhausted from their long march and could not make a concerted attack until the following day. Although sporadic fighting took place in the Fort Stevens area throughout July 12, Early realized the futility of his plan and turned away from Washington.

One month after the Confederate victory at Monocacy, Grant designed a Union campaign to bring total destruction upon the Shenandoah Valley, end the war by any means necessary, and gradually force the Confederates back to Petersburg. The plan was revealed at a "council of war" between Union Generals Grant, Sheridan, Hunter, Crook, Ricketts, and others in one of the upper rooms of the Thomas House. The resulting Shenandoah Valley Campaign was devastating to Lee's Army and would contribute to his decision to surrender in April 1865.

2.2. Commemoration at Monocacy National Battlefield

Organized commemoration of the Battle of Monocacy began in 1889, when veterans formed a national association to coincide with the 25th anniversary of the battle. In 1897 an advertisement

placed by James Gambrill for the sale of the Gambrill House emphasized the "magnificent view of the historic field of the Battle of Monocacy," suggesting that by the end of the century the local community perceived a distinct landscape called the "Monocacy Battlefield" (HABS MD-lOS 1 1991, 13).

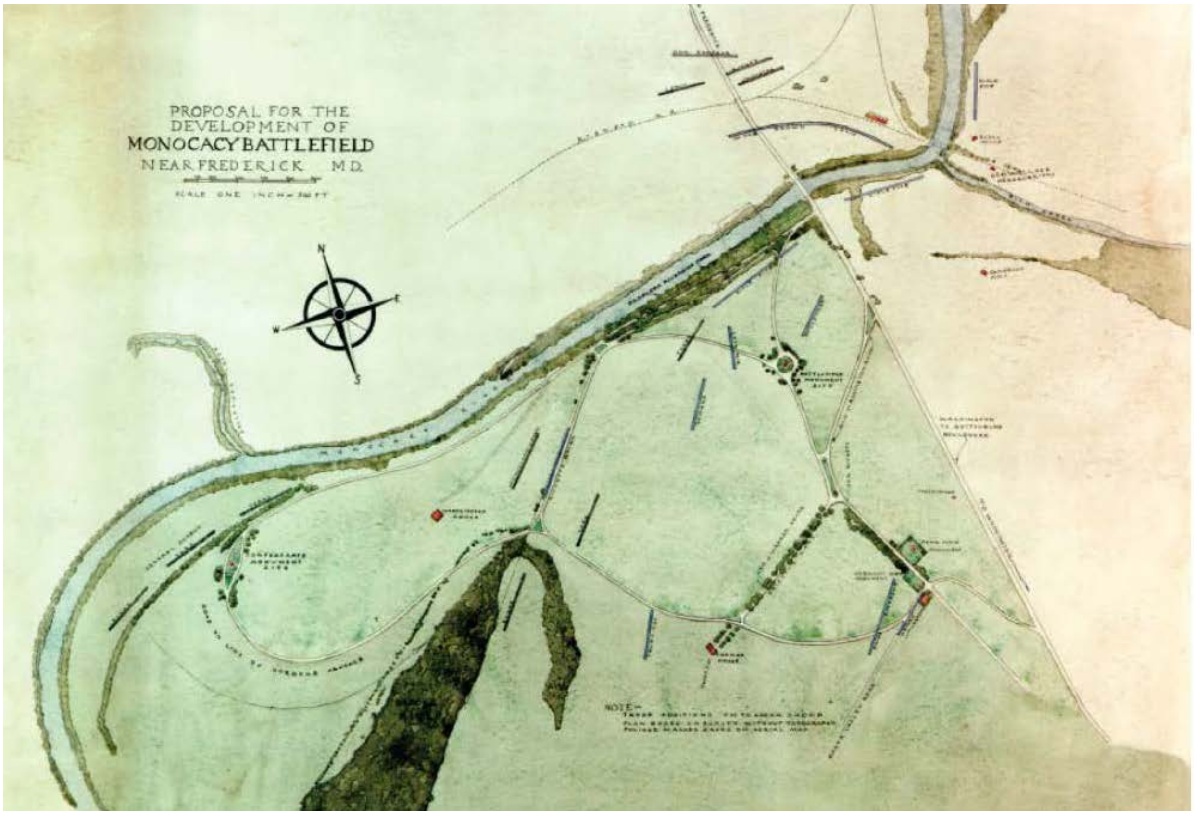
More reunions of veterans took place over the years, but the first monument was not erected until 1907, when the state of New Jersey erected a statue on the Best Farm to honor the 14th New Jersey Regiment (Cooling 1997, 236). By 1915, three more monuments had been placed, including the State of Pennsylvania Monument (1908) on the east side of the original Georgetown Pike near the Thomas Farm entry lane; the Confederate Monument (1914), erected by the United Daughters of the Confederacy on the west side of the Georgetown Pike at the northern end of the Best Farm; and the State of Vermont Monument (1915) at the corner of the old Georgetown Pike (now Araby Church Road) and Baker Valley Road, at the southeast corner of the Thomas Farm (NPS 2000, 2.31–32).

2.3. Creation of Monocacy National Battlefield

Although interest in creating a national battlefield at the site was alive in the 1920s and 1930s, Monocacy National Battlefield is a relatively young park. In 1928 the Monocacy Battle Field Memorial Association, led by Glenn Worthington, lobbied Congress to establish a park at the site. Congress authorized Monocacy National Military Park on June 21, 1934 to commemorate the Battle of Monocacy, fought on July 9, 1864 (**Figure 5**). Monocacy Battlefield received designation as a national historic landmark in late 1973, and on February 4, 1975, Monocacy National Battlefield was officially placed on the National Register of Historic Places (National Register nomination 1975; Antietam Administrative History 1979, 1). On October 21, 1976, Congress re-designated a smaller area within the NHL as Monocacy National Battlefield. Monocacy National Battlefield comprises 1,647 acres and consists of the six historic farmsteads that existed during the Battle of Monocacy, while the NHL comprises approximately 2,369 acres and encompasses the full extent of the lands upon which the Battle of Monocacy was fought (**Figure 6).** The battlefield encompasses an intact rural agrarian landscape containing 53 historic structures and 21 recorded archeological sites.

By the 1980s, the National Park Service began acquiring and protecting Monocacy National Battlefield lands through fee simple purchases and scenic easements. A small visitor contact station was opened in 1991, and now the NPS owns all six of the Battlefield's component properties. A superintendency for the battlefield was established in 2003.

Figure 5: Map of Proposal for the Development of Monocacy Battlefield



Source: NPS

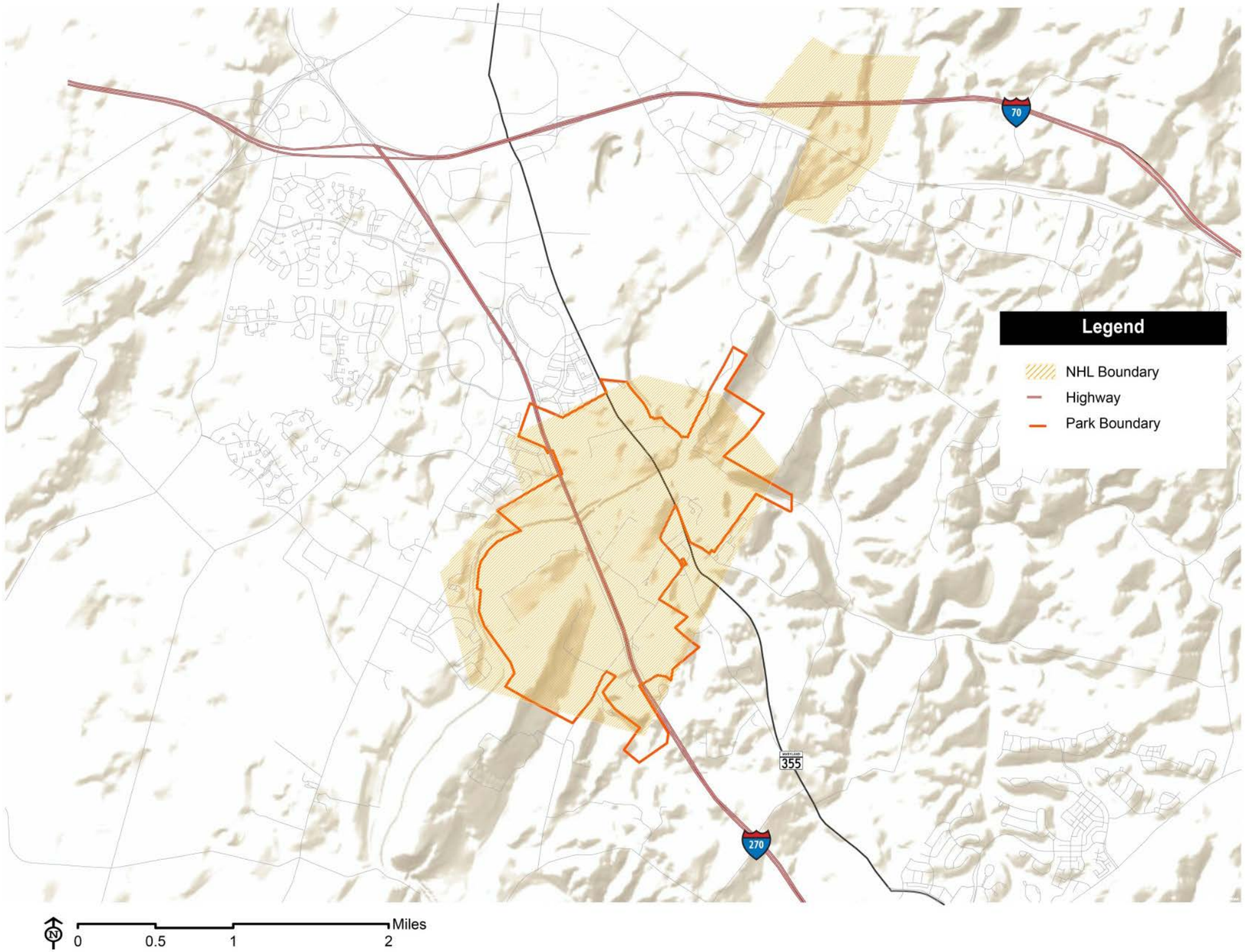
2.4. Park Significance

Significance statements define what makes the national battlefield important enough to our cultural heritage to warrant designation as a unit of the national park system. Monocacy National Battlefield is nationally significant as the site of the July 9, 1864, battle where a small Union army successfully delayed a larger Confederate army's advance on Washington, D.C., thereby providing sufficient time for Gen. Ulysses S. Grant to send Union reinforcements to the U.S. capital and prevent its capture. This Confederate campaign, its third and final attempt to bring the war to the North, also was designed to divert pressure from Gen. Robert E. Lee's besieged army at Petersburg, Virginia, and to lessen President Abraham Lincoln's chances for reelection.

It is also significant for other important events associated with the Civil War, including the 1862 Maryland Campaign and finding of Gen. Robert E. Lee's Special Order 191 outlining his plan of attack, the 1863 Gettysburg Campaign, and the August 1864 meeting of Generals Grant and Sheridan at the Thomas House to plan the Shenandoah Valley Campaign.

The park unit also serves as a national battlefield where visitors can experience a historic landscape, structures, and transportation corridors that have changed little since the Battle of Monocacy. As a result, it offers many opportunities for understanding the evolution of settlement in the region and the Civil War within the broader context of American history.

Figure 6: Monocacy National Battlefield NHL



3. Context

3.1. Park Landscape Character

Monocacy National Battlefield is located in western Maryland and in the Northern Piedmont ecoregion (EPA 2003). The Northern Piedmont is a transitional region of low rounded hills, irregular plains, and open valleys in contrast to the low mountains of areas to the north and west and the flatter coastal plains region to the east. The physical landscape at Monocacy National Battlefield consists of flat to gently rolling plains with forested areas and the Monocacy River running adjacent to or through key battlefield areas.

While natural forest vegetation was predominantly Appalachian oak forest at the time of the battle, floodplains were utilized as farmland and there were few areas of native plant-life along the rivers. Today, there are large forested areas along the rivers that serve as a buffer between the agricultural fields, waterways, and nearby roads and highways that traverse the battlefield. The forested areas consist mostly of mixed deciduous oak forest, common to the eastern United States.

Much of the battlefield and the surrounding area have an agricultural character with farm buildings and crops surrounded by wooded areas – configured as hedgerows in some locations. Low density rural residential areas outside the park are visible from some locations. Development associated with areas adjacent to the City of Frederick has also influenced the battlefield landscape, with larger buildings visible from some locations. Despite some visible elements that are out of character with the battlefield setting, the rolling topography and screening provided by wooded areas helps retain a setting similar to its historic context and allows visitors to imagine battlefield movements across the open fields.

The Monocacy National Battlefield's soundscape and viewshed are fundamental resources of the park that provide an opportunity for visitors to experience a landscape that has changed little since the Battle of Monocacy. The ability of visitors to immerse themselves in this landscape is fundamental to their understanding of the events associated with the Battle of Monocacy.

3.2. Visitor Access and Use

Urbana Pike serves as the main access for visitors to the battlefield. This highway, which has four lanes on the north side of the national battlefield, is heavily used by commuters, residents, business vehicles, and trucks. In the national battlefield, the highway is two lanes with paved shoulders on the north side of the Monocacy River, and on the south side of the river it is two lanes with narrow, unpaved shoulders. South of the national battlefield it remains two lanes with narrow, unpaved shoulders. Urbana Pike provides much of the access to important features, and the heavy volumes and high speeds of commuter traffic and commercial vehicles create a safety problem and encroach upon the visitor experience.

A new visitor center, completed in 2007, replaced the original small visitor contact station. Through the rehabilitation and restoration of many historic features almost all of the park remained open to

visitors. However, visitation figures reflect the low level of knowledge in the community and the nation that Monocacy National Battlefield exists or is open. With land acquisition nearly complete, more of the national battlefield is expected to open to visitation.

The visitor center provides an information desk, an electronic map program, a cooperating association sales outlet, two floors of exhibits, restrooms, meeting space and offices, and can accommodate several busloads of visitors. Visitation has risen from approximately 9,500 in 1992, the first year counts were taken at the park, to more than 56,000 visitors in 2014 (NPS 2015).

A brochure available at the visitor center directs visitors to a chronological, self-guided auto tour of the battlefield. It begins at the Best Farm, where the initial Confederate assault along the Georgetown Pike was halted when the covered bridge over the Monocacy River was burned. At the next stop, Monocacy Junction, visitors learn about the physical relationship between the railroad, the river, and the Georgetown Pike, as well as see how those physical features affected the military actions throughout the day of the battle. The next stop is the Worthington Farm, where the Confederate "flanking movement" is interpreted. At the final stop, the Thomas Farm, visitors can learn how the Confederates engaged in what many soldiers said was the heaviest infantry fighting they encountered in the entire war. Finally, the Union line was broken and the Union forces retreated past the Gambrill Mill. Wayside exhibits complement the visitor experience at each stop on the auto tour and at nearby locations. Additional opportunities exist in the form of walking trails at the Visitor Center, the Thomas Farm, Gambrill Mill, and the Worthington Farm.

Special interpretive and educational events are offered, usually in summer, to attract more visitors to the national battlefield and to reach out to new audiences. These events, such as ranger-led tours or demonstrations, often focus on specific themes or activities and sometimes complement a Civil War event that relates to Monocacy as well as other regional historic sites (for example, Lee's lost order and the Battle of Antietam).

3.3. Community Characteristics

Monocacy National Battlefield lies entirely within unincorporated Frederick County. The County has an estimated total population of 246,011 people (Frederick County 2016b), an increase of 12,626 (5.4 percent) over the population of 233,385 in 2010. As a result, the County has experienced substantial development pressures for both residential and commercial activities. As noted earlier, development outside of the park boundaries represent significant challenges to preservation of viewsheds.

In 2014, the County issued 1,318 permits for new residential dwellings, continuing an upward trend from the low point of the recession in 2011 (533 new dwellings). For the second consecutive year, permit activity in the City of Frederick continued to exceed the permits issued in the county, though by a much smaller margin (28 dwellings) than in 2013 (239 dwellings) (Frederick County 2014).

The County issued 928 commercial and industrial construction permits in 2014, which is a slight decrease from the 967 such permits issued in 2013. The level of activity is still notably greater than

average activity of approximately 700 permits per year during the recession period from 2007 to 2009.

The approval of preliminary subdivision plans reached an all-time high of 3,359 lots/dwellings in 2014. In 2013, 2,536 lots received preliminary subdivision plan approval. The development of multi-family housing continues to experience increases with 577 units permitted in 2014, which is an increase from the 522 units approved in 2013. Multi-family dwellings made up 44% of the total number of dwellings permitted, primarily in the City of Frederick. The number of residential units in Frederick County is anticipated to increase for the forseeable future due to population growth.

3.4. Land Use Regulations

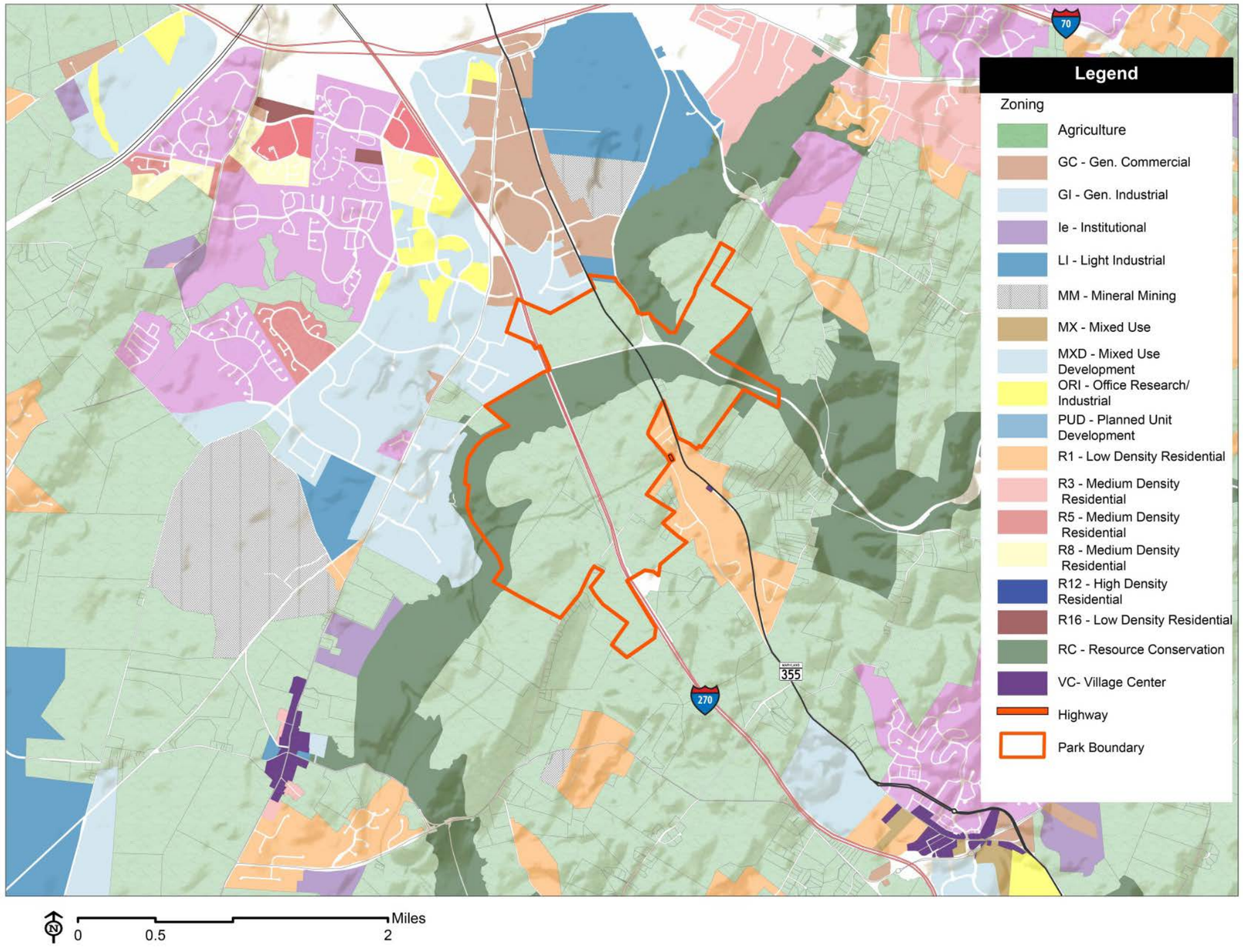
Frederick County governs land use through zoning regulations, although Monocacy National Battlefield is not required to adhere to local zoning codes due to its status as federal government property. Local zoning regulations outline the physical form and arrangement of development within parcels. Generally speaking, the zones address the following use categories: conservation, agriculture, industrial, commercial, and mixed-use (**Figure 7**). Within these broad groups, the zoning code identifies more specific subtypes.

As outlined above, each specific zone category has its own regulations regarding building form, such as minimum lot size, density, setback requirements, and building heights. Generally speaking, agriculture and residential uses have a height limit of 30 feet, while commercial and industrial uses and mixed-use developments have a height limit of 60 feet. The most notable exception to these height limits is the Residential Family and Residential Group uses within the Residential Twelve (R-12) and Residential Sixteen (R-16) Districts, which has a height limit of 100 feet. The uses and their associated height limits are included in **Table 2**. **Figure 7** depicts the location of existing zoning of parcels adjacent to the battlefield.

Table 2: Zoning and Height Limits

General Use Classification	Relevant Zones	Maximum Height (in feet)
Resource Conservation District	RC	30
Residential (low density)	R1, R8	30
Residential (high-density)	R12, R16	100
Mixed Use (Village Center)	VC	30
Mixed Use	MX	60
General Commercial	GC	60
Industrial	LI	60
Office/Research Industrial	ORI	60

Figure 7: Frederick County Zoning and Park Boundary



3.5. Existing Land Preservation Programs

Frederick County administers five land preservation programs including three State programs: the Maryland Agricultural Land Preservation Program (MALP), the Rural Legacy Program and the Conservation Reserve Enhancement Program (CREP); and two County programs, the Critical Farms Program and the Installment Purchase Program (IPP). The County also coordinates with the Agricultural Conservation Easement Program (ACEP) and the State's Maryland Environmental Trust (MET) and Maryland Historical Trust (MHT)easement programs. As of December of 2014, the County had a total of 51,243 acres under permanent preservation easements. An additional 5,362 acres of property is currently participating in the temporary MALPF District agreement. Areas that are part of the MALPF, the Rural Legacy Program, and the MET are shown in **Figure 8**. Additional information about the programs is provided below.

Maryland Agricultural Land Preservation Foundation

The Maryland Agricultural Land Preservation Foundation (MALPF) was established in the 1970's and is the primary state program for land preservation. The county has participated in this program since 1979, with property near the park shown in **Figure 8**.

Rural Legacy Program

The Rural Legacy Program is a State of Maryland program established in 1999 and funded through grants from the Department of Natural Resources (DNR) with County matching funds. The County currently has two designated Rural Legacy Areas: The Mid-Maryland Rural Legacy Area located in the Middletown valley, and the Carrollton Manor Rural Legacy Area located in the Adamstown Region. The Carrollton Manor Rural Legacy Area includes the southern portion of Monocacy National Battlefield, as well as areas beyond the park.

Conservation Reserve Enhancement Program

CREP is a federal-state partnership that pays landowners who agree to take environmentally sensitive cropland out of production for 10 to 15 years and plant streamside buffers, establish wetlands, protect highly erodible lands or create wildlife habitat. This program offers annual rental and incentive payments and cost-share assistance for streamside buffers, wetlands, livestock fencing and more.

Critical Farms Program

The Critical Farms Program is a County program established in 1994 to assist full-time farmers in buying farmland. The properties involved are subsequently preserved under one of the other preservation programs.

Installment Purchase Program (IPP)

A County program created in 2002, the Installment Purchase Program purchases easements using Zero Coupon Bonds and revenue from a 10% share of the County's Recordation Tax. This process

enables the County to leverage existing funding to purchase more easement acreage than through traditional lump-sum-easement purchase programs.

Agricultural Conservation Easement Program

ACEP provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits. Under the Agricultural Land Easements component, the National Resources Conservation Service (NRCS) helps state and local governments and non-governmental organizations protect working agricultural lands and limit non-agricultural uses of the land. NRCS provides financial assistance to eligible partners for purchasing Agricultural Land Easements that protect the agricultural use and conservation values of eligible land.

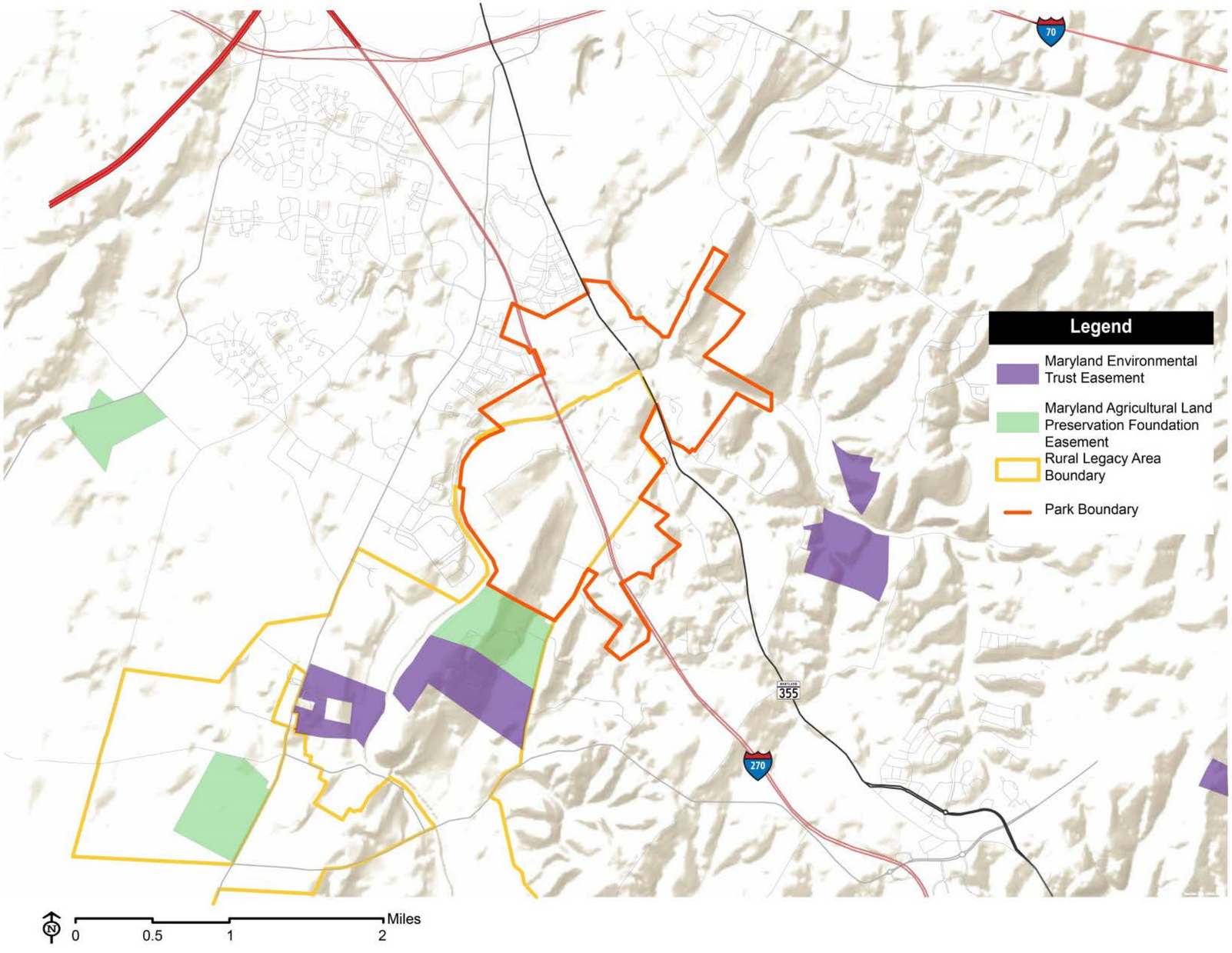
Maryland Environmental Trust Easements

MET works with landowners, local communities, and citizen land trusts to provide direct assistance, information and innovative tools to ensure the ongoing stewardship and public concern for the natural, historic, and scenic resources of the state. The landowner who gives an easement gives up most or all of the rights to develop and subdivide the land, now and in the future, but still maintains ownership of the land. The organization accepting the easement agrees to monitor it to ensure compliance with its terms.

Maryland Historical Trust Easements

As a tool to help protect and preserve historic properties, the State of Maryland offers a program to assign development rights through easements. These easements are legally binding contractual agreements that are recorded along with the deed in the land records. While the owner maintains full ownership of the property, he or she has assigned specific development rights to the MHT. These may include restrictions on new construction, alterations and excavation.

Figure 8: Existing Land Preservation Programs Map



4. Potential Challenges to Viewshed Preservation

A number of factors, both inside and outside the park, pose potential challenges to protecting the important viewsheds of Monocacy National Battlefield. The locations of these potential challenges are shown in **Figure 9**.

4.1. Challenges Within Monocacy National Battlefield

4.1.1. I-270 Widening and Interchange Improvements

I-270, which bisects Monocacy National Battlefield, serves as a major commuter route connecting Frederick County with the Washington, DC area. This four-lane highway frequently becomes congested during peak travel periods. As a result, local leaders and the Maryland State Highway Administration (SHA) have discussed the potential widening of I-270 to beyond the existing four lanes.

Currently, I-270 visually divides portions of the park and disrupts the historic integrity of battlefield views. For instance, views from Viewpoint 1 have been altered by the visual break created by the depressed roadway of I-270. The widening of this highway could increase such visual breaks or encroach upon views that are currently minimally affected by the existing roadway. The current view from Viewpoint 1 is shown in **Figure 10**.

4.1.2. MD 355 (Urbana Pike) Bridge Replacement

SHA has developed plans to replace the Urbana Pike Bridge over the CSX railroad corridor within the park. The bridge replacement is expected to include installation of a new bridge structure, removal of adjacent vegetation, and improvements to the entrance and roadway on the monument access road west of Urbana Pike.

The new bridge has the potential to be visible from viewpoints within the park. The bridge itself could be more or less intrusive, depending upon its final location, design, and materials. Vegetation removal could make the bridge more visible; alternately, addition of new plantings could contribute to a more historically accurate pattern of vegetation, depending upon the location and extent of the improvements. Changes to the monument access road would affect the viewer's existing experience at Viewpoint 19 (see **Figure 11**), although these would likely not significantly alter the existing conditions and therefore would not notably detract from the view

4.1.3. Photovoltaic Panel Installation

In order to create a more energy-efficient facility, the NPS proposed a plan in 2015 to install photovoltaic cells on two buildings: the visitors center and the maintenance facility near the Gambrill House. The panels were placed on the roofs of these two non-contributing structures. The panels covered most of the buildings' roofs with materials that have lower reflectivity than the existing roof paint.

The photovoltaic cells are visible from Viewpoints 2 and 10. In Viewpoint 2, the cells on the maintenance facility appear in the mid-ground and be visible, while cells on the visitor center would appear in the distance and are not easily distinguishable (see **Figure 12**). In Viewpoint 10, the cells on the visitor center appear in the distance, although they are not be easily distinguishable (see **Figure 13**).

Figure 9: Map of Potential Challenges to Viewshed Preservation

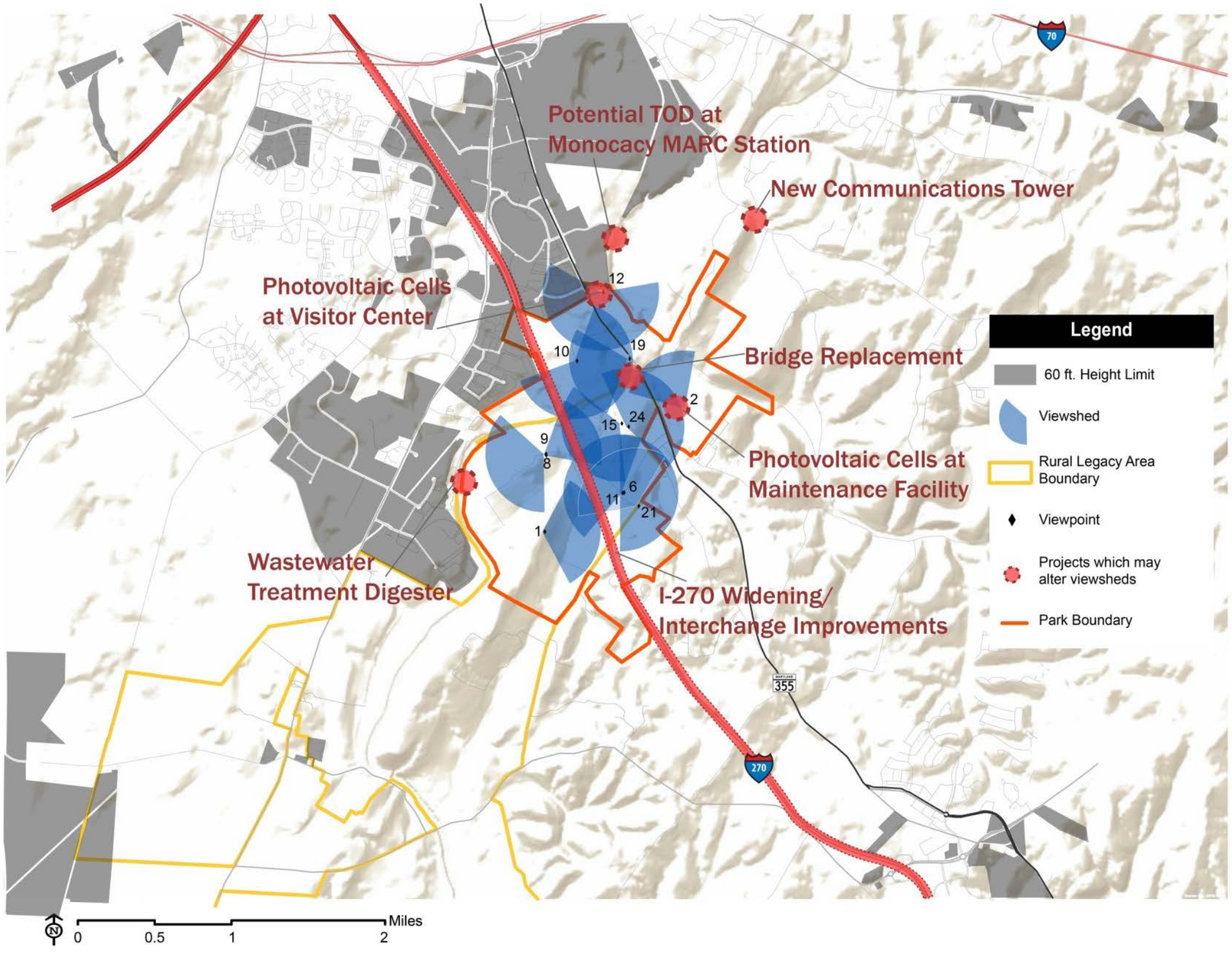


Figure 10: Viewpoint 1, Current View



Figure 11: **Viewpoint 19**



Figure 12: Viewpoint 2



Figure 13: Viewpoint 10



Figure 14: Viewpoint 8

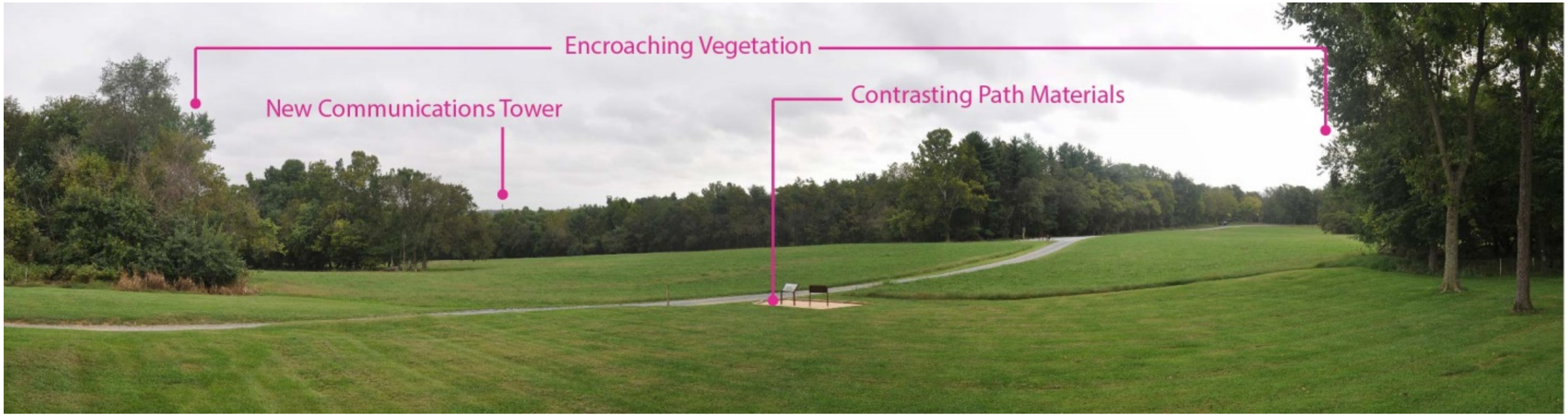


Figure 15: Viewpoint 11



Figure 16: Viewpoint 21



Figure 17: **Viewpoint 1 (Encroachment Noted)**



Figure 18: Viewpoint 12



Figure 19: Viewpoint 9



4.2. Challenges Outside of Monocacy National Battlefield

4.2.1. Communications Tower

Frederick County has constructed an emergency communication tower northeast of Monocacy National Battlefield. The tower is more than 161 feet tall, surrounded by a 70-foot by 75-foot fenced equipment compound. The required 4-foot lightning rod will be affixed to the tower. Thus, the total height of this new vertical element will be 165 feet, six inches. This very tall vertical feature would be visible from many areas of the park, for example, extending above the tree line visible from Viewpoint 12 (**Figure 18**).

4.2.2. Waste Treatment Digester

Frederick County plans to construct a waste treatment digester near its current wastewater treatment facility on the banks of the Monocacy River, west of the park. Up to four egg-shaped digesters are planned, with two programmed for the initial phase and two in a later phase. Depending upon which of three designs is chosen, the height from the floor slab to the top of each digester would be up to approximately 100 feet. The lower ring wall could be partially below grade, possibly reducing the height above grade to 75 feet. The location of these facilities across the Monocacy River from the park would introduce these elements into the viewshed from Viewpoint 9 (**Figure 19**).

4.2.3. Transit Oriented Development

The Monocacy Maryland Area Regional Commuter (MARC) rail station lies north of Monocacy National Battlefield. Discussions have occurred regarding the potential redevelopment of property adjacent to the station as transit-oriented development, or TOD. The area is currently zoned General Commercial (GC), which allows structures up to 60 feet in height. Generally speaking, based on vegetation and topography, development of up to 60 feet in height would be visible from viewpoints within the park (see **Figure 26** and **Figure 27**).

4.2.4. Development Beyond Monocacy National Battlefield Boundaries

Frederick County is a growing area, where new development regularly occurs. As described earlier, the areas to the west of the park are primarily zoned for commercial or residential purposes with a maximum building height of 60 feet. Areas to the far northeast of the park allow for building heights of up to 100 feet. If developed, numerous points to the west of the park would be visible, as shown in **Figure 20**. **Figure 21** indicates the parcels that are partially or entirely visible from the park. Areas to the east of the park are primarily zoned for low-density residential or agricultural uses, with maximum building heights of up to 30 feet.

Figure 20: Viewpoints Visible with 90-Foot Height Limit

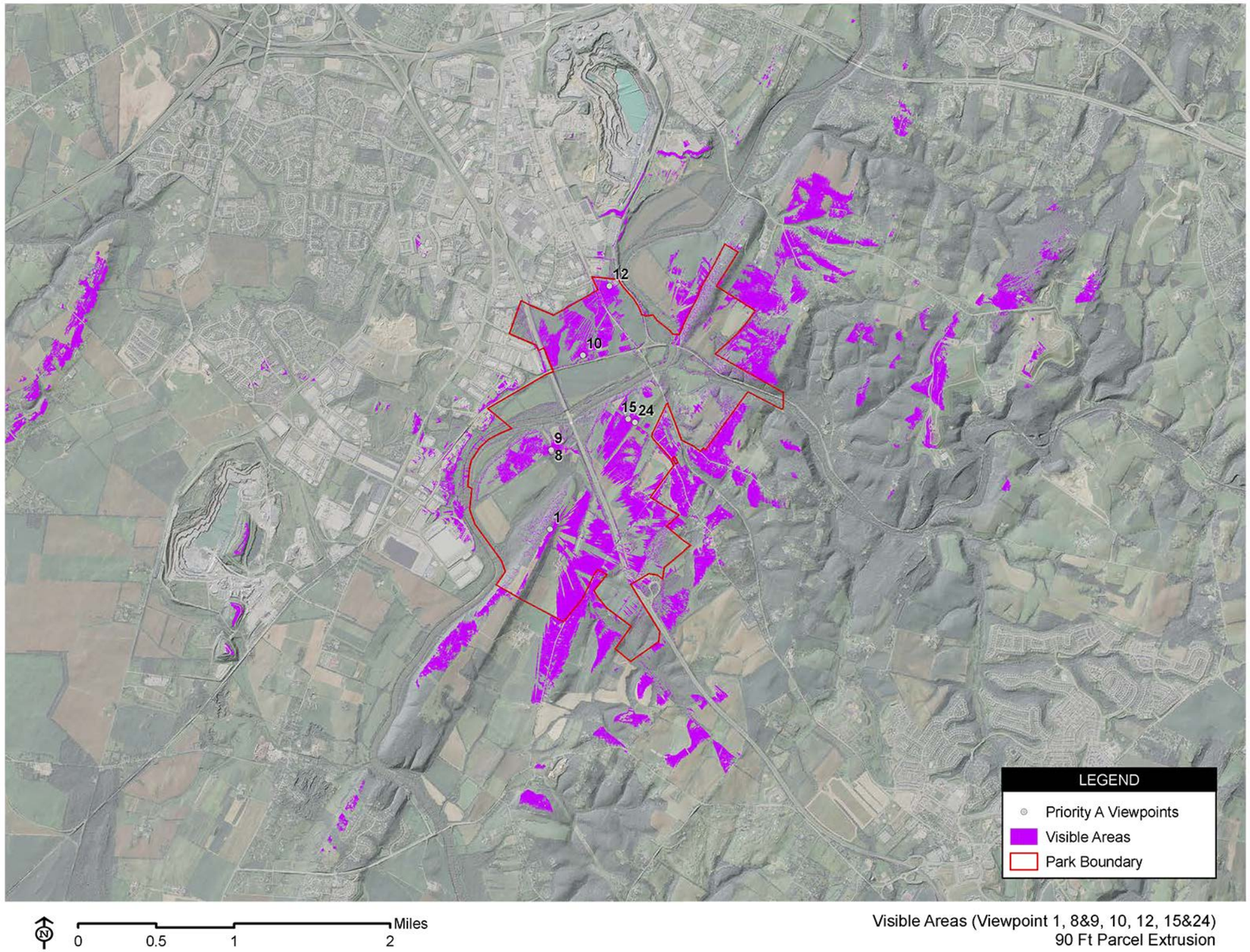
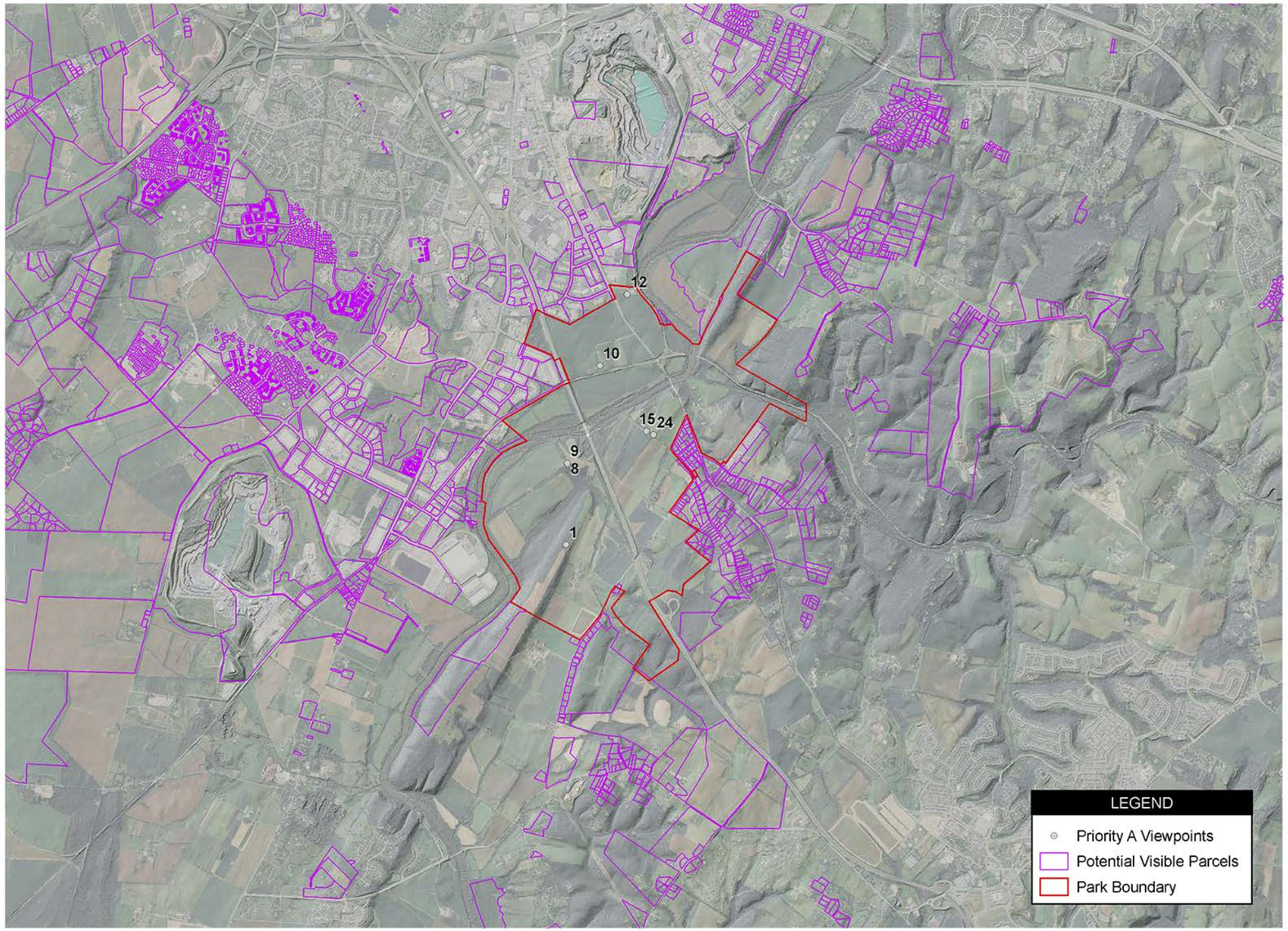


Figure 21: Parcels Visible with 90-Foot Height Limit



5. Strategies to Minimize Impacts on Viewsheds

As described above, the potential impacts on Monocacy National Battlefield viewsheds can originate from within park boundaries, where the NPS has great control over the landscape, as well as from beyond park boundaries, where the NPS has little direct control. The following section provides preliminary guidance for managing visual quality. When possible, this VRPP incorporates more specific guidance that has already been prepared, such as with the General Management Plan (GMP) or in cultural landscape reports (CLRs).

5.1. Within Park Boundaries

Monocacy National Battlefield has access to many well-tested tools to maintain and enhance the scenic and historic integrity of viewsheds within the park. These include nationally used NPS system-wide resources and standard methodologies applied to cultural landscapes and scenic resource management.

The two major objectives for viewshed management in a historic landscape are first, to avoid or minimize visual intrusions that are out of character with the historic period of significance of the landscape; and second, to make changes to the landscape that visually enhance the historic and scenic character of the landscape. For example, the Best Farm CLR and the Thomas and Worthington Farms CLR call for various changes to be considered that would meet both of these objectives in those areas of the park. Some strategies identified in these CLRs include addition or removal of specific vegetation, rehabilitation or reconstruction of missing historic features, placement of underground of utility lines currently on poles, and the removal of selected non-historic, visible features. Please refer to the CLRs for the detailed treatment recommendations. Also, see *The Secretary of the Interior's Standards for the Treatment of Historic Properties* and *Guidelines for the Treatment of Cultural Landscapes* for additional guidance on protecting and enhancing visual quality in cultural landscapes.

The purpose of the following section is to provide basic guidance and references for visual resource protection under various circumstances.

5.1.1. Placement of New Facilities

As part of current and future park plans, some new facilities may be sited within the battlefield, including parking areas and trails, buildings, and structures. In particular, the quality of viewsheds from priority viewpoints can be greatly affected by the future placement of power generation equipment. At this time, Monocacy National Battlefield has installed new sustainable power generation equipment and new access improvements to the park; no new major structures or buildings are planned. However, if new structures are needed, consideration of power generation equipment siting to avoid visibility from these viewpoints is of paramount importance.

The NPS should consider locating new facilities, such as buildings, structures, and parking areas away from the identified viewsheds, such as in the western, southern, or far eastern portions of the park, if feasible.

5.1.2. Design Guidelines

Design guidelines for current and future planned new features within the park would offer guidance for visually compatible additions, as well as alterations of existing park facilities. Therefore, Monocacy National Battlefield should consider developing detailed design guidelines for new and expanded park facilities. Examples of key areas to address in design guidelines include trails and visitor services, sustainable power generation, new structures, and others. The design guidelines should address design elements such as color, materials, massing, and vegetation management.

Trails/Visitor Services

The Best Farm CLR and the Monocacy National Battlefield Public Access Plan (currently in draft) call for new trails and parking throughout the Monocacy National Battlefield. The trails and access improvements under consideration are intended to increase accessibility of park resources, provide connections between dis-contiguous areas, and enhance opportunities for visitor education and interpretation. Such access improvements can create disruptions to viewsheds through the use of contrasting color and materials, interruption of a cohesive composition by inserting a new path, and introduction of new elements. The new design guidelines should include the following items:

- Minimize grading and earthmoving by working with the existing contours of the landscape.
- Construct new trails simply, of materials that will not be visually intrusive. Such materials could include fine gravel, sand, stone dust, and clay. Use locally produced or quarried materials if possible. Use a color palette of materials that is compatible with the colors of the surrounding landscape and recedes visually into the surrounding land: for example, warm medium- to dark brown or honey-colored crushed stone, rather than gray, light tan, or white.
- Consider maintaining mown paths in grass fields, which would be least visually intrusive, as illustrated in **Figure 22**.
- For new facilities such as parking areas, minimize lighting to only what is necessary for safety, and use only dark-sky compliant lighting to ensure night views are protected.

Figure 22: Example of Mown Path at Monocacy National Battlefield



Source: AECOM, 2015

Sustainable Power Generation

The Secretary of the Interior's *Standards for Rehabilitation and Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings* provide guidance for the introduction of renewable energy at historic sites and national parks. These *Standards* primarily focus on alterations to existing historic structures, with a focus on reducing the visibility of solar devices. This guidance applies at Monocacy National Battlefield because many of the priority viewsheds at the battlefield include historic structures. For example, the following guidelines (and the relevant page numbers within the *Standards for Rehabilitation and Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings*) relate to solar devices, windmills, and cool roofs:

- Install a solar device on a historic building only after other locations have been investigated and determined infeasible.
- Install a solar device in a compatible location on the site or on a non-historic building or addition where it will have minimal impact on the historic building and its site.
- Install a low-profile solar device on the historic building so that it is not visible or only minimally visible from the public right of way: for example, on a flat roof and set back to take advantage of a parapet or other roof feature to screen solar panels from view; or on a secondary slope of a roof, out of view from the public right of way.

- Install a solar device on the historic building in a manner that does not damage historic roofing material or negatively impact the building's historic character and is reversible
- Install solar roof panels horizontally—flat or parallel to the roof—to reduce visibility.
- Site wind-powered equipment in an unobtrusive location on a non-historic building or addition where it will not negatively impact the historic character of the landscape, historic buildings, or the surrounding historic district.
- Install wind-powered equipment on the historic building without damaging the roof or walls or otherwise negatively impacting the building's historic character.
- Select appropriate roofing materials and colors when putting a new cool roof on the historic building.
- Select appropriately-scaled vegetation for a green roof that will not grow so tall that it will be visible and detract from the building's historic character.
- For other, non-historic buildings, much of the guidance regarding sustainable energy is also applicable as it relates to the visibility of such improvements within the Monocacy National Battlefield landscape.
- To the extent possible, solar devices in the park should be located and installed in a way that is minimally visible from the priority viewpoints. Such locations could include the western, southern, and far eastern portions of the park, based on their visibility from the priority viewsheds.
- At existing buildings within the priority viewsheds, electing compatible roofing materials and colors would minimize the contrast between existing roofs and new sustainable energy practices, such as solar devices or cool roofs.
- Look to other examples of solar panels used on historic structures within the national park system. For example, a metal roofing system with high-efficiency thin film solar modules was successfully used in the rehabilitation of buildings at the Fort Baker unit of Golden Gate Park as Cavallo Point Lodge in 2010. This photovoltaic technology complies with the Secretary of Interior's *Standards for the Treatment of Historic Properties* (sources: http://www.reuters.com/article/idUS207297+03-Feb-2010+MW20100203, miasole.com/.../Miasole_Solar_Metal_Roof_Brochure_V01_02.pdf)

New Structures

As described above, no new structures are currently planned for Monocacy National Battlefield. However, design guidelines would minimize the visual impact of such new structures, should they be determined necessary in the future.

- Avoid encroachment of new structures into priority viewsheds. Concentrate new structures primarily in the western, southern, or far eastern portions of the park, as mentioned above in Section 5.1.1.
- Surface material, stain, and paint colors on structures should be consistent with the existing landscape and feature natural and neutral colors, such as green and tan, respectively. Using such a palette would enable the structure to blend into the landscape. Consider reviewing guidance developed by the Bureau of Land Management for western landscapes, and modifying to apply to the local conditions at Monocacy National Battlefield. See Manual H-

8431-1- Visual Resources Inventory and http://www.blm.gov/wo/st/en/prog/Recreation/recreation_national/RMS.html.

- Use non-reflective materials, such as wood or stone, and avoid reflective materials, such as metal and glass, unless specifically designed to avoid reflection.
- In order to minimize their visibility, new structures should also not exceed a height of 30 feet. Generally, the higher a structure is, the more visible it is. Therefore, the height of new structures should be as low as practicable, and should not exceed 30 feet.

5.1.3. Interpretation

Although it would not alter the physical area of a viewshed, interpretation can alter the experience of the viewer by explaining important elements of the viewshed to battlefield visitors. Although Monocacy National Battlefield currently has wayside exhibits through the park, opportunities exist to provide more information on, and explanation of, viewsheds. Appropriate placement of waysides, or other interpretive elements such as artillery, would orient visitors toward the correct direction. Additionally, wayside exhibits could be relocated to areas that would escape the view of priority viewsheds. As noted in the Thomas and Worthington Farms CLR, public understanding of the landscape could be greatly enhanced by improving the content, appearance, and locations of the existing wayside exhibits.

5.1.4. Infrastructure Improvements

Land Bridge

As described earlier in Section 1, I-270 bisects the park and fragments the Thomas and Worthington farm landscapes, two properties that were once connected by ownership and subsequently by the Battle of Monocacy. The reciprocal visual relationship between these properties is an important interpretive feature that is currently hard for visitors to discern due to the growth of vegetation along the physical gap created by this highway.

In order to reconnect these two properties, the Monocacy National Battlefield General Management Plan/Environmental Impact Statement (GMP/EIS) proposes constructing a pedestrian deck over the interstate highway between the Worthington and Thomas farms. The pedestrian deck would be a wedge-shaped structure covering a depressed portion of the roadway. To maximize the improvement of important viewsheds, the land bridge would provide an unobstructed view corridor between the two properties. As stated in the GMP/EIS, the wedge—or trapezoidal shape—should be covered with soil and crops, fence rows, and small trees to assist visitors in visualizing the area's historic appearance without the disruption of the interstate highway. Although vegetation should be a part of the land bridge, it should allow for the visual connection between the two farms. A similar approach was taken at the Jefferson National Expansion Memorial in St. Louis, Missouri, which is bisected by a depressed highway. Construction has begun to retrofit the highway with a land bridge connecting the Old Courthouse to the Gateway Arch (**Figure 23**).

Figure 23: Park Over Highway in St. Louis Serves as a Land Bridge



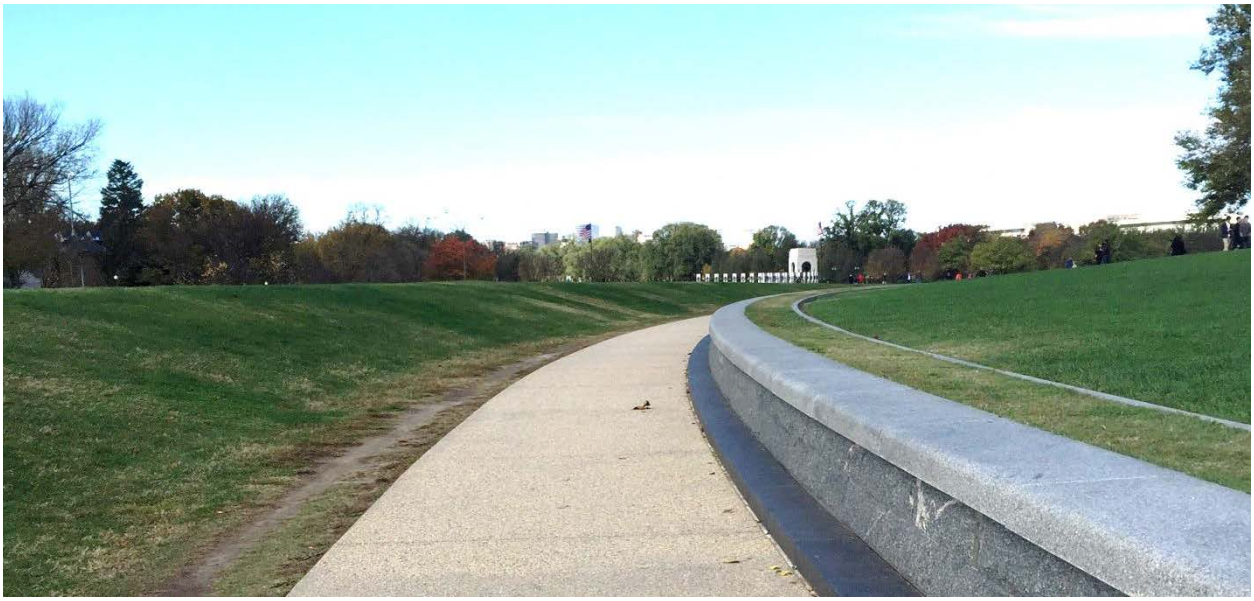
Source: CityArchRiver 2016

Ha-Ha

A ha-ha is a recessed landscape feature that serves as a vertical barrier while allowing uninterrupted views of the landscape. In farming settings, this feature was often used to prevent access by grazing livestock to cultivated areas. Its design includes a landscaped earthen incline that slopes towards a masonry retaining wall. From the viewpoint toward the top of the wall, the viewer is provided the appearance of a continuous view.

Due the relative elevations and the depression of the roadway, the conditions at I-270 through Monocacy National Battlefield would not necessitate the construction of a wall. Instead, the planting of ground cover (i.e. native meadow grass mix) would create a similar effect. The installation of such landscape treatment would disguise the gap created by I-270. This treatment at I-270 between the Thomas and Worthington farms, as considered in the Monocacy National Battlefield Public Access Plan, would support the re-establishment of a visual link between the two areas. It would be most effective when conducted with vegetation removal, described below in Section 5.1.5. Furthermore, it could serve as an interim step between current conditions and the construction of the proposed land bridge. The NPS has employed a ha-ha approach at the Washington Monument in Washington, DC (**Figure 24** and **Figure 25**).

Figure 24: Ha-Ha at the Washington Monument (view through gap)



Source: AECOM 2015

Figure 25: Ha-Ha at the Washington Monument (view across gap)



Source: AECOM 2015

5.1.5. Vegetation

Visual Buffers

Vegetation can be used to minimize the visibility of built features in a natural or rural environment. For instance, vegetation could be used to screen utilities. In order for the vegetation to blend into the natural landscape, tree buffers should be a mix of native evergreen and deciduous vegetation,

layered canopy and understory trees and shrubs, spread over an area in an organic, unregimented pattern.

Crops

Much of the land within the battlefield is leased to farmers for crop cultivation. Among the crops grown in Monocacy National Battlefield are taller crops, such as corn, and other field crops that are less than four feet in height when mature, such as alfalfa. In some areas, corn functions as a visual barrier in mid- to late-summer as it matures due to its height, which can reach greater than six feet. For farmland directly adjacent to priority viewpoints, lower crops that do not block views should be considered. For fields that appear in the middle ground or background of the viewshed, such a limitation is not necessary, as the overall viewshed can be experienced by the visitor and the crops maintain the agricultural character of the battlefield.

Vegetation Removal

The agricultural fields on the Thomas and Worthington farms are defined by boundaries related to circulation and natural features. These boundary features and fields have minimally changed in the years since the Civil War. However, the Thomas and Worthington Farms Cultural Landscape Report (CLR) notes that in a few locations, small adjustments to the field edges would better reflect the historic field and forest patterns. The CLR states that in an effort to enhance the historic open spatial character of the landscape and reopen historic views, woods and tree lines that have grown up within previously open fields since the mid-twentieth century should be removed. In particular, visual connections between the Thomas and Worthington farms should be enabled to the greatest extent practicable. Selective vegetation removal would target the following areas:

- Woods along both sides of I-270
- Woods on the south side of Worthington House
- Trees along Worthington Farm field edges and hedgerows

Invasive and successional vegetation have encroached on the historic viewshed in these areas, making the open space appear smaller than it would have at the time of the Battle of Monocacy. The reader should refer to the CLR for more detailed recommendations regarding the management of invasive and successional vegetation as a strategy to reestablish and retain historic views at the Thomas and Worthington farms.

Vegetation Restoration

In addition to removing selected vegetation that has grown up within priority viewsheds since the battle, restoring vegetation that was present in selected areas at that time would enhance the historic and interpretive qualities of some priority viewsheds. The Best Farm CLR recommends that the lawns north, south and east of the house be maintained as open (and the lawn to the north extended slightly). The area west of the house, beginning near the corn crib and extending beyond the stone barn, should remain in rough grass as it is today. The CLR notes that lawn is also an

acceptable treatment for the former vegetable garden area, where the suggestion of a fence around its perimeter will help define the space.

New trees planted in the park, unless they represent a specific historic specimen tree, should be locally native trees and shrubs of the same woodland communities growing in the park currently (oak, hickory, etc.). Such plantings would help maintain the continuous appearance of the woodland over time.

5.1.6. Fence Rehabilitation

The Thomas and Worthington Farms CLR calls for the rehabilitation of fences within these two properties, noting that in order to enhance the historic character of both properties, extant historic fencing should be retained and preserved, and lost fencing should be restored (when documentation is available). The rehabilitation of fencing would improve the public's understanding of the historic nature of the site, as well as reinforce the historic lines within the viewshed. At the Thomas House, the existing board fencing along the perimeter of the house grounds should be realigned to more accurately depict the historic spatial arrangement of the property. Specifically, the stone tenant house should not be enclosed within the house yard, as evidenced by historic images and aerial photography. At the Worthington Farm, a six-rail fence should be reestablished to the east of the Worthington House to redefine the boundary of the domestic yard and rectangular area that presumably enclosed a kitchen garden and orchard during the historic period. Finally, as called for in both the GMP/EIS and the Thomas and Worthington Farms CLR, the fence line between the Thomas and Worthington farms should be reestablished to the greatest extent possible.

5.1.7. Utilities

Utilities can encroach into viewsheds, especially utility poles and aerial lines. In order to minimize the presence of such features within the viewshed, utilities should be undergrounded to the greatest extent possible. Furthermore, the Thomas and Worthington CLR states that utility lines should be made inconspicuous in the landscape, suggesting the use of native plants to screen any remaining above ground utility features. Consider use of paint and finish colors that match the surrounding landscape on aboveground utility features to further reduce their visibility.

5.2. Beyond Park Boundaries

5.2.1. Alterations to Existing Regulatory Framework

Comprehensive Plan

Frederick County is now in the process of updating its Comprehensive Plan. The purpose of the comprehensive plan is to guide development and policies for the county. The current update of this plan provides an excellent opportunity to incorporate viewsheds from Monocacy National Battlefield into the long-range plans that will guide the county's development-related decision

making. The NPS should work with the county to include the following in the Comprehensive Plan update:

- Reflect viewsheds from the battlefield as a cultural resource outside the boundaries of the park, acknowledging that important views do not terminate at the park's boundaries
- Specify areas identified in this VRPP as within the Priority A viewsheds.
- Support adoption of an overlay district and other tools to address potential development at properties within the viewsheds, which could be altered due to development activities.

Zoning Code and Map

The Frederick County Zoning Code defines land uses and development requirements for land throughout the county. Although existing zoning regulations seek to encourage compatibility to nearby properties, they do not necessarily take into consideration the potential incompatibility a development would have with Monocacy National Battlefield miles away. In order to address this, the NPS should work with Frederick County to create an overlay district for properties that are within the Priority A viewsheds.

Overlay District

An overlay district is defined by the Frederick County Code as "an area where certain additional requirements are superimposed upon a base zoning district or underlying district and where the requirements of the base or underlying district may or may not be altered." In this case, the additional requirements that are superimposed on the properties would be related to design, rather than use, and would focus on requirements such as height in order to minimize the visibility of new development on existing viewsheds. **Figure 26**, **Figure 27**, **Figure 28**, and **Figure 29** illustrate how zoning heights could alter the visibility of development outside the park. These requirements should be carried out in conjunction with the development of design guidelines (Section 5.2.2).

As part of an overlay district, NPS should work with Frederick County to develop a process by which development within the Priority A viewsheds is reviewed to ensure that intrusions that could affect the viewsheds are avoided. For instance, stakes with flags could accurately indicate proposed buildings as to dimensions, height, and rooflines by poles and access roads. Such indications of the extent of development would then be recorded photographically with superimposed representation of the proposed project. The standard for review would be the objective determination of whether the private proposed development would be visible from the priority viewsheds.

Furthermore, the overlay district legislation should require Planning Commission review of development within the overlay district to ensure that development adheres to best practices to minimize intrusions into the viewshed.

Transfer of Development Rights

Transfer of Development Rights (TDR) serve as an alternative strategy to purchasing land in order to maintain viewshed quality. TDRs preserve scenic areas by transferring, or "sending," development rights from sensitive lands to "receiving" areas marked for growth. The intent is to

provide economic compensation in the form of density credits for the loss of potential density or development on properties within important viewsheds. Many TDR programs offer incentives such as increased density, faster permit processing, less stringent design review, or tax breaks to encourage developers and landowners to take advantage of the program.

Frederick County currently enables TDR in the Agricultural District. The Agricultural Rights Transfer Option (ARTO) is intended to

> …encourage the conservation of farmland, particularly in areas of the county known for prime agricultural soils, by permitting the transfer of existing development rights from one agriculturally zoned parcel to another, and further by limiting the parcels which will be eligible to receive the transfer of such rights to land zoned agricultural and located in more densely developed areas of the county; and to provide an additional privately funded farmland preservation program. (Frederick County 2016a)

The existing ARTO could serve as a model to use TDR as a method for viewshed protection. A similar approach could encourage new development and density to occur outside the primary viewsheds. Such a TDR would identify sending areas within the primary viewsheds, as well as appropriate receiving areas that are beyond the viewsheds. The NPS should work with Frederick County to identify potential sending and receiving areas for TDR.

Appendix C offers examples of regulatory strategies that utilize TDR. These include stated policies, municipal codes, and permit applications.

Tree Canopy Preservation

Currently, the Frederick County Code includes in its priorities for on-site tree conservation nonhazardous trees that are part of a historic site or are associated with a historic structure. The NPS should work with Frederick County to include trees that are within Priority A viewsheds in the list of priorities. This regulatory alteration would support a continuous tree canopy, which would minimize breaks in the overall visible landscape. The tree canopy could also provide a consistent visual buffer to new development, the visibility of which can be buffered by trees at the site of the new development, but also through the viewshed.

5.2.2. County Design Guidelines

Siting

New development frequently clears trees from much of the property and can place new buildings at prominent topographic points within a property. The result is a decline in the consistency of the tree cover and intrusions of built elements within the viewshed. In order to maintain the visual quality associated with Priority A viewsheds, design guidelines should identify appropriate requirements for siting new structures in unobtrusive locations within the site. The design guidelines should also encourage the preservation of existing tree cover within development sites. As described above, these design guidelines would be implemented through an overlay district.

Materials

Similar to the park recommendations, non-reflective materials, such as wood or stone, would minimize the visibility of structures; reflective materials, such as metal and glass (unless specifically designed to avoid reflection), should be avoided.

Color

The colors used for new features in the priority viewshed areas should be consistent with the existing landscape and feature natural and neutral colors, such as green and brown. Using such a palette would enable the structure to blend into the landscape and reduce the contrast between the overall viewshed and new development. The NPS should see Bureau of Land Management (BLM) guidelines (found at http://www.blm.gov.bmp) for selecting color choices in the Western landscape for an example of a well-tested methodology for developing and using a palette of locally landscape-compatible colors for paint color selection for Monocacy National Battlefield (**Figure 30**).

Vegetative Buffers

Vegetation can be used in some areas to minimize the visibility of built features that fall within Priority A viewsheds. Place the vegetative buffers in locations that maximize their ability to block views of new built features, such as in a higher topographic location or nearest to the building. In order for the vegetation to blend into the natural landscape, tree buffers should be a mix of native evergreen and deciduous vegetation, layered canopy and understory trees and shrubs, spread over an area in an organic, unregimented pattern.

Figure 26: Points Visible with 60 Foot Height Limit

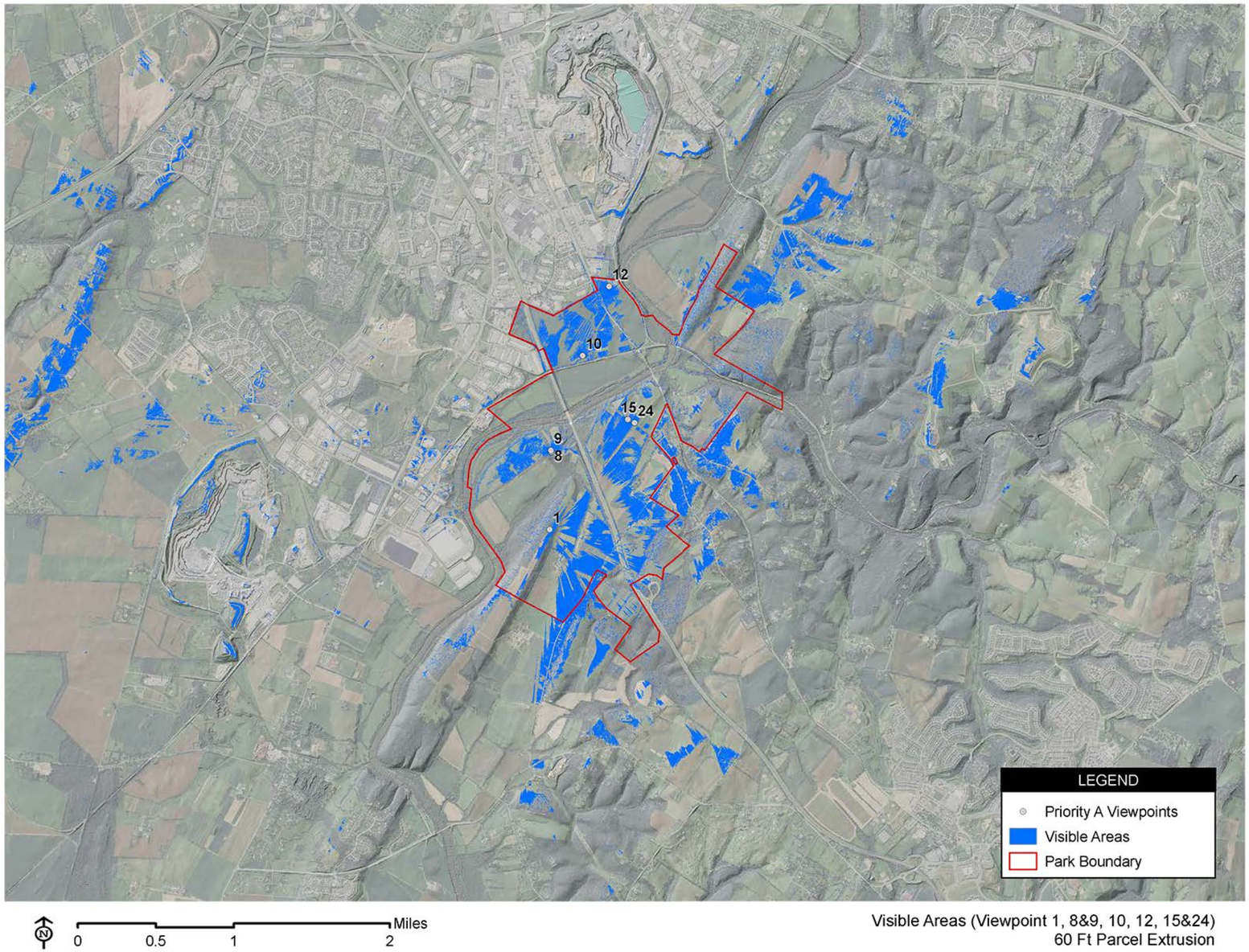
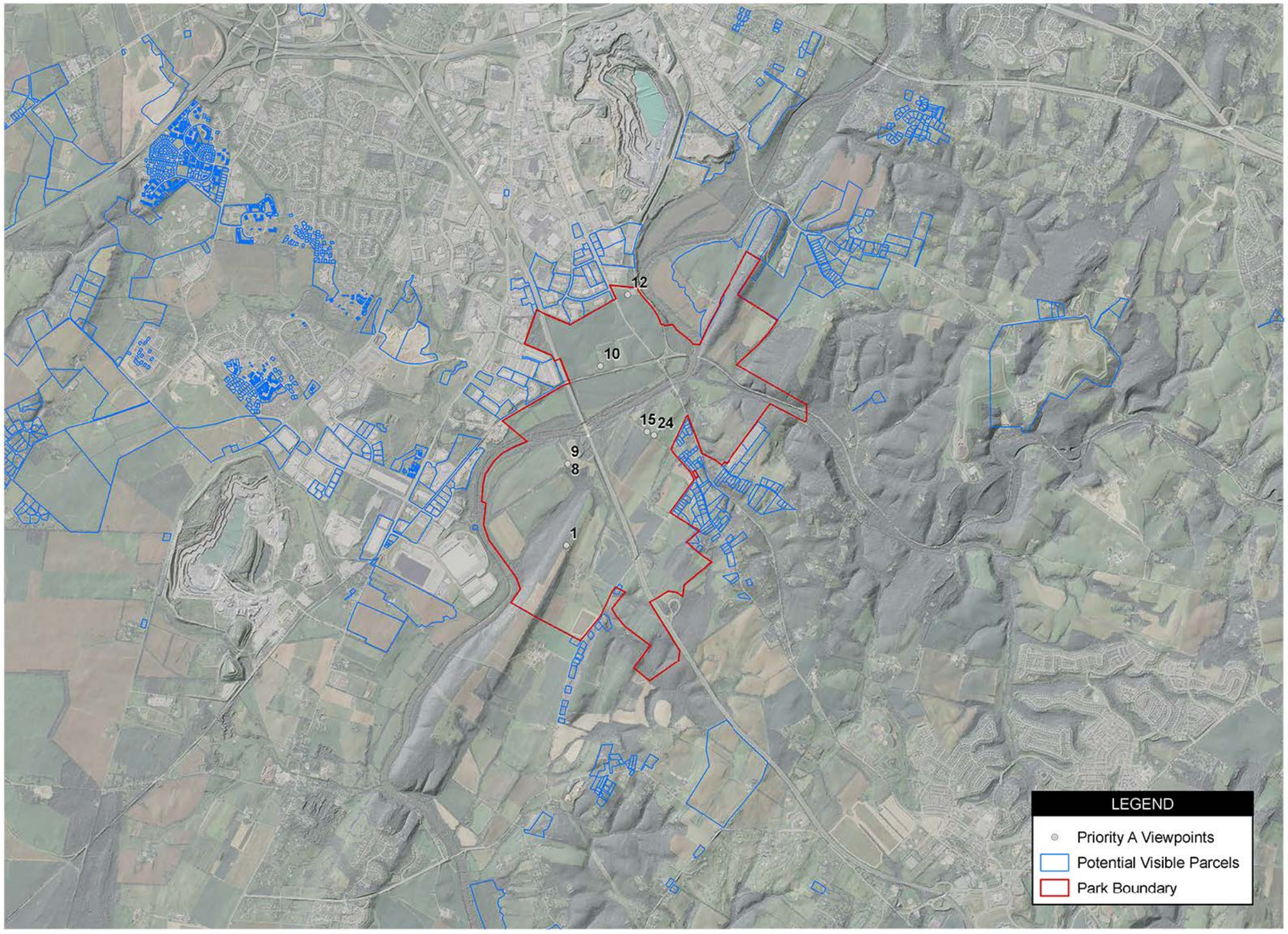


Figure 27: Parcels Visible with 60 Foot Height Limit



Potential Visible Parcels (Viewpoint 1, 8&9, 10, 12, 15&24)
60 Ft Height Scenario

Figure 28: Points Visible with 30 Foot Height Limit

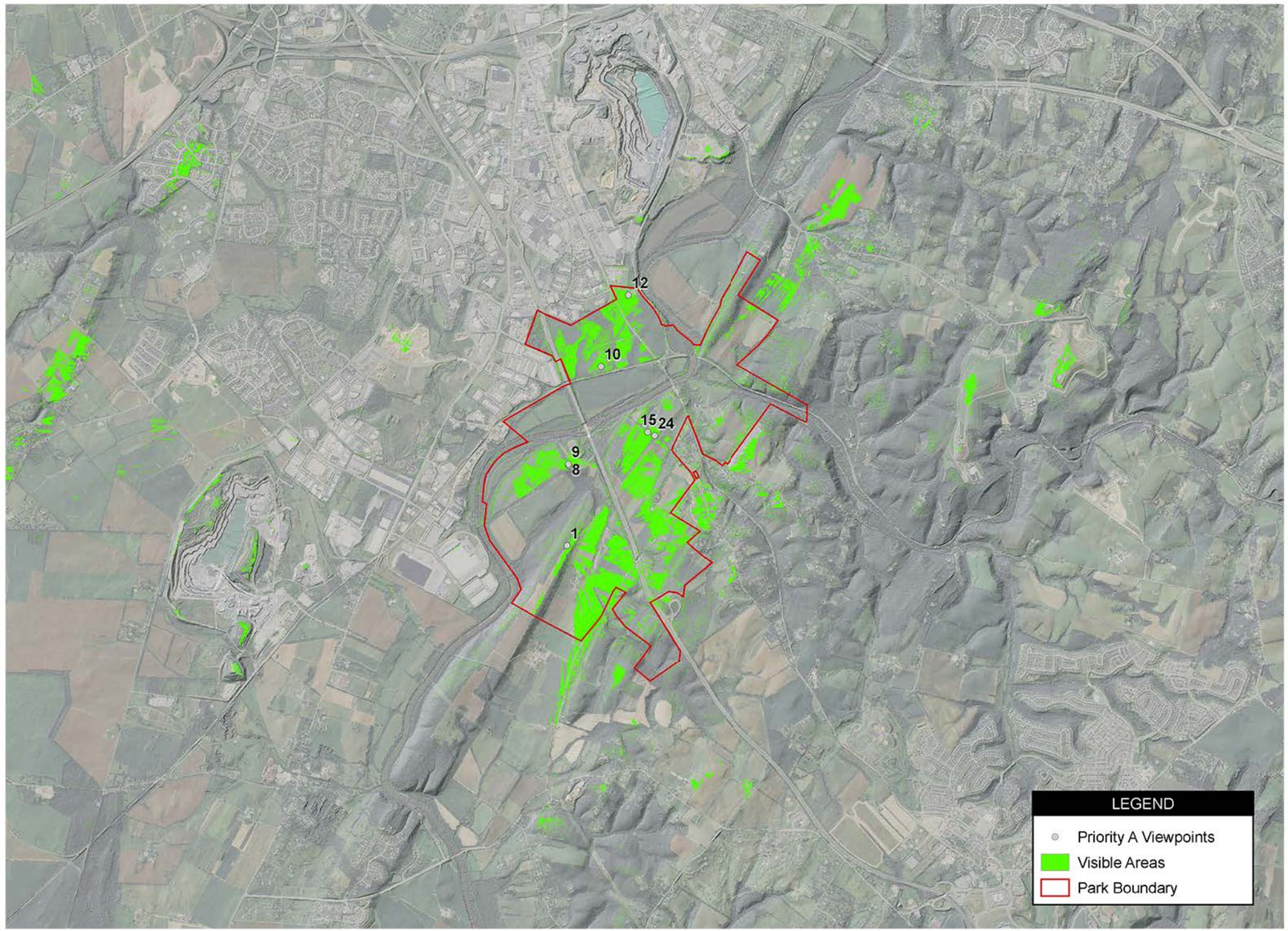


Figure 29: Parcels Visible with 30 Foot Height Limit

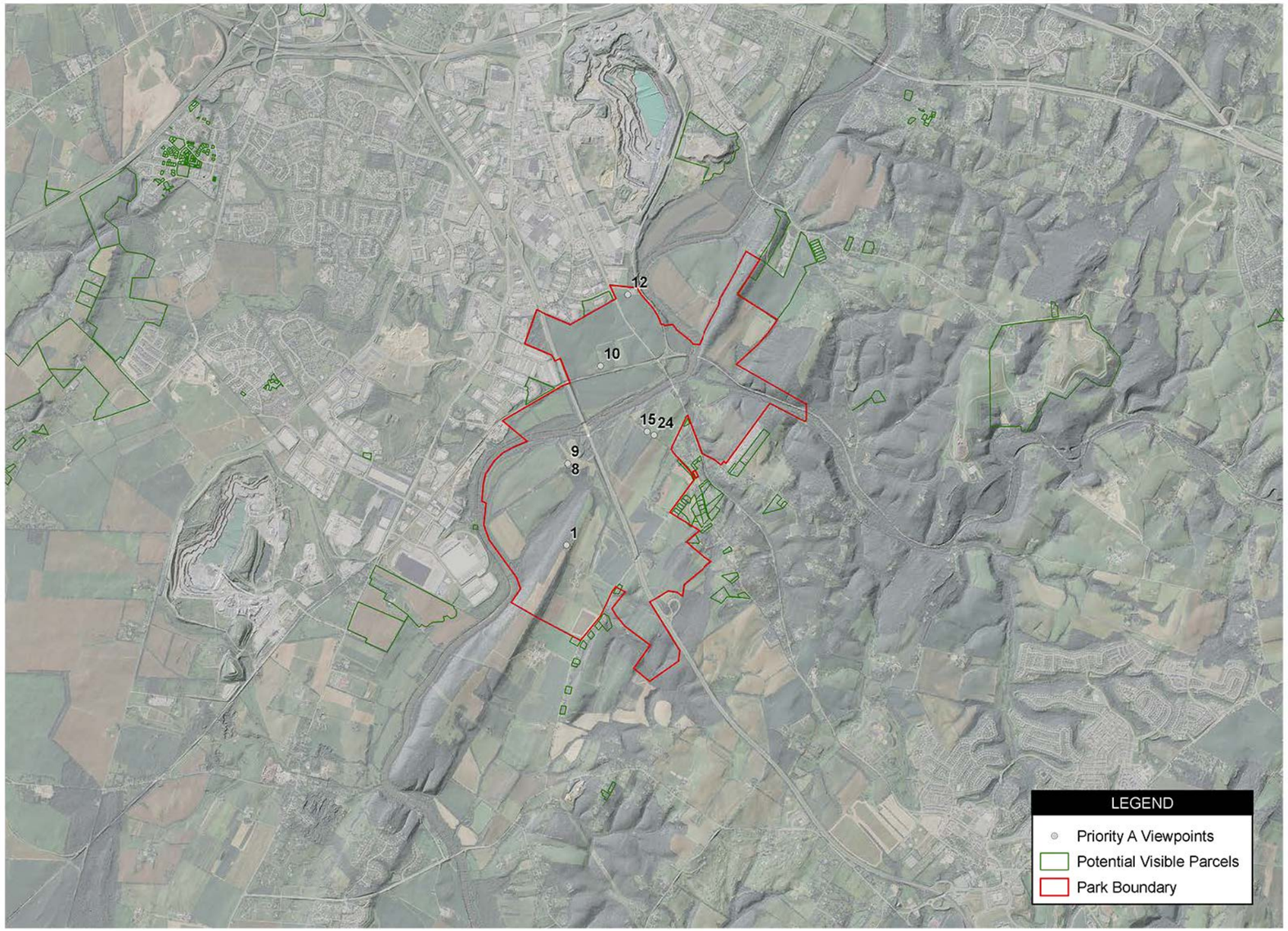
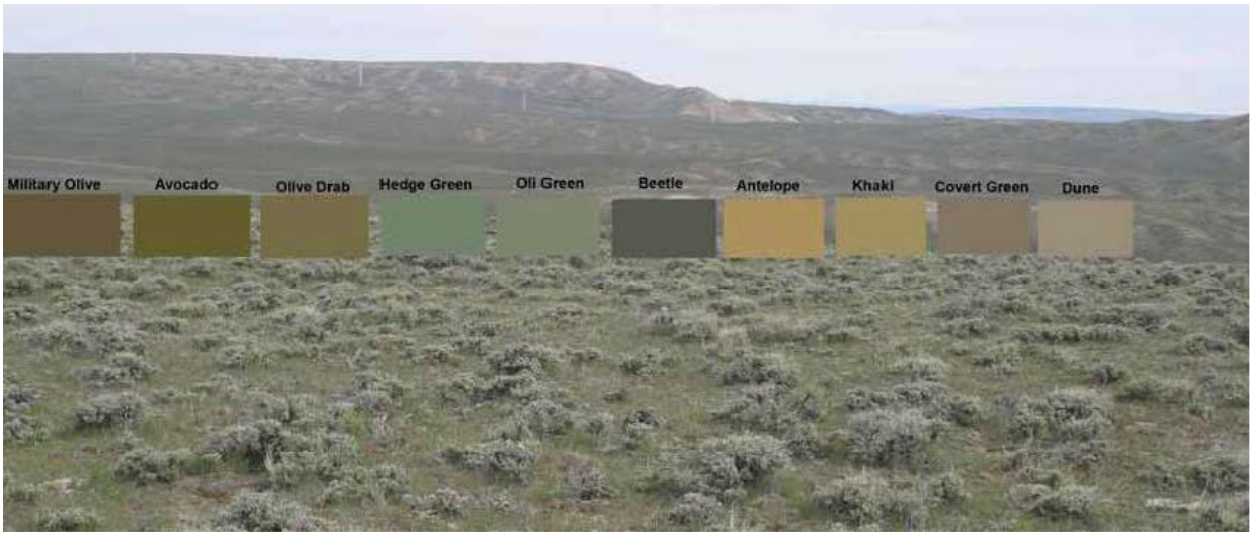


Figure 30: Example of Compatible Color Palette



Source: BLM

5.2.3. Utility Location

Coordinate with local governments and utility providers to ensure views from the priority viewpoints within the battlefield are considered in planning for utility features that would be placed within the landscape. Structures such as utility poles, communications towers, and water storage tanks can significantly diminish the quality of scenic views by their height and volume, as well as the number of trees needed to buffer views of them. In order to minimize their impact, consider co-locating utilities within the existing rights-of-way to the extent possible, rather than clearing new areas. Utilities should be placed underground, when feasible, in order to minimize the visual intrusions. Topography should also be considered. New facilities would not be appropriate in high, prominent places or in open fields. The NPS and the relevant agencies, including utilities and transportation departments, should develop a policy of integrated tree cover management, which would maintain tree cover in the vicinity of the utilities. This offers the opportunity to shield views of the utilities through vegetation. Structures should be in a dark, natural-tone palette to minimize their visibility.

5.2.4. Purchase of Easements and Use of Life Estates

As described in Section 3.5, the State of Maryland and Frederick County administer agricultural preservation programs. Directly to the south of Monocacy National Battlefield, agricultural land is under a MET easement or a MALPF easement (**Figure 8**). However, land to the southwest, southeast, and east (beyond the residential area along Araby Church Road) do not have such development protections. Given their relative visibility, efforts should be made to establish preservation programs focused on adjacent agricultural lands, as well as those that are not contiguous but are within priority viewsheds.

5.3. Viewshed-Specific Analysis

The visual resource protection strategies described above address Monocacy National Battlefield as a whole. **Table 3** below shows the specific strategies appropriate for each Priority A viewshed.

Table 3: Appropriate Strategy by Viewshed

Viewpoint Number	Cardinal Direction Facing	Appropriate Strategy
1	East	Interpretation Vegetation management
2	Northwest	Vegetation buffers Park and County design guidelines Zoning changes TDR Interpretation
6	West-northwest	Land bridge Ha-ha vegetative treatment Crops Utilities
8	Northeast	Interpretation Vegetation Management Fences Land bridge Ha-ha vegetative treatment
9	West-southwest	Interpretation Vegetation County design guidelines Zoning changes TDR
10	Southeast	Interpretation Land bridge Fences Vegetation County design guidelines TDR
11	East	Vegetation County design guidelines Easements and Use of Life Estates TDR
12	South- southwest	County design guidelines Zoning changes TDR Vegetation Easements and Use of Life Estates
15	West-southwest	Land bridge Ha-ha vegetative treatment Vegetation
19	West	None

Viewpoint Number	Cardinal Direction Facing	Appropriate Strategy
21	Northwest	Land bridge Ha-ha vegetative treatment Vegetation Fencing Utilities
24	Northeast	County design guidelines Vegetation Zoning changes TDR Easements and Use of Life Estates

Viewshed 1: East from Brooks Hill

The addition of interpretive signs or other features would help tell the story of Monocacy National Battlefield to visitors, augmenting the power of the viewshed.

Viewshed 2: Northwest near Grambrill House

The viewshed near Gambrill House is a relative highpoint offering views of a substantial portion of the park and beyond. From this point, the non-historic maintenance facility is visible, as well as the Visitors Center, Frederick County, City of Frederick, and Gaithland State Park. The installation of appropriate vegetation could help shield visible intrusions into the landscape. Design guidelines, both within and beyond the park, would minimize interruptions into the viewshed that would occur from incompatible siting, materials, and colors. Furthermore, zoning changes that would limit the height of structures would also minimize the incursion of new structures into the viewshed. The use of TDR could facilitate the implementation of such height limits. The elevation of the viewshed also offers the opportunity for interpretation of a wide area due to the panoramic quality of the viewshed.

Viewshed 6: West–northwest at Thomas Farm

The viewshed west-northwest at the Thomas Farm looks across the property toward the Worthington Farm. As such, a variety of measures could be implemented to preserve and restore the viewshed. First, reestablishing visual connections between the Thomas and Worthington Farms would improve the historic character of the viewshed. This could be accomplished through the clearing of encroaching vegetation, the introduction of a vegetative treatment to provide a continuous landscape, and the implementation of a land bridge. The cultivation of lower crops would also provide a deeper vista. Finally, the removal of utility lines in the periphery of the viewshed would also improve the view.

Interpretation at this viewpoint could also be altered to improve the experience at the viewshed. Interpretation could emphasize the viewshed. The driveway material could be replaced with more color-appropriate materials to detract less from the view.

Viewshed 8: Northeast at Worthington Farm

Along with Viewshed 6, Viewshed 8 forms a reciprocal view between the Thomas and Worthington Farms. The view northeast is currently obscured by vegetation. This reciprocal view could be reestablished through the clearing of encroaching vegetation, the introduction of a ha-ha, and the implementation of a land bridge. Further reestablishing the fence line would improve the historic character of the view as well.

Interpretation at this viewpoint could also be altered to improve the experience at the viewshed. Interpretation could emphasize the viewshed. The patyway material at the existing interpretive panels could be replaced with more color-appropriate materials to detract less from the view.

As currently configured, development around the park poses little encroachment to this viewshed.

Viewshed 9: West-southwest at Worthington Farm

Viewshed 9 looks west-southwest from Worthington Farm and extends beyond the Monocacy National Battlefield to Gaithland State Park. Near the Worthington Farm, the removal of non-historic woods and tree-lines north of the house would help restore the vistas to its previous breadth. Additional interpretation of the view could explain the vista to visitors.

Outside Monocacy National Battlefield, zoning changes could avoid the encroachment of built features into the viewshed by limiting the height of new structures. Under current zoning, multiple points and parcels would be visible, if built to the maximum height. Additional restrictions limiting height in specific areas would minimize the visibility of new development. The use of TDR could facilitate the implementation of such height limits. Similarly, if development occurs at sites within the viewshed, the implementation of design guidelines for parcels within the viewshed would further minimize effects to the view. For instance, the use of colors that blend into the background scenery would help maintain the existing viewshed quality.

Viewshed 10: Southeast at Best Farm

Viewshed 10 faces southeast from the Best Farm. To the south and east, the view is primarily of the park. However, areas to the west, north, and east that are near to the park are also potentially visible. Within the park, interpretation could be improved and expanded at the site. Furthermore, the pathway material at the existing interpretive feature should be replaced to a color that blends more with the existing setting.

Outside the park, zoning changes and design guidelines could be implemented to minimize visual intrusion. Height limits would limit the appearance of new structures within the viewshed. Similarly, design guidelines mandating compatible colors and materials would also limit visibility. Also, given the relative close proximity of the visible areas outside the park to the viewpoint, vegetative buffers that appear part of the natural environment would also be appropriate.

Viewshed 11: East at Thomas Farm

Viewshed 11 faces east from the Thomas Farm. Because the Thomas Farm is located very near the border of Monocacy National Battlefield, the viewshed would benefit from numerous strategies applied outside the park's boundaries. Currently, the properties are zoned to allow heights of up to 30 feet, limiting intrusions into the viewshed. The use of TDR could help avoid new development within the viewshed. Instituting design guidelines would minimize interruptions of the viewshed if new structures are built. Also, the use of easements would help protect the park from future development of adjacent properties.

Viewshed 12: South from Visitors Center

Viewshed 12 faces south from the Visitors Center and encompasses areas within and beyond the park. Much of the area visible beyond park boundaries are in areas with development pressures. The use of TDR could facilitate limits to new development that would occur outside the viewshed. The implementation of design guidelines would minimize interruptions of the viewshed if new structures are built. Similarly, the use of a vegetative buffer would help shield intrusions into the viewshed, as well as clearing vegetation along MD 355 which would help rehabilitate the landscape. Also, the use of easements and life estates would help protect the park from future development of adjacent properties.

Viewshed 15: West-Southwest from Thomas Farm

Viewshed 15 faces west-southwest from the Thomas Farm and looks across the farmland to the Worthington House. If I-270 is widened, changes could interrupt the viewshed. In such case, the lowering of the roadbed or the use of a vegetative buffer would help avoid potential visual impacts.

Viewshed 19: West from New Jersey Monument

Viewshed 19 faces west from the New Jersey Monument, near the intersection of MD-355 with the CSX tracks. SHA is currently working to develop plans that would enable access to the area from MD-355. This improvement would improve access to the site. In the distance, Gaithland State Park is visible. Therefore, NPS should coordinate with the State of Maryland to minimize alterations to this background visual element.

Viewshed 21: Northwest from Thomas House Entrance at Baker Valley Road

Viewshed 21 looks northwest toward the Thomas Farm. The visual intrusions present at the site include the telephone poles and wires. In order to improve the visual quality, the undergrounding of utilities would remove the visual intrusions created. Similarly, the restoration of the landscape per the CLR recommendations for orchard and yard definitions with board and picket fences and osage orange hedges would further help to restore the viewshed to its previous condition.

The potential widening of I-270 could encroach into the viewshed. In order to minimize such effects, NPS should coordinate with SHA to encourage lowering of the interstate roadbed.

Viewshed 24: Northeast from the Thomas Farm

Viewshed 24 overlooks farmland at the Thomas Farm, as well as neighboring properties outside park boundaries. Within the park, the viewshed could be enhanced by removing vegetation in order to emphasize the view of Georgetown Pike trace.

The primary challenge to preserving the viewshed is the development of low-density residential uses to the east of the park. The use of life estates and easements to preserve farmland would diminish the potential for visual intrusions. The use of TDR could help avoid new development occurring within the viewshed. Similarly, the implementation of design guidelines and height limits would help limit the visual intrusion for potential new development.

6. Implementation

In order for the visual resource preservation strategies described in Section 5 to be effective, NPS must undertake preliminary planning and coordination activities. The guidelines are intended to protect Monocacy National Battlefield over the long term. However, some of the challenges to viewshed preservation are immediate. The following steps are intended to facilitate implementation of the preservation strategies:

Short-Term (1-2 Years) Strategies

S.1 Install interpretive elements consistent with CLRs. Monocacy National Battlefield should install interpretive elements at areas identified in this plan and in the Best Farm CLR and the Thomas and Worthington Farms CLR. The interpretive elements should focus on presenting the historical context of the view.

S.2 Install fences and vegetation consistent with CLRs**.** Monocacy National Battlefield should place fences in historically appropriate locations as identified in the Best Farm CLR and the Thomas and Worthington Farms CLR. Similarly, vegetative rows, such as osage oranges, should be installed at appropriate locations. Both of these measures would help convey the historic conditions to the visitor.

S.3 Remove successional vegetation consistent with CLRs. Monocacy National Battlefield should remove vegetation that has grown in the years since the park's period of significance in a manner consistent with the Best Farm CLR and the Thomas and Worthington Farms CLR. Such clearing would help convey the historic conditions to the visitor and could potentially expand the extent of the viewshed that would otherwise be blocked.

S.4 Work with leaseholders to limit the height of crops. Monocacy National Battlefield should work with leasehold farmers to limit the height of crops within the primary viewsheds, as described in this document. For these areas, Monocacy National Battlefield should coordinate with farmers to identify crops that would better maintain the expanse of the viewshed.

S.5 *Implement Standards for Rehabilitation and Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings* regarding solar panels. Monocacy National Battlefield should implement the Secretary of the Interior's *Standards for Rehabilitation and Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings* as it installs solar panels or other sustainable energy sources and technologies with a focus on minimizing the visibility of such facilities within primary viewsheds. The park should explore options that blend in color with the existing structure and landscape, and that minimize reflectivity.

S.6 Work with Frederick County to include design guidelines and potential height limits within upcoming planning efforts. As Frederick County undertakes its Comprehensive Plan update, Monocacy National Battlefield should work with the County to preserve the primary viewsheds of the park. In order to accomplish this, a first step would be to coordinate with the County to identify potential strategies for areas within the County that could potentially affect viewsheds, and incorporate these in the Comprehensive Plan and other planner efforts undertaken by the County.

Mid-Term (3-5 Years) Strategies

M.1 Underground utilities. Monocacy National Battlefield should develop a plan to underground utilities that are currently visible within primary viewsheds, such as those at the Thomas Farm. The undergrounding of the utilities would remove current intrusions into these viewsheds. This effort would require developing engineering plans for the relocation of the utilities, as well as the receipt of funding.

M.2 Install ha-ha treatment along I-270 to reconnect reciprocal viewsheds**.** Monocacy National Battlefield should install a ha-ha at I-270 to reconnect the reciprocal viewsheds between the Thomas and Worthington Farms. The ha-ha would serve as an interim step between the current conditions, where the visual connection between the two properties is severely limited by vegetation. This effort would also require the removal of vegetation along I-270, as supported by the Thomas and Worthington Farms CLR.

M.3 Work with Frederick County to develop design guidelines for beyond park boundaries. In order to support the recommendations to incorporate in the Frederick County Comprehensive Plan, Monocacy National Battlefield should work with the County to develop design guidelines for properties outside the park that have the potential to alter primary viewsheds. These guidelines would be applied to development beyond the borders of the park as part of the county's development review process.

M.4 Coordinate with adjacent property owners and state agencies regarding easements and trusts. Some properties outside the park that are within the primary viewsheds would be good candidates for easements and life estates. Monocacy National Battlefield should reach out to these property owners to determine if such measures would be welcome. The park should also coordinate with state agencies that administer the programs to facilitate the use of such programs.

Long-Term Strategies

L.1 Work with Frederick County to develop and implement viewshed protection ordinance to limit height in areas closest to park. Monocacy National Battlefield viewsheds are particularly susceptible to development outside the park with heights outside the current development patterns. As a result, Monocacy National Battlefield should work with Frederick County to develop and implement viewshed protection ordinances. These could include the requirement of design guidelines and of height limitations. Such limitations would likely occur through the implementation of an overlay district. Such a mechanism would apply additional restrictions to development within a specific general area without altering the underlying zoning.

L.2 Develop design guidelines for use within the park. Monocacy National Battlefield does not currently plan to construct new structures within the park. However, design guidelines should be considered as a tool to guide future development within park boundaries should the need arise.

L.3 Implement plans for land bridge across I-270**.** The land bridge across I-270 appears in the parks General Management Plan and is considered a key element of uniting the disparate parts of the park. Monocacy National Battlefield should continue to work with SHA to create a land bridge. It should be noted that this would most likely occur as part of a project to widen I-270.

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Appendix A

National Park Service
U.S. Department of the Interior

Natural Resource Stewardship and Science

Enjoy the View — Visual Resources Inventory Report

Monocacy National Battlefield

Natural Resource Report NPS/MONO/NRR—2016/1232



ON THE COVER
View of Brooks Hill from Four Corners/Thomas Farm at Monocacy National Battlefield
Photograph courtesy of the National Park Service

Enjoy the View — Visual Resources Inventory Report

Monocacy National Battlefield

Natural Resource Report NPS/MONO/NRR—2016/1232

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Abstract

Each unit of the national park system has special visual characteristics that are often a central component to the unit's management and visitors typically rank scenic views as one of the top five reasons for visiting a park. At Monocacy National Battlefield views are important ways to better understand the connection between natural and cultural resources and many views are in, and/or have views of, the location where the 1864 Battle of Monocacy occurred. As part of Enjoy the View, Call to Action, Monocacy National Battlefield completed a visual resource inventory that identified key facts about a selection of views throughout the battlefield. Most of the views inventoried were determined to have relatively high Scenic Quality ratings and high View Importance ratings. The Scenic Inventory Values at Monocacy National Battlefield derived from the combination of Scenic Quality and View Importance ratings range from Very Low to Very High. Despite some visible elements that are out of character with the battlefield setting, the rolling topography and screening offered by wooded areas helps retain a setting similar to its historic context and allows visitors to imagine battlefield movements across the open fields.

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Keywords

Visual resources, scenic resources, scenery, viewsheds, scenic inventory, Monocacy National Battlefield

1. Introduction

The National Park Service (NPS) Organic Act identifies the purpose of the NPS:"…to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." With this central mission the NPS has been entrusted with some of the most spectacular and historically significant landscapes throughout the country.

Each unit of the national park system has special visual characteristics that are often a central component of the unit's management and visitor experience. Visitors typically rank scenic views as one of the top five reasons for visiting a park (Kulesza, 2013). Inspiring vistas can lift the human spirit, expand our sense of place, and provide connections to the natural world and our history as a country.

From a cultural and historical perspective, views are not just about the scenery, but an important way to better understand the connection between natural and cultural resources. This is especially true at Monocacy National Battlefield where many views are in, and/or have views of, the location where the 1864 Battle of Monocacy occurred. Many of these views of the landscape remain similar to the historic setting. Visualizing the historic landscape in the context of the battle is a critical part of the Monocacy National Battlefield visitor experience.

NPS Director Jonathan B. Jarvis issued a 5-year "Call to Action" plan for moving the NPS toward its second century. The purpose of the Enjoy the View, Call to Action item #38, is to ensure that by protecting visual resources and air quality the NPS can actively preserve both stunning and historically significant views for future generations. Many significant views extend beyond park boundaries and can be affected by actions outside parks that impact air quality and adjoining land use. As part of Enjoy the View, Call to Action #38, Monocacy National Battlefield has undertaken a visual resource inventory.

The specific objectives of the visual resources inventory were to:

1) Conduct a visual resource inventory and assessment that establishes a baseline crucial for park planning and internal and external decisions that may impact scenic, cultural, and natural resources.
2) Identify, describe, and map scenic resources at Monocacy National Battlefield.
3) Develop an understanding of the value of clean air and scenic views to inform collaboration efforts with a variety of stakeholders.

Methods

Visual Resource Inventory Overview

The visual resource inventory focused on identifying key facts about the scenic views at Monocacy National Battlefield. The inventory was completed according to the methodology of the Visual Resource Inventory process developed by NPS for assessing visual resources. The unit of inventory in the NPS VRI is "a view" consisting of the viewpoint, the viewed landscape, and potential viewers, i.e., park visitors. The inventory system consists of both fieldwork associated with view description and scenic quality ratings, and an office-based process for assigning importance values to the views. See Appendix A for more details on the inventory methods.

For each view, the inventory fieldwork process included the collection of descriptive data, as well as a standardized assessment of scenic quality. Assessments were conducted in the field on September 10, 2014. The process included photo documentation, written descriptive information about the viewpoint and viewed landscape, and the Scenic Quality rating for each view. The Scenic Quality ratings are determined with objective criteria and through group discussions resulting in a single scenic quality value for the view. The rating was based on scores from three scenic quality factors: landscape character integrity, vividness, and visual harmony. Scenic Quality ratings fall into five classes: from A to E based on how high they score. Class A views have the highest scenic quality and Class E the lowest.

The View Importance rating identifies NPS and visitor values for the view and also identifies key descriptive information about the viewpoint and viewed landscape that helps inform the rating process. The view importance evaluation for each viewpoint was conducted by Monocacy National Battlefield staff on September 29, 2014. The importance of a view involves assessments of the following factors: viewpoint importance, viewed landscape importance, and viewer concern. Each factor was assessed by a team of NPS staff and resulted in a single View Importance rating for the view. View importance ratings fall into five classes: from 1 to 5 based on how high they score. Class 1 views have the highest view importance and Class 5 the lowest.

The Scenic Quality and View Importance ratings are combined to determine a Scenic Inventory Value (SIV) for each view. The SIV is determined using a matrix that consolidates the 25 potential combinations of Scenic Quality and View Importance into five values ranging from Very Low to Very High (Figure 1). The SIV and all other data collected during the scenic quality and view importance evaluations are stored in a geospatial database.

Scenic Inventory Value Matrix						
		View Importance Rating				
		1	2	3	4	5
Scenic Quality	A	VH	VH	VH	H	M
	B	VH	VH	H	M	L
	C	H	H	M	L	L
	D	H	M	L	VL	VL
	E	M	L	VL	VL	VL

Figure 1. Scenic Inventory Value Matrix

Inventory Team

The scenic quality fieldwork for the visual resource inventory at Monocacy National Battlefield was conducted as a joint effort with Catoctin Mountain Park. After a two day training workshop, including a field training exercise, staff and volunteers from the parks conducted the field inventory for both units. The field teams at Monocacy included park management, park staff from natural and cultural resources, interpretation, facilities, and law enforcement, as well as cultural landscape staff from the National Capital Regional office, and volunteers. The volunteers who participated are long-time volunteers who assist the park with interpretation and visitor services. The training workshop and field inventory efforts were led by staff from the NPS Air Resources Division.

View Selection

Monocacy National Battlefield selected 24 views for the visual resource inventory to inform internal view management objectives and external view conservation goals (Table 1, Figure 2). The selection process was based on the following general criteria:

1) Critical inventory priorities (Priority a) include views that are considered most important to the visitor experience or where there an immediate threat to the view from a proposed project or land management or development decisions.
2) Moderate inventory priorities (Priority b) include views that are less important to the visitor experience or where there is limited potential for land management or development to affect the view.
3) Low inventory priorities (Priority c) include views that are somewhat protected from intrusions; views that may already have visual intrusions; or views that are unimportant to the visitor experience.

Table 1. Identified and Prioritized View at Monocacy National Battlefield

ID	Name	Rationale	Priority
1	Brooks Hill – east side 180 degrees	Contributing view noted in Monocacy National Battlefield Cultural Landscape Inventory (CLI) (2007). One of best views in the park for visitor	a
2	Hill behind Gambrill Mill and House	Contributing view noted in Monocacy National Battlefield CLI (2007). Along access road. 90 degree view. Possibly see proposed incinerator stack	a
3	Bluffs above railroad crossing	Contributing view noted in Monocacy National Battlefield CLI (2007). Historic camp Hooker area. Can see Junction. Limited visitor access, planned future trail	c
4	Outside park – I-270 Scenic Overlook to the Frederick Valley and Battlefield	Contributing view noted in Monocacy National Battlefield CLI (2007). Field is growing up in trees (state ROW)	b
5	From Thomas House toward Georgetown Pike	Contributing view noted in Thomas Farm (Araby) CLI (2009). Looking down driveway	c
6	From Thomas Farm complex to Worthington Farm complex	Contributing view noted in Thomas Farm (Araby) CLI (2009). Front side of barn, can see trail and Brooks Hill. 270 degree view (similar to 11, which is 360 degree)	a
7	From Brooks Hill toward the Worthington Farm complex	Contributing view noted in Worthington Farm CLI (2013). Leaf off only. Could view proposed incinerator	c
8	From Worthington Farm toward the Thomas Farm complex	Contributing view noted in Worthington Farm CLI (2013). Historically was an important view but not currently. Place where 1930's photo was taken in Baltimore Sun (similar to 9)	a
9	360 view from Worthington Farm complex	Preserve historic rural character of interpretive node noted in Thomas and Worthington Farm CLR (2013). North of house by apple tree	a
10	360 view from Best Farm complex	Preserve historic rural character of interpretive node noted in Best Farm CLR (2005). Wayside area to north of house. Could view proposed public safety communications tower	a
11	360 view from Thomas Farm complex	Preserve historic rural character of interpretive node noted in Thomas and Worthington Farm CLR (2013)	a
12	View south, southwest from Visitor Center	Preserve historic rural character of interpretive node noted in Best Farm CLR (2005). From observation area in VC. Could view proposed public safety communications tower	a
13	View from Georgetown Pike road trace towards Ferry landing	Observation of NPS staff. Looking north toward witness tree-sycamore. High point. 180 view	b
14	View from Ferry Landing site across the river	Observation of NPS staff. Actual ferry landing site	c
15	Four Corners – Thomas Farm	Westerly view of Brooks Hill toward Worthington, 1890's photo from this point shows Worthington, shows connection between Thomas and Worthington (similar to 13). Viewpoint from gap in treeline	a
16	Lewis West	High Point. No visitor access. Good view of Baker Farm	b
17	Brooks Hill Cliffs	Can see South Mountain, 340 water tower. Good strategic view from battle. Minimal visitor access	b
18	River Access	View of Railroad and Monocacy River and 355 overpass	c
19	NJ Monument	Looking past monument with river on left, treeline in distance. Incinerator site visible, possible development outside boundary	b
20	Araby Pulloff	West View of Thomas Farm from Georgetown Pike	c
21	Thomas Farm Parking Lot	Potential threats exist. Could view proposed public safety communications tower.	a

Table 1 (continued). Identified and Prioritized View at Monocacy National Battlefield

ID	Name	Rationale	Priority
22	Gambrill Mill Trail – southern tip	Gambrill House wayside, looking down historic lane toward ford	c
23	Thomas trail	Thomas trail toward Worthington House – SHA maintained view	b
24	Four Corners to Araby Church Road	Northeastern view, historically important view. Araby Church Road is visible on right side of view. Mostly crop field in foreground. This point is southeast of viewpoint 15.	-

Due to time constraints, the initial phase of the inventory focused on high priority views. All of the critical inventory priorities (priority a) were evaluated, along with a single moderate inventory priority (#19 – New Jersey Monument) (Table 2). It is anticipated that the remaining views will be inventoried in the future as time and resource permit. A supplement to this report will be prepared upon completion of the inventory.

Table 2. Views Inventoried/Assessed at Monocacy National Battlefield

#	View Name	Latitude Coordinate	Longitude Coordinate	View Direction/ Bearing	Approximate Width of View
1	Brooks Hill	39.3540617°	-077.4019783°	E	124^0
2	Gambrill Hill	39.3655250°	-077.3845733°	NW	84^0
6	Thomas barn west	39.3581611°	-077.3924556°	NW	160^0
8	Worthington Farm to Thomas Farm	39.3648867°	-077.3928133°	NE	80^0
9	Worthington Farm past house	39.3616283°	-077.3850733°	W	133^0
10	Best Farm	39.3705750°	-077.3986972°	SE	230^0
11	Thomas Farm Complex	39.3581666°	-077.3924861°	E	180^0
12	Visitor Center	39.3770861°	-077.3956000°	S	220^0
15	Four Corners to Brooks Hill	39.3645200°	-077.3926550°	SW	135^0
19	New Jersey Monument	39.3708944°	-077.3922194°	SW	100^0
21	Thomas Parking Lot	39.3570639°	-077.3908305°	NW	130^0
24	Four Corners to Araby Church Road	39.3646050°	-077.3919350°	NE	202^0

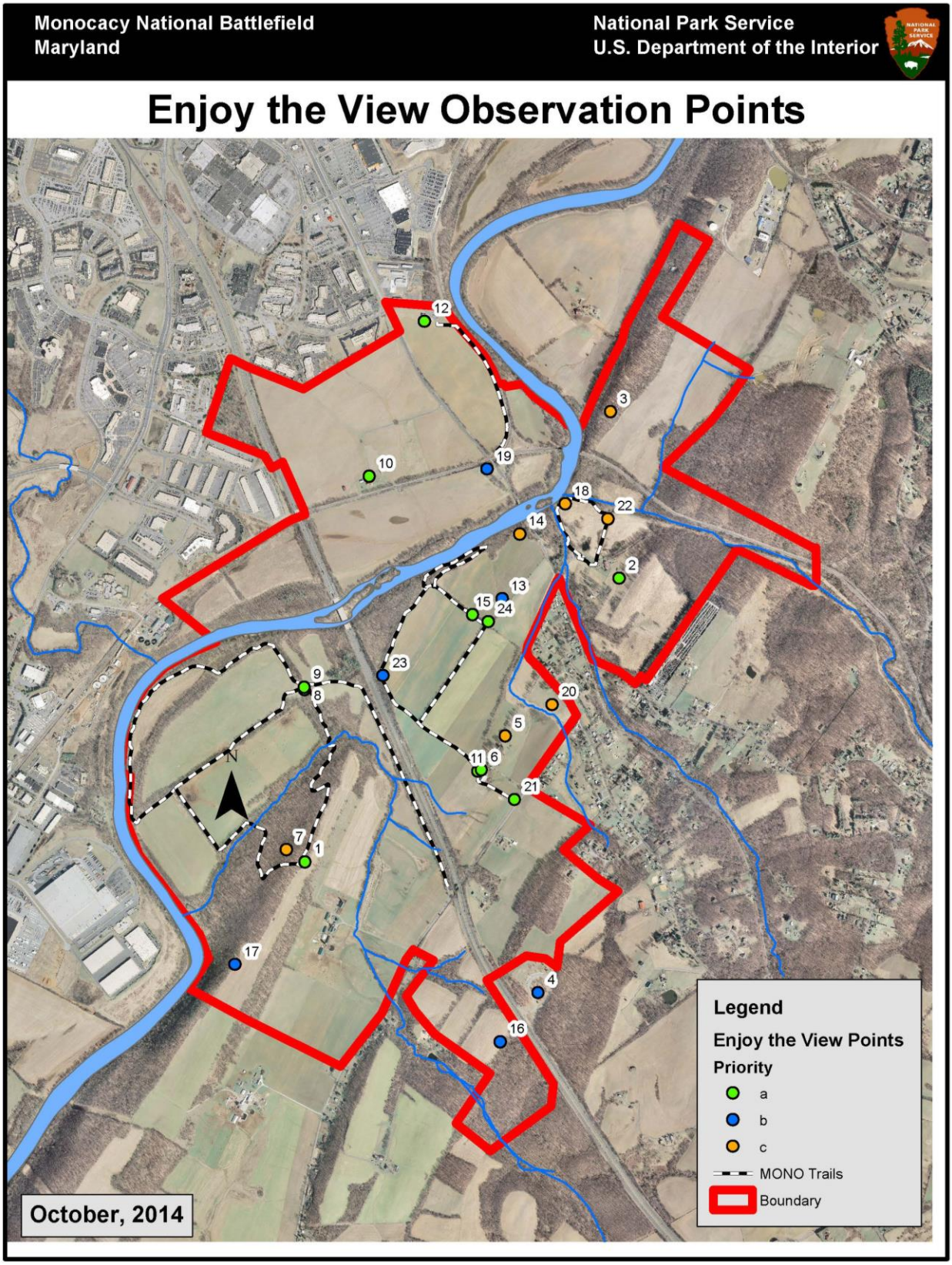


Figure 2. Map of Monocacy National Battlefield Viewpoints

Summary of Findings

Landscape Character at Monocacy National Battlefield

The landforms, geology, vegetation, and other features of the regional location of an NPS unit help define the visual characteristics of the landscape. Monocacy National Battlefield is located in western Maryland and in the Northern Piedmont ecoregion (EPA). The Northern Piedmont is a transitional region of low rounded hills, irregular plains, and open valleys in contrast to the low mountains of areas to the north and west and the flatter coastal plains region to the east. The physical landscape at Monocacy National Battlefield consists of flat to gently rolling plains with forested areas and the Monocacy River running adjacent to or through key battlefield areas.

While natural vegetation here was predominantly Appalachian oak forest, at the time of the battle floodplains were utilized as farmland and there were few areas of native plant-life along the rivers. Today, there are large forested areas along the rivers that serve as a buffer between the agricultural fields, waterways, and nearby roads and highways that traverse the battlefield. The forested areas consist mostly of mixed deciduous oak forest, common to the eastern US.

Much of the battlefield and the surrounding area have an agricultural character with farm buildings and crops surrounded by wooded areas – configured as hedgerows in some locations. Low density rural residential areas outside the park are visible from some locations. Development associated with the Frederick area has also influenced the battlefield landscape with larger buildings visible from some locations. Despite some visible elements that are out of character with the battlefield setting, the rolling topography and screening offered by wooded areas helps retain a setting similar to its historic context and allows visitors to imagine battlefield movements across the open fields.

Scenic Quality and Importance Ratings

Most of the views inventoried at Monocacy National Battlefield were assessed Scenic Quality ratings of B or C; one view was rated as having Scenic Quality D (Table 3). At most viewpoints, visitor attention is focused on elements in the immediate foreground or middleground while the distant background is free of extensive visual intrusions. This helps to create a visual setting that connects visitors to the historic past.

Importance ratings for inventoried views ranged from 1 to 4 with only two views rated 4 and two rated 3 (Table 3). The location of the inventory viewpoints are shown in Figure 1, and an overview of the scenic quality and importance ratings at each location are below. For discussion purposes the summaries are organized by general area within the battlefield rather than numerical order.

Table 3. Scenic Quality, View Importance Ratings and Scenic Inventory Values

#	View Name	Scenic Quality Rating	View Importance Rating	Scenic Inventory Value
1	Brooks Hill	B	3	H
2	Gambrill Hill	C	4	L
6	Thomas Barn west	B	2	VH
8	Worthington Farm to Thomas Farm	C	1	H
9	Worthington Farm past house	B	1	VH
10	Best Farm	B	1	VH
11	Thomas Farm Complex	B	2	VH
12	Visitor Center	B	1	VH
15	Four Corners to Brooks Hill	B	3	H
19	New Jersey Monument	B	1	VH
21	Thomas Parking Lot	B	1	VH
24	Four Corners to Araby Church Road	D	4	VL

Brooks Hill – Viewpoint #1

This view overlooking agricultural fields and the rural settlement area east of Interstate-270 that includes Thomas Farm, received a Scenic Quality rating of *B*. The view offers a good overview of a portion of the battlefield from an elevated position and retains a strong sense of a historic agricultural landscape (Figure 3). Interstate-270 is generally not visible though one can see occasional vehicle movement. New development that is similar in character and density to existing development would not likely affect the visitor experience but highly visible elements added to the landscape that are of distinctly different character could reduce the scenic values of the view. The view was also partially screened by the full height corn crop and at a different time of year or when a shorter crop was in the foreground field more of the valley and Thomas Farm could be visible.



Figure 3. View from Brooks Hill

The landscape in the view from Brooks Hill is heavily interpreted from multiple locations especially Thomas Farm and the view received a View Importance rating of *3*. The viewpoint at Brooks Hill is not as highly publicized or interpreted as other locations and access to the viewpoint is from a somewhat long and steep trail compared to other viewpoints in the park. While the lower publicity and interpretation coupled with the more difficult access results in a lower level of visitation, the location offers a rewarding view that enhances the visitor experience.

Gambrill Hill – Viewpoint #2

This viewpoint offers an expansive view toward the visitor center with the city of Frederick, Maryland in the background (Figure 4). The view received a Scenic Quality rating of *C*. From this location a visitor has an overview of key parts of the battlefield, though some areas are obstructed by tall trees in the foreground on the Gambrill property and along the Monocacy River. More areas might be visible during seasonal "leaf-off" conditions. The park maintenance facility in the foreground is not a major distraction as the viewer's eye is drawn to the visitor center and battlefield area in the middle ground. The city in the background does not extensively detract from the view of the mountain ridge line which provides a strong backdrop for the view. Continued development in the city is not likely to affect the view except that large, incompatible elements could become a focal point and diminish the viewer's experience of the battlefield.



Figure 4. View from Gambrill Hill

This viewpoint is not a major destination and received a View Importance rating of *4*. There is no official trail to the location and the park does not publicize the view or location in any park literature. Visitors access the location on their own – perhaps after visiting the Gambrill Mill Trail that is in the open area below the viewpoint – and they are coming to the location specifically for the view.

Thomas Farm – Viewpoints #6, #11 and #21

The viewpoints at Thomas Farm offer multiple perspectives of a mostly intact agricultural landscape and all three received a Scenic Quality rating of *B*. The view from viewpoint #6, looking west offers a view across open agricultural fields to a wooded area. While it does not have any of the farm buildings in the view it gives viewers a strong sense of the battlefield setting with few visual intrusions. The wooded area provides screening of I-270 and the highway is likely to be more visible during "leaf-off" conditions. From viewpoint #11 the viewer has a close-up, enclosed view of the farm complex (Figure 5). The farm buildings offer color and form contrasts with the surrounding fields that one expects in an agricultural setting. There are a few residences visible on the hills in the background that are out of character with the agricultural foreground but they are not a major distraction in the view. The view from the parking lot at viewpoint #21 is also an enclosed view of the farm with the strong form of Brooks Hill in the middle ground. From this location the highway and a small power line are visible elements that are out of character but not major distractions in the view. Similar to Viewpoint #11 the farm buildings present pleasing colors and forms in the view that are appropriate to the setting.



Figure 5. View of Thomas Farm Complex

The Thomas Farm complex is one of the most highly visited and interpreted locations at Monocacy National Battlefield. It is a popular commercial auto tour stop and is publicized in internal and external materials. Viewpoint #21 received a View Importance rating of *1,* while viewpoints #6 and #11 received View Importance ratings of *2*. Viewpoint #21 was rated slightly higher because it has more extensive interpretive features and generally has higher visitation because some visitors never go beyond the parking area. Viewpoints #6 and #11 are used for interpretive talks but lack panels and other infrastructure. At these locations the lack of interpretive features and reduced improvements – gravel pads rather than extensive paving and trails – serve to let visitors who venture beyond the parking lot experience the historic landscape.

Worthington Farm – Viewpoints #8 and #9

Viewpoint #8, at the farm house porch offers an enclosed view of agricultural fields bordered by woodlands (Figure 6), while viewpoint #9 is an expansive view beyond the farm house to the wooded areas along the river and the mountains in the distant background. The view from the farm house porch is relatively intact but uninteresting and received a Scenic Quality rating of *C*. It is more intimate in scale than many other views and the wayside exhibit is a minor distraction because it is centered in the view in close proximity to the farm house. The woodland backdrop provides screening of I-270 which may be a distraction in "leaf-off" conditions. The view from viewpoint #9 near the wayside exhibit is more open to the west and received a Scenic Quality rating of *B*. The farm house in the view offers interest, scale, and perspective as the visitor views the battlefield area. A few visible elements of development and industrial features are visible but are in the background and because of the distance they are not a major distraction in the view. The vegetation at the edge of the agricultural fields and along the Monocacy River provides good screening of nearby development which is likely more visible during "leaf-off" conditions.



Figure 6. View from Porch of Worthington Farm House

Worthington Farm is a highly publicized and interpreted location at Monocacy National Battlefield and both views received View Importance ratings of *1*. The view from near the wayside exhibit (viewpoint #9) is one of the park's iconic views and is used on the park brochure. In addition to the wayside exhibits the location is used for ranger talks and as a stop for commercial tours. Visitors are also directed to the porch of the farm house to experience the historic landscape from the perspective of farm owners. There are few intrusions in either view, and visitors are expected to be highly sensitive to elements that could diminish the enjoyment of the historic setting.

Best Farm – Viewpoint #10

This location has a view of croplands and the farm building complex from an interpretive panel exhibit and received a Scenic Quality rating of *B* (Figure 7). The view is enclosed by trees that screen a railroad running through the farm as well as Interstate 270 adjacent to the park on the west. The view's agricultural elements add interest and create a landscape setting similar to that of the battle period. There are only a few minor intrusions including power lines and roads. The panel display itself is somewhat distracting in some parts of the view but they are an expected part of the visitor experience.

Best Farm is also among the most popular and highly visited sites and received a View Importance rating of *1*. The location is highly publicized and actively used for interpretation including ranger

talks and commercial tours. The landscape setting provides visitors an opportunity to experience a setting very close to the historic landscape and additional intrusions could diminish that experience.



Figure 7. View of Best Farm Complex

Visitor Center – Viewpoint #12

The view from the visitor center overlook provides an expansive view of the battlefield area near the Monocacy River (Figure 8). The view received a Scenic Quality rating of *B* with some visible farm elements that add interest to the view and vegetation that somewhat screens other potential intrusions, though some elements such as a car salvage yard are more visible with the loss of vegetation during Hurricane Sandy. The highway and a nearby office building are the most noticeable elements that are out of context while the parking lot and interpretive panels near the visitor are a minor but expected distraction.

By virtue of its location this viewpoint is the most visited location in the park and it received a View Importance rating of *1*. Visitors often spend an extended amount of time at the location because of the museum and interpretive facilities. This is also often the visitor's first view of the battlefield and they are expected to be sensitive to elements that detract from the visual experience of the historic landscape. The office building visible to the west is somewhat of a distraction but its position at the edge of the view reduces its potential effect on visitors. Future development that is substantially out of character with the historic setting could diminish the visitor experience of this view.



Figure 8. Partial View from Visitor Center Balcony

Four Corners – Viewpoints #15 and #24

These viewpoints are in the midst of agricultural fields and represent views from a battlefield area that is not located near one of the key farms. The view to the southwest toward Brooks Hill (#15) received a Scenic Quality rating of *B* and the view to the northeast toward Araby Church Road received a Scenic Quality rating of *C*. Viewpoint #15 offers an open view across agricultural fields surrounded by wooded areas (Figure 9). The key vantage point of Brooks Hill is centered in the view and there are few inconsistent elements visible. The trees at the edge of the agricultural fields provide screening of I-270 and visibility of the highway could change during "leaf-off" conditions. The view from viewpoint # 24 overlooks agricultural fields and a portion of the residential area to the east of the Four Corners area, with a small hill providing a backdrop. The view consists mostly of planted crops and generally lacks interest. A forested area to the north screens the Monocacy River and the tree row along the southeast edge of the field provides some screening of the adjacent residential area. The residential area along with visible communication towers somewhat diminish the experience of the historic setting.

Neither of the Four Corners viewpoints are as highly publicized or visited as some of the farm areas and more accessible viewpoints. Viewpoint #15 received a View Importance rating of *3*. It is located on the Thomas Farm Loop Trail which some visitors do use when visiting the farm. The viewpoint does not have a wayside exhibit or other interpretive elements to indicate a location for a view of Brooks Hill, but rather the trail experience gives visitors a sense of being within the historic landscape. A small interpretive element pointing out the view and significance of Brooks Hill could be an opportunity to enhance the visitor experience. Viewpoint #24 is located off of the trail and received a View Importance rating of *4*. The location represents a typical location where visitors might go if exploring off the trail to experience the historic landscape. Viewpoints such as this would have very low visitation as most visitors stay on the trails. Though there are more visible intrusions

than Viewpoint #15, the view is still somewhat undisturbed and presents an opportunity to enhance the visitor experience through the development of interpretive facilities.



Figure 9. View of Brooks Hill from Four Corners

New Jersey Monument – Viewpoint #19

The view at New Jersey Monument received a Scenic Quality rating of *B*. The monument is the central focal point of the view and the surrounding agricultural fields provide a simple and undisturbed backdrop (Figure 10). Much of the land beyond the fields is within the park boundary so there is a reduced risk of potential intrusions though large scale development in the background could be a noticeable distraction and diminish the visitor experience.

The New Jersey Monument is a highly visited location and received a View Importance rating of *1*. It is a popular auto stop and in addition to the wayside exhibit, ranger led talks are held at the location as part of the park's interpretive program. The view of the monument is the reason for the visitor's stop and intrusions that distract from the visual setting could diminish the visitor experience.



Figure 10. View of New Jersey Monument

Scenic Inventory Values

The Scenic Inventory Values at Monocacy National Battlefield derived from the combination of Scenic Quality and View Importance ratings range from Very Low to Very High. Though no views were rated as having a Scenic Quality Rating of A, the importance of the historic landscape setting as part of the visitor experience resulted in high ratings at the farm complexes, which are a primary visitor attraction. The Low and Very Low Scenic Inventory Values identified are at locations where visitors could find themselves when exploring in the park and seeking alternative visual experiences at Monocacy National Battlefield. These viewpoints are not identified locations where park staff send visitors, however, as visitors are encouraged to explore the historic landscape some will find the views from these and other locations a valuable part of their experience.

Conclusions

Monocacy National Battlefield offers visitors an opportunity to experience the historic landscape of the battlefield from multiple vantage points. Beyond the visitor center, most visitors stop at the historic farms where there are interpretive facilities and designated stops on commercial and self-directed auto tours. The farms and agricultural landscapes are keys to connecting visitors to the context of the battle, and the visual setting at most of the locations is relatively undisturbed. The intrusions, or out of context elements, that are visible tend to be minor and somewhat expected in the rural and agricultural setting of the battlefield and surrounding area. Despite the proximity to the urban and industrial development of Frederick to the north and west of the battlefield, it is generally not visible enough to diminish the visitor's experience. The wooded areas in and around the battlefield, while most are not a historic part of the landscape from the time of the battle, currently provide screening of roads and development that might otherwise be visible and detract from the sense of being within the historic landscape. However, the views from several locations could be quite different during the parts of the year when the deciduous trees are in their "leaf-off" condition. There is potential for future construction outside of the park boundary to negatively impact several of the assessed viewsheds. Overall, the visual setting at Monocacy National Battlefield allows visitors to enjoy the experience of a historic setting that enhances their understanding of the battle and visualize how it played out across the landscape.

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Appendix A: Scenic Quality and View Importance Rating Methods

Scenic Quality

Assessing scenic quality involves field-based assessments of: Landscape Character Integrity, Vividness and Visual Harmony.

Each component is assessed in the field while viewing the landscape from the viewpoint, and the assessments requires that the group evaluate three factors for each component. All factors are equally weighted.

Landscape Character Integrity

Scenic integrity indicates the degree of intactness and wholeness visual aspect of the landscape character identified in the landscape description section. It is not an assessment of cultural or historic integrity of the landscape. The highest scenic integrity ratings are given to those landscapes which have little or no deviation from the character valued for its aesthetic appeal.

The rating process assumes that in order to have the highest degree of integrity, i.e. a high quality example of the identified landscape character the view must:

- Have most or all of the key elements of landscape character present;
- Have elements that are of high quality and in the appropriate condition for the landscape character, i.e. well built, well cared for, or, for historic/rustic landscapes, appropriately worn/aged; and
- Be relatively free of elements that are inconsistent with the landscape character.

Vividness

Vividness is the degree to which landscape elements are distinctive or striking enough to make a view memorable. The rating assumes that to have a high degree of vividness, the view must:

- Contain one or more dominant visual features or focal points;
- Contain striking forms and/or lines; and
- Contain striking colors, textures, or visible motion.

Visual Harmony

Visual harmony is the extent to which there is a pleasing array of visual elements in a landscape, usually as a result of a sense of visual order, compatibility, and completeness between and among the land forms, water forms, vegetation, or built elements visible in the landscape. The approach assumes that a high degree of visual harmony is achieved when:

- There is a clearly recognizable structure, pattern, or order to the spatial relationships of the landscape elements;
- The landscape elements display pleasing scale relationships; and
- The landscape displays pleasing color relationships.

Scenic quality ratings fall into five classes from A to E. Class A views have the highest scenic quality and Class E the lowest.

Importance Values

The View Importance rating identifies NPS and visitor values for the viewpoint, the viewed landscape and the viewers. This rating is an office-based exercise. Each component is assessed by a team of NPS staff. In the same manner as Scenic Quality, the process requires that the group evaluate three factors for each component and all factors are equally weighted.

Viewpoint Importance

Viewpoint importance assesses the extent to which the viewpoint is publicized and managed for visitors. The rating system assumes that to have the highest importance rating the viewpoint must:

- Be extensively publicized, especially for its scenic views, in NPS or external communications and media (e.g. hiking guides, web sites, movies);
- Have facilities that have been added or are planned for the viewpoint area to enhance the visitor experience; and
- Have a high level of interpretive services that contribute to the visitors' enjoyment of scenic, historical, cultural scientific or other NPS values of the unit.

Viewed Landscape Importance

Viewed landscape importance assesses the extent to which the elements in the viewed landscape are publicized and used for interpretation. The assessment also evaluates how important special designations such as Wilderness or historic sites are within the view. The viewed rating system assumes that to have the highest level of importance the viewed landscape must:

- Be extensively publicized, especially for its scenic views, in NPS or in external communications or media (e.g. hiking guides, web sites);
- Consist of all or mostly specially designated areas, or nationally/regionally significant scenic, historic, cultural, or scientific features or landmarks (e.g. wilderness areas, cultural landscapes); and
- Strongly illustrate the NPS unit's scenic character or important interpretive themes and/or be connected to the unit's goal for visitor experience

Viewer Concern

The evaluation of viewer concern relies primarily on the knowledge and professional judgment of NPS staff, and the rating system assumes that to have the highest level of viewer concern:

- The viewpoint must have a high level of visitation in relation to other viewpoints in the park;
- Viewers generally spend an extended period of time at the viewpoint; and
- Most visitors would be unusually sensitive to potential changes in a view because they are seeking views of natural character or historic significance.

View importance ratings fall into five classes from 1 to 5. Class 1 views have the highest view importance and Class 5 the lowest.

Appendix B: Viewpoint Panoramas



Viewpoint 1: View from Brooks Hill; View Direction: East; Approximate Width of View: 124 degrees



Viewpoint 2: View from Gambrill Hill; View Direction: Northwest; Approximate Width of View: 84 degrees



Viewpoint 6: View from Thomas Barn to West; *View Direction: Northwest;* *Approximate Width of View: 160 degrees*



Viewpoint 11: View of Thomas Farm Complex; *View Direction: East;* *Approximate Width of View: 180 degrees*



Viewpoint 21: View from Thomas Farm Parking Area; View Direction: Northwest; Approximate Width of View: 130 degrees



Viewpoint 8: View from Worthington Farmhouse Porch; View Direction: NE; Approximate Width of View: 80 degrees



Viepoint 9: View of Worthington Farm Looking Past House; *View Direction: West;* *Approximate Width of View: 133 degrees*



Viewpoint 10: View of Best Farm; *View Direction: Southeast;* *Approximate Width of View: 230 degrees*



Viewpoint 12: View from Visitor Center Balcony; View Direction: South; Approximate Width of View: 220 degrees



Viewpoint 15: View of Brooks Hill from Four Corners; View Direction: Southwest; Approximate Width of View: 135 degrees



Viewpoint 24: View from Four Corners to Araby Church Road; View Direction: Northeast; Approximate Width of View: 200 degrees



Viewpoint 19: View of New Jersey Monument; View Direction: Southwest; Approximate Width of View: 100 degrees

The Department of the Interior protects and manages the nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its special responsibilities to American Indians, Alaska Natives, and affiliated Island Communities.

NPS 894/133261, June 2016

National Park Service
U.S. Department of the Interior



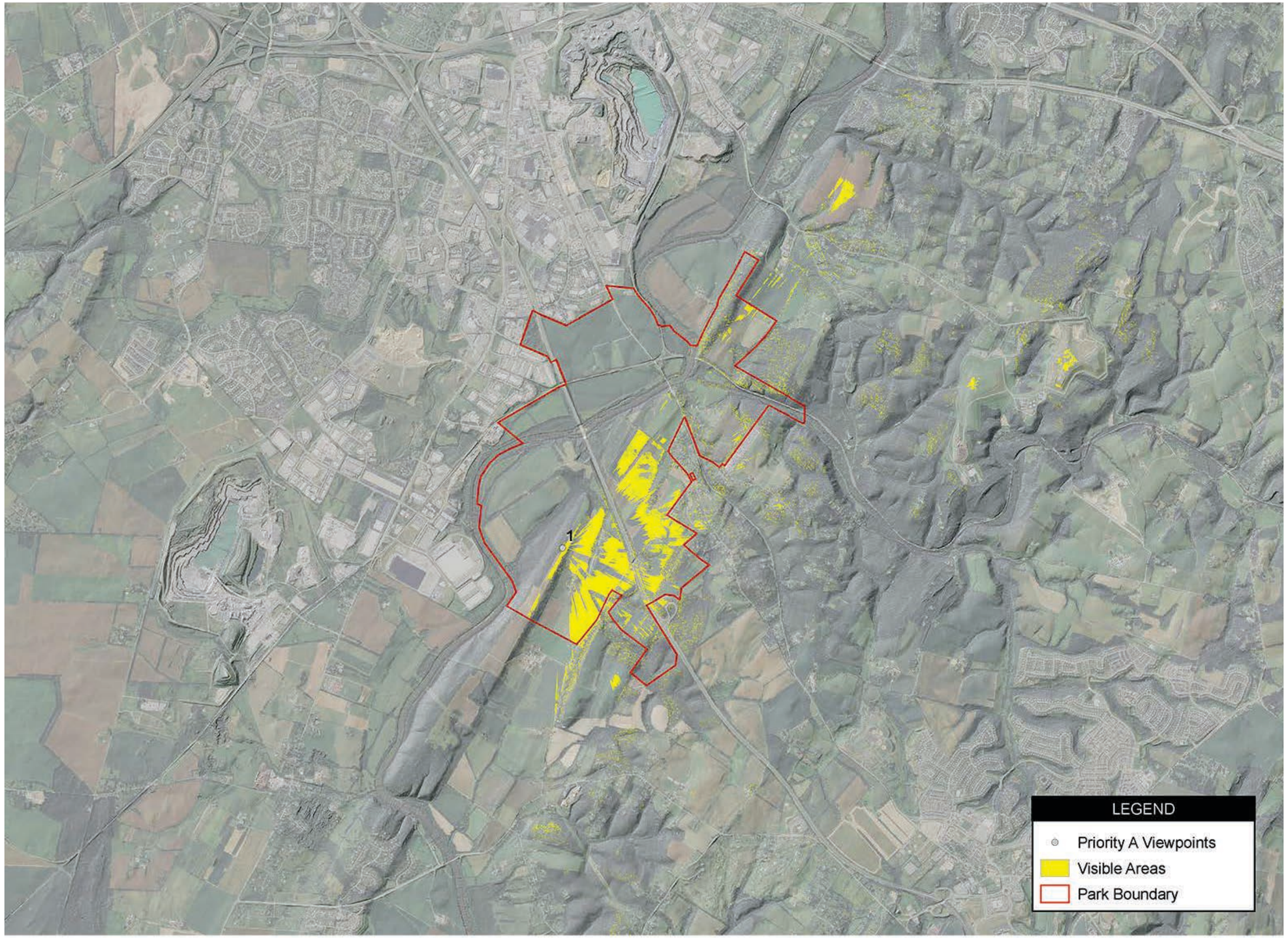
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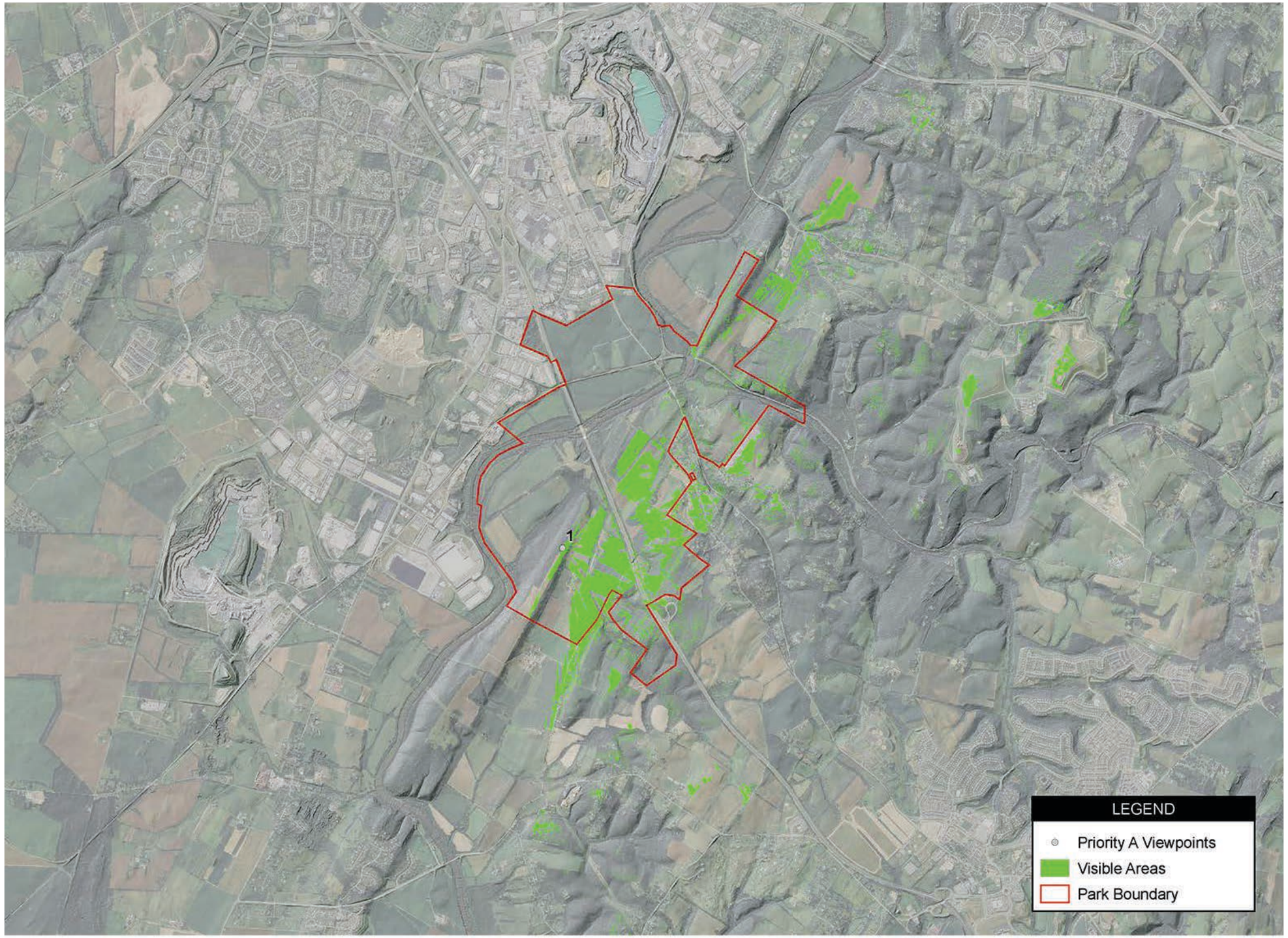
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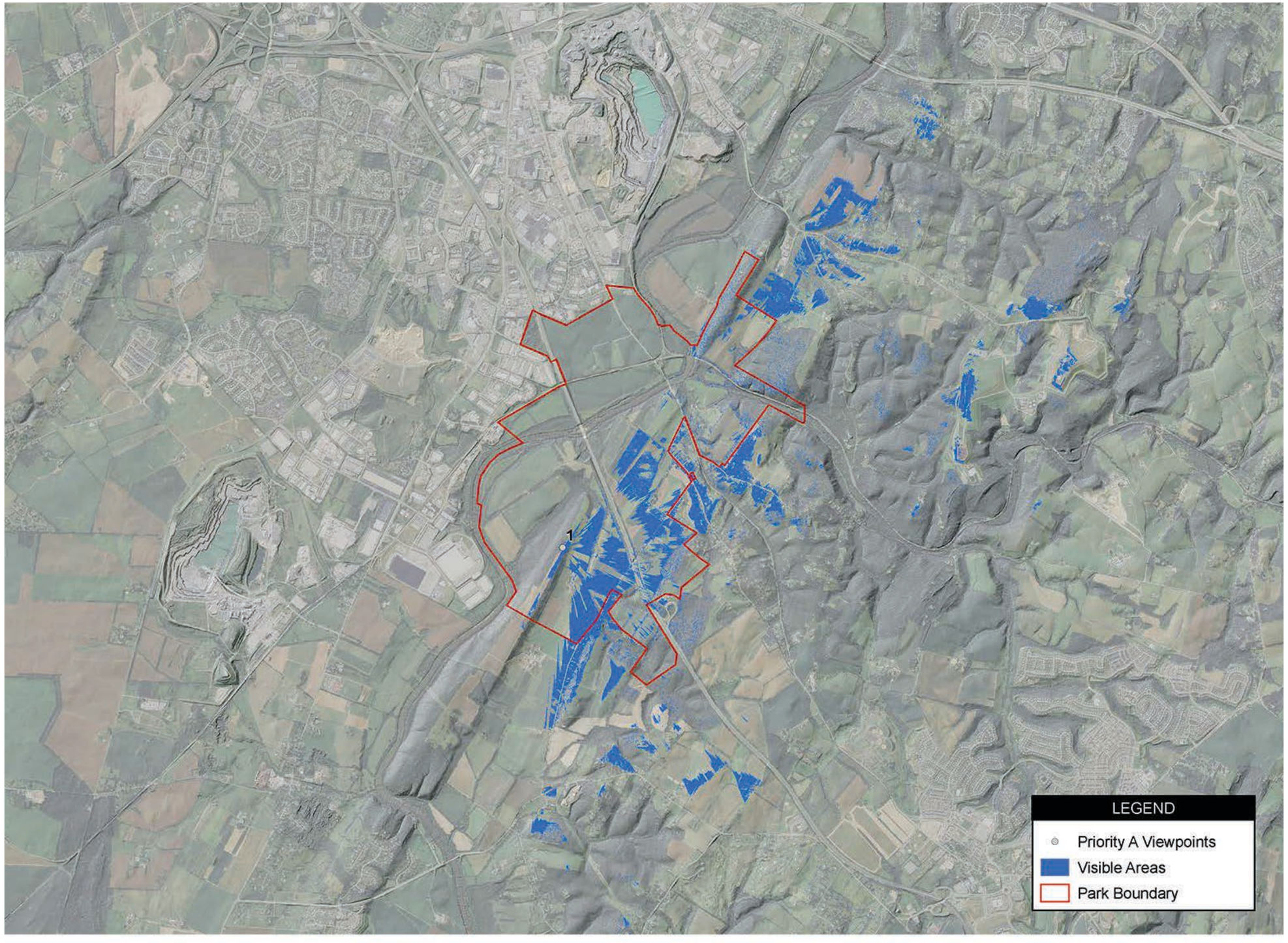
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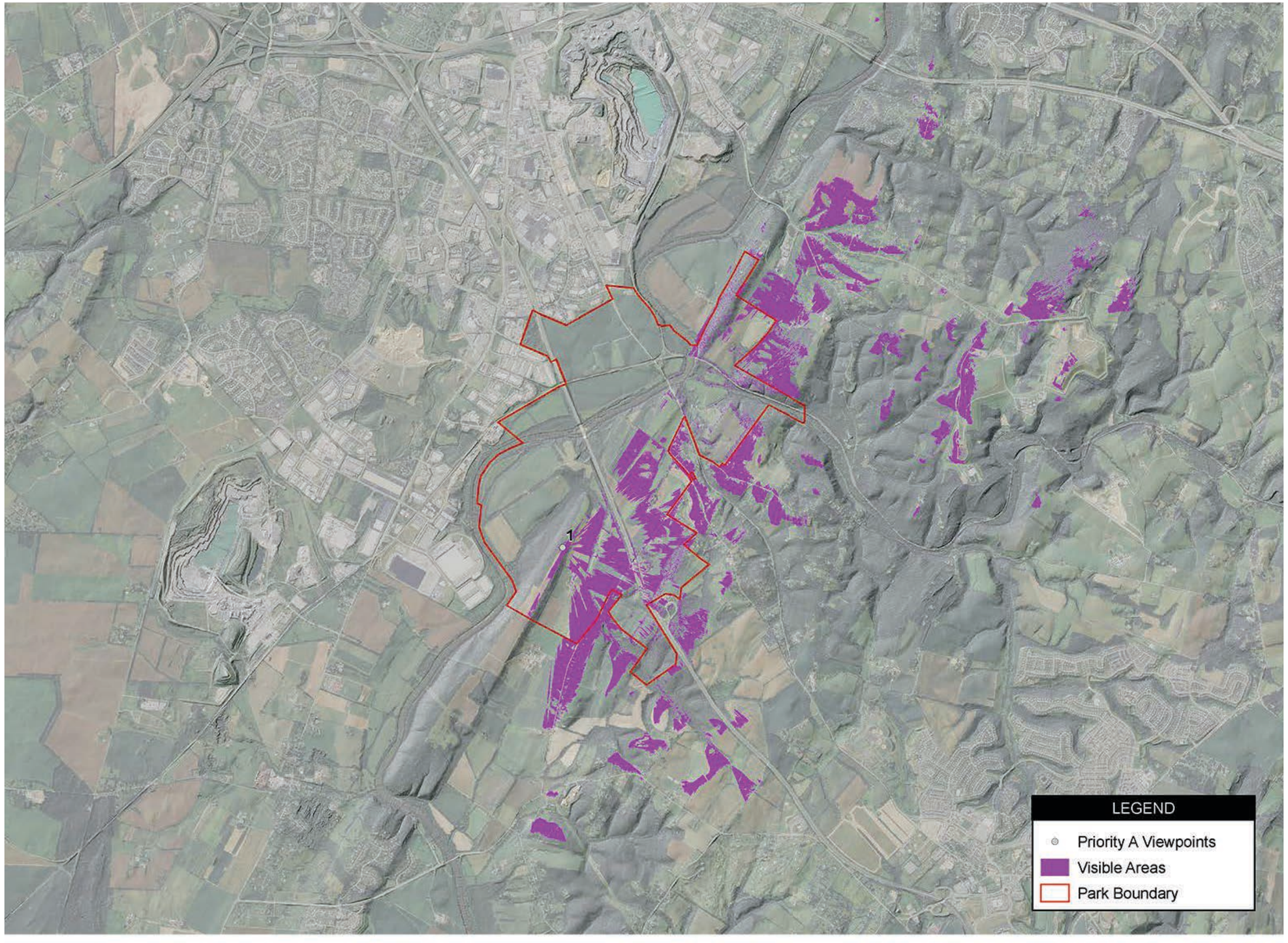
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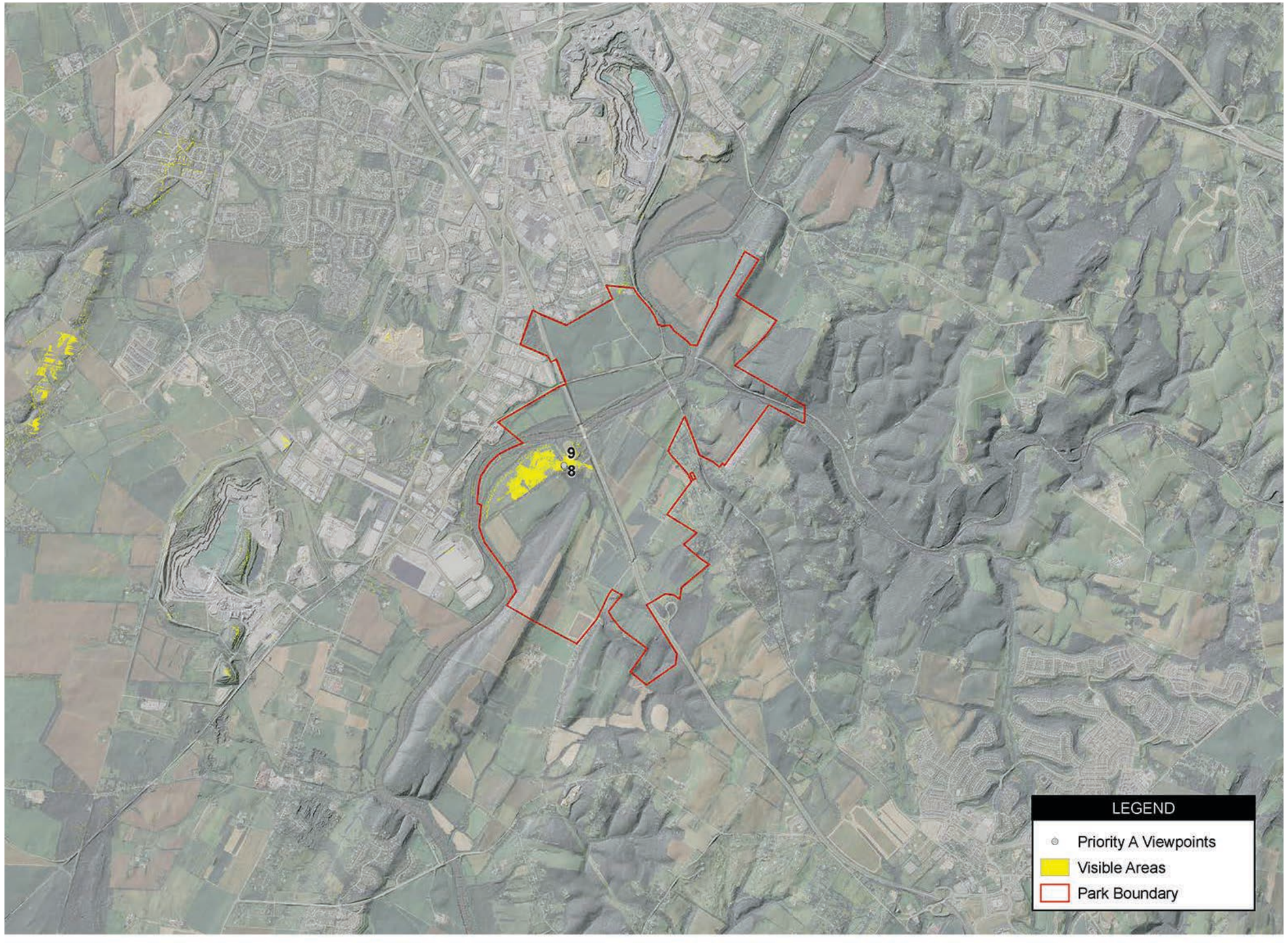
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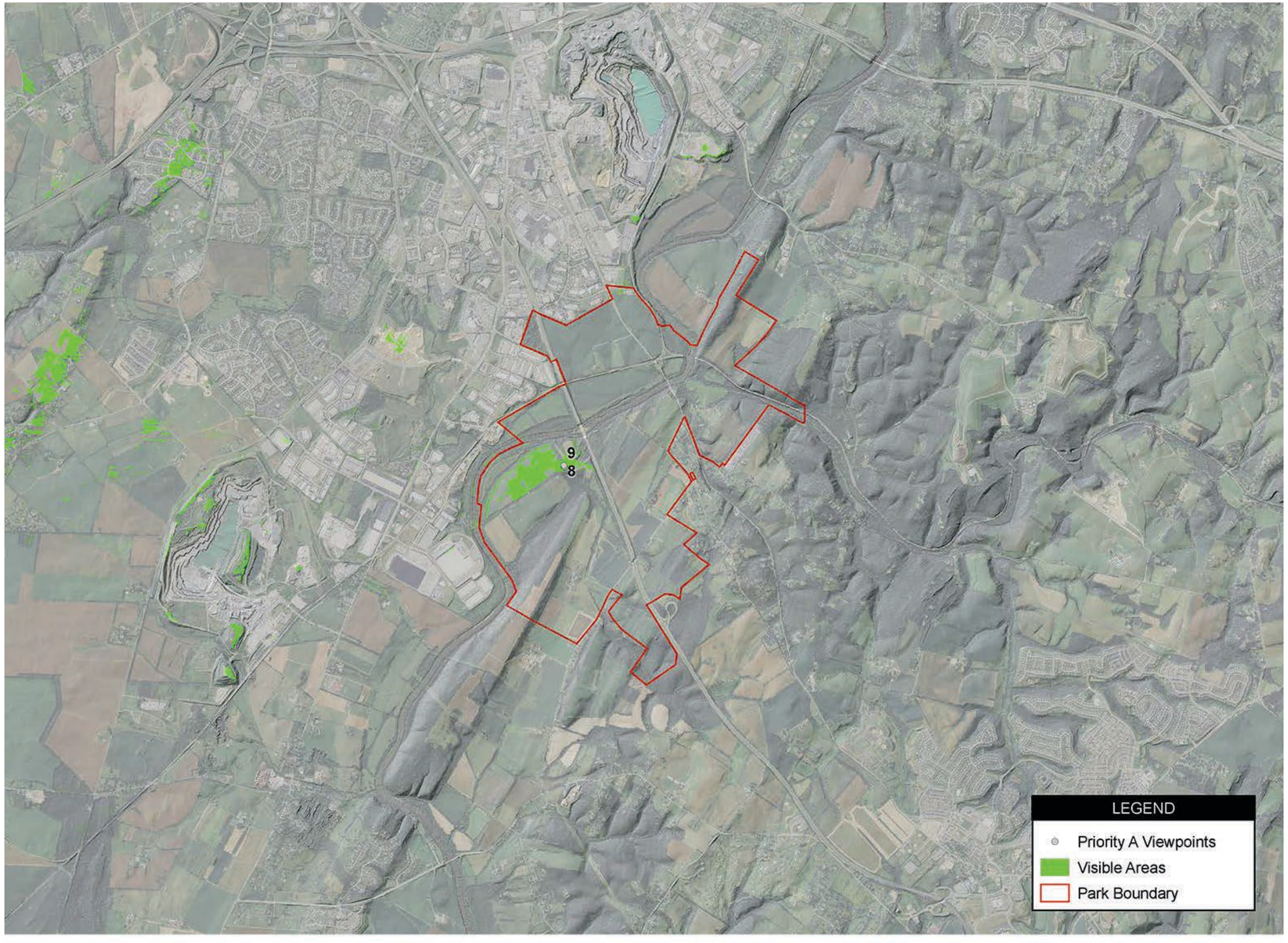
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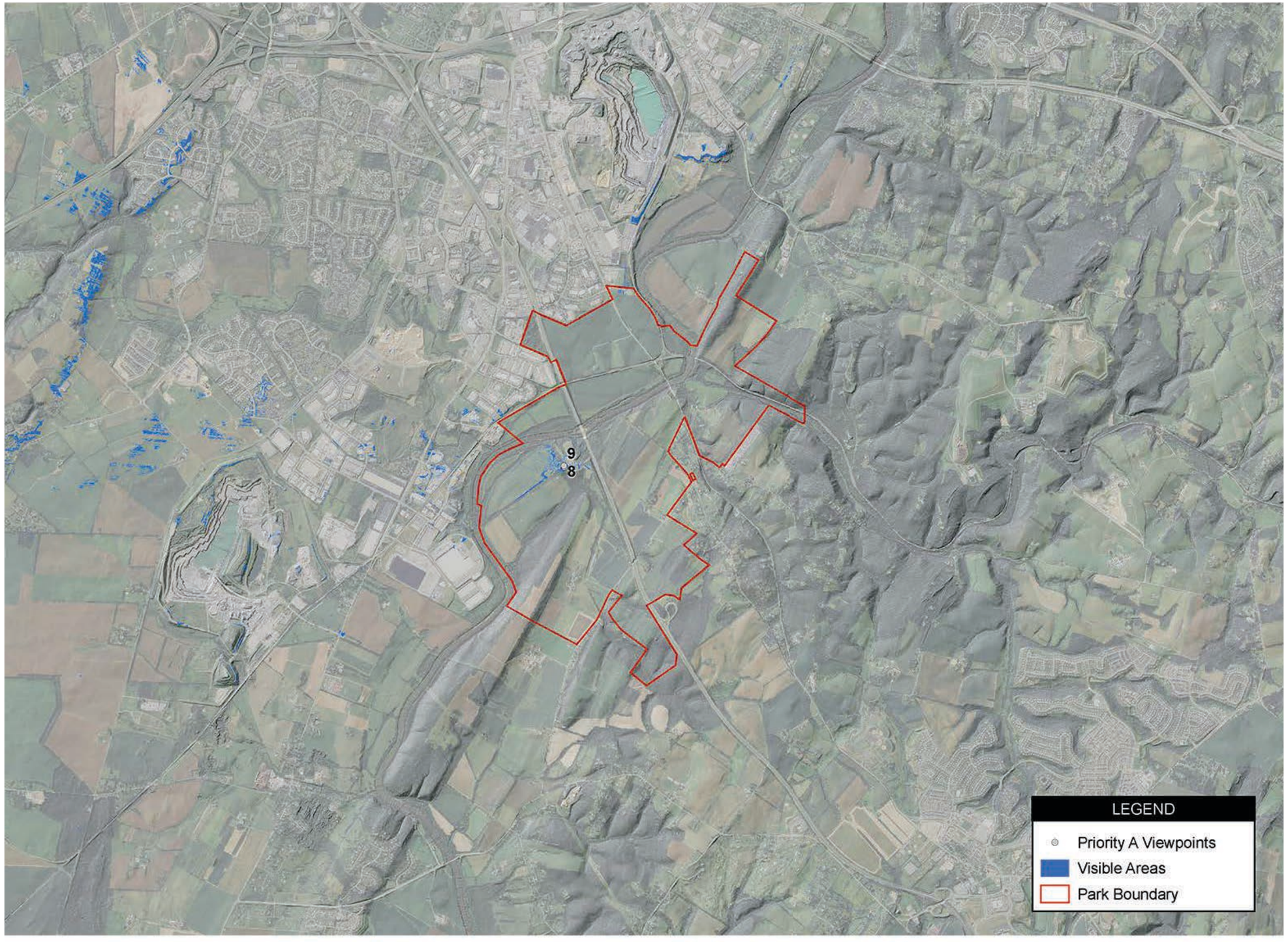
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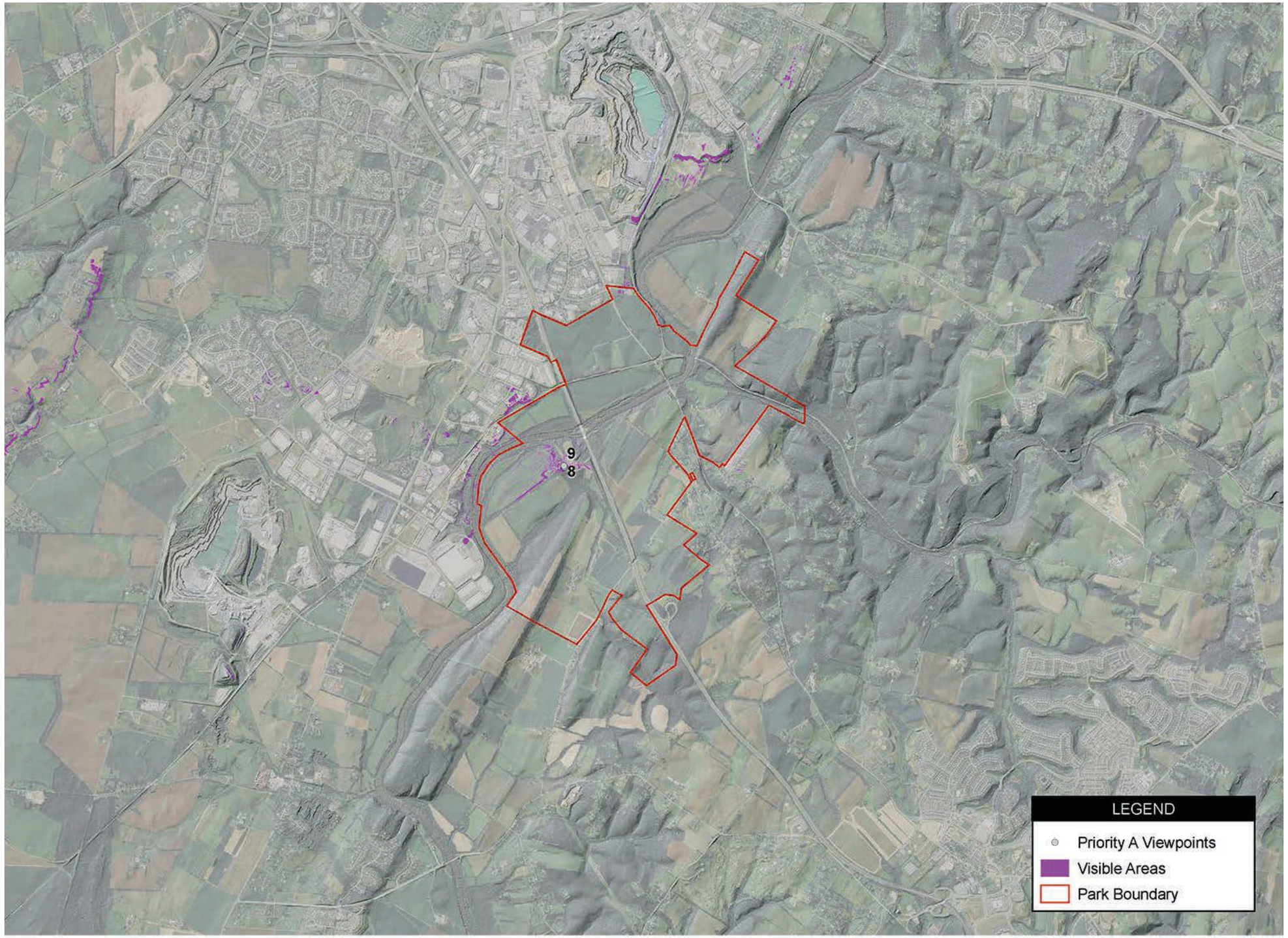
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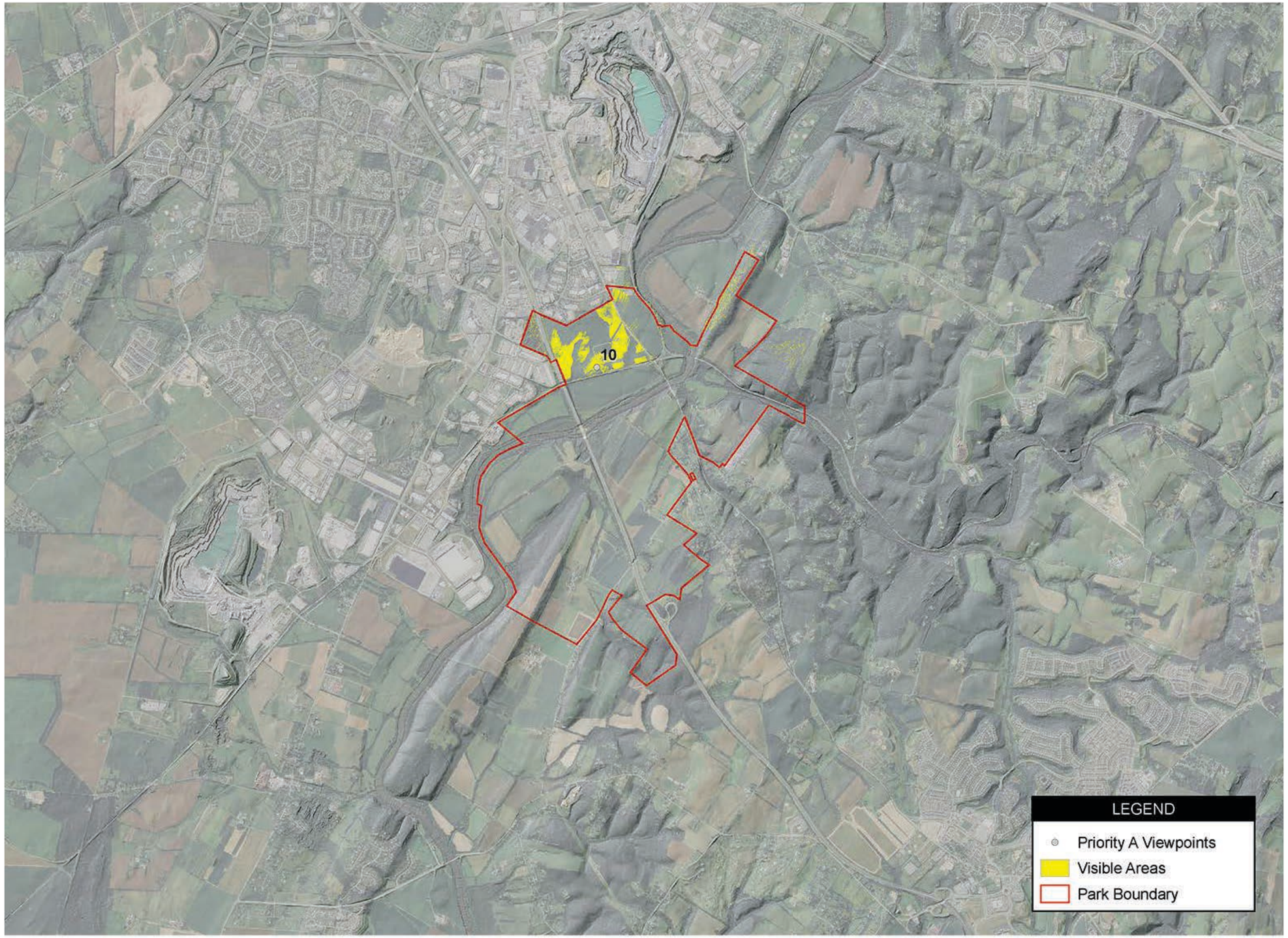
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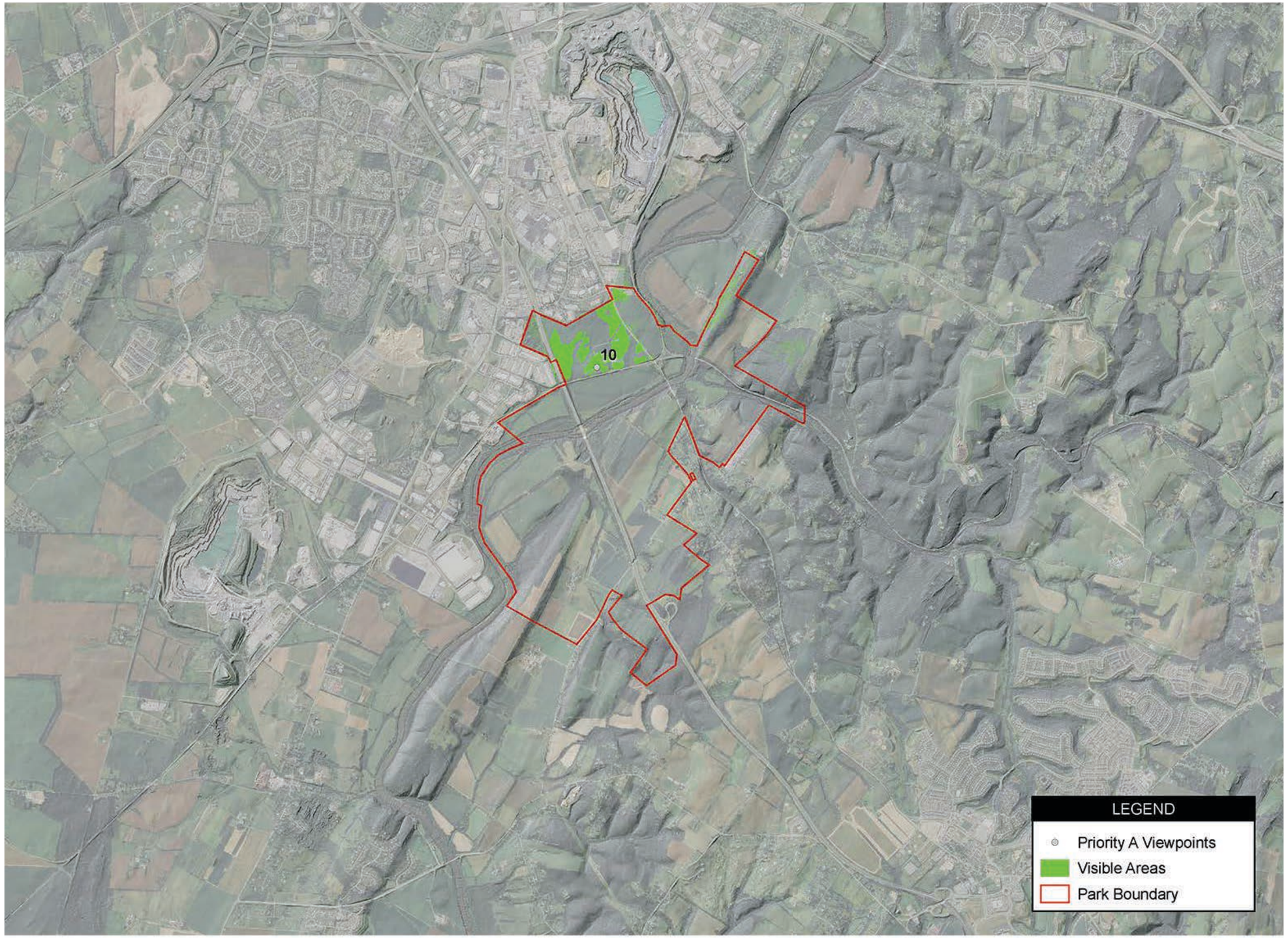
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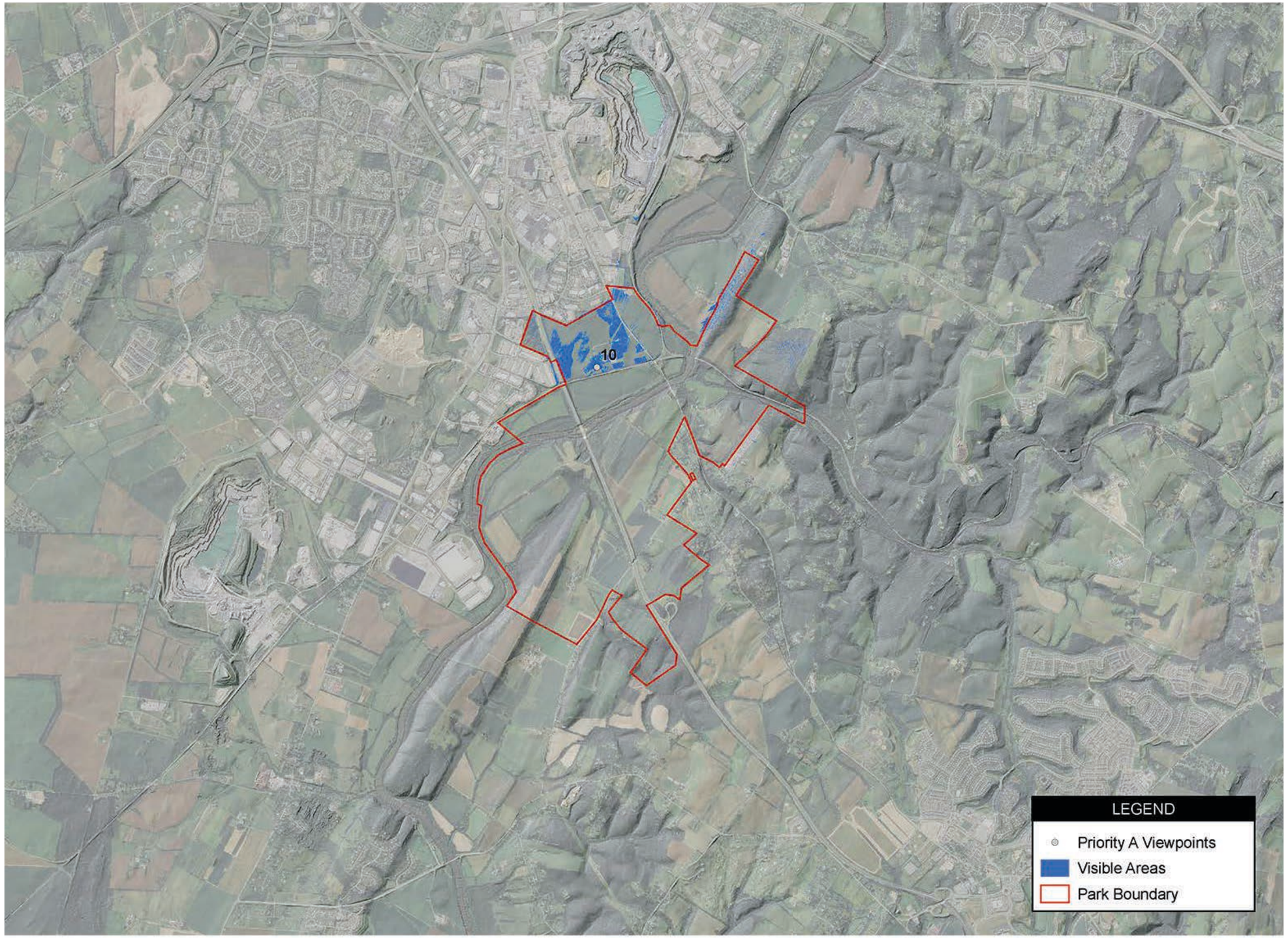
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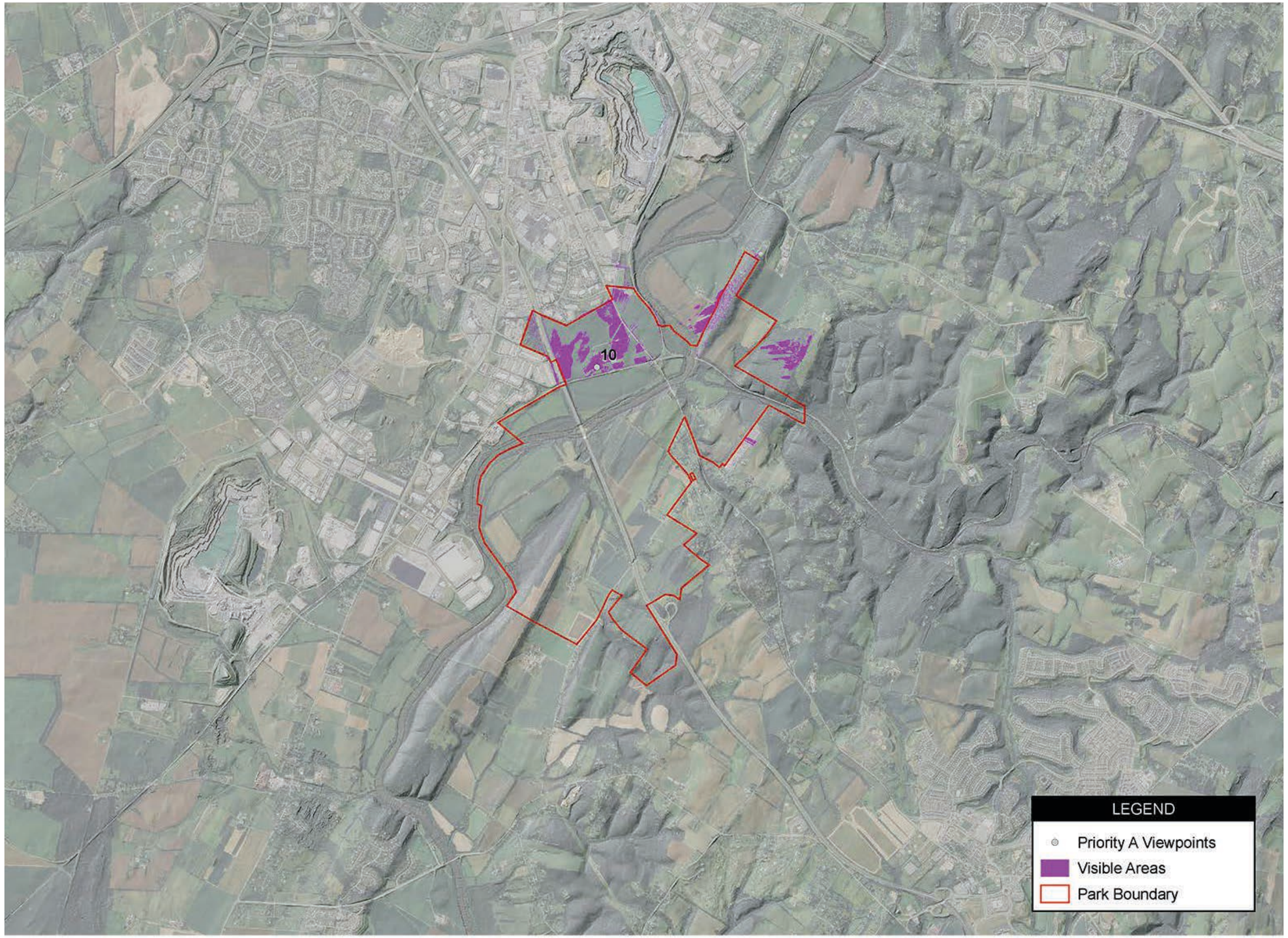
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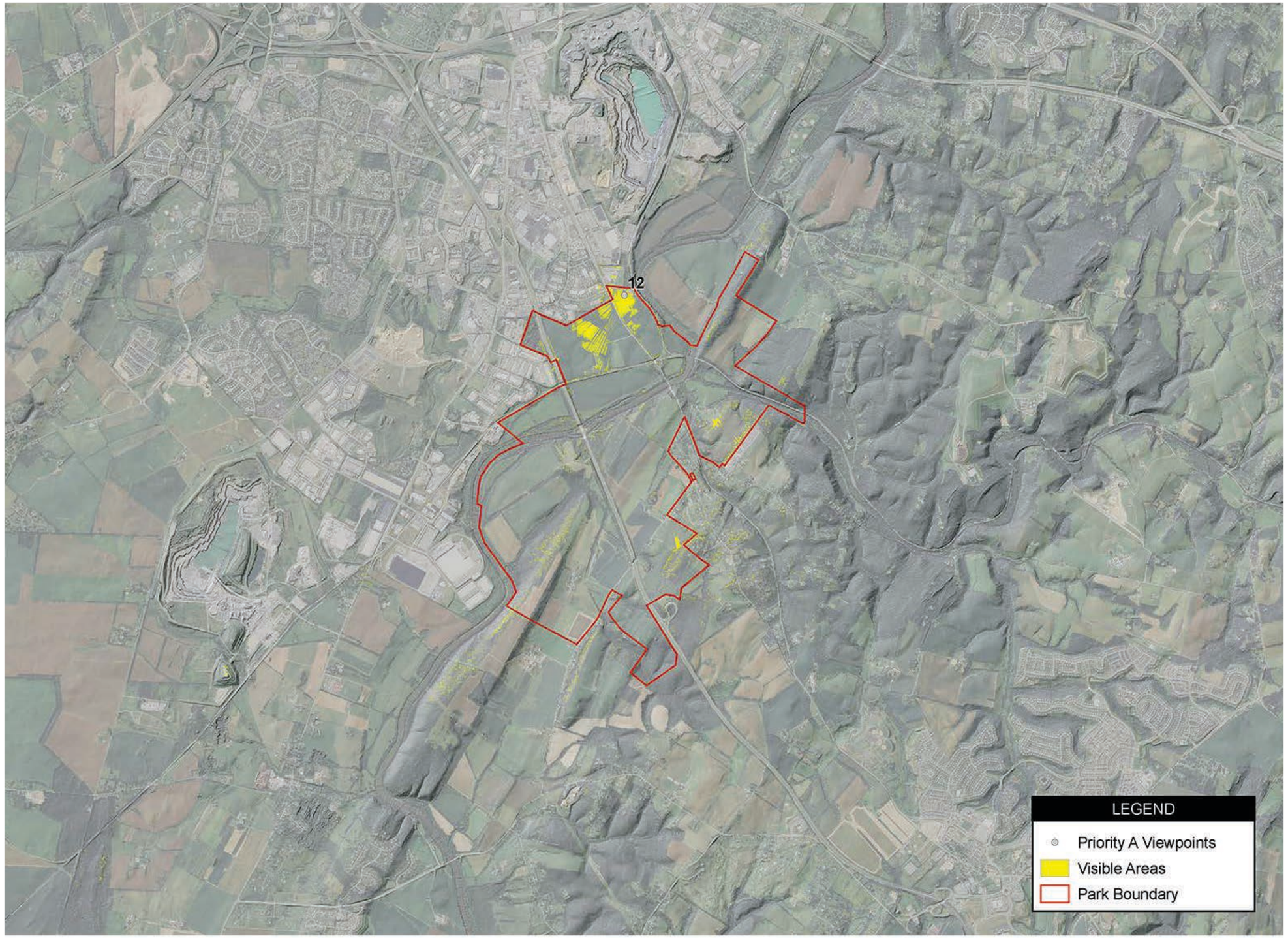
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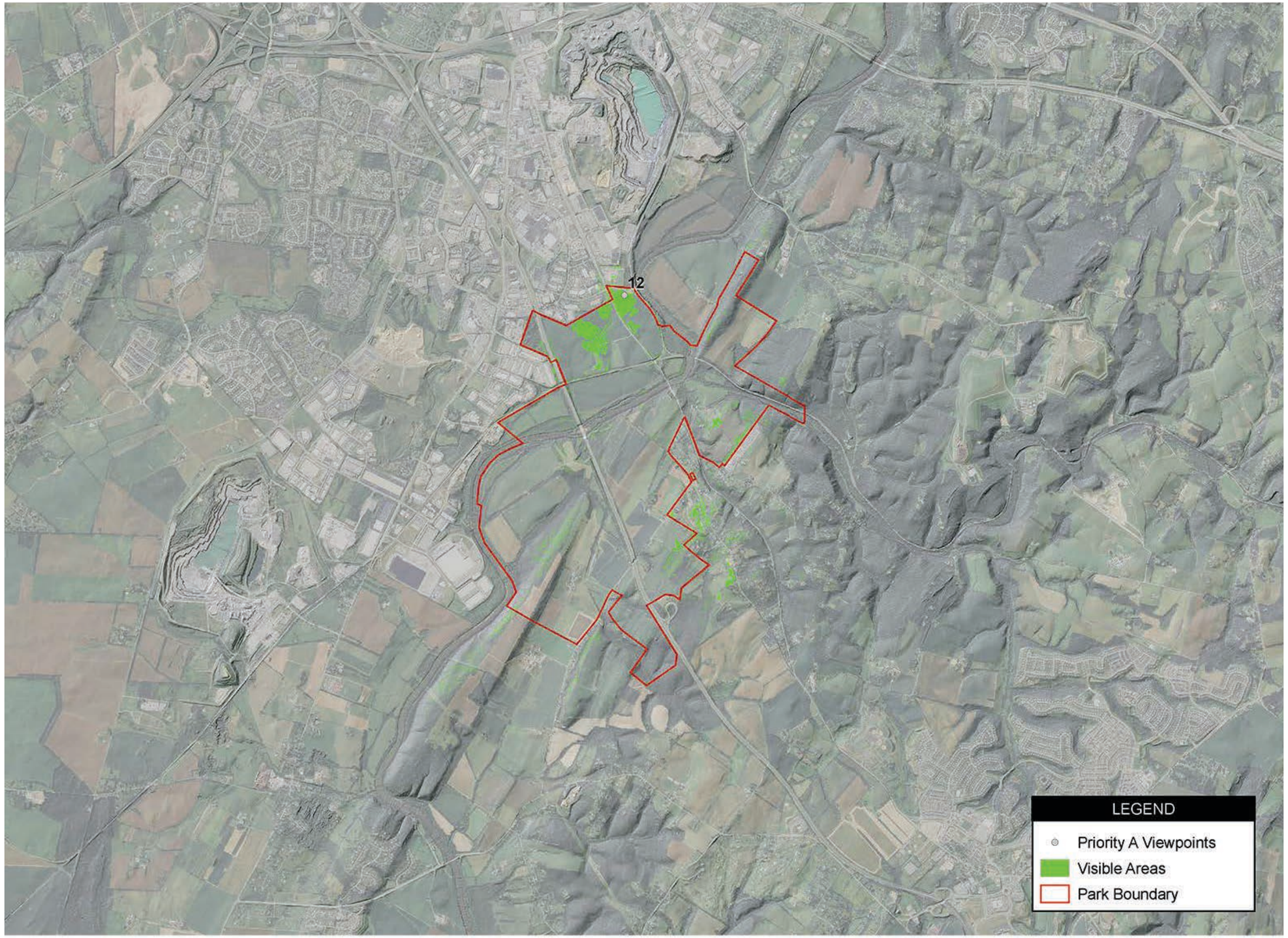
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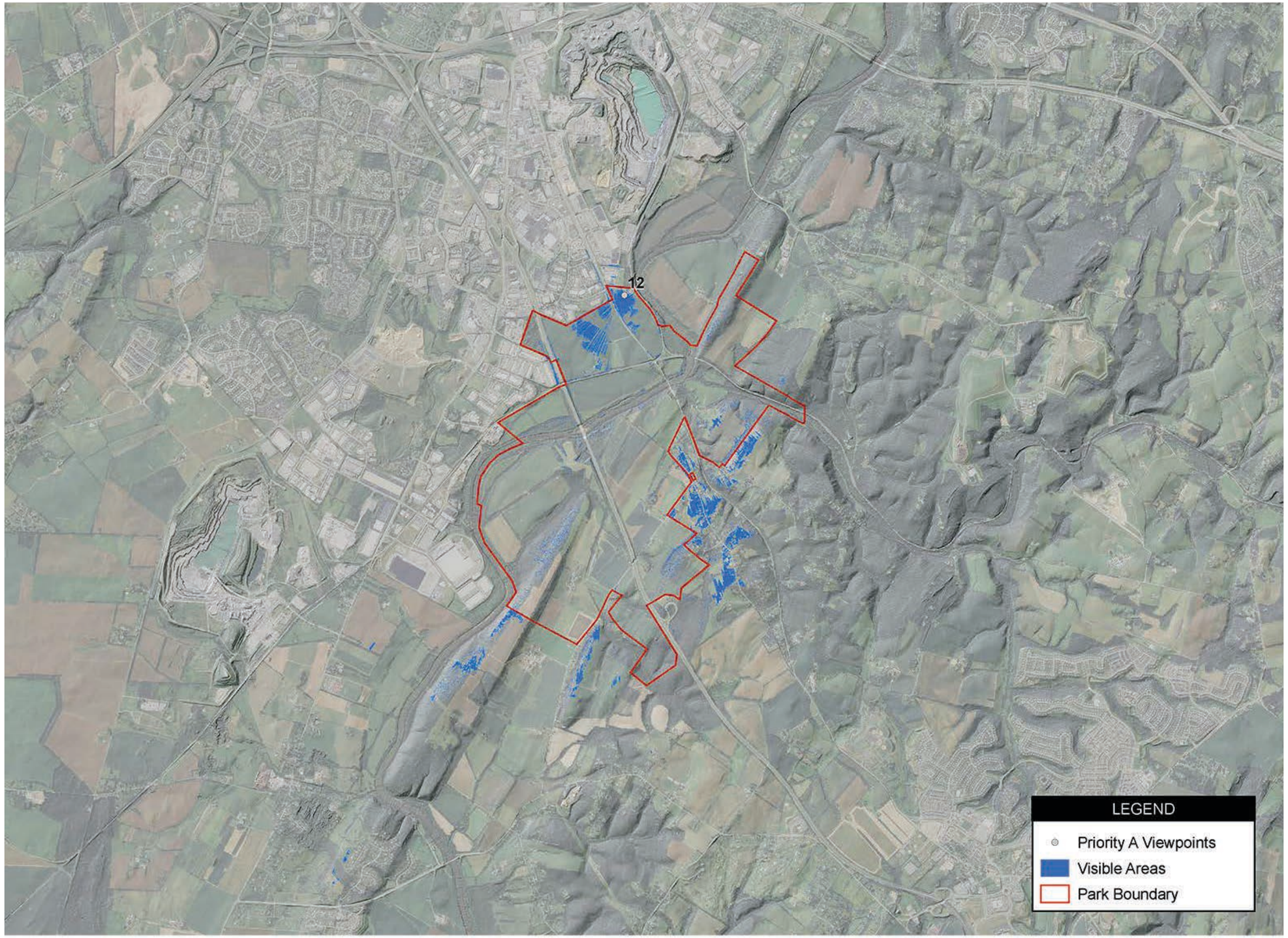
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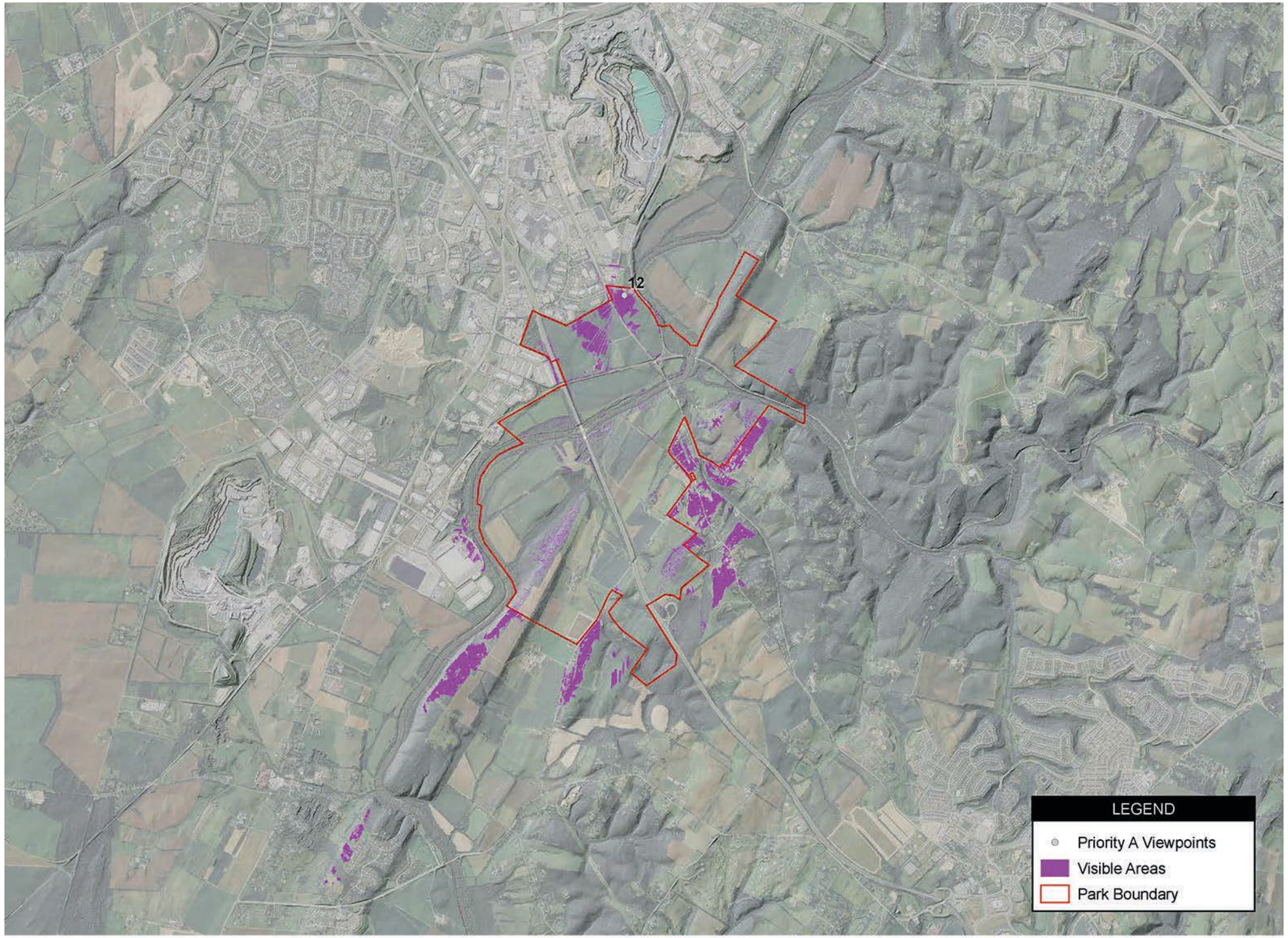
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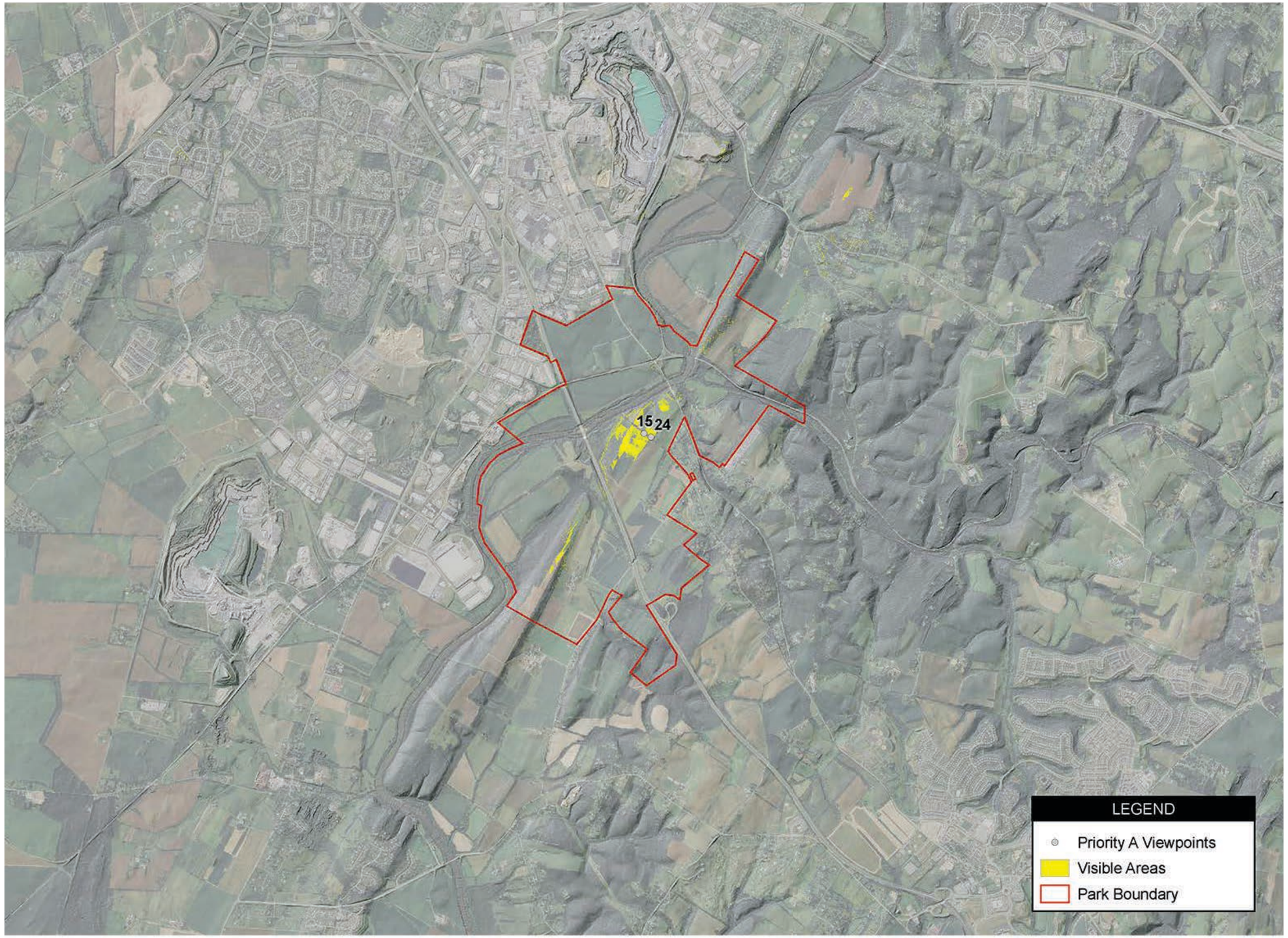
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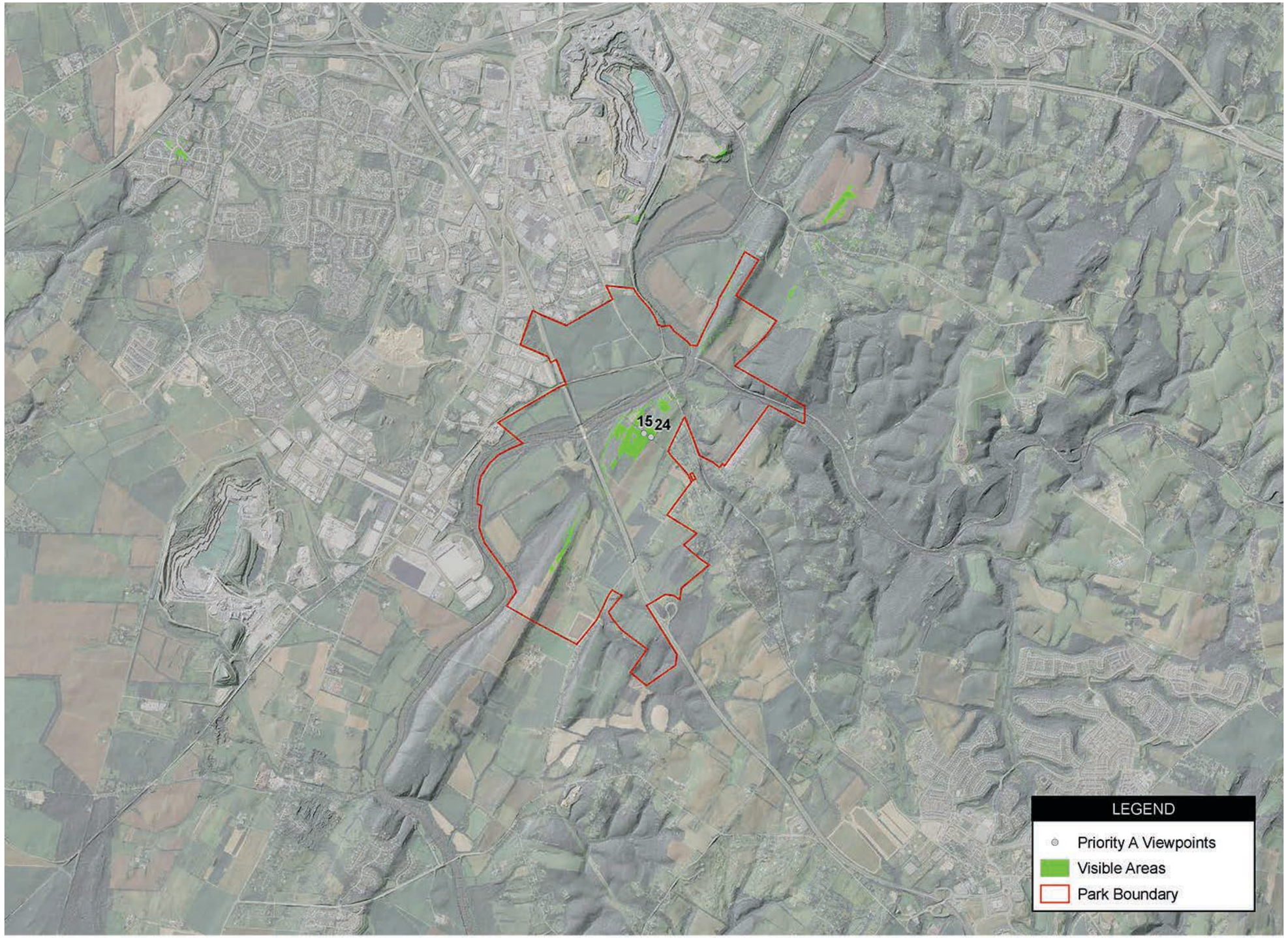
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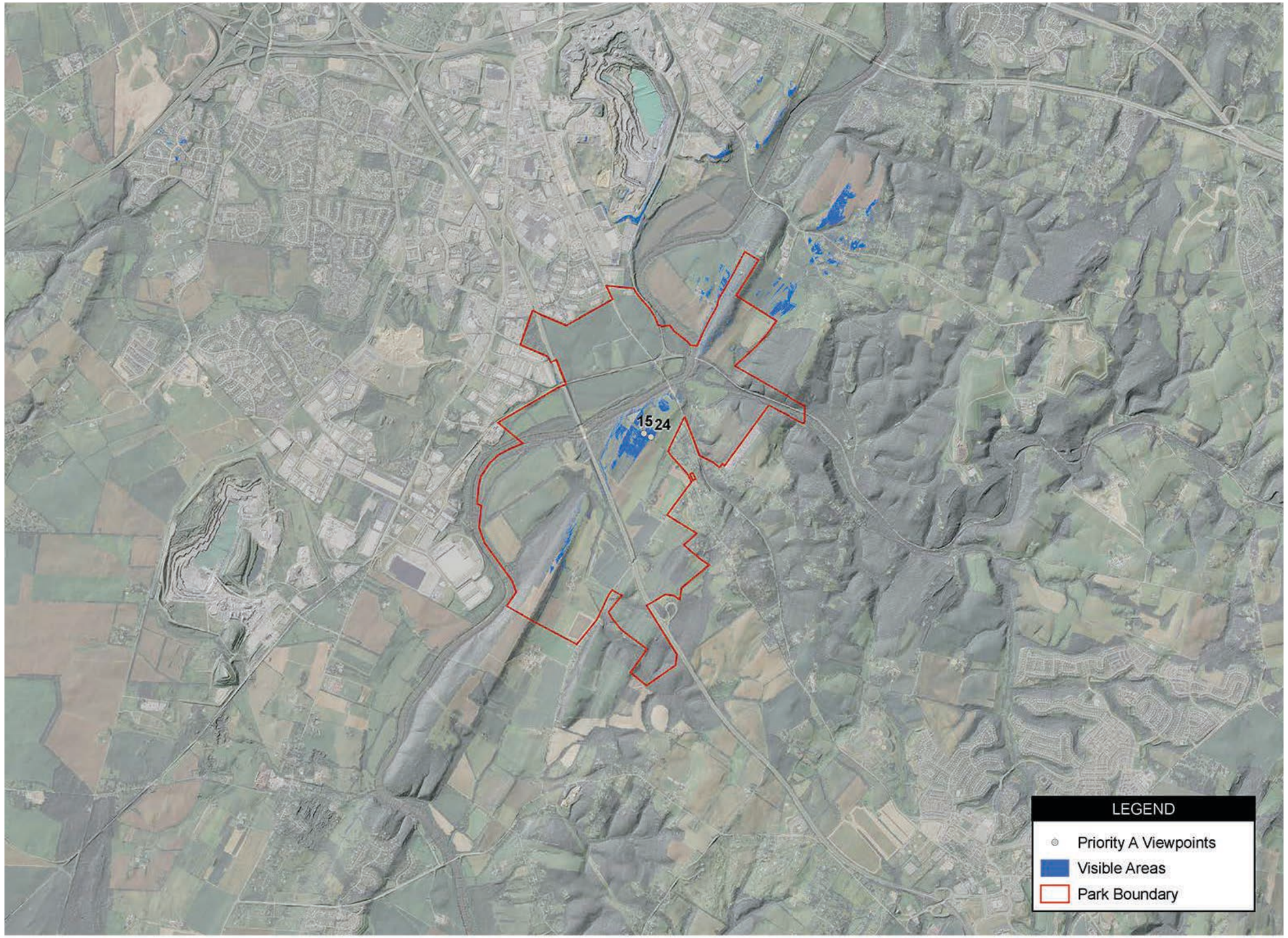
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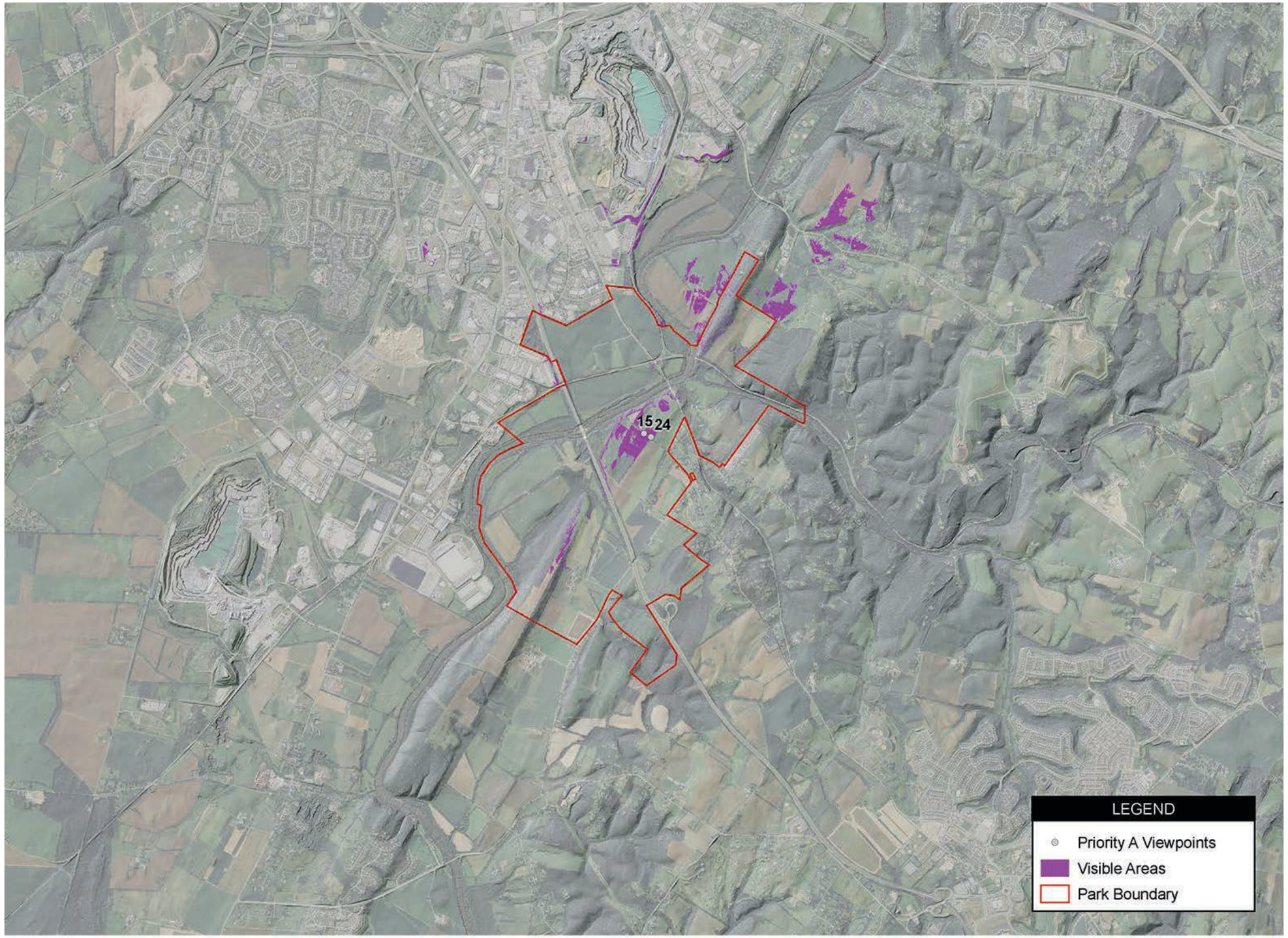
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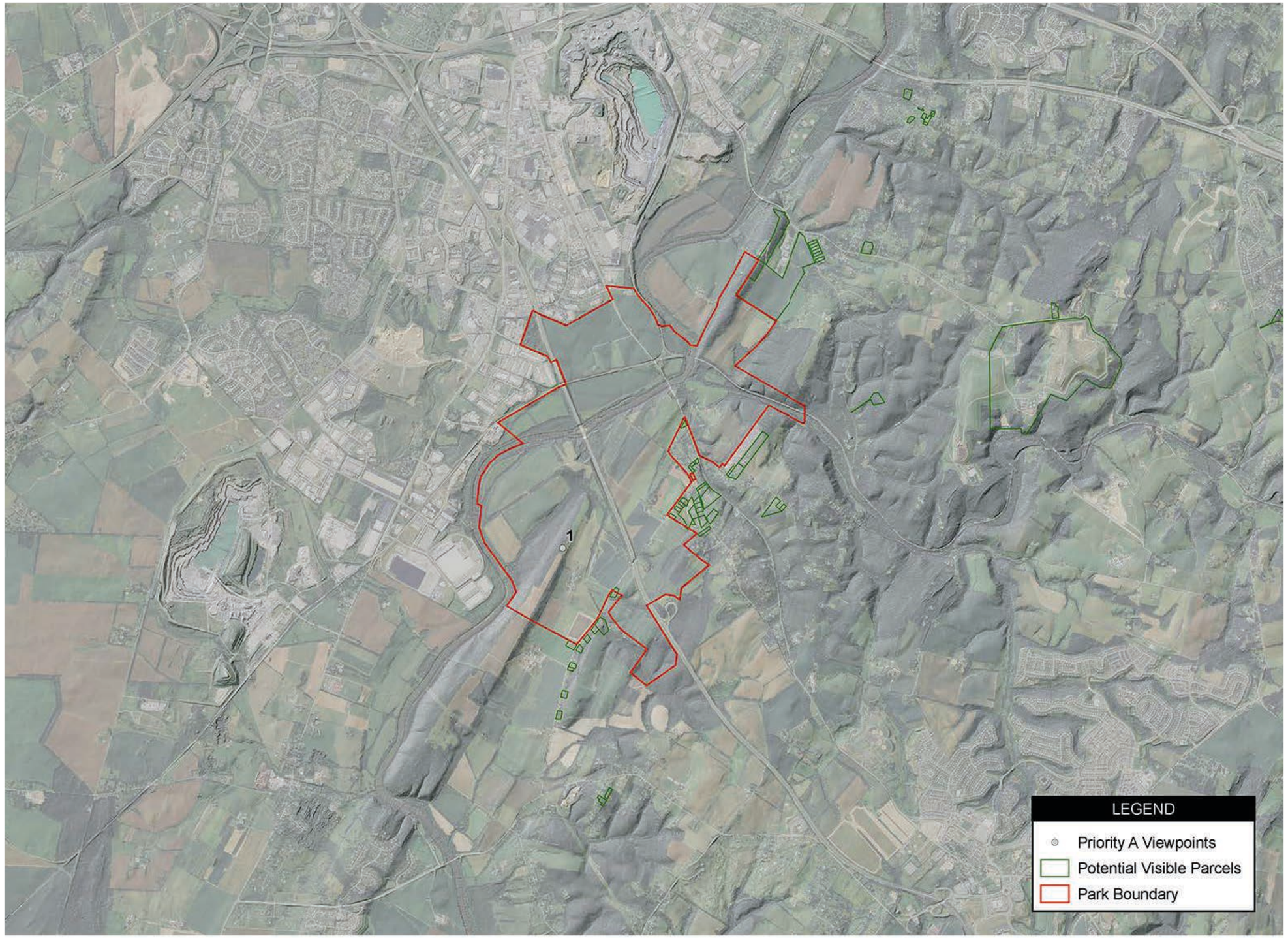
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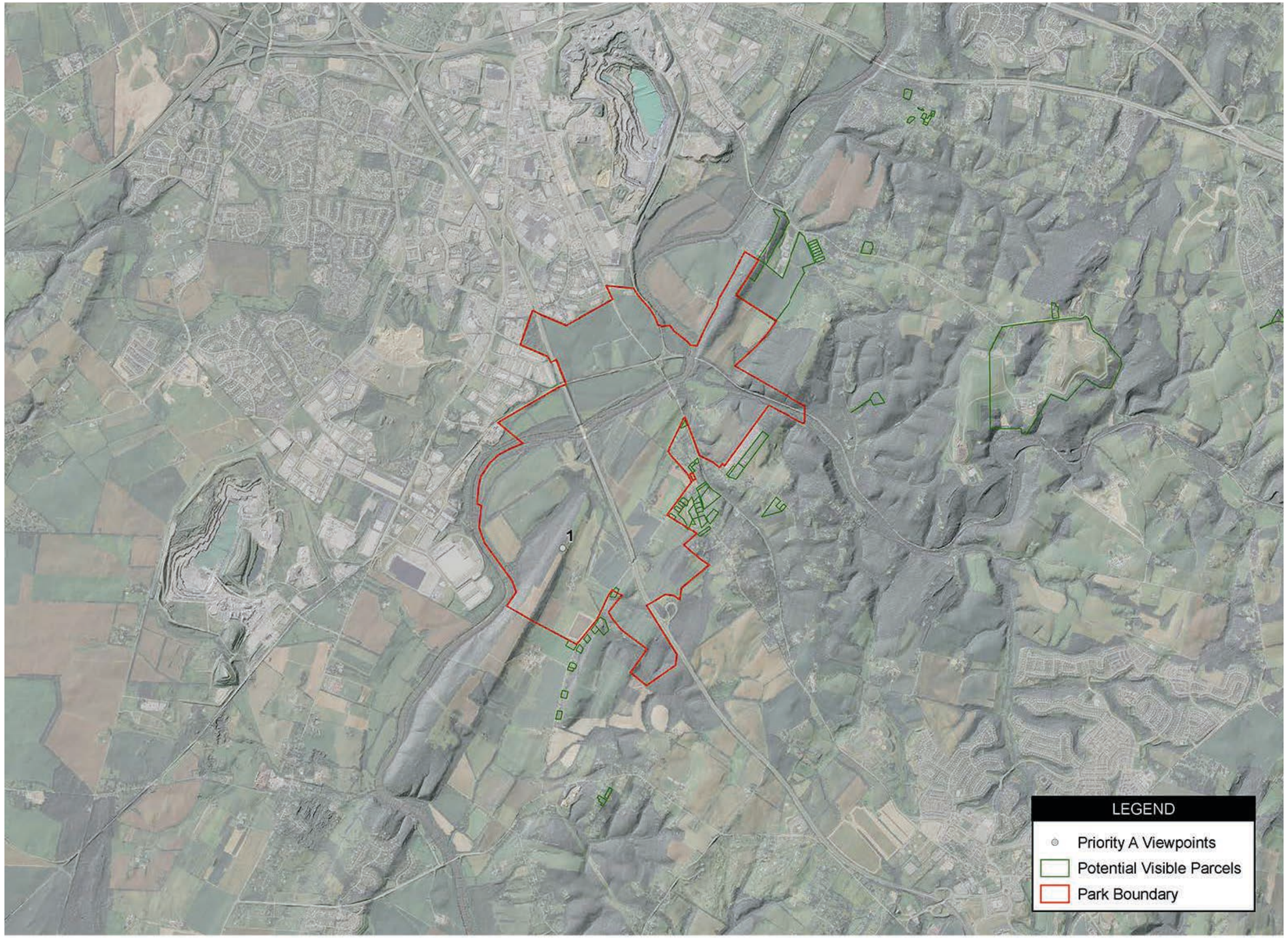
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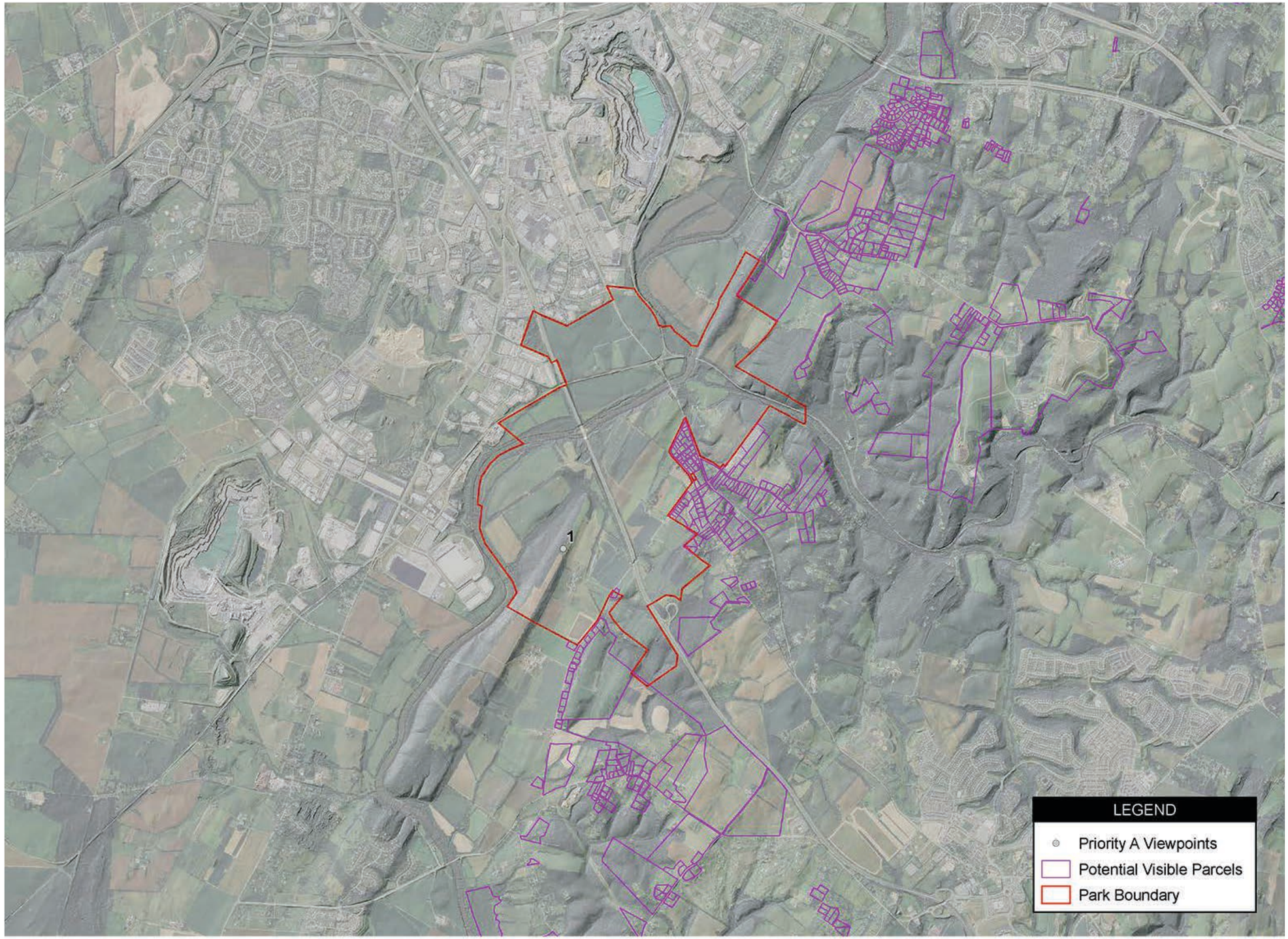
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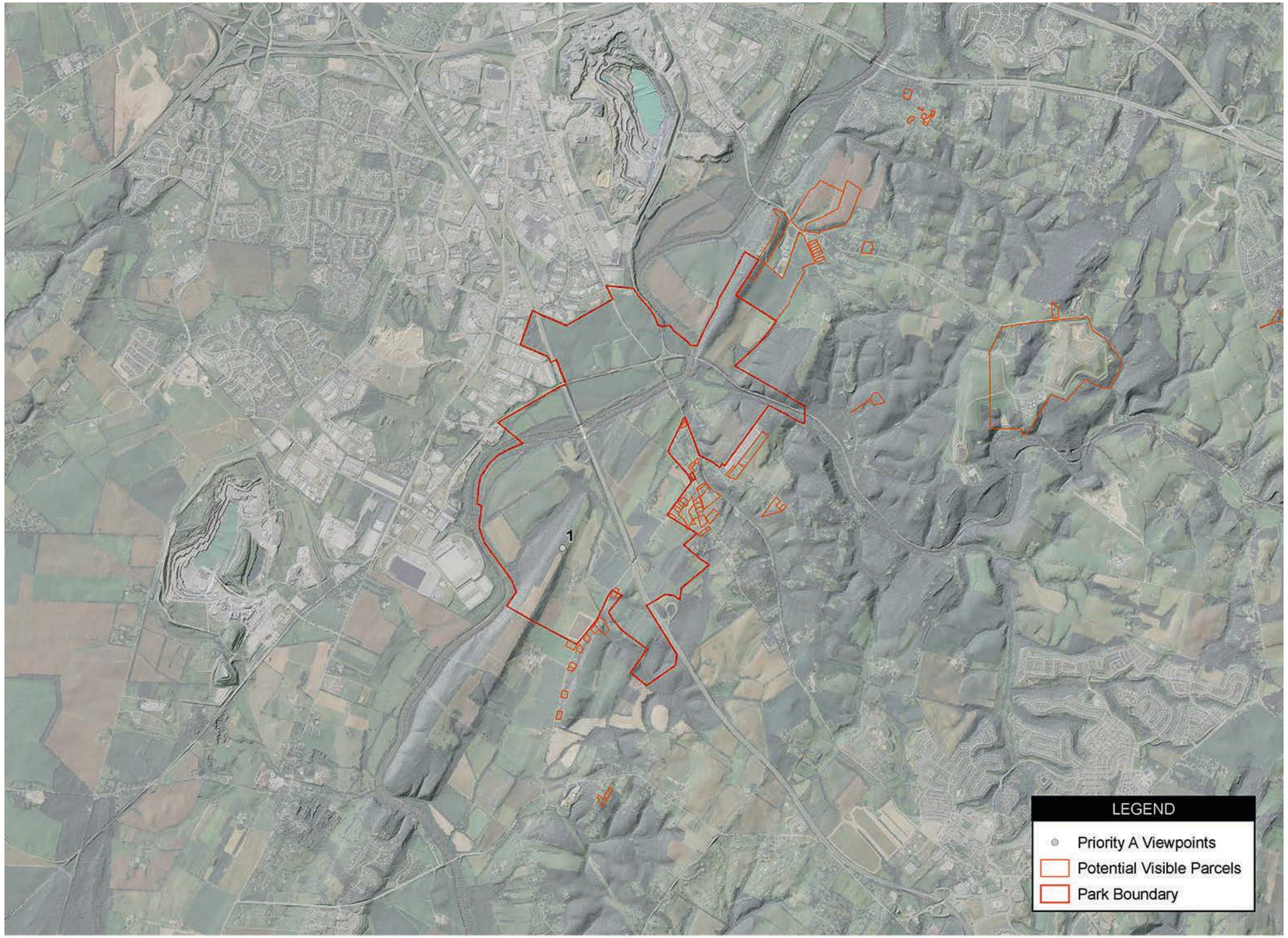
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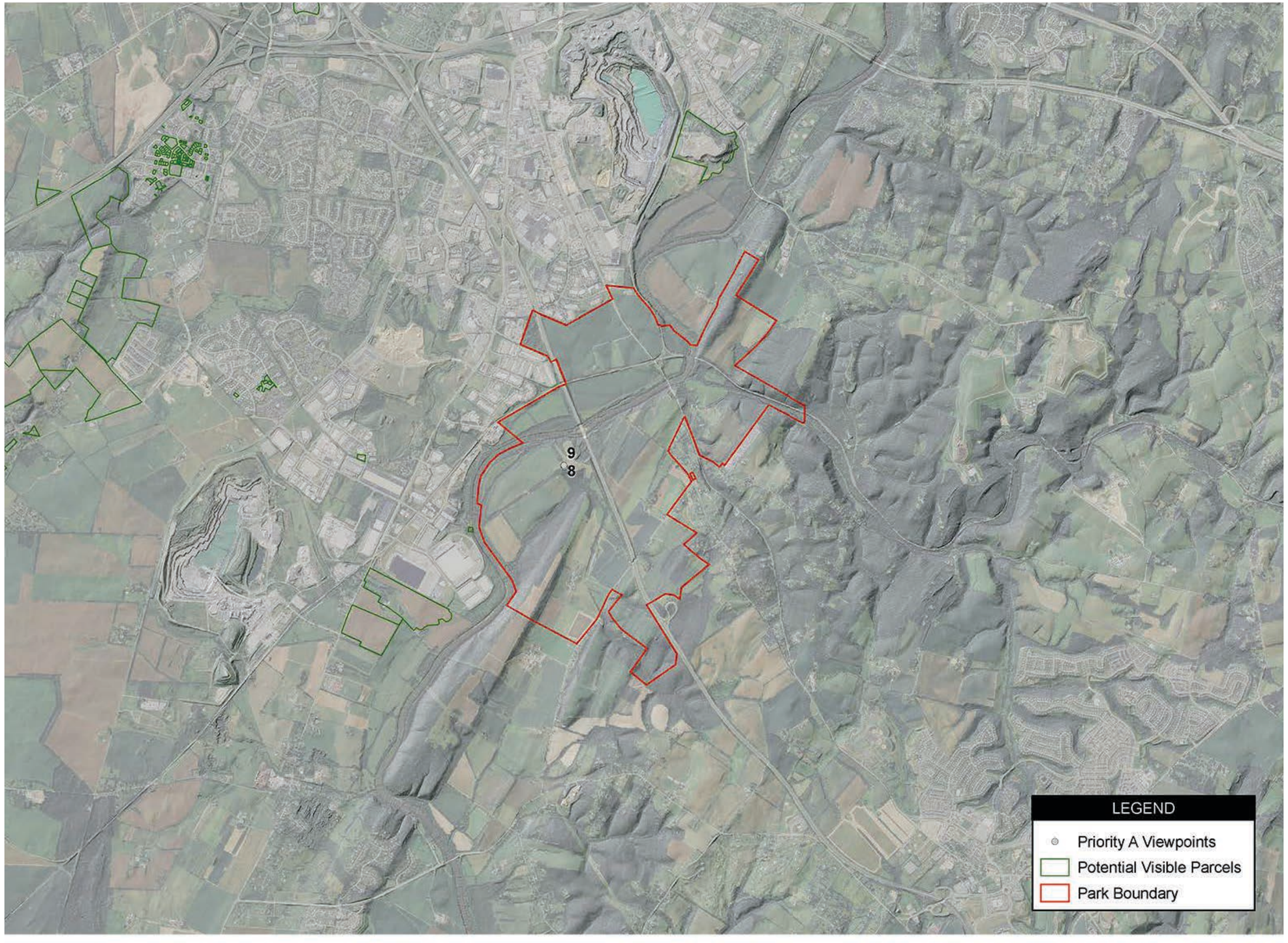
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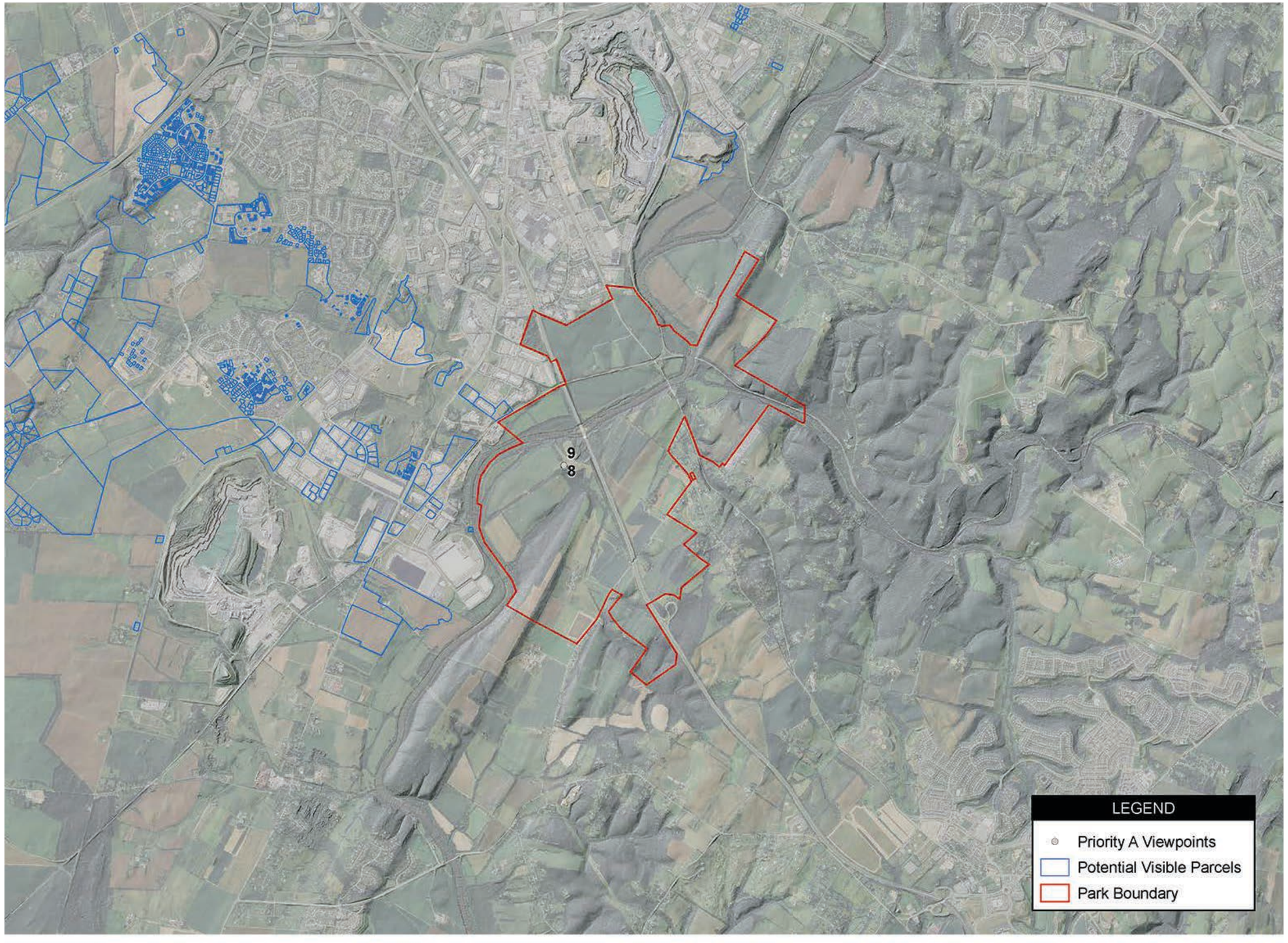
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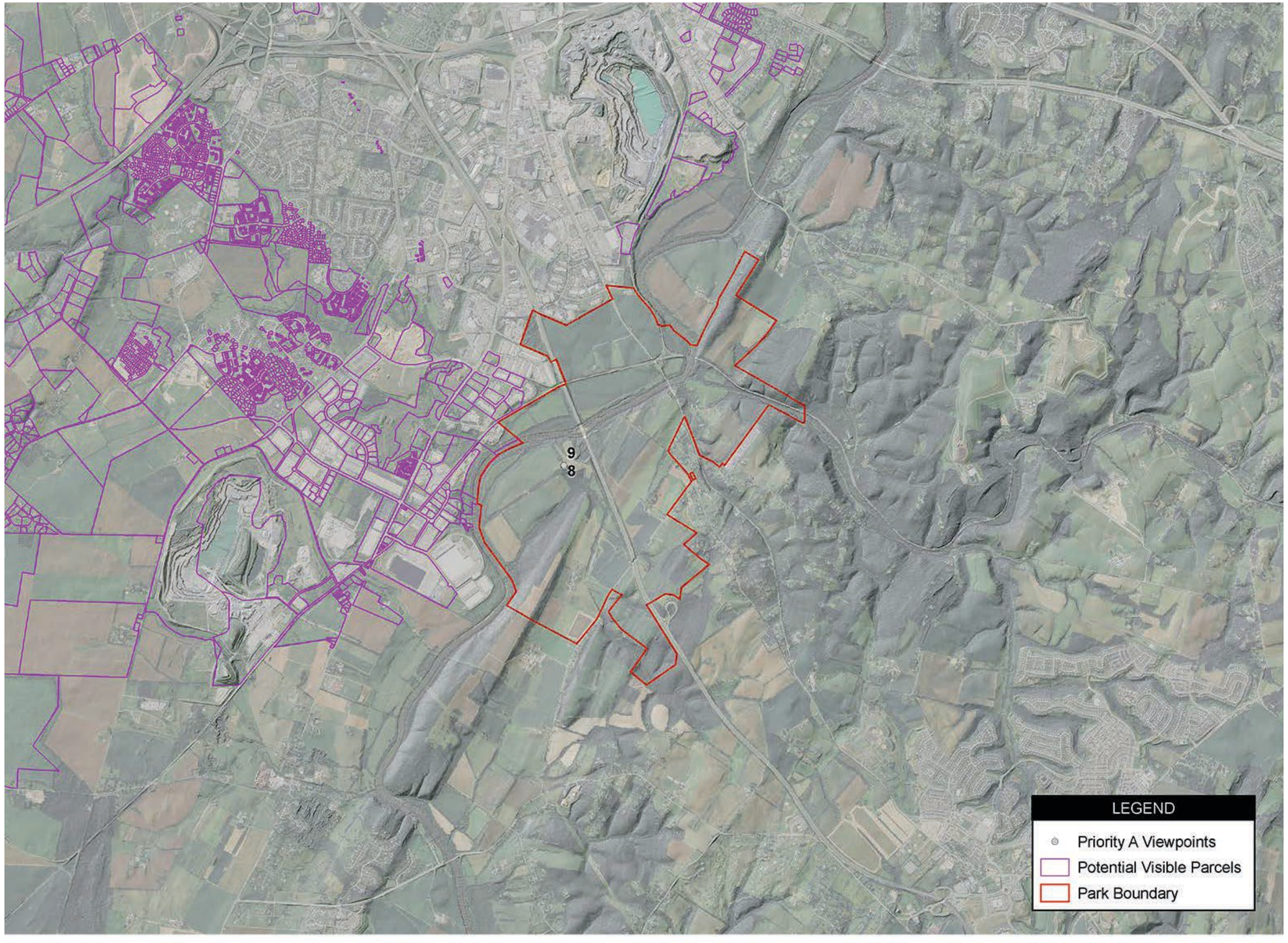
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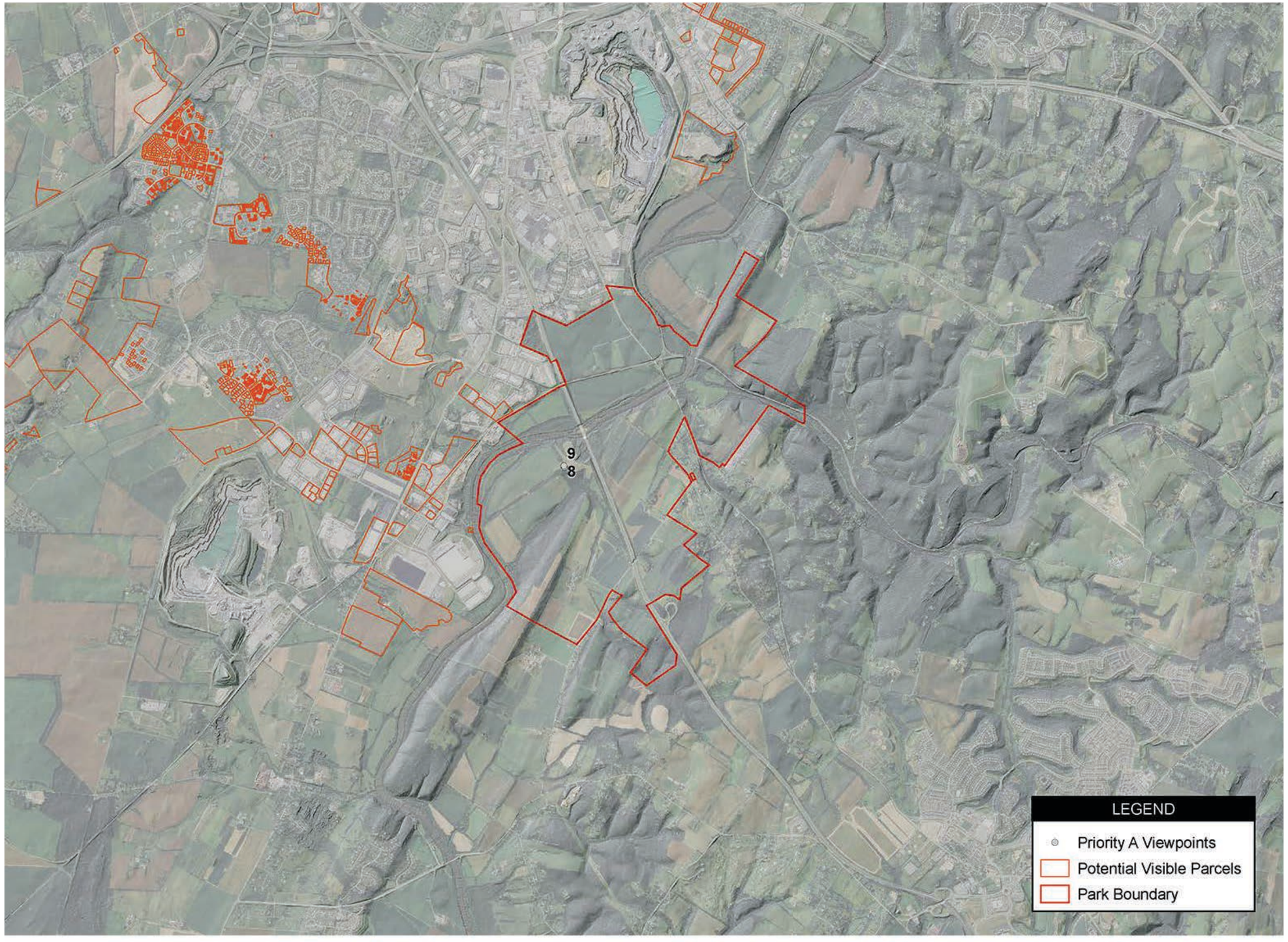
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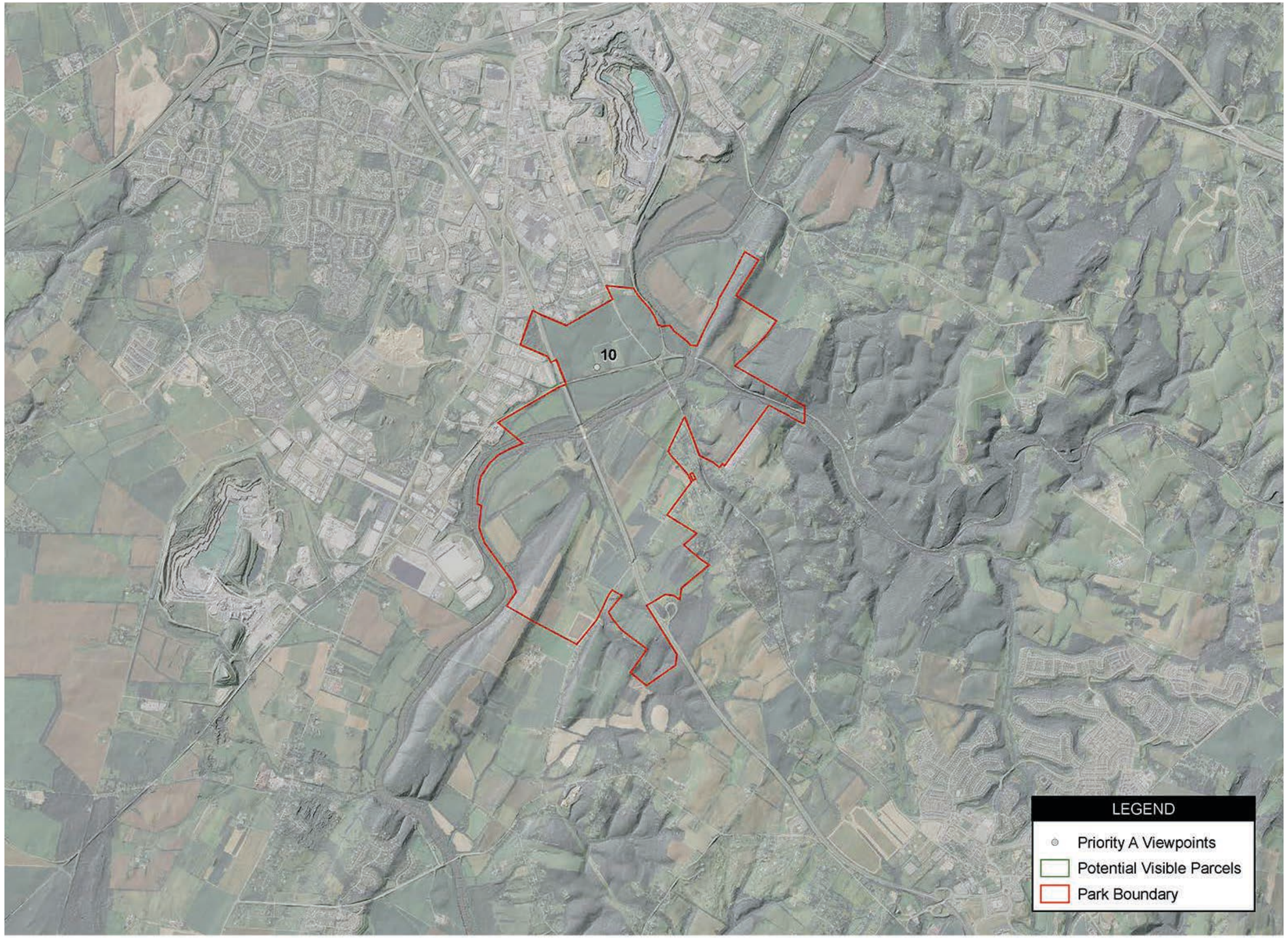
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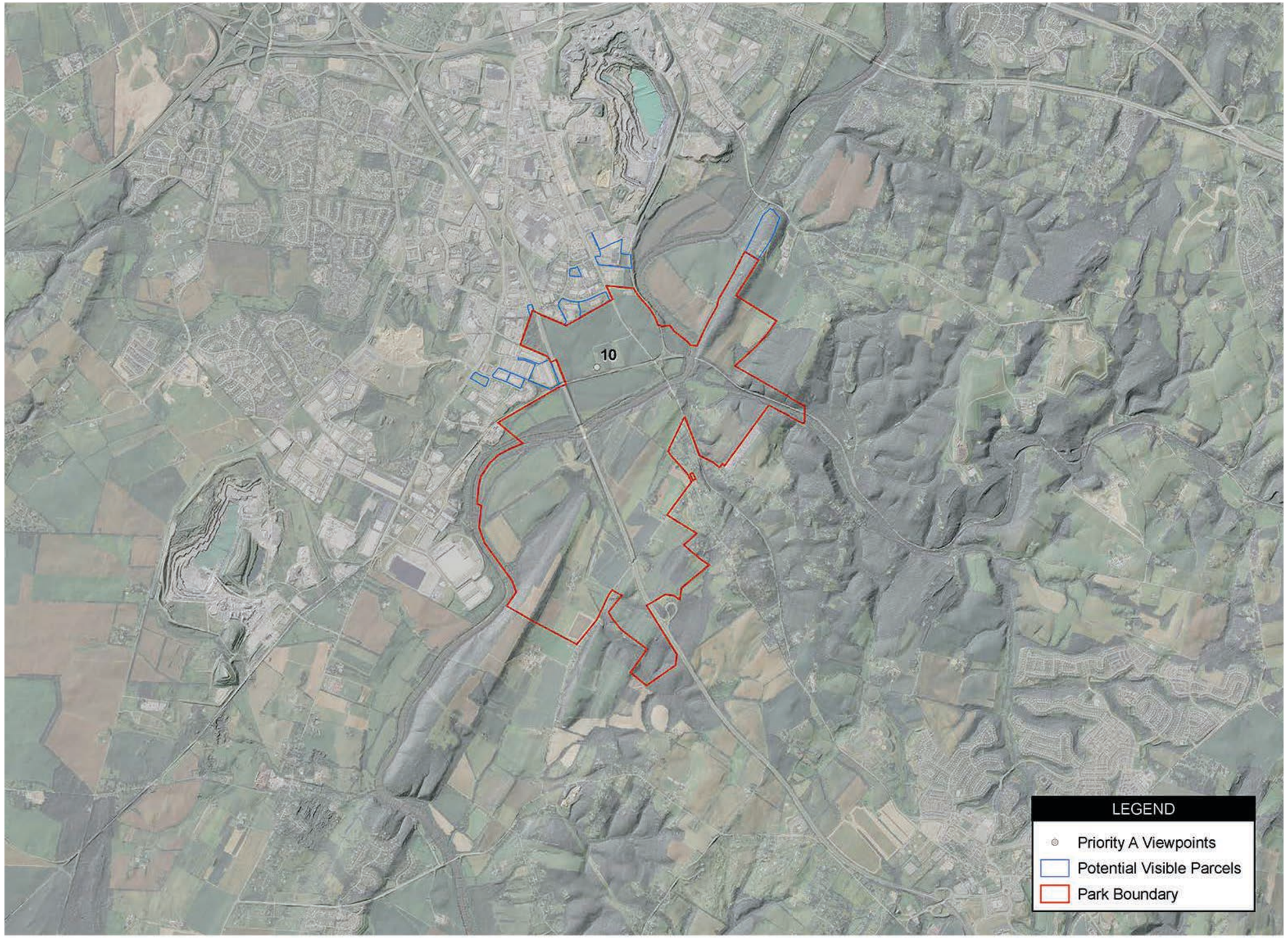
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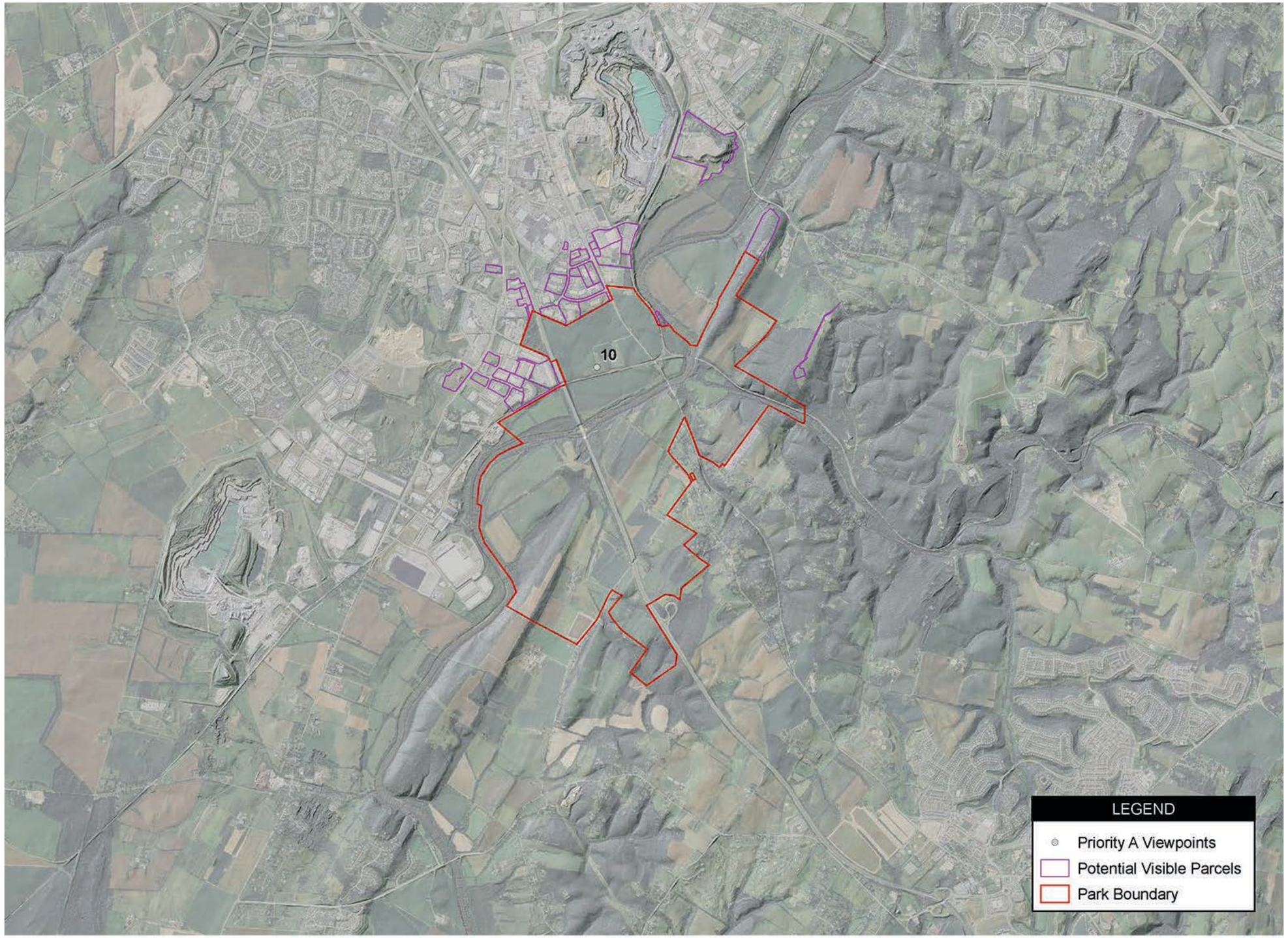
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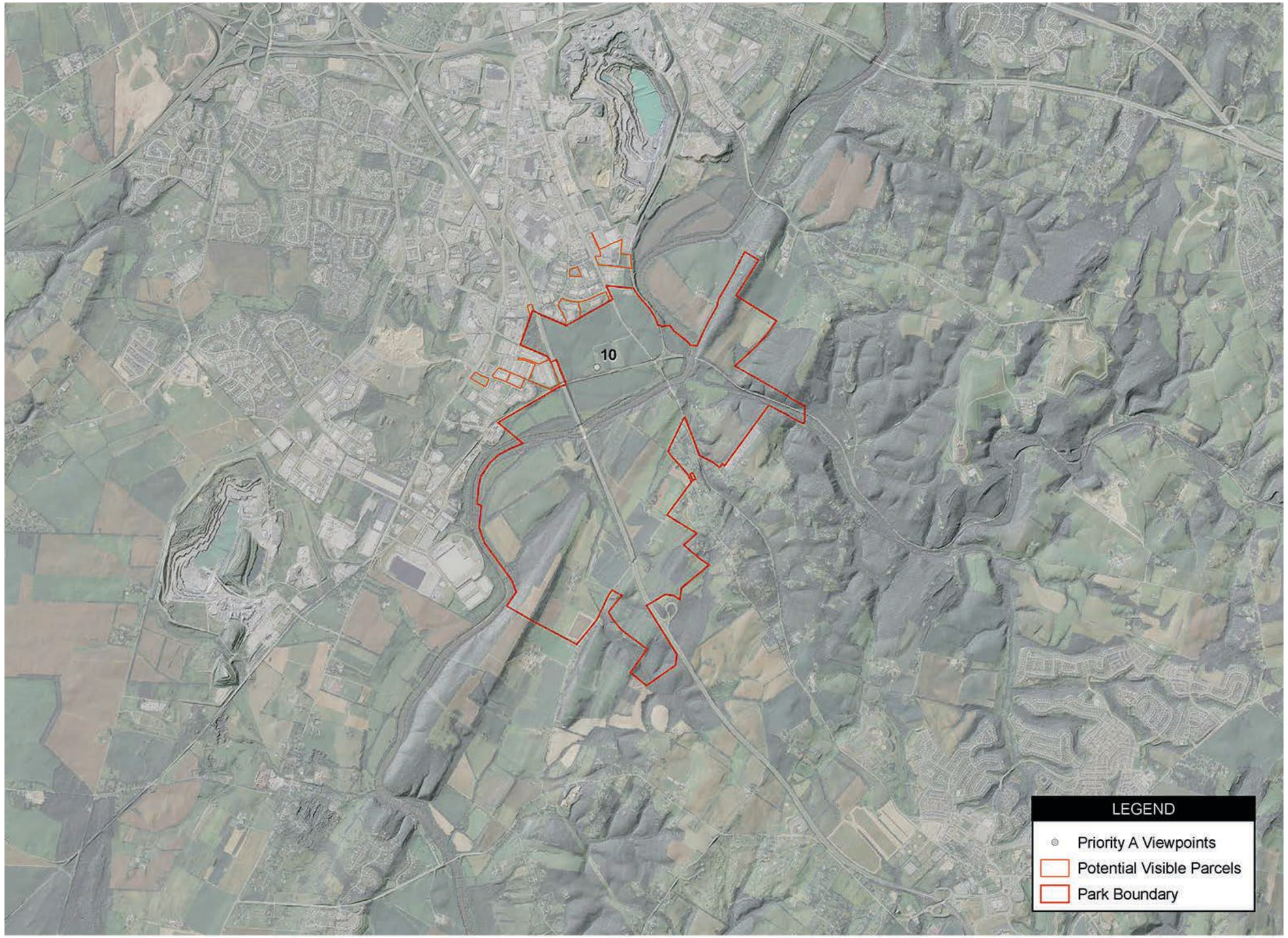
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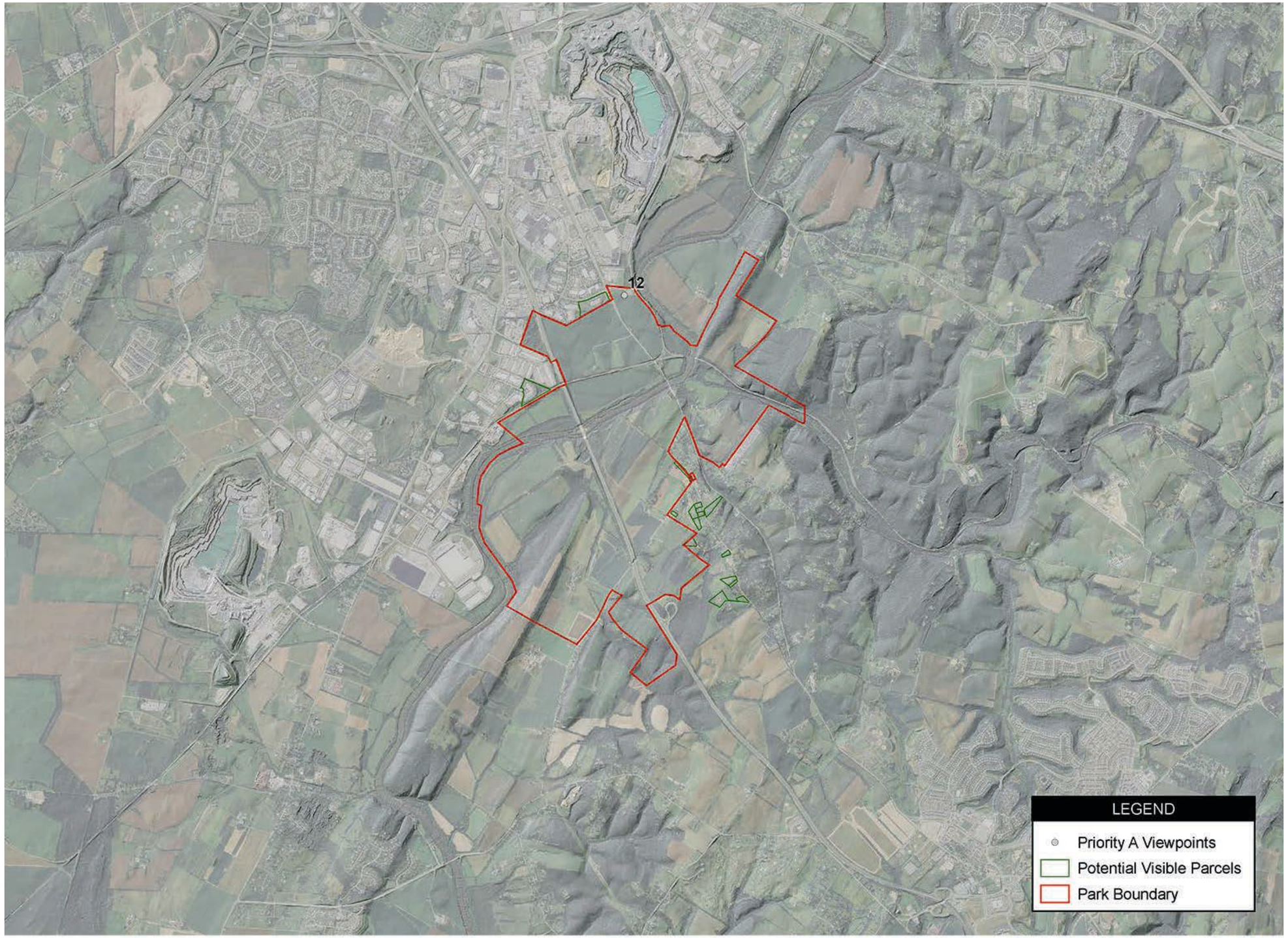
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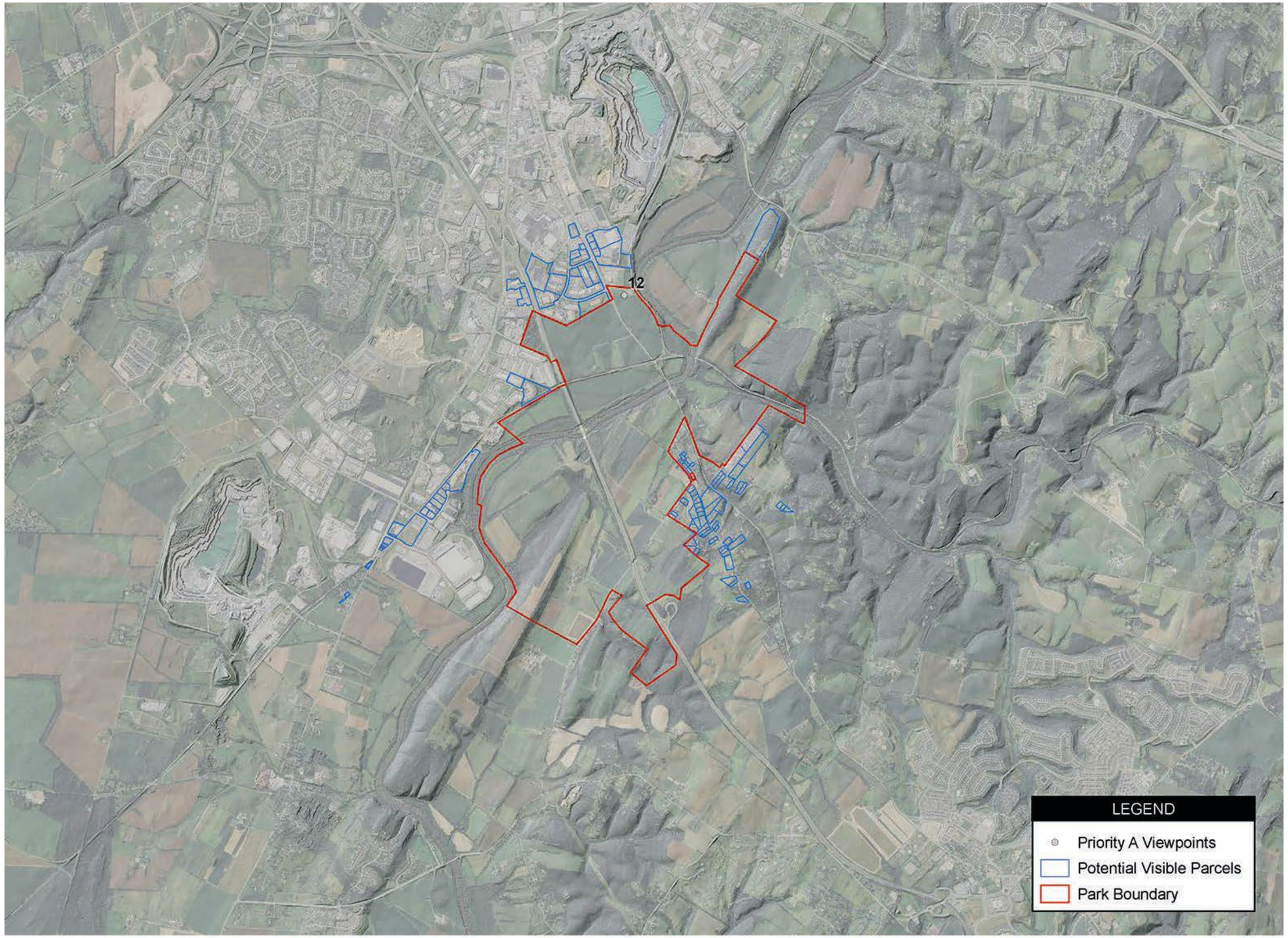
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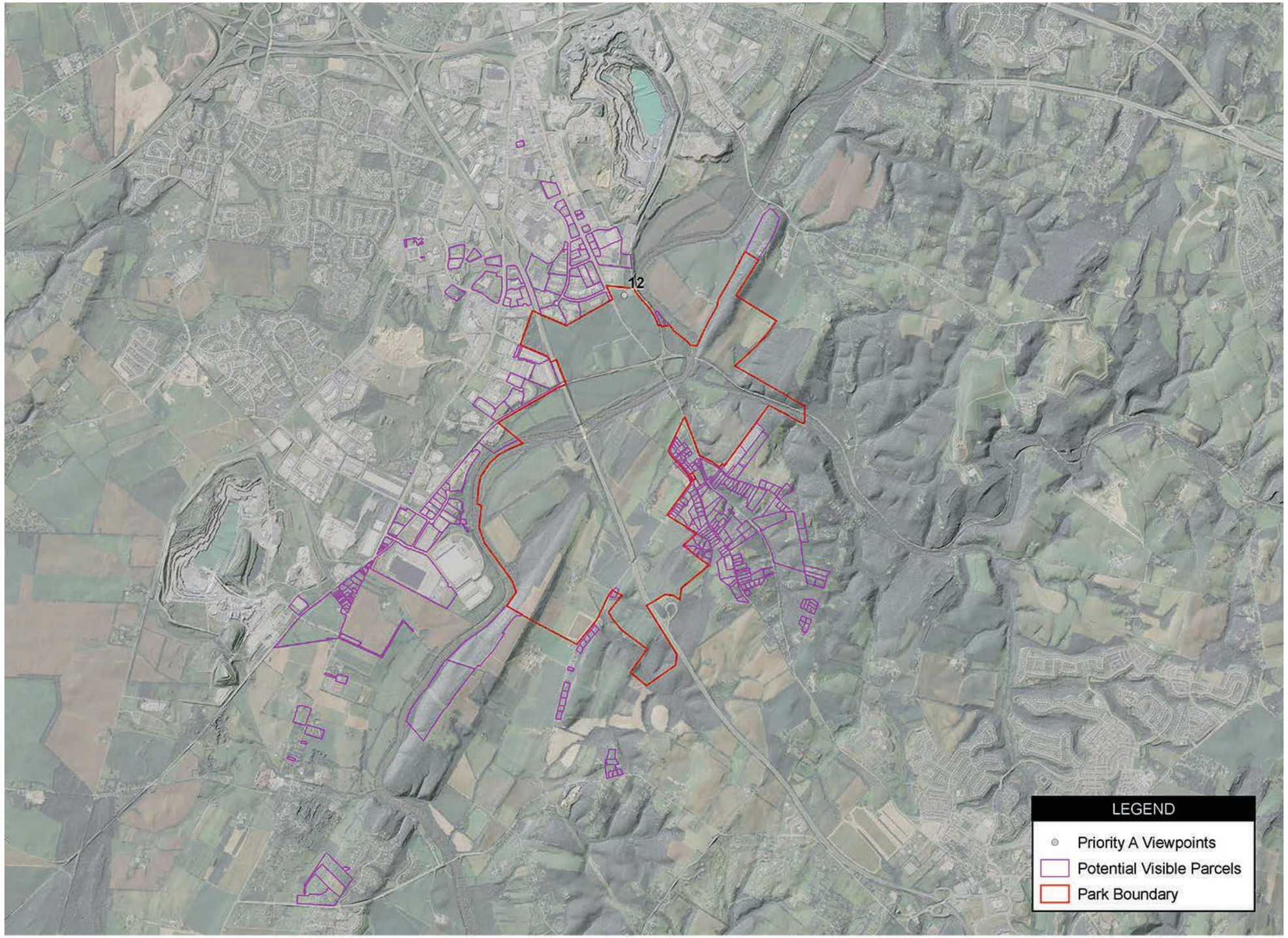
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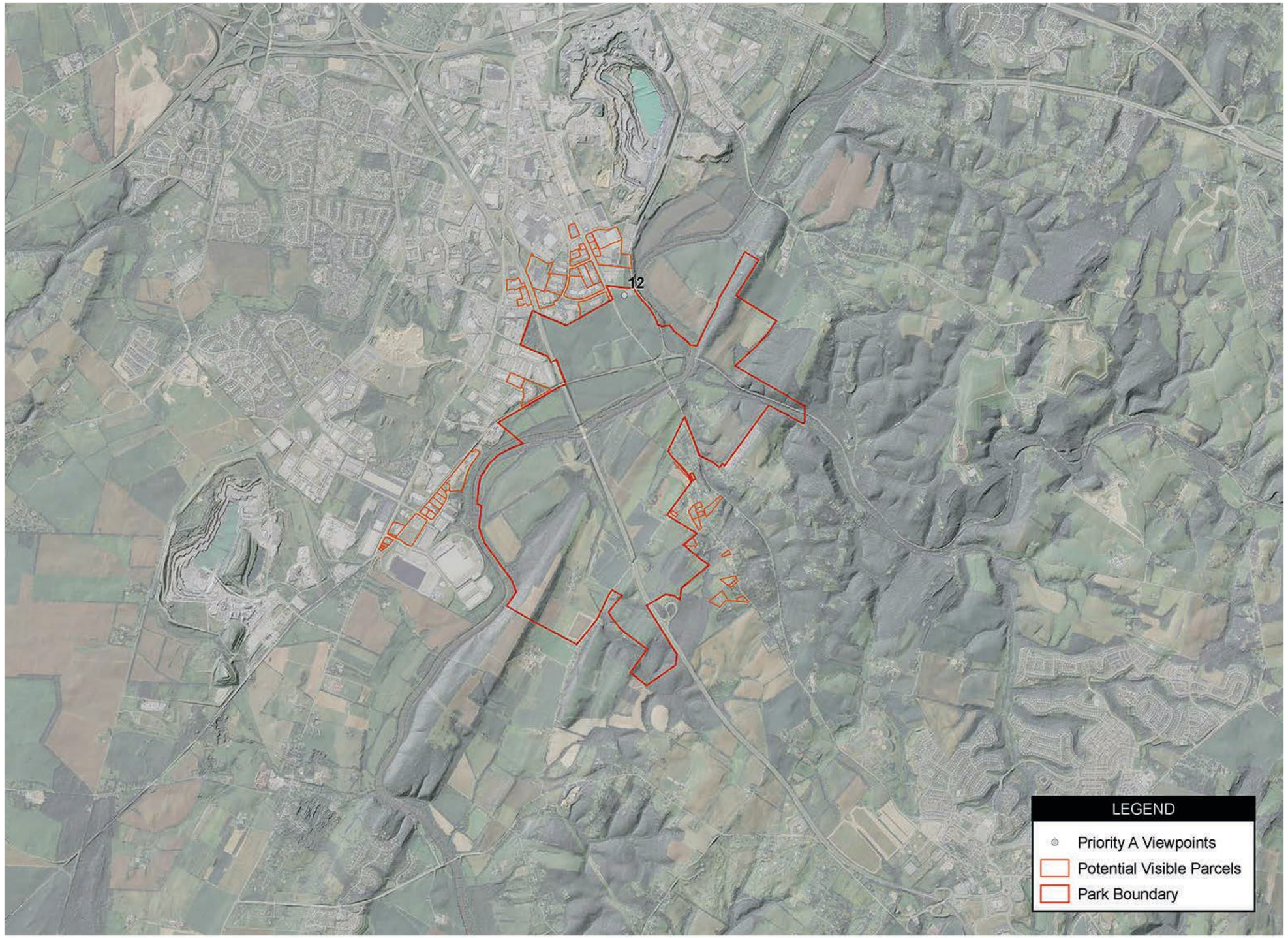
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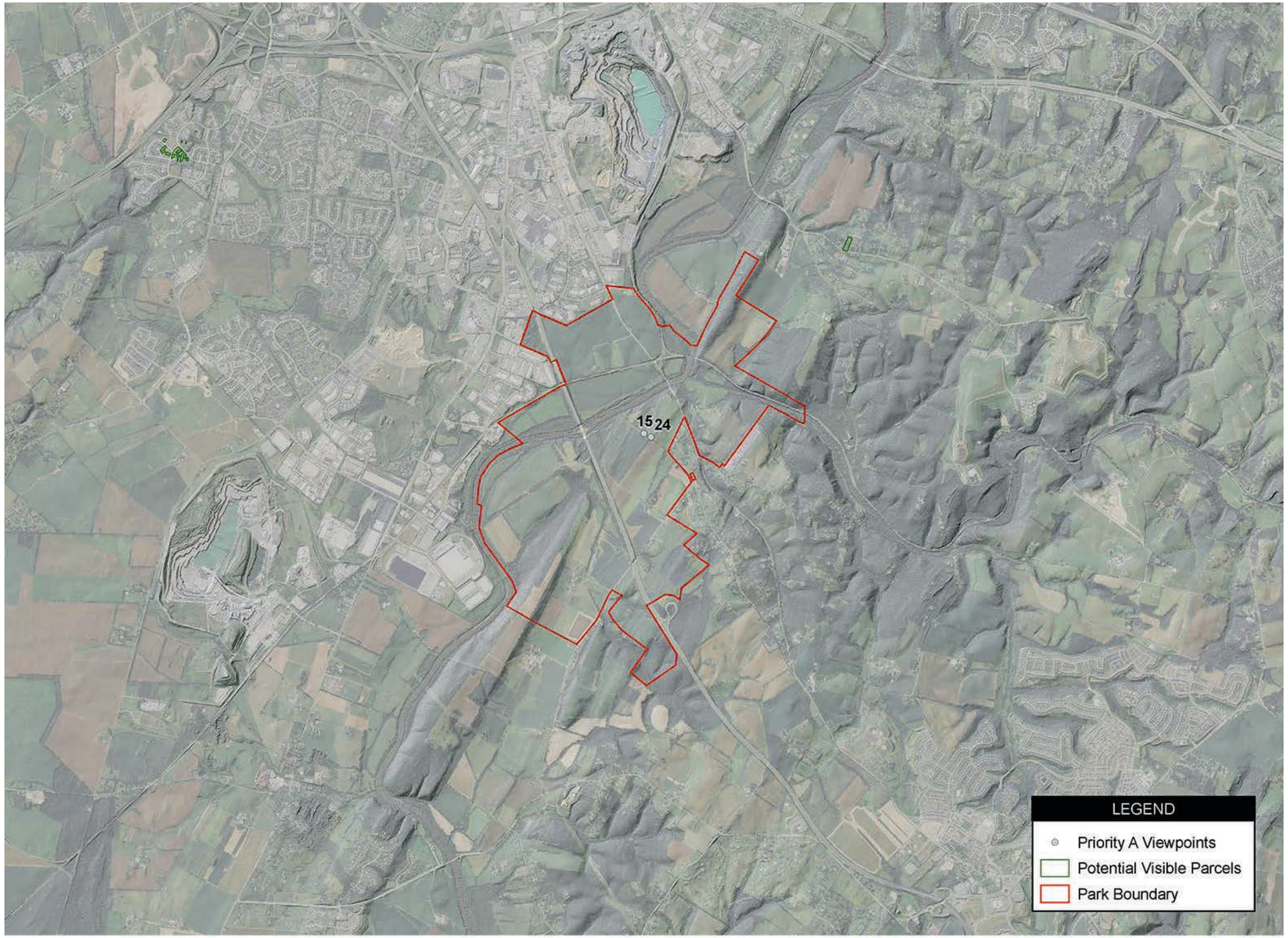
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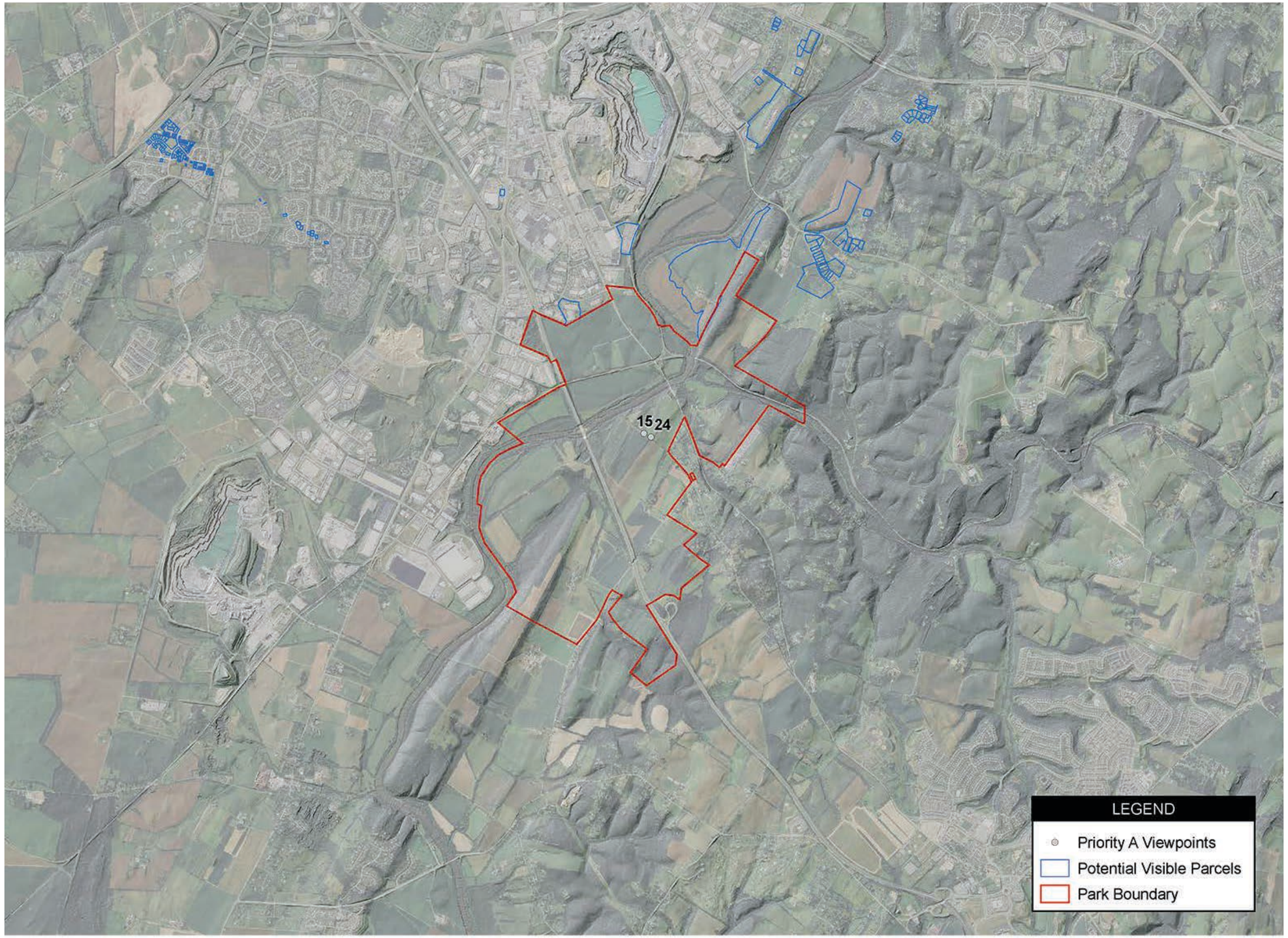
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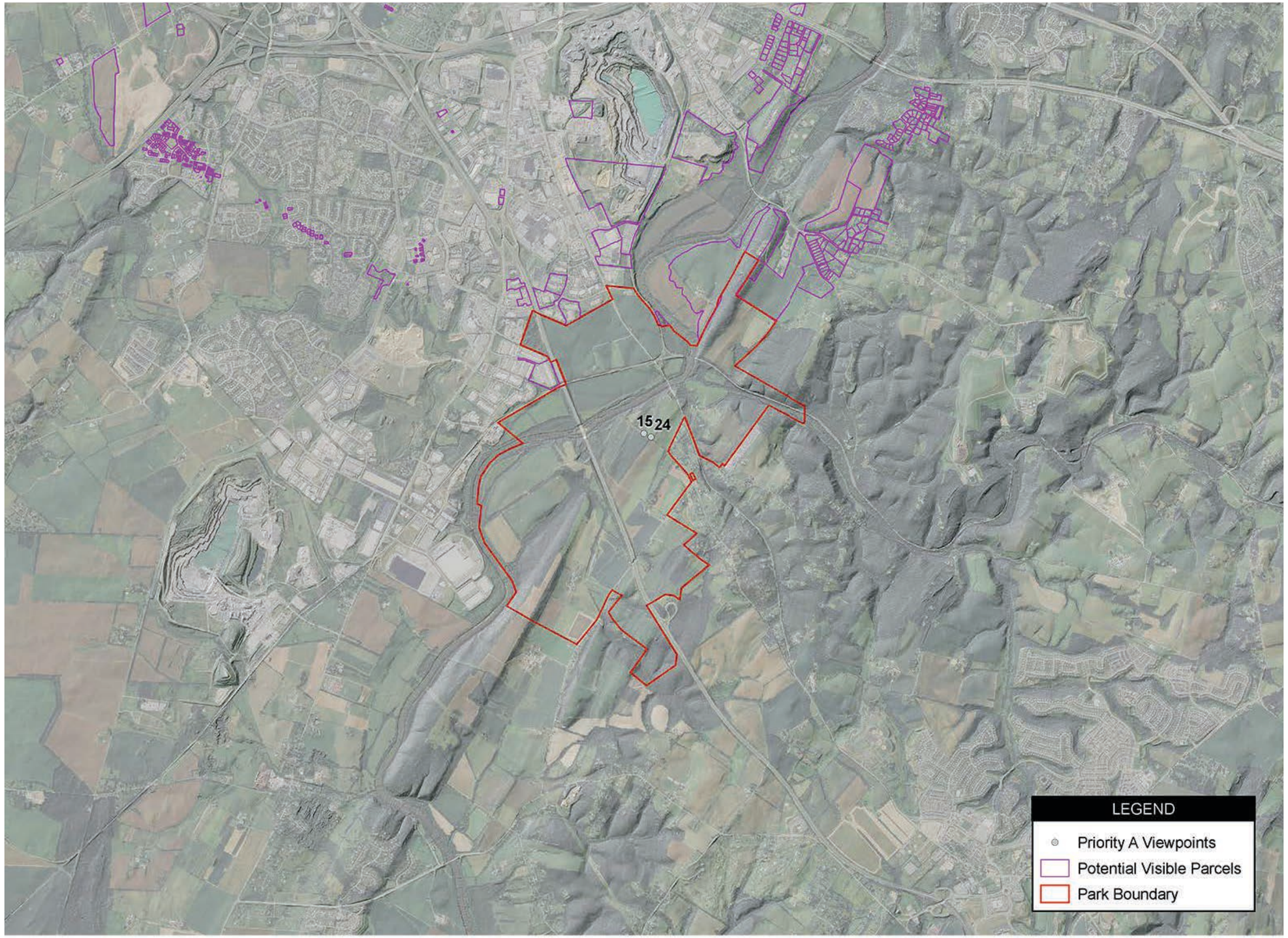
Potential Visible Parcels (Viewpoint 12)
Zoning Maximum Height Scenario



Potential Visible Parcels (Viewpoint 15&24)
30 Ft Height Scenario



Potential Visible Parcels (Viewpoint 15&24)
60 Ft Height Scenario



Potential Visible Parcels (Viewpoint 15&24)
90 Ft Height Scenario

Appendix C

Vision Statement

The Big Sur Planning Area is a "Special Coastal Community" stretching from Malpaso Creek in the north to the Monterey County line in the south. This Planning Area includes rural communities, remote ranches and homes, visitor-serving facilities, and outdoor recreational opportunities. The many State Parks and the vast Los Padres National Forest offer camping and wilderness experiences.

A fundamental and long-standing goal for the Big Sur Coast is to preserve for posterity the incomparable beauty of the Big Sur country with its special cultural, artistic, and natural resources, its landforms and seascapes and inspirational vistas. A primary tool in this preservation ethic is the critical viewshed policy.

Land use planning and management policies should maintain and restore of Big Sur's rural and wilderness character. New development should remain within the small scale and rural values of the area, and quality should have precedence over quantity of any permitted use whether residential, recreational, or commercial. To this end, development should harmonize with and remain subordinate to the wild and natural character of the land. All proposed uses, whether public or private, must meet the same exacting environmental standards and must not degrade the Big Sur landscape.

The special characteristics of the Big Sur Coastal community are also to be recognized as a primary resource. The quality of the country itself has shaped the character of its people. The residents of the Big Sur coastal community, with their traditional way of life and their passionate vigilance, actively help to protect the environment, and significantly enhance the visitor experience. Their presence along this coast continues to reflect a pioneering attitude of independence, self-sufficiency and resourcefulness. The environment remains a special nurturing ground for artistic inspiration and creative fulfillment.

Because preservation of the land in its natural state is the highest priority, care must be taken that while providing public access to the beauty of the coast, its tranquility, and the health of its environment are not marred by public overuse or carelessness. Visual access should be emphasized throughout Big Sur as an appropriate response to the needs of visitors. Sightseeing and scenic driving provide the main tourist experience.

In order to support the continued existence of this "Special Coastal Community" we must seek to provide and protect housing to accommodate the people who live and work here, and to maintain cultural, regulatory and economic conditions that encourage traditional rural lifestyles to flourish.

Special Policies For the Big Sur Area

Big Sur Policy #1 – Special Coastal Community

In recognition of the self-sustaining community of people who live and work in Big Sur, the incomparable beauty of the Big Sur coastal area with its extraordinary natural resources, landforms and seascapes, and its inspirational vistas, the Big Sur Planning Area is hereby designated as "Special Coastal Community" and a significant statewide coastal resource pursuant to Coastal Act Section 30253. In order to protect the dynamic interaction of people and place in Big Sur, as well as its special natural and scenic resources, policies tailored to the unique conditions of the area are included in this policy section, such as critical viewshed protection, a Transfer of Development Credits program, a public land acquisition policy, and special affordable housing provisions.

Big Sur Policy #2 – Large Scale Mineral Development

Large-scale mineral development is not an appropriate use in Big Sur, and shall be strictly limited. The total amount of proposed surface from any mineral extraction operation or aggregate of operations (including quarry sites, tailings, overburden disposal sites, drilling pads, processing sites, roads) within any watershed shall be the minimum necessary to support the operation. For the purposes of this policy, a watershed must be considered in its entirety, from the point where it drains into the Pacific Ocean, inland to the limit of the coastal zone.

Big Sur Policy #3 – Public Land Acquisitions

The fundamental goal within the Big Sur Planning Area is to protect both the community of people who live and work in Big Sur as well as the extraordinary natural and scenic resources. To accomplish this, the following measures should be carried out to ensure that future public land acquisitions and related land use changes are consistent with this goal:

a. Ensure early and continuous public participation in the development and update of the long-range recreational development plans of federal, state and local agencies within Big Sur. The Big Sur Multi Agency Advisory Council should take a lead role in coordinating this public participation.

b. Base future public acquisition of private lands in Big Sur heavily on the following criteria:

    1) Opportunities permanently to protect the critical viewshed;

2) Balance the need to protect the natural environment of Big Sur against the need to preserve the long-term sustainability of the traditional Big Sur community, comprising the local residents, employees, commercial businesses and visitor-serving uses;

3) Maintenance of the integrity of existing residential neighborhoods.

4) Opportunities to enhance public access to and along the coastline, consistent with the public access policies regarding site-specific areas of this Big Sur Area Section;

5) Opportunities to preserve significant natural, scenic, cultural and agricultural resources that are in particular jeopardy of loss to development; and

6) Acceptance of voluntary land donations by property owners to the extent they meet the other criteria above.

c. Preserve and maintain existing residences on public land to the maximum extent feasible.

d. Ensure that adequate public safety and fire protection services, as well as stewardship resources for on-going resource management activities, are available to serve public lands.

Big Sur Policy #4 – Recreational Development Plans

The County shall request State and Federal agencies to prepare long range recreational development plans for areas under their jurisdiction, and shall further request that these plans contain traffic components describing the portion of Highway 1 capacity required to serve proposed recreational development, including public transportation potential. The County shall encourage public agencies in Big Sur to address and ensure coordinated public safety, fire protection and hazard mitigation activities in their respective management and development plans.

Big Sur Policy #5 – Short Term Rentals

There shall be no short-term rental of residences within the Big Sur Planning Area. Inn units, Bed and Breakfast guest rooms and Hostels shall be the only habitable structures that shall be rented for a term of less than 30 days within the Big Sur Planning Area. This policy shall not be construed as precluding the renting of tents in an area designated as Visitor-Serving Commercial, such as Treebones.

Big Sur Policy #6 -- Local Workforce Housing

The County recognizes the critical need for additional workforce housing in Big Sur to support the local business community and local visitor-serving recreational uses. The County shall work with housing providers, Big Sur business owners and public entities, Big Sur and South Coast Land Use Advisory Committees and other interested citizens to develop a program to provide affordable housing for those employed within the Big Sur Planning Area. This program should consider a variety of affordable housing options with income and occupancy restrictions, such as second units on residential properties, a small grouping of employee housing units on property readily accessible to commercial or visitor-serving uses outside the critical viewshed, or additional employee housing units on commercial and visitor-serving recreational properties. This program shall limit the creation of new employee housing units to meet the specific needs of the local commercial and visitor-serving facilities in Big Sur. County incentives, such as density bonuses, permit fee reductions, expedited processing times, and staff assistance in permit processing should also be considered. The program shall be adopted by the Board of Supervisors along with any General Plan amendments, ordinance amendments needed to establish density bonuses or other County incentives. Program implementation, such as funding mechanisms and compliance monitoring, may be carried out by a non-profit community housing organization, Monterey County Housing Authority or another specified entity other than Monterey County.

Big Sur Policy #7 – Westmere

Westmere, well known as the site of a lodge serving visitors to the northern portion of the Big Sur Coast, may reestablish the historic use as a lodge of 24 units that reflects the historic character of the site in design and scale. In order to meet policies for the protection of the critical viewshed, the new lodge should use the original site, which is hidden from public view. Overall visual restoration of the surrounding area, under the same ownership, should be carried out, as a condition of the development of the lodge, and public access to the beach at Rocky Creek should also be provided.

Big Sur Policy #8 – Pacific Valley

Pacific Valley Center, destroyed by fire in 1995, shall be permitted to develop up to a maximum of 30 inn units, provided that all policies of this Plan are followed.

Big Sur Policy #9 – Existing Commercial Facilities

Existing commercial facilities are encouraged to improve existing buildings as a desirable means of meeting demand. Renewal of coastal permits for existing commercial uses or the establishment of new uses will require careful consideration of the impact of the use on surrounding land from a good neighbor point of view. Particularly where commercial activities are in proximity to residences, care must be

taken to ensure that noise or visual modification do not affect the peace and tranquility of existing neighbors.

Big Sur Policy #10 – Essential Services

Commercial developments within the Big Sur Valley, Lucia, Gorda, and Pacific Valley, as well as at Rocky Point Restaurant, Big Sur Inn, and Coast Gallery, provide essential services to the community and visiting public, and the importance of these services to the public shall be considered in connection with any proposal for commercial development within the Big Sur Planning Area.

Big Sur Policy #11 – Public/Quasi-Public Uses

A range of public and quasi-public services are present in the Big Sur Rural Community Centers and serve both the local community and visitors. These include, or have included in the past, churches, two elementary schools, volunteer fire protection, a County library, Post Office, Big Sur Grange Hall, the Big Sur Station - Multi Agency Facility, ambulance service, and the Big Sur Health Center. Such public and quasi-public uses should continue to be concentrated in the Big Sur Valley, Pacific Valley, Lucia, and Gorda Rural Community Centers, but should be upgraded based on present need and future growth. The volunteer fire departments should continue to be dispersed throughout the Big Sur area, wherever needed; as should radio repeaters, flood monitors, and navigational aids.

Big Sur Policy #12–New or Expanded Recreation Facilities

Maintenance of the rustic, outdoor recreational character of Big Sur is emphasized. The expansion and development of recreation and visitor-serving facilities in Big Sur shall be of a scale and nature that is compatible with the natural and cultural character of the area while offering opportunities for visitors to experience and enjoy the beauty and inspiration that the Big Sur environment presents. Intensive recreational uses or facilities are not appropriate and shall not be permitted. Parking lots shall be prohibited within the critical viewshed.

Big Sur Policy #13–Recreation Uses in Undeveloped Areas

Undeveloped areas in Big Sur shall be encouraged for low intensity recreational use, such as hiking, camping and nature study. Only minimal alterations of Big Sur's existing natural environment and recreational character shall be allowed. Development of low intensity recreation uses and visitor-serving facilities are encouraged on the larger properties where this will assist in providing economic uses of the land and in meeting Coastal Act objectives for public recreation.

Big Sur Policy #14 – Surfing and Scuba Diving

Surfing and scuba diving are hazardous activities due to the high energy surf environment along the Big Sur Coast. Development of special facilities to encourage surfing and scuba diving uses by the general public shall not be allowed.

Big Sur Policy #15 – Hang Gliding

The Forest Service may designate appropriate areas in the vicinity of Pacific Valley for hang-gliding and shall provide supervision to discourage hang-gliding in areas where that activity could endanger the safety of hang-gliders and the public. Hang-gliding from private property shall be allowed only upon prior approval of the owner.

Big Sur Policy #16 – Non-Standard Homes

The County shall work cooperatively with Big Sur residents desiring to construct hand-made houses of original design, utilizing native materials. The County encourages this as a contribution to the coast's culture and will assist residents in ensuring these designs meet minimum necessary health and safety standards pursuant to the Monterey County Code.

Big Sur Policy #17 – Transfer of Development Credits

Transfer of Development Credits (TDCs) comprise a system that will assist the owners of lots restricted in their residential development potential by viewshed policies contained within this Plan. They provide an economic and planning incentive under which density credits can be reallocated within certain boundaries. Additionally, the use of this technique is intended to encourage the transfer of residential development potential from large ranch parcels within the critical viewshed in order to maintain the viability and stability of agricultural operations. To assist in the implementation of this program, the County shall maintain a directory of willing landowners of TDC "donor" and "receiver" sites.

Big Sur Policy #18 – Intent of Big Sur TDCs

The intent of TDCs in Big Sur is three-fold:

a. To provide owners of "critical viewshed lots" fair and real opportunities to build in Big Sur.

b. To provide incentives for preservation of large ranches in agricultural operations within the critical viewshed, and permanently to protect their viewshed.

c. To provide economic compensation in the form of density credits for lots rendered unbuildable due exclusively to Big Sur viewshed policies.

Big Sur Policy #19 – TDC Receiver Sites

Any non-critical viewshed parcel in Big Sur is a potential "receiver" site, provided the development proposed for the parcel meets the development and siting standards of this Plan and the TDC program policies for obtaining additional density. Critical viewshed exempt parcels do not qualify as TDC receiver sites. As part of a countywide Transfer of Development Credits (TDR) program, the County shall consider allowing Big Sur TDCs to be transferred to receiver sites established under the countywide TDC program outside of the Big Sur Planning Area.

Big Sur Policy #20 – Transfer Rights

"Critical viewshed lot" owners would have the right to transfer residential development potential from such restricted parcels and to build two residential or inn units elsewhere in Big Sur, or transfer two development credits for each lot retired subject to the criteria of these policies. Residential receiver sites shall be located only within Watershed and Scenic Conservation and Rural Countryside designations and may be subdivided to create one additional parcel to accommodate the transferred development credits provided under this policy. No more than four inn units over and above the maximum otherwise allowed by this Plan may be transferred to a Rural Community Center property and the Westmere Special Treatment Area. The County shall also consider allowing the transfer of residential development potential to receiver sites outside the Big Sur Planning Area under a countywide TDC program.

Big Sur Policy #21 – Coast Highway Management Plan

For the purposes of implementing the General Plan, the County recognizes the Coast Highway Management Plan (CHMP) as an inter-jurisdictional guidance document, to protect and enhance the Scenic Highway's intrinsic qualities, by establishing preferred methods and best practices to guide development, improvements, and maintenance within the Highway right-of-way, to maintain safe highway operation, and to facilitate a coordinated response to emergency highway situations. The CHMP does not impose additional regulations or requirements on public or private development outside the highway right-of-way and does not supersede County policies or regulations.

Any activity carried out pursuant to the CHMP shall be consistent with the goals and policies of the General Plan. Furthermore, any future related plans or programs for the purpose of implementing the CHMP, such as a Public Works Plan, shall also be consistent with the goals and policies of the General Plan.

Big Sur Policy #22 – New Access Roads

Sites for new structures shall be selected to avoid the construction of access roads visible from Highway 1 and to minimize the extent of environmental and engineering problems resulting from road construction. New roads providing

residential, recreational, or agricultural access will be considered only where it has been demonstrated that the use of existing roads is not feasible. New roads shall be constructed according to all policies of this General Plan, and to the greatest extent feasible shall be located along the margins of forested areas, along natural land contours, or within existing vegetation. Roads shall be aligned to minimize removal of native trees, and constructed to minimum standards consistent with the requirements of fire safety and emergency use. Drainage and erosion control measures must be adequate to prevent harm to resources from erosion. Realignment of existing access roads may be allowed if the new alignment would better meet policies of this Plan, and the old alignment is retired and restored.

Big Sur Policy #23 – Roads Outside The Critical Viewshed

New private roads may be permitted only where:

a. The proposed new road is appropriate for the establishment, continuation or expansion of a Coastal Act priority use: or

b. The proposed new road is essential for basic residential access, and no feasible alternative exists; or

c. The proposed new road provides a superior alternative to an existing road in carrying out the policies of this Plan, and the old road is retired and restored.

Big Sur Policy #24 – Driveway Accessibility

In the generally rugged terrain in Big Sur, use of an alternate driveway access shall be considered by the fire authority having jurisdiction consistent with Public Resources Code 4290 and Monterey County Ordinance 3600. Nothing in this Policy shall be construed as relieving an applicant from meeting the requirement that a driveway be accessible to all fire equipment if the appropriate fire authority does not agree that the driveway is not needed for fire-equipment access to structures.

Big Sur Policy #25 – Traffic Study Required

An applicant proposing a new or expanded private recreation and visitor-serving uses shall be required to submit with their application, a traffic study which evaluates the anticipated impact of the proposed new or expanded use to Highway 1 service capacity and makes recommendations on how impacts can be overcome or mitigated.

Big Sur Policy #26 – Traffic and Mining and Logging

An applicant proposing commercial mining or logging that may produce heavy truck traffic shall submit with their application a traffic study evaluating traffic impacts of the proposed use and potential conflicts with recreational and residential use of Highway 1

and County roads, and forming mitigation measures to avoid such conflicts. In general, the County shall not approve applications requiring use of heavy trucks on Highway 1 during peak recreational use periods.

Big Sur Policy #27 – Shoulder Parking on Highway1

Pedestrian and traffic hazards which result from on-shoulder parking at unsafe locations shall be corrected wherever possible, with priority being given to congested recreational attractions. New commercial, facilities must have adequate and safe off-shoulder parking before they are opened to public use. Expansion of existing commercial facilities shall not be approved unless adequate and safe parking is provided.

Big Sur Policy #28 – New Access Points on Highway 1

The number of private roads and recreational access road entrances off Highway 1 shall be limited whenever possible for traffic safety and management purposes. The County shall require new developments to demonstrate that the use of existing public or private roads is either not feasible or that easements for use cannot be obtained before it approves construction of a separate entrance to Highway 1.

Big Sur Policy #29–Road Maintenance and Improvement

Sycamore Canyon Road and Palo Colorado Road shall be maintained safely to accommodate resident and visitor traffic. Improvements to the width or alignment of these roads shall be approved only if the County determines that negative visual and environmental impacts will not result.

Big Sur Policy #30–Appropriate Access

The public's right of access to the shoreline must be protected, and providing access and opportunities for recreational hiking on public lands must also be protected, encouraged and enhanced. However, because preservation of the natural environment is the highest priority in the Big Sur Planning Area, all future access must be consistent with this objective. Care must be taken that while providing public access, the beauty of the coast, its tranquility and the health of its environment are not marred by public overuse. The protection of visual access from Highway 1 shall be emphasized throughout Big Sur as an appropriate response to the needs of recreationists. To this end, curbing or berming shall not block or impede visual access. Visual access shall be maintained by directing all future development out of the critical viewshed. In addition, protection of private property rights must always be of concern.

Big Sur Policy #31 – Public Transit on Highway 1

Pleasure driving along scenic Highway 1 is a major recreational activity. In order to improve traffic flow, the County shall encourage public transit service to and along the

coast. Local transit service within Big Sur should serve residents, employees and visitors to State Parks and Los Padres National Forest facilities, and private recreation and visitor-serving facilities.

Big Sur Policy #32 – Bicycle and Pedestrian Access

Improvements for bicyclists and pedestrians along Highway 1 shall be provided wherever feasible, and particularly where local use is the greatest, such as in the Big Sur Valley and in the area between Esalen Institute and South Coast Center. The highway shall be properly marked to alert drivers and provide bicyclists and pedestrians extra protection.

Big Sur Policy #33 – Shoreline Access

Maximum shoreline access and recreational opportunities shall be provided for public use, consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Big Sur Policy #34 – Coastal Access Parking

Lateral access along the shoreline and vertical access to the shoreline should be developed and maintained in accordance with access management plans that provide for protection of natural and cultural resources, protection of views from Highway 1 and other public viewing areas, and that protect public safety. In order to provide for appropriate coastal access, creative designs shall be employed to develop parking areas consistent with the protection of the critical viewshed. Parking lots shall be located outside of the critical viewshed, as shall associated facilities such as restrooms. Associated facilities shall preferably be located in conjunction with parking lots.

Big Sur Policy #35 – Off-Road Recreational Use

Off-road vehicle recreation is not an appropriate use in the Big Sur Coastal area.

Big Sur Policy #36 – Coastal Access Trails

The coastal and inland trailhead access areas along Highway 1 should be planned for low-intensity, day-use only recreational uses with minimal development of facilities. The scenic and natural resources of these areas should be preserved in a natural state.

Big Sur Policy #37 – Big Sur Forest Land

The primary use of forested land in Big Sur shall be for recreational and aesthetic enjoyment and for educational, scientific, watershed, and habitat protection activities. Commercial logging of healthy old growth redwood shall be considered an inappropriate use of a nationally significant resource. Limited salvage and selective

logging activities will be allowed to maintain the health of the forest provided that all natural resource protection provisions of this Plan are met.

Big Sur Policy #38 – Old Growth Redwoods

Commercial harvesting of old growth redwoods or rare or sensitive tree species is inappropriate in the Big Sur Planning Area because of their scarcity, uniqueness, and scientific and educational value.

Big Sur Policy #39 – Coastal Lagoon and Estuary Buffer

The wetlands, coastal lagoons and estuaries of the Big Sur Coast shall remain undeveloped. Development in the adjacent buffer area shall be limited to the minimum required to support low-intensity recreational, scientific or educational uses. The wetland, coastal lagoon and estuary buffer area shall, at a minimum, include all areas within 150 feet of the landward extent of hydrophilic vegetation or the average high water mark if no such vegetation exists.

Big Sur Policy #40 – Streams Supporting Trout

Water quality adequate year-round flows, and stream bed gravel conditions shall be protected in streams supporting rainbow and steelhead trout. These streams include: Garrapata Creek, Rocky Creek, Bixby Creek, Little Sur River, Big Sur River, Partington Creek, Anderson Creek, Hot Springs Creek, Vicente Creek, Big Creek, and Limekiln Creek.

Big Sur Policy #41 – Alteration of the Shoreline

Alteration of the shoreline, including diking, dredging, seawalls, rip rap and filling, shall not be permitted except for work essential for the maintenance of Highway 1. Where dredging or temporary dikes are required for essential work or maintenance of Highway 1, they should avoid disruption of marine and wildlife habitats and should restore the site to its original condition as early as practical. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches.

Big Sur Policy #42 – Shoreline Structures

Boating facilities or other uses requiring onshore structures are not appropriate on the Big Sur coast. If a harbor of refuge is required, it should be designed so as not to require onshore structures.

Big Sur Policy #43 – Petroleum or Related Products

Because of extraordinary risk to the Big Sur coast's special wildlife and recreational values, and based on extensive evaluation of the Big Sur Coast, no sites have been

identified which would be either practical or appropriate for the exploration, extraction, or handling of petroleum or related products either on shore or off shore. Therefore, such uses are not provided for in this Plan, and are prohibited, either on-shore or offshore, in areas under the jurisdiction of the State of California and Monterey County. This prohibition is designed especially to protect the designated Monterey Bay National Marine Sanctuary, the California Sea Otter State Fish and Game Refuge, the watersheds that empty into the Ventana Wilderness, a designated Area of Special Biological Significance, and any Ecological Reserve, State Protected Waterway, State Fish and Game Refuge, or public beach or other public shoreline recreation area located on the Big Sur coast.

Big Sur Policy #44 – Consultation With Public Agencies

To assure protection of habitat and recreational values on adjacent lands, the County shall consult with the affected public land management agency prior to approval of any mining activity on any parcel adjacent to National Forest, State Park, or University of California Land and Water Reserve lands, access roads or trails. The County shall establish mechanisms for consultation and comment upon mining operations on federal lands.

Big Sur Policy #45 – New Roads in Critical Viewshed

New private roads, grading or excavations (including all alterations of natural landforms by earthmoving equipment) will not be allowed to damage or intrude upon the critical viewshed. Such road construction or other work shall not commence until the entire project has completed the permit and appeal process. These restrictions shall not be interpreted as prohibiting restoration of severely eroded watercourse channels or gullying, provided a plan is submitted and approved prior to commencing work.

Big Sur Policy #46 – Critical Viewshed Procedures

All private development applications shall require individual onsite investigations to determine whether they would intrude on the critical viewshed. The proposed buildings shall be accurately indicated as to dimensions, height, and rooflines by poles and access roads, by stakes with flags which shall remain in place for the duration of the project review and approval process. Such indications of the extent of development shall be recorded photographically with superimposed representation of the proposed project. The standard for review is the objective determination of whether any portion of the private proposed development is visible from Highway 1 or the major public viewing areas identified in the definition of the critical viewshed.

Visibility will be considered in terms of normal, unaided vision in any direction for any amount of time at any season. Ocean views from Highway 1 shall not be obscured by artificial berming/mounding or landscaping.. Exterior light sources shall be prohibited

if such light source would be directly visible from the critical viewshed. The critical viewshed does not include areas visible only from the hiking trails.

Any private construction not in conformance with the approved representations shall be subject to removal.

Big Sur Policy #47 – Scenic Easements

Landowners will be encouraged to grant scenic easements to the County over portions of their land in the critical viewshed. As a condition of permits issued for parcels where additional development would be in the critical viewshed, a scenic easement shall be required to prevent future incursions into the critical viewshed.

Big Sur Policy #48 – Restoration of Lands

The County encourages creative public and private efforts to restore the scenic beauty of visually impacted areas of the coast and will assist such efforts where possible.

Big Sur Policy #49 – Land Not in Critical Viewshed

Land not in the critical viewshed shall be developed consistent with the following siting and design standards. These standards shall apply to all development, whether by public or private entities, and whether residential, commercial, or agricultural, including access roads thereto. When applying these standards to a particular project on a particular piece of land, the goal is to consider all of the standards together to best ensure that the visual continuity of the natural terrain is not made subordinate to the project. The natural terrain, not the project, should predominate.

To the maximum extent practical, all development shall be sited and designed to not detract from the natural beauty of skylines, ridgelines, and the shoreline.

Applicants for new development, when selecting a building site, must consider the visual effects upon public views as well as the views and privacy of neighbors. New applicants, when selecting a building site, must consider the visual effects upon public views as well as the views and privacy of neighbors. The portion of a parcel least visible from public viewpoints will be considered the appropriate site for the location of new structures. New structures shall be located where existing topography or trees provide natural screening and shall not be sited on open hillsides or silhouetted ridges. Sites shall not leave excavation scars or slope disturbance. Structures and access roads shall be designed to minimize alterations of the natural landform and to avoid, insofar as feasible, removal of healthy tree cover, and to minimize alteration of the natural landform; provided however, this shall not be construed as precluding a structure itself from being excavated into a landform in order to allow the structure to better conform with and blend into the surrounding area.

New development should be subordinate to and blend with its environment, using materials or colors that will achieve that effect. Where necessary, appropriate modifications will be required for siting, structural design, size, shape, color, textures, building materials, access, and screening. New trees and other vegetation should not obscure more than the proposed residence so as to minimize the viewshed impacts along Highway 1. When mature, planted plants and trees shall conform in appearance to native growth in the area. Non-native invasive species shall not be used.

Big Sur Policy #50–Exceptions to Critical Viewshed Policy

The following are exceptions to the critical viewshed policy:

a. Agricultural structures that are essential to and required by commercial ranching and agriculture operations that cannot be feasibly located outside the viewshed shall be permitted under careful design and siting controls. Examples include barns, fences, windmills, water pumps, water tanks, stockponds and corrals. All aquaculture facilities will be subject to the same resource protection criteria and environmental standards as other development.
b. Existing parcels between Highway 1 and the sea, from (and including) the southernmost residential parcel on Rocky Point to the northernmost parcel on Kasler Point and from the southernmost parcel north of Abalone Cove to Garrapata Creek, shall be permitted to be used for residential purposes subject to the following additional standards. Additional standards shall include keeping driveways as narrow as possible, avoiding paving where practical and consolidation of driveways; the use of roof and surface treatments, colors and materials which will visibly blend with the surrounding environment; the use of berming and other measures designed to minimize views of structures without blocking ocean vistas seen from Highway 1; prohibiting the dumping of excavated materials over the coastal bluff, and additions, antennae, night flood lighting, or other improvements in view of Highway 1 without separate permit consideration; and dedication of scenic easement over undeveloped portion of lot. Guest houses shall be attached to the main dwelling except where they can be sited to better implement these policies.
c. The following natural resource management needs and the specific necessary public facilities specified below are permitted, provided that in each case there be a finding that no reasonable alternative exists, that no significant adverse visual impacts will result, and that all development

will conform with all policies of this Plan applicable to development outside the critical viewshed. The exceptions are limited to:

1. Removal of non-native trees and invasive species;
2. Improvements to existing County roads that are consistent with the limitations and requirements applicable to exceptions for "Highway 1" in this policy;
3. On-shore navigational aids (lights, radio beacons, weather stations) needed by the commercial fishing industry; and
4. Improvements to Pacific Valley School.

Big Sur Policy #51 – Signage

Commercial signage shall be limited. Permitted signs on private property along Highway 1 shall be constructed of natural materials or wood, and shall be unpainted except for lettering. Signs shall not be internally illuminated. No neon or animated advertising signs will be allowed inside windows or outdoors.

Big Sur Policy #52 – Big Sur River Flood Hazards

The 100-year floodplain of the Big Sur River poses considerable limitations on development in the Big Sur Valley. No additional permanent structures shall be permitted in the floodplain. Campgrounds or similar temporary outdoor recreational uses are most appropriate in this hazardous area.

Big Sur Policy #53 – Water Transfers

Interbasin transfers of water from the Big Sur Planning Area to other Planning Areas shall not be allowed.

Big Sur Policy #54 – Big Sur Valley Sewer Systems

It is the policy of Monterey County to not permit the construction of sewer systems and treatment plants to serve new development in the Big Sur Valley, unless potential pollution of the Big Sur River requires this step. The rugged terrain and dispersed population within the Big Sur Planning Area are unlike other areas of Monterey County. The geology of most of the Big Sur Planning Area has excellent septic percolation characteristics. The terrain and dispersed population in the Big Sur area makes it physically and economically unfeasible to consolidate private on-site wastewater systems into a regional wastewater system.

Big Sur Policy #55 – Wastewater Drainfield Setback

Unless the County Division of Environmental Health agrees that a lesser setback will not endanger public health, septic system drainfields shall not be closer than 100 feet from any creek, stream, or river. This Policy shall not be construed as rendering non-

conforming any existing drainfield that was installed in compliance with the laws in effect at the time of installation. Replacement of such existing drainfields shall conform with this Policy to the maximum extent possible. When replacement drainfields would not meet this setback, the Division of Environmental Health should consider allowing feasible alternative means of sewage disposal once regulatory infrastructure has been codified to grant the Division of Environmental Health regulatory powers to require mandatory monitoring and maintenance with enforcement tools. Nothing in this Policy shall be construed as requiring the Division of Environmental Health to approve any septic drainfield or alternative sewage system that presents a significant danger of harm to public health or safety.

Land Use Planning
- Introduction
- Key Principles
- Strategies
- Civic Participation
- Tools
- Success Stories
- Codes / Ordinances
- Articles / Publications
- Educational Materials
- Other Resources

Codes/Ordinances

Transfer of Development Credits
Zoning Ordinance Title 20
Monterey County, California

Chapter 20.64.190

Sections:

20.64.190.010 Premises of the Transfer of Development Credit Ordinance.

20.64.190.020 Objectives of the Transfer of Development Credit Regulations.

20.64.190.030 Definitions.

20.64.190.040 Designation of Donor Sites.

20.64.190.050 Designation of Receiver Sites.

20.64.190.060 Transfer of Development Credit.

20.64.190.070 TDC's Created but not Transferred.

20.64.190.080 Fund to Purchase TDCs.

20.64.190.010 Premises of the Transfer of Development Credit Ordinance.

The Transfer of Development Credit Ordinance is based, in part, on the following premises:

1. The California coast has been recognized as an area of special significance requiring state-enacted regulation of land use, with the most significant manifestation of this intent being the passage of Proposition 20 in 1972;

2. The Big Sur was recognized as an area of statewide importance and of particular concern in the California Coastal Plan of 1975;

3. The significance of cumulative impact concerns in the Big Sur area was legislatively recognized through the substantial increase in Coastal Act regulatory jurisdiction in the California Coastal Act of 1976 (up to several miles inland) in comparison with the 1,000 yard permit boundary of the California Coastal Zone Conservation Act of 1972;

4. The California Coastal Act of 1976 places great stress on resolving land use and environmental protection problems at the local government level rather than having specific solutions imposed by the state regulatory agency (e.g., Public Resources Code Section 30500(c);

5. Based on extensive studies, all levels of government concur in the view that Big Sur is an area of national significance whose resources would be threatened by the cumulative impact of development absent an effective regulatory program; and

6. A major land use issue confronting the County is how cumulative impacts can be regulated in both an effective and equitable manner.

20.64.190.020 Objectives of the Transfer of Development Credit Regulations.

Based on the foregoing premises, the Big Sur Transfer of Development Credits program is intended to carry out the following objectives:

1. Maintain the natural and scenic resources of Big Sur for the benefit of County residents and of residents of the State of California;

2. Maintain the natural and scenic resources of Big Sur to assure the vitality of the County's tourism industry which depends in large part on the Big Sur;

3. Provide a system of land use regulation of the Big Sur that is controlled and implemented locally.

4. Provide a means of implementing the policies of the Big Sur Local Coastal Program (certified pursuant to the provisions of the California Coastal Act of 1976), which, while publicly regulated, relies primarily on private involvement and participation to carry out the program.

5. Establish regulations for transferring development credit from parcels rendered unbuildable by the viewshed policies of the Big Sur Land Use Plan to other sites within the Big Sur Land Use Plan area deemed viable for additional development beyond that normally

allowed by the Big Sur Land Use Plan and zoning consistent with that Plan.

20.64.190.030 Definitions.

Chapter 20.06 of this Title includes those definitions applicable in the County and as are commonly used throughout this Title. These definitions are also applicable in the Coastal Zone.

Definitions provided in this chapter specifically adopted to implement the Big Sur Coast LCP TDC Program shall apply only in the Big Sur Coastal segment.

In addition to the other definitions made in this Title the following terms are defined for the purposes of this chapter:

Buildable Parcel, a "buildable parcel" is any parcel which, regardless of size, contains a site which can be accessed and upon which at least one single family residence can be constructed in conformity with all of Monterey County's health and safety codes and all County Land Use Plan policies except the critical viewshed policy in effect at time of application for a development or building permit.

Donor Site, a "donor site" is a buildable viewshed lot within the Big Sur Coast Land Use Plan area which has been designated as a donor site at a public hearing pursuant to Section 20.84 to qualify for transferable development credits (TDCs).

Viewshed Policies, the "LCP viewshed policies" are the Critical Viewshed Policies set forth in the Big Sur Coast Land Use Plan.

Receiver Site, a "receiver site" is a buildable parcel designated to receive one or more TDCs for use in developing a specific project. The designation is made after a noticed public hearing pursuant to Section 20.84 or Title 19 (Subdivision Ordinance) of the Monterey County Code.

Residential Building Site, a "residential building site" is a location within a buildable parcel upon which one single family residence can be constructed.

Rendered Unbuildable, to be "rendered unbuildable" means that a buildable parcel may not be developed because the parcel is subject to the constraints of the viewshed policies. Public Resources Code ~ 30106.

Transfer, a "transfer" is the set of actions which result in an increase in development on one parcel--"receiver site"--over the level initially allocated under zoning by reducing the development on another parcel--"donor site"--by a like amount. In a typical transaction, two

parcel owners will contract to transfer between themselves to their mutual financial advantage. The transfer of development is officially validated at the time the receiving site is issued a development permit to receive the increased development, and the donor site has been encumbered by documents permanently restricting its development potential. A parcel from which development credits have been transferred may be retained by the owner or transferred subject to any restrictions encumbering the parcel.

Transferable Development Credit (TDC), a "transferable development credit" (TDC) is the right to transfer the right to develop a residential building site from a donor site to a receiver site within the Big Sur Coast Land Use Plan area. One credit or TDC would equal the right to develop one residential building site on an eligible parcel designated as a receiver site.

Transferable Development Credit Decision, a "transferable development credit decision" is a written statement of decision rendered by the Planning Commission or the board of supervisors on appeal after noticed public hearing which is evidence that a donor site is entitled to one or more development credits.

Viewshed Lot, a "viewshed lot" is an otherwise buildable parcel upon which a residential building site can be located and accessed in conformity with all Big Sur Coast Land Use Plan policies except for the LCP viewshed policies.

20.64.190.040 Designation of Donor Sites.

1. Donor sites may be designated by the Planning Commission or board of Supervisors on appeal after an application by the property owner pursuant to the procedure set forth in Chapter 20.70 (Coastal Development Permits) of the Monterey County Code.

2. The application to designate a donor site need not contain the information necessary to obtain a coastal development permit pursuant to Chapter 20.70, but it must contain sufficient information to determine whether a buildable parcel, and more specifically, a residential building site may be located on the parcel in conformity with all LCP policies except for those on viewshed.

If a parcel is a buildable parcel upon which a residential building site could be developed under the Big Sur Coast LCP’s detailed exception policies, it cannot qualify as a donor site.

3. To designate a parcel as a donor site, the Planning Commission or Board of Supervisors on appeal, as the appropriate authority under Section 20.70.050, must make the following written findings:

a. the parcel is a buildable parcel; and

b. the parcel is a viewshed lot.

4. Upon designation of a parcel as a donor site, the owner of the donor site shall be granted two transferable development credits. This decision shall be recorded. The transferable development credits (TDCs) may be transferred to designated receiver sites.

5. Designation of a parcel as a donor site shall require an offer to dedicate to the County of Monterey a permanent, irrevocable scenic easement on the property, the text of which has been approved by the County. Upon transfer of the first TDC, the County shall accept the easement offer.

The scenic easement may make exceptions for passive open space, agricultural and maintenance uses, but shall prohibit residential and commercial use of the property.

20.64.190.050 Designation of Receiver Sites.

1. Receiver sites may be designated by the Planning Commission, or Board of Supervisors on appeal, after an application by the property owner for a specific project utilizing transferred development credit has been filed:

> a. Pursuant to the procedure set forth in Chapter 20.70 (Coastal Development Permits) of the Monterey County Code;
>
> b. And, if applicable, pursuant to the procedures set forth in Title 19 (Subdivision Ordinance) of the Monterey County Code.

2. To designate a parcel as a receiver site, the Planning Commission, or Board of Supervisors on appeal, as the appropriate authority under Section 20.70.050, must make the following written findings:

> a. The receiver site has the potential for development consistent with the policies of the Big Sur Coast Land Use Plan except for the maximum development otherwise allowed by the Big Sur Land Use Plan and implementing zoning.
>
> b. The new residential building sites made possible by the receipt of TDCs have the minimum feasible number of common driveway access onto Highway 1.
>
> c. The new development provided on the receiver site meets the septic, viewshed protection, resource protection, water supply and geologic safety criteria specified in the Big Sur Coast Land Use Plan although

the land use designation and zoning may have been amended to accommodate the receipt of the TDCs.

d. The receiver site is not permitted to be developed to an overall density of more than one residential unit per net acre.

e. The increase in residential density on the receiving property does not exceed twice that which is specified by the Development Policies contained in chapter 5.4 of the certified Big Sur Coast Land Use Plan; or, although the increase in residential density on the receiving property exceeds that which is specified by the Development Policies contained in Chapter 5.4 of the certified Big Sur Coast Land Use Plan, the environmental impact analysis reveals that the site is suitable for more units, and traffic impacts will be mitigated through a reduction in the potential number of driveway encroachments onto State Highway Route 1. (Big Sur L.U.P. 3.2.6.3).

20.64.190.060 Transfer of Development Credit.

1. Application.

The application to transfer a development credit shall contain the following information in addition to the information required by Monterey County Procedure:

a. Identification of the application for the proposed donor site which will generate the TDC to be transferred to the receiver site or identification of the transferable development credit and the donor site from which it is generated.

b. Evidence of a binding commitment to transfer one or more development credits to the receiver site upon approval of designation of both donor and receiver site; or in the alternative, evidence of a binding commitment to transfer one or more development credits upon approval of the designation of the receiver site.

2. Timing of Transfer

The TDC may be transferred from a designated donor site to a designated receiver site. Transfer shall take place after the designation of both the donor and receiver sites.

3. Right to Transfer TDCs.

The right to transfer a TDC shall be granted by the Planning Commission's written decision designating the receiver site and canceling a TDC on a donor site upon approval of a coastal development permit pursuant to Chapter 20.70, Monterey County Code. The written decision of the Commission shall serve as the transfer of development credit defined in Section 20.64.190.030.

4. Duration of TDC after Transfer.

After a TDC has been transferred to a receiver site, the right to its use continues as long as the right to use the approval for development granted to the receiver site. For example, if a TDC is transferred to a receiver site which is subdivided with the use of the TDC, the life of the TDC is extended for the full period granted by law and the exercise of discretion by the advisory planning agency under the State Map Act. In the case of a subdivision, the life of a TDC would be extended for or terminated upon the expiration of the period between the tentative map approval and the final map approval and discretionary extensions of these periods.

20.64.190.070 TDCs Created But Not Transferred.

Because two TDCs are granted to the donor site at the time of its designation, it may be that both TDCs are not immediately transferred. It may be that a receiver site may be granted only one TDC. This section addresses those TDCs created but not immediately transferred upon their creation.

1. Right to Transfer TDC.

The Planning Commission written decision designating the donor site shall serve as the record of the creation of development credits. This decision shall be recorded as an inchoate right upon the property that is the donor site. This right is extinguished upon transfer to a receiver site.

2. Duration of Right to Transfer TDC.

The right to transfer a TDC from a donor site to a receiver site shall exist in perpetuity. However, the duration of this right may be shortened by its transfer to a receiver site. After its transfer the right to use the TDC would extend only for the period in which the owner of the receiver site must complete the conditions of development.

3. Transfer and Assignment of TDCs.

A TDC may only be transferred from a donor site to a receiver site.

4. Upon transfer of a TDC, the provisions of Section 20.64.190.040.5 shall apply.

20.64.190.080 Fund to Purchase TDCs.

The Board shall establish a revolving fund to purchase the right to transfer TDCs for retirement or for transfer. This fund may be funded by County funds, charitable contributions, non-profit trusts, or other governmental monies.

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COUNTY OF NAPA
PLANNING, BUILDING, AND ENVIRONMENTAL SERVICES

VIEWSHED PROTECTION PROGRAM

APPLICATION PACKET

1. Applicant's Checklist
2. Viewshed Protection Program Application
3. Indemnification Agreement
4. Application Completeness Requirements and Checklist
5. Adjoining Property Owner's List Requirements
6. Excerpts from Viewshed Protection Program Ordinance
7. Viewshed Protection Manual
8. Slope Determination Methodology

NOTE:

PLEASE INCLUDE THREE COPIES OF
ALL REQUIRED APPLICATION MATERIALS SUBMITTED.

VIEWSHED PROTECTION PROGRAM

APPLICANT'S CHECKLIST

1. ☐ Completed and Signed Application and Indemnification Form*

   *A signed Indemnification Form will only be required if a public hearing is conducted (i.e. if this is an item before the Zoning Administrator or Commission).

2. ☐ Vicinity Map
3. ☐ Proposed Site Plan
4. ☐ Topographic Map/Preliminary Grading Plan
5. ☐ Building/Structural Elevations
6. ☐ Landscaping and/or Vegetation Retention Plan
7. ☐ Exterior Lighting Plan
8. ☐ Visual Impact Analysis
9. ☐ Title Insurance Company Certified List of Adjoining Property Owners within 1000 feet
9. ☐ Application Fee of $_____ (to be determined at time of Pre Application meeting) (Napa County Policy Manual, Part 3 § 80.050). Checks made payable to the County of Napa.

Note:

1) Items numbered 2-4 above may be combined and submitted on the same drawing.
2) A detailed list of all the required submittal items is provided herein under "Application Completeness Requirements and Checklist".
3) Many of the items required for review under the Viewshed Ordinance are the same items that would be normally be required for an Erosion Control Plan (ECP) Review. If you are concurrently applying for an ECP Review, provide us with a copy of the appropriate items. Please, do not duplicate your efforts.

A Tradition of Stewardship
A Commitment to Service

FILE #_____

NAPA COUNTY
PLANNING, BUILDING, AND ENVIRONMENTAL SERVICES

1195 THIRD STREET, SUITE 210, NAPA, CALIFORNIA, 94559 • (707) 253-4417

APPLICATION FOR VIEWSHED PROTECTION PROGRAM

FOR OFFICE USE ONLY

ZONING DISTRICT: _____ DATE SUBMITTED: _____
TYPE OF APPLICATION: _____ DATE PUBLISHED: _____
REQUEST: _____

Project Type: Structure ___ Driveway ____ Road ____ Reservoir ____ Mass Grading ____ Other _____
Other Permits Applied/Pending/Required:
ECP ___ Grading Permit ___ Use Permit ___ Variance ___
SDSDS ___ Groundwater Permit: ___
#_____ #_____ #_____ #_____ #_____ #_____

Review Agencies: PBES: _X_ County Consultant: ___ Name/Contact:_____

Final Approval: PBES _X_ Date: _____/_____/_____ Conditions: Yes ___ No ___

TO BE COMPLETED BY APPLICANT
(Please type or print legibly)

Applicant's Name: _____

Telephone #: (___)_____-_____ Fax #: (___)_____-_____ E-Mail: _____

Mailing Address:_____
No. Street City State Zip

Status of Applicant's Interest in Property: _____

Property Owner's Name:
_____

Telephone #: (___)_____-_____ Fax #: (___)_____-_____ E-Mail: _____

Mailing Address:_____
No. Street City State Zip

Site Address/Location: _____
No. Street City State Zip

Assessor's Parcel #:_____-_____-_____ Parcel Size: _____ acres Development Area Size: _____ acres

Slope Range of Development Area: ____ % to ____%

(**NOTE**: Contour map/survey is required for all development areas with an estimated slope of 15% or greater and for all road/driveway projects, Contour map must include all areas within 100'of the cut and fill edges. Percent slope shall be calculated and presented as whole numbers. (Please see attached Slope Determination Methodology)

I hereby certify that all the information contained in this application, including but not limited to, this application form, the supplemental information sheets, site plan, plot plan, cross sections/elevations, is complete and accurate to the best of my knowledge. I hereby authorize such investigations including access to County Assessor's Records as are deemed necessary by the County Planning Division for evaluation of this application and preparation of reports related thereto, including the right of access to the property involved.

_____ ___/___/___ _____ ___/___/___
Signature of Applicant Date Signature of Property Owner Date

_____ _____
Print Name Print Name

TO BE COMPLETED BY PLANNING, BUILDING, AND ENVIRONMENTAL SERVICES

Application Fee: $_____ Receipt. No. _____ Received by:_____ Date:_____

INDEMNIFICATION AGREEMENT

Pursuant to Chapter 1.30 of the Napa County Code, as part of the application for a discretionary land use project approval for the project identified below, Applicant agrees to defend, indemnify, release and hold harmless Napa County, its agents, officers, attorneys, employees, departments, boards and commissions (hereafter collectively "County") from any claim, action or proceeding (hereafter collectively "proceeding") brought against County, the purpose of which is to attack, set aside, void or annul the discretionary project approval of the County, or an action relating to this project required by any such proceeding to be taken to comply with the California Environmental Quality Act by County, or both. This indemnification shall include, but not be limited to damages awarded against the County, if any, and cost of suit, attorneys' fees, and other liabilities and expenses incurred in connection with such proceeding that relate to this discretionary approval or an action related to this project taken to comply with CEQA whether incurred by the Applicant, the County, and/or the parties initiating or bringing such proceeding. Applicant further agrees to indemnify the County for all of County's costs, attorneys' fees, and damages, which the County incurs in enforcing this indemnification agreement.

Applicant further agrees, as a condition of project approval, to defend, indemnify and hold harmless the County for all costs incurred in additional investigation of or study of, or for supplementing, redrafting, revising, or amending any document (such as an EIR, negative declaration, specific plan, or general plan amendment) if made necessary by said proceeding and if the Applicant desires to pursue securing approvals which are conditioned on the approval of such documents.

In the event any such proceeding is brought, County shall promptly notify the Applicant of the proceeding, and County shall cooperate fully in the defense. If County fails to promptly notify the Applicant of the proceeding, or if County fails to cooperate fully in the defense, the Applicant shall not thereafter be responsible to defend, indemnify, or hold harmless the County. The County shall retain the right to participate in the defense of the proceeding if it bears its own attorneys' fees and costs, and defends the action in good faith. The Applicant shall not be required to pay or perform any settlement unless the settlement is approved by the Applicant.

Applicant	Property Owner (if other than Applicant)
Date	Project Identification

VIEWSHED PROTECTION PROGRAM

APPLICATION COMPLETENESS REQUIREMENTS AND CHECKLIST

1. ☐ Completed and Signed Application and Indemnification Form.

2. ☐ Vicinity Map.

   A. A 7" by 5 ½" portion of a 7.5-minute (1"=2000') United States Geological Survey (USGS) topography map.
   B. Map shall show improvements in their relationship to abutting properties/structures and major and minor ridgelines.

3. ☐ Proposed Site Plan. A proposed site plan shall be prepared to locate only the proposed site improvements and areas to be disturbed (i.e. building site, graded area). Scale of the plan shall be appropriate to the area disturbed either through grading, construction or clearing of vegetation. The area surrounding the building pad/site shall be scaled at 1" = 20' or finer and roads or driveways at 1"=100' or finer. A scaled Site Plan shall include:

   A. Location of all existing structure(s) to be removed or remain on site; note on plan whether to remain or to be removed.
   B. Location of all existing vegetation six inches in diameter or greater, measured in diameter at breast height (DBH), including variety, height and canopy width.
   C. Location of all proposed impervious surfaces (i.e. driveways, motor courts, patios).
   D. Location of all wastewater disposal systems on site.
   E. Proposed setbacks from property lines(s) and other structures.
   F. Location of all spoils/stock pile area for all excavated and/or imported soils.
   G. Total floor area shown, including all floors, of all structures, regardless of use.

4. ☐ Topographic Map/Preliminary Grading Plan. Map shall note the following:

   A. Existing and proposed contours of the building site before and after all construction is completed, drawn at 2' or 5' intervals at a scale of 1"=20' or better; driveways or access roads must show 5' intervals at a scale of 1"=100' or better.
   B. Map shall include the following section(s) at minimum:
      i. Disturbed areas, including proposed/existing roads;
      ii. Building(s) height(s), measured according to the most recently County adopted California Building Code;
      iii. Roadways/Driveways, shown at intervals as required in County Slope Determination Methodology, Conservation Regulations Exhibit A (Resolution 91-61), shorter intervals may be required in areas of changing topography;
      iv. Retaining walls or man-made embankments and berms, illustrating location and height (scale of ¼" = 1').
   C. Preliminary drainage plans for the site, showing the pattern and direction of flow, as well as any on site natural or man-made drainage/waterways.
   D. Highest point of the proposed structure(s) measured vertically to top of nearest ridgeline.

5. ☐ Building/Structure Elevations.

   A. Elevations shall scaled and include type of building material, color treatment and sample color-chip, roofing material and color.

B. Include information on window reflectivity and extent of window coverage.
C. "Building Height(s)," as defined in the most recent County adopted edition of the California Building Code, must also be shown on the elevations (See item #3 C. Determining Building Height in the Viewshed Protection Manual for measurement details).

6. ☐ Landscaping and/or Vegetation Retention Plan. Newly planted vegetation for the purpose of visual screening, must be of sufficient size to adequately screen the proposed structure(s) in two (2) to five (5) years. A complete plan shall include the following:

A. Identify and locate all the existing vegetation to remain as visual screening for the proposed structure(s), indicate variety, height and canopy width.
B. Identify initial planting sizes and varieties of all materials to be installed.
C. Illustrate the size and canopy width of planted materials, as they would appear 10 years after installation.
D. Distinguish the natural and/or installed landscaping to be included in the visual impact analysis.
E. Installed landscaping must be compatible with existing vegetation and landscape.
F. Establish a comprehensive landscape maintenance program, including a protection and pruning program for existing and planted trees.

7. ☐ Exterior Lighting Plan. Identifying the location, type of fixture, focus/purpose, as well as the use of any timers or motion sensor devises

8. ☐ Visual Impact Analysis. One or more of the following may be required to determine the visual impact of the structure(s) and its associated improvements and their conformance with the Viewshed Protection Program.

A. Story poles (the temporary placement of a mock wooden skeleton in the general shape of the building, then draping plastic orange snow fencing around the roofline to portray the visual prominence and bulk of the proposed structure).
B. Computer simulation.
C. Photomontage.
D. Picture or visual as viewed from designated public road at point(s) where the structure(s) is/are visible.
E. Appropriately scaled model.
F. Additional views or materials as required by staff from other vantage points.

9. ☐ Title Insurance Company Certified List of Adjoining Property Owners within 1000 feet. Identifying all property owners within 1000' of the subject parcel, specifying name, address and parcel number; included on two sets of mailing labels with accompanying Assessor's Pages used to compile the above property owner list. Please see "ADJOINING PROPERTY OWNER LIST REQUIREMENTS" for details on preparing the requested list.

10. ☐ Application Fee of $_____ (to be determined at Pre-App meeting) plus an Initial Environmental Review Fee (if applicable) of $_____ (to be determined at Pre-App meeting) (Napa County Policy Manual, Part 3 § 80.050). Checks made payable to the County of Napa.

ADJOINING PROPERTY OWNER LIST REQUIREMENTS

All applications shall include a list of the current owners of all the properties whose outer perimeters are within **1000 feet** of the property boundary of the project site. The list shall include the property owner's names, their addresses and the assessor's parcel numbers of the property owned.

Preparation, verification and submission of this list of property owners is the responsibility of the applicant. Lists of the property owners appearing on County tax rolls in the form required are available from all local title insurance companies. A title insurance company must certify each such list, ensuring that it reflects the most recent County tax roll information.

INSTRUCTIONS TO TITLE COMPANY

Please prepare the property owners' list as follows:

1. Type the property owners' names, parcel numbers and mailing addresses on an 8½" by 11" sheet of Avery #5160 Laser Labels so that this information can be readily used in mailing by Planning, Building, and Environmental Services.

2. Submit a full page copy of the assessors' parcel book page(s) and a copy of the latest equalized assessment roll used to compile the property owners' list. Please indicate the location of all parcels listed, by check mark or colored parcel number circled on the pages.

If you should have any questions, please contact Planning, Building, and Environmental Services at (707) 253-4417.

Chapter 18.106 - VIEWSHED PROTECTION PROGRAM

18.106.010 - Purpose.

The purpose and intent of these regulations is to protect the public health, safety, and community welfare and to otherwise protect the scenic quality of the county both for visitors to the county as well as for its residents by ensuring that future improvements are compatible with existing land forms, particularly county ridgelines and that views of the county's many unique geologic features and the existing landscape fabric of the county's hillside areas are protected and preserved. These regulations are consistent with the goals and policies of the Napa County general plan, particularly as specified in the land use, open space and conservation, circulation and the scenic highways elements. Furthermore, it is intended that these regulations accomplish the following:

A. Provide hillside development standards to minimize the impact of man-made structures and grading on views of existing landforms, unique geologic features, existing landscape features and open space as seen from designated public roads within the county;
B. Protect and preserve views of major and minor ridgelines from designated public roads;
C. Create a development review process that maximizes administrative, staff level approval of projects which meet administrative standards, while also providing a vehicle for review by the zoning administrator or planning commission of those projects that do not meet the administrative standards;
D. Minimize cut and fill, earthmoving, grading operations and other such man-made effects on the natural terrain to ensure that finished slopes are compatible with existing land character; and
E. Promote architecture and designs that are compatible with hillside terrain and minimize visual impacts.

18.106.030 - General provisions.

A. Applicability—New and Expanded Structures. No building permit, erosion control plan for structural development, grading or other administrative permit shall be issued by any county staff, agency or department for any new structure or improvement to an existing structure if the structure is located on a slope of fifteen percent or more as defined in Section 18.106.020 or if the structure is located on any minor or major ridgeline as defined in Section 18.106.020 except as specifically provided for herein. The ordinance codified in this section shall apply to all new structures located on slopes of fifteen percent or more or located on a minor or major ridgeline. In the event of a conflict among the regulations in this chapter and those elsewhere in this code, the regulations in this chapter shall prevail. The provisions of this chapter shall also apply to projects undertaken by public agencies and special districts except for the maintenance of existing county public roads within existing rights-of-way.
B. Applicability—Grading or Earthmoving Activities. No permit or administrative or discretionary approval shall be issued to authorize any grading or earthmoving activity, including grading or earthmoving necessary to create or improve an existing or new driveway, road or other access, or benches or shelves, if such earthmoving or grading would occur on slopes of fifteen percent or more until the applicant has complied with the applicable provisions of this chapter. Agricultural roads within planted areas subject to erosion control plans under Chapter 18.108 of the code shall not be subject to this requirement.
C. Relationship to the Review of Tentative Parcel Maps, Final Maps, and Subdivision Maps. All future building sites identified on either a tentative parcel map, final map, or subdivision map shall be reviewed and conditions of approval established to ensure conformity with the purpose and intent of this chapter.

D. Relationship to Previously Approved Use Permits and Small Lot Subdivisions. All structures described in a use permit approved prior to the effective date of Ordinance Number 1189 shall not be subject to the requirements of this chapter. Parcels in small lot subdivisions (defined as groups of at least five parcels of less than two acres each for the purposes of this section) established prior to the effective date of Ordinance Number 1268 shall not be subject to the requirements of this chapter.

E. Relationship to Previously Accepted or Approved Building Permits. All residential structures or accessory structures for which a building permit was approved prior to the effective date of Ordinance Number 1189, or for which a building permit application had been accepted and deemed complete for departmental review by the county prior to December 1, 2001, shall not be subject to the requirements of this chapter. Such structures and the accompanying permits may be modified prior to the final occupancy inspection if the predominant portion of the proposed modifications to the structure is screened from view from a designated public road by natural vegetation, landscaping, architectural design, and colortone that is in accordance with the Design Manual and provisions of this chapter.

F. Relationship to Use Permit Applications. Applications requiring the issuance of a use permit or use permit modification, as required by the code, will be reviewed for their adherence to the requirements of this chapter during the application process for the issuance of the use permit or use permit modification.

G. Relationship to Conservation Regulations. The structures or activities referred to in Section 18.108.050, except subsections (A) and (B), shall be exempt from the requirements of this chapter and will be cleared for further processing.

H. Determination of Adverse Effects on Ridgelines. The director shall determine whether the proposed location of a structure could adversely affect a minor or major ridgeline for the purpose of administering this chapter based upon elevation of the proposed structure, the height of its roof line and the location of the structure in relationship to surrounding topography.

I. Application Form and Fee. Applications for new, expanded or remodeled structures subject to this chapter shall be submitted to the department on a form provided by the department accompanied by a fee determined by a resolution adopted by the board of supervisors.

(Ord. 1278 § 1 (part), 2006: Ord. 1268 § 8, 2005: Ord. 1232 § 2, 2003: Ord. 1189 § 3 (part), 2001)

18.106.040 - Projects subject to administrative review.

A. General Provisions. Permit applications which meet the criteria in subsection (A) or (E) of Section 18.106.030, and/or grading or earthmoving activities meeting the criteria in subsection (B) of Section 18.106.030, shall be submitted to the department for review by the director. If the application, either as submitted, or upon the inclusion of specified measures, meets the criteria specified in subsection (B) or (C) of this section, the director shall certify that the project complies with the applicable provisions of this chapter and the project will then be cleared for continuing processing pursuant to Title 15 of the code. The director may require the submittal of additional information including, but not limited to, a photo or computer simulation of the project and associated improvements, prior to determining that the project meets the criteria contained in this chapter.

B. Visibility Determination. If the director determines that the project cannot be viewed from any designated public road, because of its relationship to surrounding topography or existing vegetation, then the project will be cleared for further processing pursuant to the code. If the determination was made based on existing vegetation coverage, then the property owner, prior to the issuance of a building permit, shall be required to execute and record in the county recorder's office a use restriction, in a form approved by county counsel, requiring the existing covering vegetation to be maintained, or replaced with equivalent

vegetation, by the owner or the owner's successors, so as to prevent the project from being viewed from any designated public road.

C. Administrative Criteria. A project shall be certified and cleared for further processing, if the director determines that a project meets all of the following conditions:
    1. The highest point of the proposed structure is located more than twenty-five vertical feet below a major or minor ridgeline;
    2. The project as designed and sited meets all of the following standards and substantially conforms to the Design Manual:
        a. The maximum floor area, including all floors, of the main residence or agricultural structure is four thousand square feet or less and the maximum floor area, including all floors, for accessory structures are a combined total of two thousand five hundred square feet or less,
        b. The height of the structure is twenty-four feet or less as measured from finished grade along fifty percent or more of the longest wall as viewed from any designated public road,
        c. The improvement(s), including any required earthmoving or grading associated with the structure shall minimize removal of existing vegetation with emphasis on preserving mature trees. If the improvements require the removal of any tree with a diameter of six inches or greater, a detailed landscaping plan shall be prepared showing the location and replacement of trees and vegetation in a manner which screens the improvements from substantial views from designated public roads and provides for defensible space in conformance with state law,
        d. A significant portion of natural on-site vegetation has been retained to naturally screen the project from views of designated public roads,
        e. Landscaping will be installed and designed to screen the project from substantial views from designated public roads,
        f. The project lighting, including site lighting, has been designed to minimize off-site visibility and glare,
        g. The exterior color treatment of the structure will blend with the color of surrounding vegetation and landforms,
        h. Exterior windows and trim are nonreflective, and
        i. Roof angles and composition are designed to conform to existing landforms and landscape;
    3. If the structure is an addition to an existing residence or an agricultural structure, the total floor area, including all floors shall not exceed four thousand square feet. If the addition pertains to an accessory structure, the total floor area, including all floors, shall not exceed a combined total of two thousand five hundred square feet;
    4. The project as sited and designed shall be in substantial compliance with the Design Manual to reduce its visual impact on the views of major and minor ridgelines as viewed from any designated public road and unique topographic or geologic features as viewed from any county road. The following landforms will be considered to be unique topographic or geologic features for the purposes of this subsection: Mt. St. Helena, Stag's Leap, Calistoga Palisades, Round Hill, Mt. George and Mt. St. John;
    5. Involves the grading of less than one and one-half acres of land;

6. Future structures, including roads, driveways, wastewater disposal systems, and necessary earthmoving to construct project improvements shall be located to avoid environmentally sensitive areas as defined by Section 18.08.270 of the code;
7. A detailed landscape plan prepared by a qualified landscape professional shall be prepared which incorporates the criteria set forth in the Design Manual for review and approval by the director.

D. Prior to the issuance of a building permit for any project authorized under this section, the property owner shall be required to execute and record in the county recorder's office a use restriction, in a form approved by county counsel, requiring building exteriors, and existing and proposed covering vegetation, as well as any equivalent level of replacement vegetation, to be maintained by the owner or the owner's successors so as to maintain conformance with either subsection (B) or (C) of this section.

E. Projects that do not satisfy the criteria and standards contained in Section 18.106.040 shall be subject to review and approval under Section 18.106.050

(Ord. 1278 § 1 (part), 2006: Ord. 1232 § 3, 2003: Ord. 1189 § 3 (part), 2001)

18.106.050 - Processing of projects subject to review and approval by the zoning administrator or the commission.

A. If the director determines that a project does not meet the criteria in Section 18.106.040 the project shall not be cleared for further processing until the findings contained in subsection (B) of this section are made and a permit is issued by the zoning administrator, or upon referral, by the commission.

B. The zoning administrator or commission shall make all of the following findings prior to approving a project:
1. The project as designed or modified is consistent with Chapter 18.108 of the code;
2. If the highest point of the proposed project is located more than twenty-five vertical feet below a major or minor ridgeline, that measures have been included in the project to reduce its visual impact on the major or minor ridgeline through use of existing natural vegetation, landscaping, topographical siting, architectural design, and colortone; or if the highest point of the proposed structure is within twenty-five vertical feet of a major or minor ridgeline, that the existing vegetation, proposed landscaping, topographical siting, architectural design, and colortone screen the predominant portion of the proposed structure;
3. The proposed structure, access roads and other site improvements are sited and designed to minimize adverse effects on views from designated public roads;
4. The proposed structure, access road and other site improvements, including earthmoving or grading, and benches or shelves minimize the removal of vegetation;
5. The siting and design of site improvements and access roads minimize grading and alteration of natural landforms and topography;
6. A landscape and/or vegetation retention plan in conformance with the Design Manual has been submitted and approved for the site that would provide maximum screening from designated public roads through preservation of existing vegetation and the planting of new vegetation and provide for defensible space in conformance with state law;
7. The proposed structure and associated improvements substantially conform with the Design Manual in order to reduce their visual impact on the views of major and minor ridgelines as viewed from any designated public road and unique topographic or geologic features as viewed from any county road. The following landforms will be considered to be unique topographic or

geologic features for the purposes of this subsection: Mt. St. Helena, Stag's Leap, Calistoga Palisades, Round Hill, Mt. George and Mt. St. John;

C. Prior to the issuance of a building permit for any project authorized under this section, the property owner shall be required to execute and record in the county recorder's office a use restriction, in a form approved by county counsel, requiring building exteriors, and existing and proposed covering vegetation, as well as any equivalent level of replacement vegetation, to be maintained by the owner or the owner's successor so as to maintain conformance with subsection (B) of this section;

D. If one or more of the findings in subsection (B) of this section cannot be made, the application shall be forwarded to the commission for a possible exception pursuant to Section 18.106.070

(Ord. 1278 § 1 (part), 2006: Ord. 1232 § 4, 2003: Ord. 1189 § 3 (part), 2001)

18.106.060 - Required public and private notification.

A. Within seven days of the issuance of a tentative decision that the project is subject to administrative approval under Section 18.106.040, the director shall give notice of his tentative decision, including the date on which the tentative decision will become final, which date shall be ten calendar days following the date notice of the tentative decision is mailed.

1. The notice shall be provided to the city or town closest to where the project is proposed to be built and to all public or private property owners located within three hundred feet of the outer perimeter of the property on which the project would be constructed as shown on the latest equalized assessment roll.
2. The tentative decision shall be final once the period identified in the notice has expired unless an appeal has been filed by the applicant or any interested person pursuant to Chapter 2.88 of this code, in which case the tentative decision shall become final only if and when the appeal is withdrawn, dismissed or denied. If the appeal is granted, in whole or in part, the decision of the board on appeal shall become final in the manner and within the time set forth in Chapter 2.88

B. At least ten days prior to a decision by the zoning administrator or the commission under Section 18.106.050 or 18.106.070, notice of a public hearing shall be provided to the city or town closest to where the project is proposed to be built and to all property owners located within three hundred feet of the outer perimeter of the property on which the project would be constructed as shown on the latest equalized assessment roll.

(Ord. 1278 § 1 (part), 2006: Ord. 1232 § 5, 2003: Ord. 1201 § 7, 2002; Ord. 1189 § 3 (part), 2001)

18.106.070 - Exceptions.

Upon application by the property owner of a site, an exception to the requirement contained in subsection (B) of Section 18.106.050 may be granted by the commission. Such exception may be granted if, after conducting a public hearing and reviewing available building sites on the subject property, the commission makes all of the following findings:

A. Compliance with the provisions of subsection (B) of Section 18.106.050 would result in greater visual impact than would the proposed construction on the proposed building site;

B. Compliance with the provisions of subsection (B) of Section 18.106.050 would result in greater impact on existing landforms and landscape than would the proposed construction on the proposed building site;

C. Measures have been included in the project to reduce its visual impacts as seen from any designated public roads. Such measures include but are not limited to:

1. Installation of landscaping designed to screen the project from view of designated public roads;
2. Low level lighting on buildings and site which minimize off-site visibility and glare;
3. Nonreflective exterior windows and window frames;
4. Use of earth tone colors on building exteriors;
5. Roof angles and composition designed to conform with the existing land forms and landscape; and
6. Building height has been designed to minimize the silhouetting against the sky when viewed from any designated public road or open space owned or managed by a public agency or land trust.

D. Prior to the issuance of a building permit for any project authorized under this section, the property owner shall be required to execute and record in the county recorder's office a use restriction, in a form approved by county counsel, requiring building exteriors, and existing and proposed covering vegetation, as well as any equivalent level of replacement vegetation, to be maintained by the owner or the owner's successors so as to maintain conformance with subsection (C) of this section.

E. The project as designed or modified is consistent with the requirements of Chapter 18.108 of the code.

(Ord. 1278 § 1 (part), 2006: Ord. 1232 § 6, 2003: Ord. 1189 § 3 (part), 2001)

VIEWSHED PROTECTION MANUAL
VIEWSHED PROTECTION PROGRAM

A. Purpose.

The purpose of this manual is to detail the requirements of the Viewshed Protection Ordinance. The manual utilizes text and graphical examples accompanied with brief explanations intended to standardize hillside development and convey the intent of the Ordinance. Where possible, the manual provides examples explains of practices intended to minimize the impact of man-made structures and grading on views of existing landforms and landscape, unique geologic features as seen from designated public roads within Napa County.

B. General Requirements and Conventions.

1. All final grades, including all cut and fill slopes, visible from any designated public road shall be:
    a. Consistent with the existing landscape to the greatest extent possible, avoiding uninterrupted slope surfaces that stand out against existing topographic contours;
    b. Contoured to resemble existing terrain by varying slope increments and breaking the visual surface of banks and inclines both vertically and horizontally as naturally as possible;
    c. Constructed to allow for the creation of berms or mounding at the top of slopes and in other locations for the screening of structures and assurance proper site drainage.

2. Design, height and massing of hillside development shall:
    a. Maintain a balance of scale and proportion using design components that are harmonious with natural landforms and landscaping;
    b. Be small scale and low in height, conforming with hillside topography by stepping or staggering the mass of the proposed building up or down slope, avoiding flat pad construction and vertical massing;
    c. Utilize structural elements, building materials and color tones which blend artificial surfaces with surrounding native elements;
    d. Utilize construction materials, glass, roofing and other surfaces that are of a non-reflective nature;
    e. Ensure articulated walls that utilize reveals, cornice detailing, alcoves or other features which are appropriate to the scale of the building and building projections, trellises, landscaping or other devices, which in total, serve to break up long, continuous building walls which are visible from designated public roads; and
    f. Ensure that the proposed structure is not silhouetted against the sky when viewed from any designated public road.

3. Roadways, driveways and utility alignments shall be:
    a. Located to minimize grading and earthmoving activity, by following existing contours and positioned upon gradual slopes whenever possible;
    b. Constructed to blend with the existing landscape, through alignment with the natural curving contour of the land instead of keeping to straight lines or geometric patterns;
    c. Concealed from view through preservation and maintenance of existing vegetation or through planned landscaping that is constant with the natural character of the area.

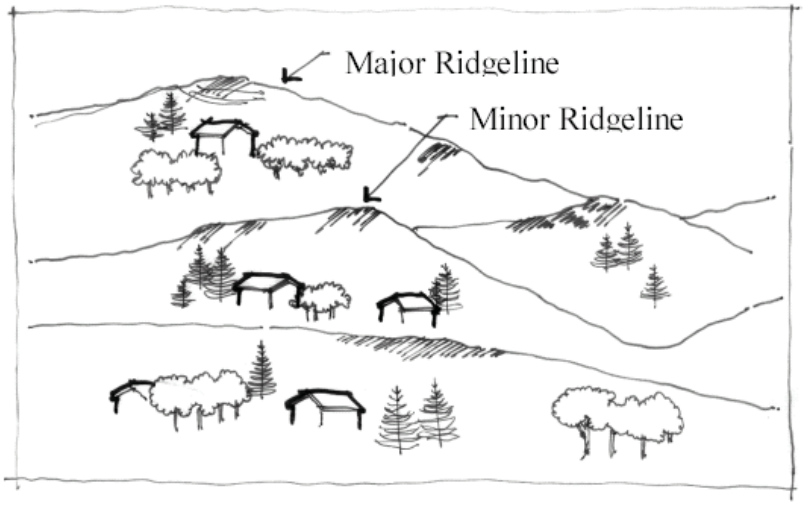
4. Landscape planting and vegetation preservation shall:
    a. Incorporate trees where appropriate, planted in random groupings or clusters that mimic or maintain natural assemblages rather than in systematic rows;
    b. Maintain vegetation lines which convey the existing slope of the hillside;
    c. Preserve native vegetation, including grasses and open space when ever possible;
    d. Use native materials to the greatest extent possible and/or non-natives that are compatible with indigenous vegetation and confined to the adjacent vicinity of the proposed structure;

e. Include a sufficient irrigation, maintenance and monitoring program designed to provide species requirements as well as protect against sedimentation, soil loss and land sliding;

5. Exterior and landscape lighting applications shall be:
   a. Designed to minimize nighttime disruption and visual glare by shielding lamp sources downward and away from view of designated public roads;
   b. Controlled by timers and/or motion sensors, to limit the duration of use and reduce prolonged glare;
   c. Sized with the minimum wattage possible to meet desired application.

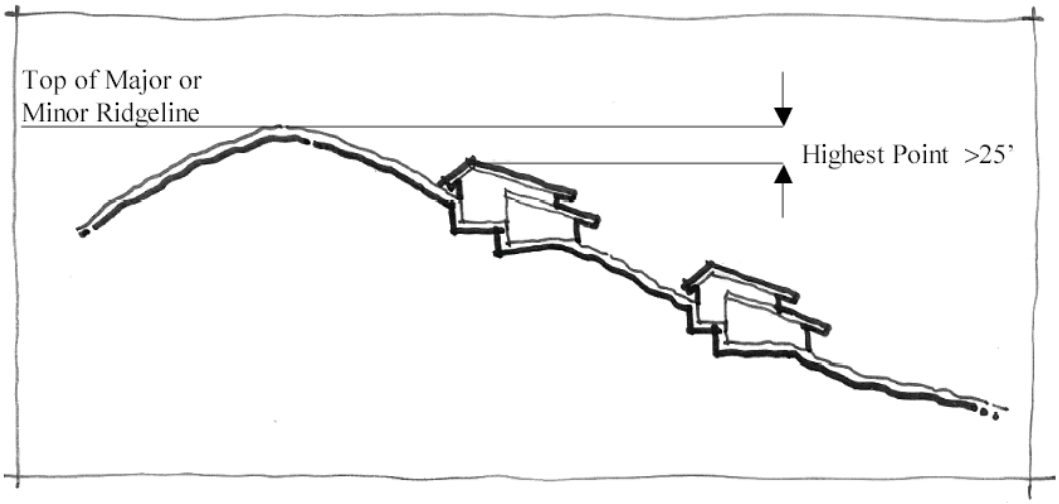
C. Graphical examples.

1. Major and minor ridgelines:



   a. "Major Ridgelines" shall mean a ridgeline, which is prominently visible from a substantial land area within the County, characterized by the lack of a topographical backdrop where the sky is visible beyond the ridge;
   b. "Minor Ridgelines" shall mean a ridgeline that is not prominently visible to a large area of the County and those typically lower in height, when compared to the surrounding terrain and which may be visible only to a limited area, or have a backdrop of a nearby higher topographical feature.

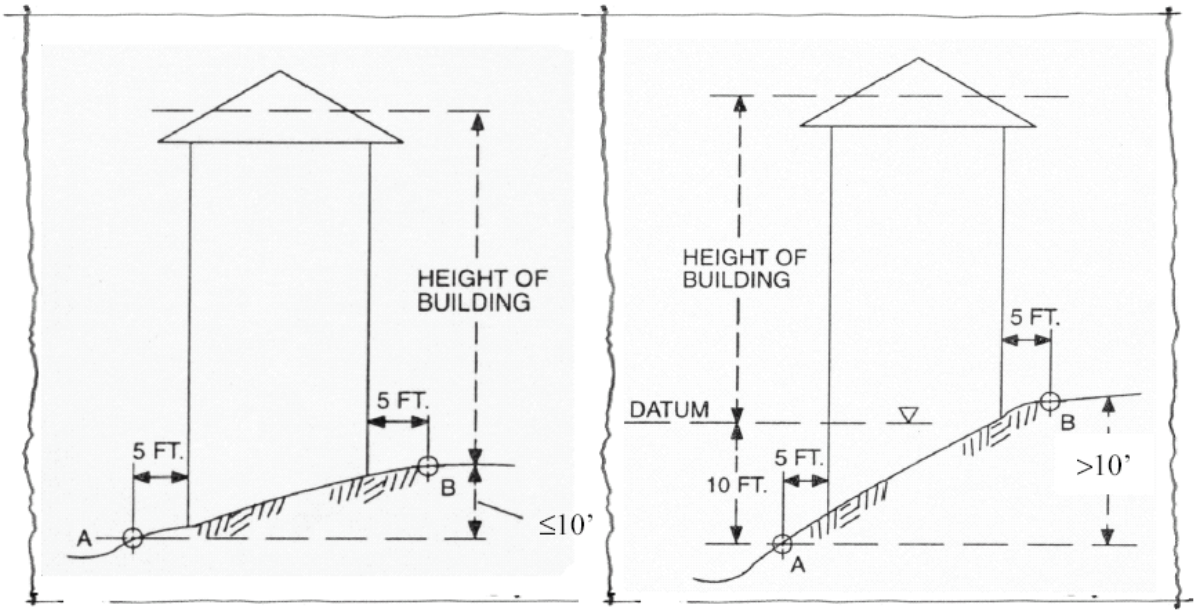
2. Restricted development area for administrative review:



   a. A project shall be certified and cleared for further processing under 18.106.040(B) if the project cannot be seen form a designated public road or under 18.106.040(C) if all the administrative criteria listed in

that section are met, including that the highest point of the proposed structure is located more than 25' below a major or minor ridgeline.

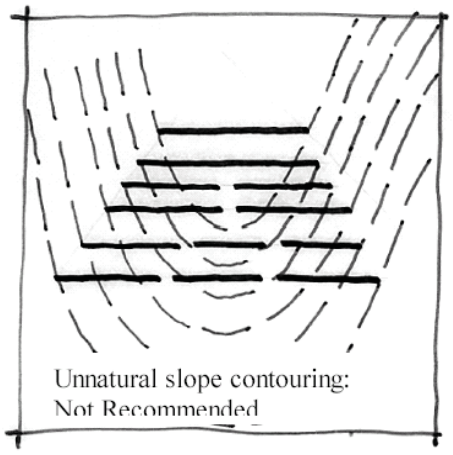
3. Determining height of a building*:*

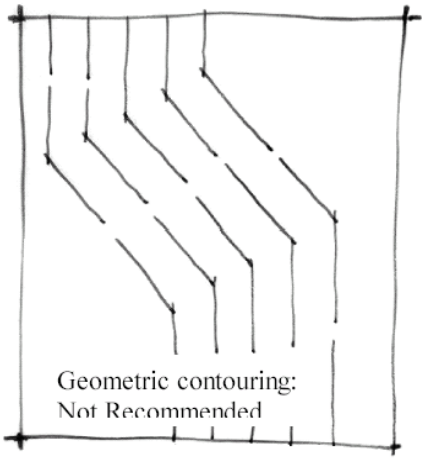


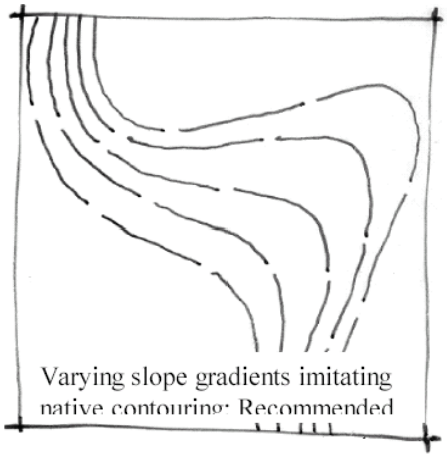
a. Height of a building is the vertical distance above the highest point of the coping of a flat roof or deck line of a mansard roof or to the average height of the highest gable of a pitched of hipped roof. The reference datum shall be either of the following, whichever yields the greater height of building:
   i. The elevation of the highest adjoining sidewalk or ground surface within a 5' horizontal distance of the exterior wall when such sidewalk or ground surface is not more than 10' above lowest grade;
   ii. An elevation 10' higher than the lowest grade when the sidewalk or ground surface described in item a. above is more than 10' above lowest grade;

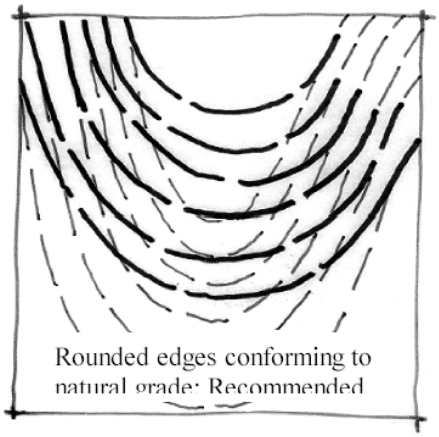
b. The height of a stepped or terraced building is the maximum height of any segment of the building.

4. Grading cut and fill slopes, roadways and driveways:

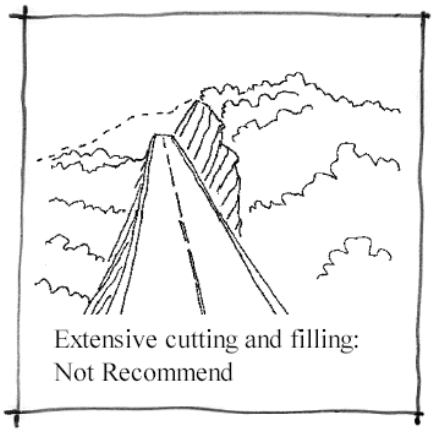


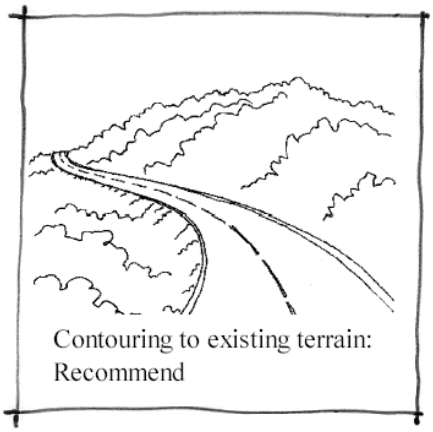






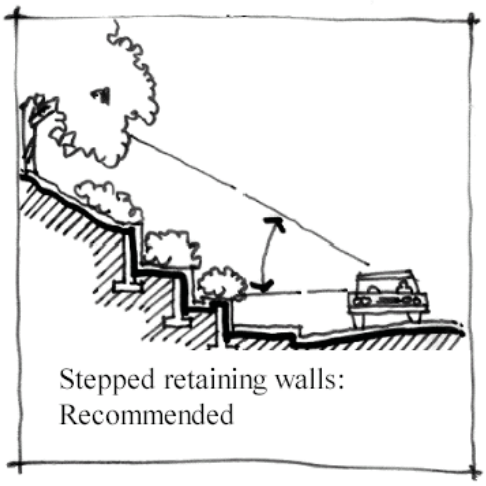
a. Finished cut and fill slopes shall be constructed to blend with the existing landscape, curving with the natural contour of the land, avoiding straight lines and/or geometric patterns;



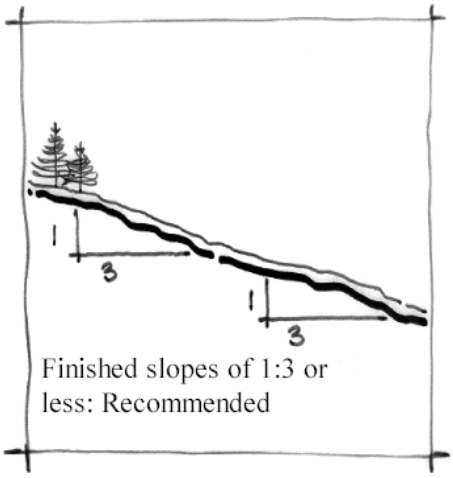


b. Unwarranted cutting and filling should be avoided when constructing roads, driveways and other related structures, using measures such as laterally balancing cut and fills, alignment with natural contours and restricting development to gentle climbing gradients;



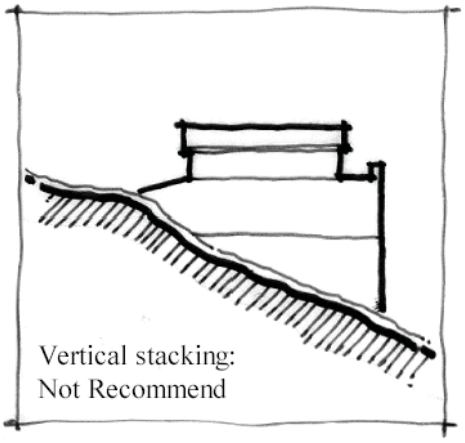




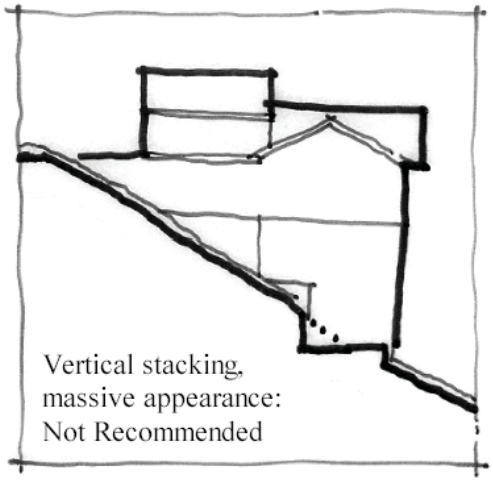


c. Retaining walls along roadways or associated with structural developments should be stepped and terraced incrementally, avoiding tall flat surfaces that restrict views and slopes steeper than 1:3;

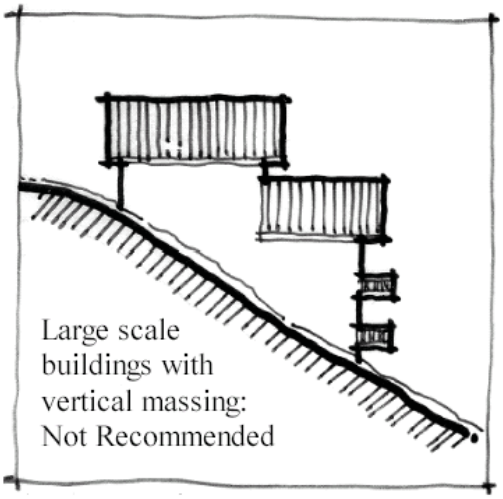
5. Building design, massing and configuration:

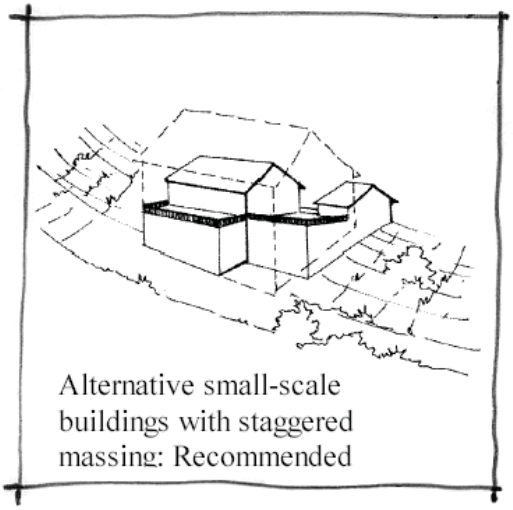








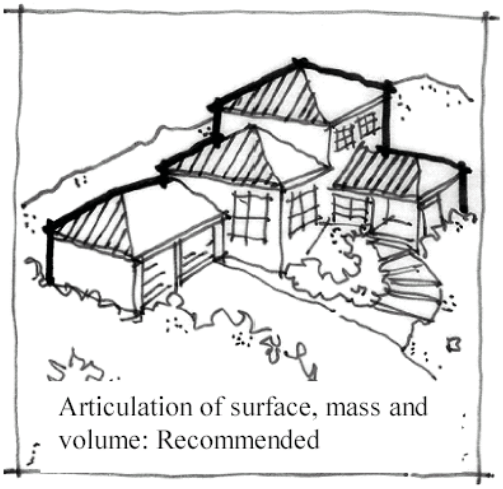




a. Small scale and low in height construction is recommended, conforming with hillside topography by stepping or staggering the mass of the proposed structure up or down slope, avoiding flat pad construction;

b. Maintain a balance of scale and proportion using design components which are harmonious with natural landforms and landscaping;



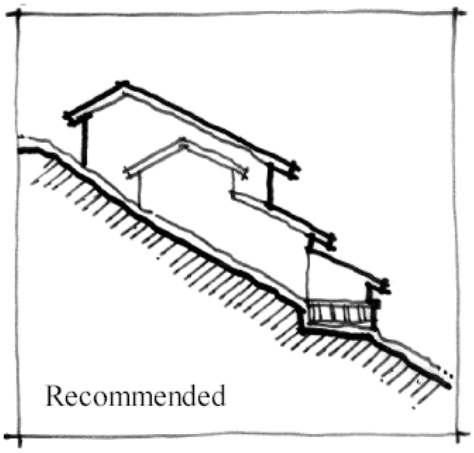




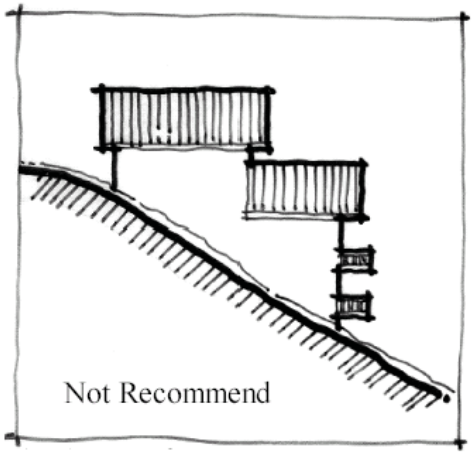


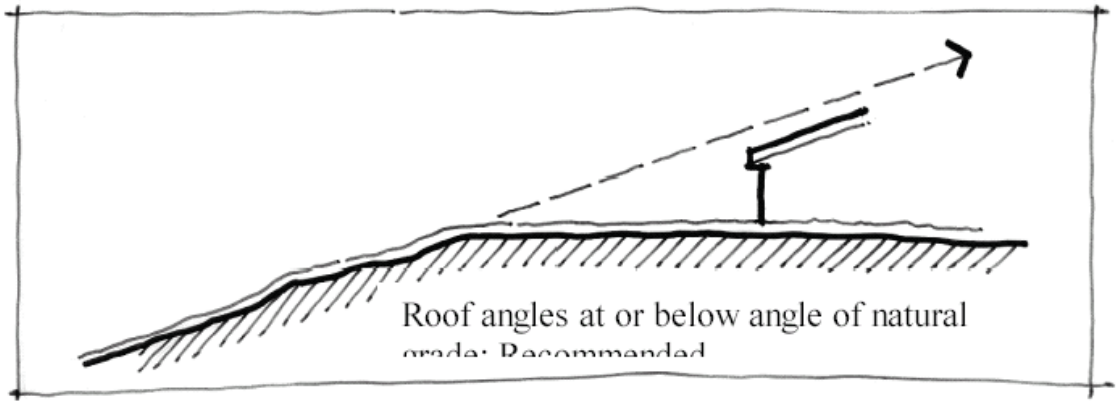
c. Building shall ensure articulated walls and utilize reveals, cornice detailing, alcoves or other features which breakup the scale of the building. Uses of projections, trellises, landscaping or other devices which in total serve to break up long, continuous building walls is encouraged;





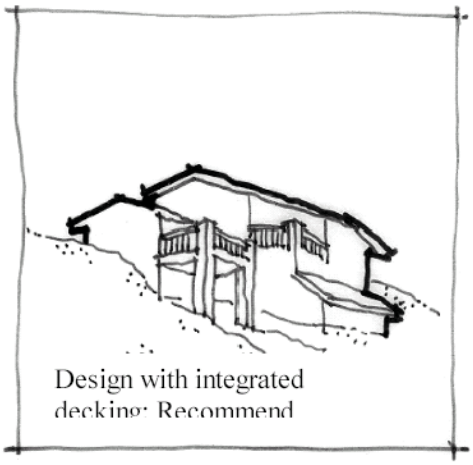






d. Roof slopes that follow the gradient of the site are recommended over those that diverge from the hill slope;
e. Construction materials, glazing, roofing and other surfaces that are of a non-reflective nature are encouraged;





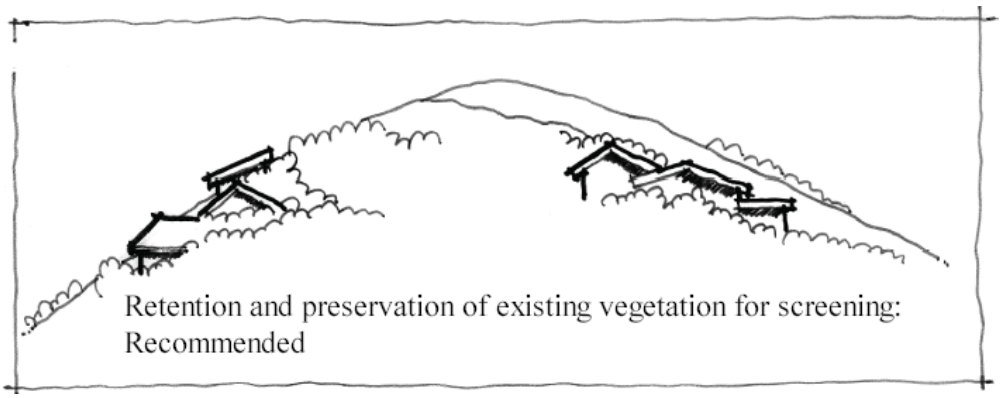
f. Installation of decking that is integrated into the building is recommended over that which is attached or tacked on to exterior walls;
g. To the greatest extent possible, structural elements, building materials and color tones shall blend artificial surfaces with surrounding native elements;



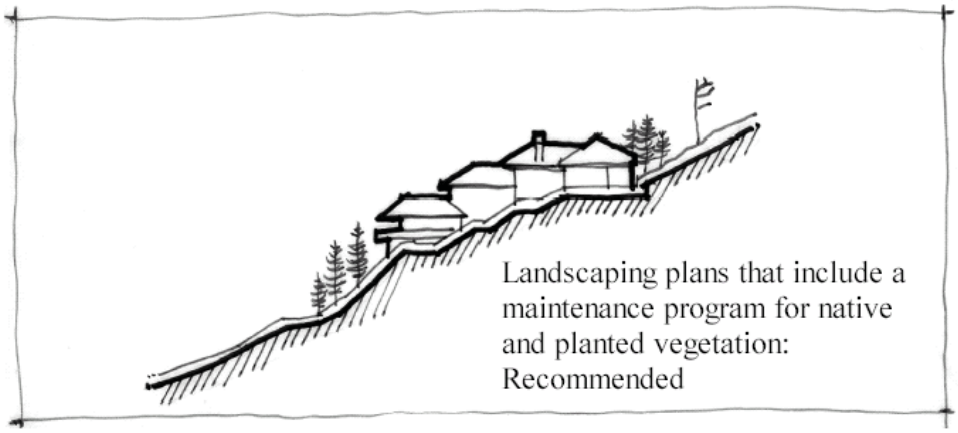


h. Proposed structures shall not be sited atop peaks nor silhouetted against the sky when viewed from any designated public road.

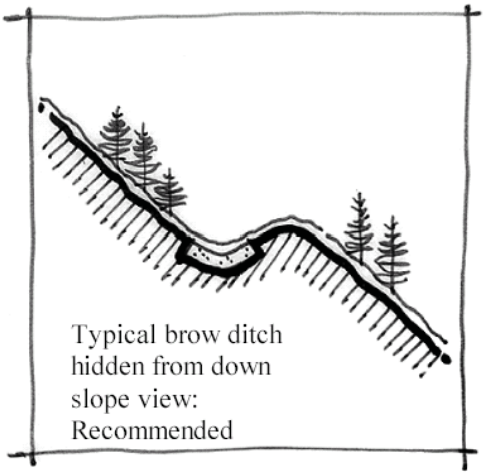
6. Landscape planning and vegetation preservation:



Retention and preservation of existing vegetation for screening: Recommended



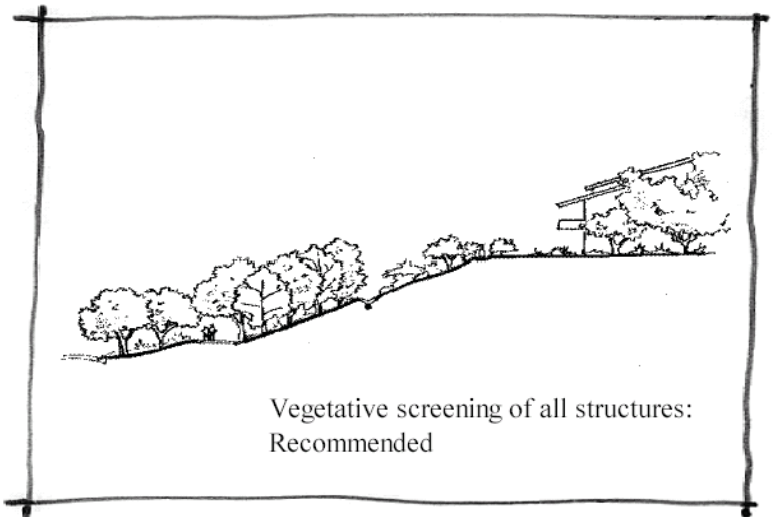
Landscaping plans that include a maintenance program for native and planted vegetation: Recommended



Typical brow ditch hidden from down slope view: Recommended

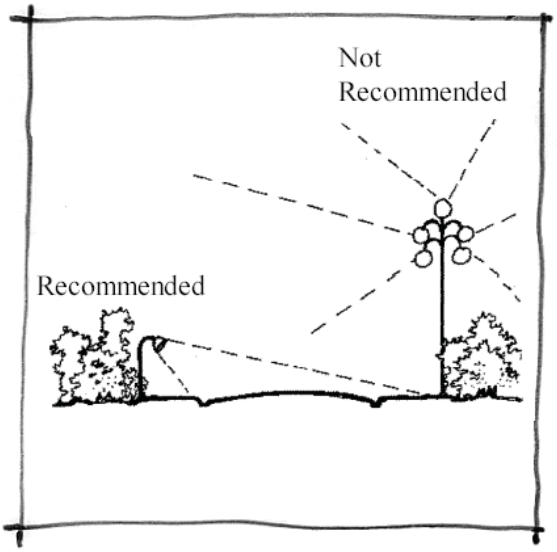


Use of native rock to naturalize manmade ditch: Recommended



a. Whenever possible, structures, including roads shall be concealed from view through preservation and maintenance of existing vegetation or through planned landscaping that is consistent with the natural character of the area.

7. Exterior lighting of structures and landscaping:



a. Outdoor lighting shall be designed to minimize nighttime disruption. Lamp sources should be shielded from view and light source directed downward. Timers and motion detectors should be used wherever possible.

NOTE: The Viewshed Protection Manual has not been updated to reflect the revisions to the Viewshed Protection Program Ordinance. The Ordinance shall prevail if there's a conflict between the Manual and the Ordinance

NAPA COUNTY
PLANING, BUILDING, AND ENVIRONMENTAL SERVICES
1195 THIRD STREET, SUITE 210, NAPA, CALIFORNIA, 94559 • (707) 253-4417

SLOPE DETERMINATION METHODOLOGY
VIEWSHED PROTECTION PROGRAM

Slope is the ratio of the vertical distance to the horizontal distance, or the elevation change in feet divided by the distance in feet. The percent slope of a development area (ie, the entire contiguous area that will be disturbed by the land clearing, grading, or other earthmoving activities) is the natural slope of the existing terrain, **NOT** the finished or proposed percent slope resulting from the project.

Structures & Related Improvements: The percent slope of each contiguous development area shall be measured perpendicular to the contours across the area being disturbed including the driveway when the driveway is less than 50 feet in length. Its average slope shall be determined by averaging at least 3 typical cross sections. The slope determination will be made using a site plan with a contour interval of 2 to 5 feet and a scale of 1"=20' or better.

When a driveway exceeds 50 feet in length, the slope of the "structural development area" is measured perpendicular to the contours across the area being disturbed excluding the driveway. The driveway slope is measured separately as identified in the Roads and Driveways category below.

If the average slope of each development area is less than 30%, an administrative approval may be granted. If the average slope of any development area is 30% or greater, work in that area cannot be undertaken unless a use permit is approved by the Napa Co. Zoning Administrator or Conservation Development and Planning Commission. If the average slope is greater than 50%, approval of a variance will be required (*For further information regarding a variance please contact a planner).*

Roads & Driveways: The percent slope of a road or driveway longer than 50 feet shall be measured using the following procedure:

a) Stations will be established on the plan along the centerline of the proposed roadway at 100 foot intervals with 0+00 being assigned to the point where grading commences (at the new roads juncture with the existing road)

b) Cross sections at a scale of 1" = 10' horizontal and vertical extending **100 feet** from outer limits (edges) of the grading shall be taken at each station (i.e. at 0+00, 1+00, 2+00 etc). When the roadway is less than 200' long, 3 equally spaced cross sections shall be taken. The axis of each cross section shall be perpendicular to the existing contours pertinent to that section. The average slope of each cross section shall be calculated by dividing the difference in elevation of the cut and/or fill catch points by the intervening distance.

c) The average slope of the roadway shall be determined by averaging all these cross sections excluding those measured at less than 5% slope.

This slope determination will be made by evaluating a site plan with a contour interval of 5 feet or less and a scale of 1"= 100' or better.

If the average slope calculated is less than 30%, an administrative approval may be issued. If the average is 30% or greater **OR** if three (3) or more cross sections exceed 50%, road development cannot be undertaken unless a use permit is approved by the Napa Co Conservation Development and Planning Commission. If the average slope is greater than 50%, approval of a variance will be required *(For further information regarding a variance please contact a planner)*.

General Land Clearing: The methodology for determining slope and the criteria applied thereto are the same as those utilized for agricultural projects under the Conservation Regulations (see section below).
Agriculture: The percent slope of each contiguous area cleared (i.e., each area not separated by roads, streams, or non-cleared areas) shall be measured perpendicular to the contours across said area. Its average slope shall be determined by averaging at least 3 typical cross sections

The slope determination will be made by evaluating a site plan with a scale of 1"=200' or greater. When the project involves less than 30 acres contour intervals of 20 feet or less shall be used. When the project involves more than 30 acres, contours intervals of 5 feet or an interval acceptable to the CDPD shall be used.

If the slopes of all portions of each contiguous area are less than 30%, an administrative approval may be issued. However, if any portion within each contiguous area to be cleared is 30% or greater in slope, the following standards then apply:

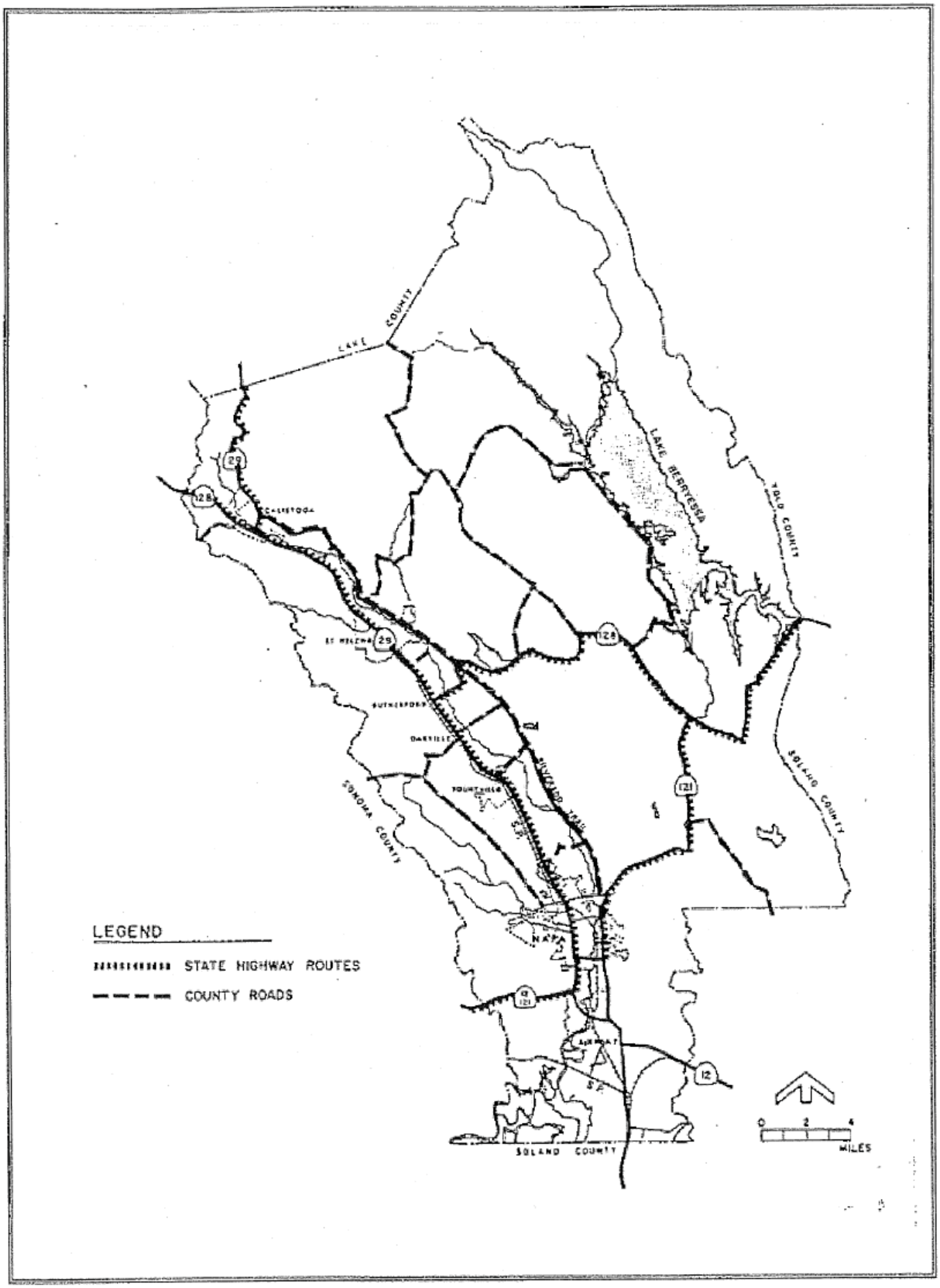
a) If the total area of the contiguous clearing is larger than 1 acre, sub-areas completely inside the boundaries of the area being cleared up to 1 acre in size in the 30%-50% slope range may upon the recommendation of the Napa Co Resource Conservation District or County Consultant AND written approval by the Director or his/her designee be cleared. Clearing of areas in the 30%-50% slope range (1) adjacent to the boundaries of the proposed clearing, or (2) exceeding 1 acre in size will require approval of a use permit by the Napa Co Conservation, Development and Planning Commission.

b) If the total contiguous area to be cleared or graded is less than 1 acre, up to 1/3 of the area to be cleared or graded may exceed 30% in slope but only upon the recommendation of the Napa Co Resource Conservation District or County Consultant AND written approval by the Director or his/her designee.

c) Any area with a greater than 50% slope cannot be cleared or graded unless a variance is approved (*For further information please contact a planner)*

If the average slope of any area is 30% or greater development of that area cannot be undertaken unless the Napa County Planning, Building, and Environmental Services and Planning Commission approve a use permit. Moreover, any area with an average slope greater than 50% cannot be cleared or graded unless a variance is approved *(For further information regarding a variance please contact a planner)*.

FIGURE 75: CANDIDATES FOR SCENIC HIGHWAY DESIGNATION



DESIGNATED PUBLIC ROADS

(Figure 76 – Scenic Highways Element Napa County General Plan)

COUNTY ROADS

Silverado Trail
Dry Creek Road – Oakville Grade
Petrified Forest Road
Deer Park Road and Howell Mountain Road (from St. Helena to Pope Valley Road)
Butts Canyon, Pope Valley and Chiles Valley Roads
Pope Canyon Road
Wooden Valley Road
Berryessa Knoxville Road
Oak Knoll Avenue
Yountville Cross Road
Zinfandel Lane
Lodi Lane
Bale Lane
Jameson Canyon Rd from Hwy 29 to the Solano County Line;
American Canyon Rd from Flosden/Fairgrounds Rd. to Interstate 80;
Highway 29 in its entirety;
Mt. Veeder Road;
Partrick Road;
Lokoya Road;
Wall Road;
Larkmead Lane;)
Dunaweal Lane;
Tubbs Lane;
Redwood Road;
Spring Mountain Road; and
Old Sonoma Road

STATE HIGHWAYS

State Hwy 128 (from Rutherford to Monticello Dam)
State Hwy 29 (from American Canyon to Lake County Line)
State Hwy 121 (from Sonoma County to Napa; from Napa to State Hwy 128)

VIEWSHED UPDATES

ORDINANCE #1232 adopted 12-9-03 amended the Viewshed regulations to include the following;

1. The extension of applicability to include "benches and shelves" which are defined as "flat areas which could be used as a building site which are otherwise surrounded by slopes of fifteen percent or greater';

2. The definition of "substantially" as "fifty one percent or more of viewable areas as it relates to views or screening of structures and benches and shelves from the designated road(s)"; and

3. A requirement, depending on the project, to execute and record a "use restriction" prior to the issuance of building permit.

Be advised that the above is only a summary of the amendments. For specific information on the viewshed program and regulations in its entirety, consult Chapter 18.106 of the Napa County Code.