Southern Avenue Bus Garage Replacement

WMATA Task Order #
11-FQ10065-MCAP-02

Environmental Assessment

June 2011

Washington Metropolitan Area Transit Authority

Federal Transit Administration

U.S. DEPARTMENT OF TRANSPORTATION (USDOT) FEDERAL TRANSIT ADMINISTRATION
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
SOUTHERN AVENUE BUS GARAGE REPLACEMENT

ENVIRONMENTAL ASSESSMENT

ABSTRACT

The Washington Metropolitan Area Transit Authority (WMATA) in coordination with the Federal Transit Administration (FTA) is considering the replacement of the existing Southern Avenue Bus Garage, located at the intersection of Southern Avenue and Marlboro Pike, in the area of Prince George's County, Maryland, that borders the District of Columbia.

The replacement of the Southern Avenue Bus Garage would enable the continuation and improvement of bus service to communities throughout the District of Columbia and the southern portion of Prince George's County by accommodating modern Metrobuses and providing for recent and future increases in system capacity. This action would further the vision and existing plans adopted by WMATA by supporting Metrobus ridership growth and network expansion.

During a previous planning effort in 2009, WMATA started the process of evaluating potential expansion possibilities for the existing Southern Avenue Bus Garage. Before planning was complete, WMATA received an unsolicited proposal from a private developer offering a new possible location for replacing the Southern Avenue Garage. After receiving this proposal, WMATA posted an open Request For Proposals (RFP) and received one additional proposal. Thus, this Environmental Assessment (EA) evaluates the two proposals received in addition to a rebuild-in-place option for the existing facility, for a total of three build alternatives. This EA also documents and evaluates a No Build Alternative for comparison purposes.

The three-sites are located within Prince George's County, Maryland, within approximately 5 miles of each other. To meet WMATA's program requirements, the selected site must be able to provide for the following:

- A fleet of up to 250 Metrobuses;
- Maintenance and administrative building;
- Employee parking;
- Service lane facility where fueling, washing, and fare box collections are conducted;
- Compressed natural gas fueling facility;
- Perimeter and other landscaping;
- Security fencing or other security measures; and
- Storm water management measures.

This EA presents the evaluation of each alternative and potential associated impact on the built and natural environment, as appropriate. A public hearing on the EA will be held at 7:00p.m. on July 27, 2011 at Andrew Jackson Academy, 3500 Regency Parkway, District Heights, MD to provide citizens and agencies an opportunity to comment on the alternatives and their anticipated impacts. Comments may be made orally at the public hearing or submitted in writing. Written comments must be submitted to the Board Secretary, Washington Metropolitan Area Transit Authority, 600 5th Street, NW, Washington, DC 20001.

Following close of the comment period, a Public Hearing Report will be prepared to document and respond to comments received at the hearing and during the comment period. FTA will review the findings of the EA and responses to comments. FTA will make its formal NEPA determination and the comments will be formally addressed in the NEPA finding.

Additional information is available by contacting:

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1.0 Purpose and Need for the Project

1.1 Project Introduction

The Washington Metropolitan Area Transit Authority (WMATA or Metro) in coordination with the Federal Transit Administration (FTA) is considering the replacement of the existing Southern Avenue Bus Garage, located at the intersection of Southern Avenue and Marlboro Pike, in the area of Prince George's County, Maryland, that borders the District of Columbia.

The replacement of the Southern Avenue Bus Garage will enable the continuation and improvement of bus service to communities throughout the southern portion of Prince George's County and the District of Columbia by accommodating modern Metrobuses and providing for recent and future increases in system capacity. This action would further the vision and existing plans adopted by WMATA by supporting Metrobus ridership growth and network expansion.

1.1.1 Existing Facility Site Background and Description

The existing facility is approximately 6 acres in size and is located at the intersection of Southern Avenue and Marlboro Pike in Prince George's County, Maryland. The garage was built in 1922 and owned by a private bus company for nearly half a century. In 1973, WMATA acquired the facility through its purchase of multiple private bus companies operating in the Washington metropolitan area. In 2000, WMATA refurbished the facility.

The existing facility, shown in **Figure 1-1**, is surrounded by a variety of land uses, including commercial, institutional, and residential. Adjacent to the facility's northern boundary is vacant retail space and surface parking in Green Hill Plaza, as well as the Free Gospel Deliverance Temple. Abutting the facility's western boundary are businesses between Pear and Quinn Streets, and directly east of the facility is the Coral Hills Shopping Center. Residences are located along the southern boundary of the facility.

The garage includes a single maintenance building that extends from Southern Avenue to Boones Hill Road as well as asphalt-paved employee parking and bus storage parking. Within the maintenance building are the fueling, fare box collection and washing facilities, as well as maintenance bays, offices, and a bus operators' lounge. The westernmost portion of the building, adjacent to Southern Avenue, is generally unoccupied. While Boones Hill Road is used as an entrance and exit for all Metrobuses, the access road is also utilized by Metrobuses maneuvering from their parked positions to the western portion of the maintenance building. An emergency entrance/exit is located at the end of Pear Street.

1.1.2 Metrobus and Existing Facility Operations

As of June 2009, WMATA's active revenue fleet consisted of 1,482 Metrobuses. These buses serve a population of 3 million through 319 routes on 174 bus lines. As shown in **Table 1-1** and **Figure 1-2**, WMATA maintains nine bus garages located throughout Washington metropolitan area. Of these garages, the Southern Avenue Bus Garage is one of the oldest and has one of the lowest capacities.

Table 1-1: WMATA Active Bus Garages

Garage	Year Built	Capacity
Bladensburg	1962	257
Northern	1907	175
Western	1945	138
Landover	1989	210
Montgomery	1983	240
Southern Avenue	1922	103
Four Mile Run	1977	218
Royal Street	1945	83
West Ox	2009	100
SYSTEM TOTAL		**1,524**

Source: 2010 Metrobus Fleet Management Plan, p. 69

Figure 1-1: Existing Southern Avenue Bus Garage

Although the Southern Avenue facility has a capacity of 103 buses, it currently serves 133 buses, as shown in **Figure 1-3**, exceeding its capacity by nearly 30 percent. As the WMATA *2010 Metrobus Fleet Plan* acknowledges, the majority of Metro's older garages, which are located in the District of Columbia and inner suburbs and serve the core Metrobus market, are currently at or near capacity. Generally, the newer garages in the outer suburbs have excess capacity, but provide less service given the distance from the bus routes.

Older bus garages, such as the Southern Avenue Bus Garage, lack desired maintenance capabilities and require intensive upkeep and investment in buildings, mechanical equipment, and electrical systems. Because the existing infrastructure has not been updated to accommodate modern buses, buses with new technological features cannot be stored or maintained at the garage. Specifically, the present facility limits WMATA's ability to purchase and deploy compressed natural gas (CNG) buses. Bladensburg and Four Mile Run are the only garages currently providing CNG fueling, as shown in **Figure 1-3**.

1.2 Proposed Action

The proposed action is to construct and operate a new WMATA bus garage that would replace the existing Southern Avenue Bus Garage on its current site or at another identified site to accommodate more storage capacity and incorporate modern features to service modern buses.

1.2.1 Project Alternatives

Three alternatives have been identified for the proposed replacement of the Southern Avenue Bus Garage. WMATA is considering developer proposals to develop a new bus operations and maintenance facility at two alternative site locations in Prince George's County, located within 5 miles of the existing facility, as well as a third option of rebuilding the facilities at the existing site. The three build alternative locations under consideration are described below. See **Figure 1-4** for a location map of the three sites and **Figure 1-5** for the boundaries of each alternative.

Alternative A (Rena Road)

Alternative A is approximately 36 acres in size, and is located northwest of the Joint Base Andrews Naval Air Facility and southwest of the intersection of Suitland Parkway and the Capital Beltway (I-95/I-495). This site would be part of a larger, planned industrial park known as Andrews Federal Campus that is beginning construction. However, the site proposed for the WMATA facility is currently a wooded, undeveloped site.

Alternative B (Westphalia Road)

Alternative B is approximately 52.5 acres in size, and is located northeast of the intersection of Suitland Parkway and the Capital Beltway (I-95/I-495). The site was used originally as a Pepco Production and Training Facility, and consists of a 100,000 square-foot shop and warehouse space, a 50,000 square-foot two-story office space, a two-lane access road, and 295 parking spaces.

Alternative C (Southern Avenue)

Alternative C would rebuild the existing facilities at Southern Avenue on approximately 8.2 acres. The rebuild would require that the existing facility be closed during construction. All current functions would be moved to the planned Shepherd Parkway Bus Garage temporarily.

Figure 1-2: WMATA Bus Maintenance Facilities

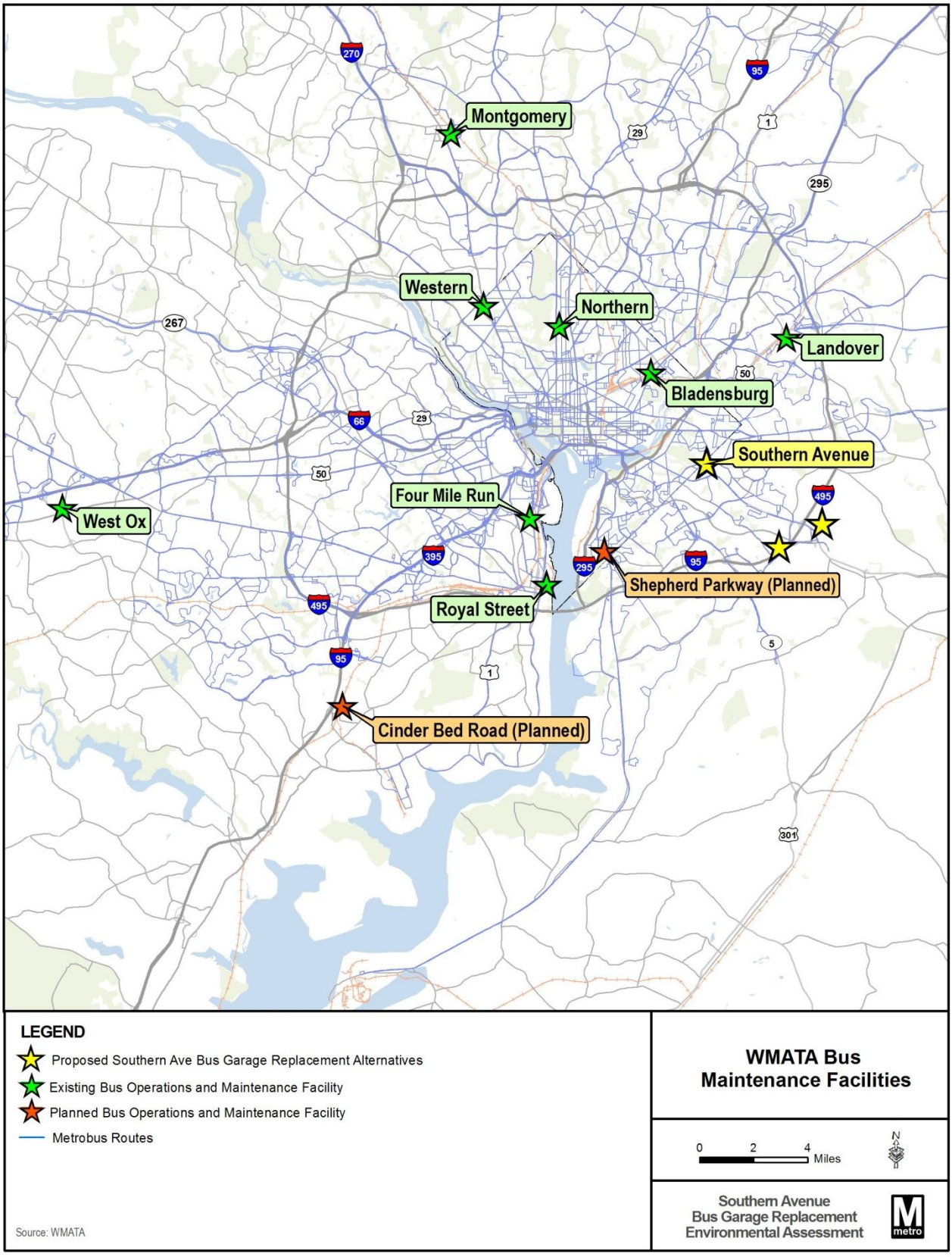
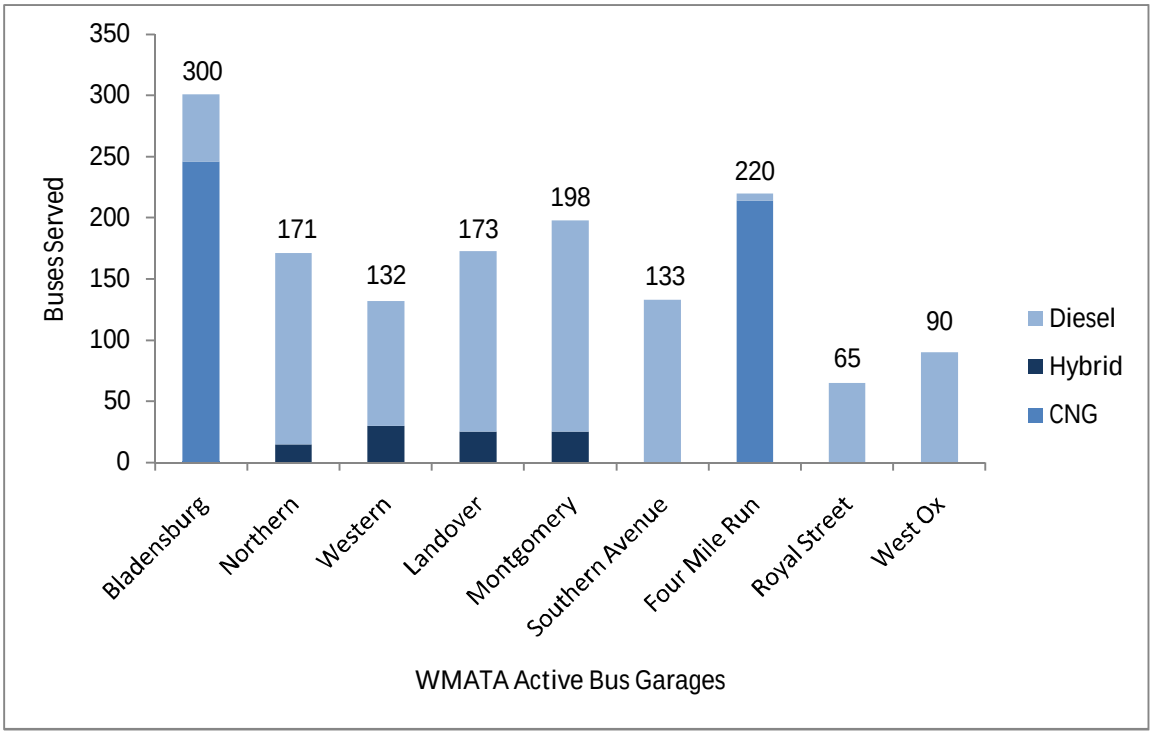


Figure 1-3: Fleet Type Served by WMATA Active Bus Garages



Source: 2010 Metrobus Fleet Management Plan, p. 78

Figure 1-4: Location of Build Alternatives

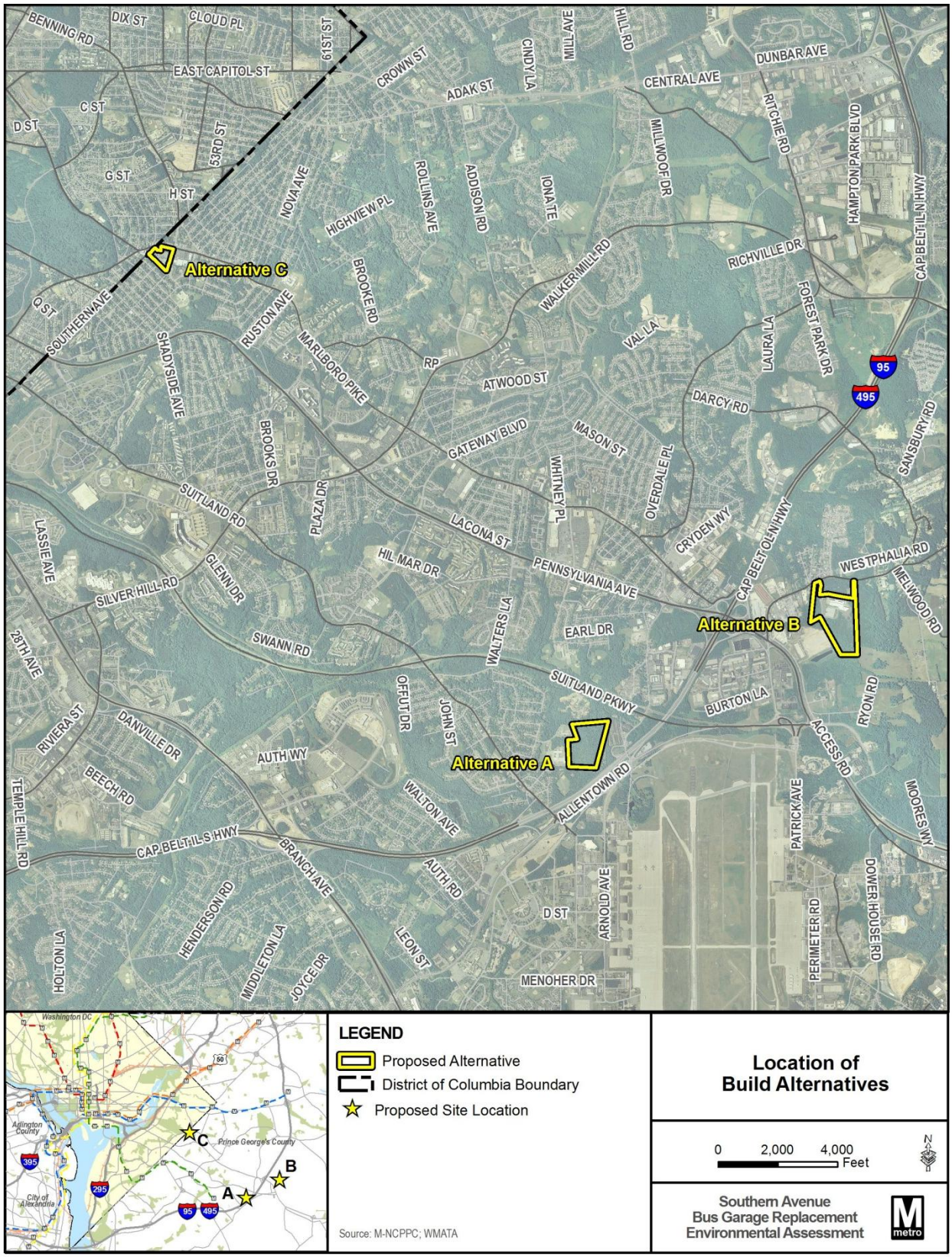
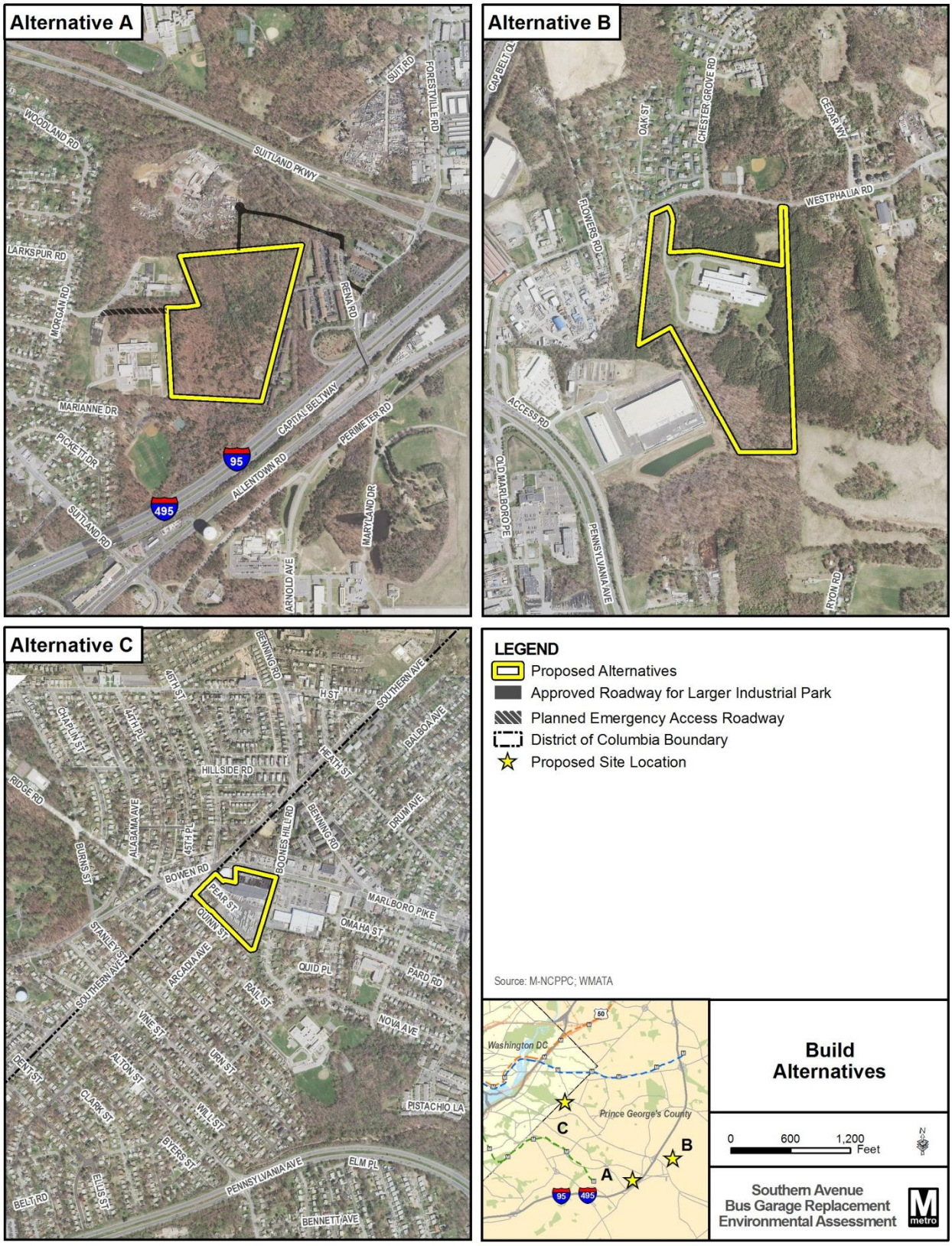


Figure 1-5: Build Alternatives



1.3 Purpose and Need of the Proposed Action

1.3.1 Purpose of the Southern Avenue Bus Garage Replacement

The purpose of the Proposed Action is to provide a replacement of the Southern Avenue Bus Garage that would provide a cost-effective maintenance, operations, and storage facility that supports existing and modern bus technologies and provides additional capacity within the existing Southern Avenue Bus Garage service area.

1.3.2 Need for the Southern Avenue Bus Garage Replacement

The existing Southern Avenue Bus Garage site and facility exhibits many problems, including aging and outdated infrastructure, exceeded capacity, and operational challenges. These weaknesses are summarized in **Table 1-2**. Furthermore, the replacement of the existing facility would further the vision and existing plans adopted by WMATA by addressing WMATA's system-wide goal to support ridership growth and network expansion.

Table 1-2: Southern Avenue Bus Garage Problems

Problem	Description
Aging and outdated infrastructure	• Built in 1922, refurbished in 2000 • Serves only standard diesel buses • Not able to accommodate the technology of modern buses
Exceeded capacity	• Serves 130 buses when capacity is 103, therefore exceeding capacity by nearly 30 percent
On-site operational challenges	• Maneuvering and circulation difficulties due to facility layout

The Southern Avenue Bus Garage replacement is needed to provide for recent and future increases in system capacity, new technology, and more efficient maneuvering and circulation in and around the facility. Because of the current facility's demonstrated operational deficiencies, the Southern Avenue Bus Garage is not currently considered cost-effective for operations. As WMATA seeks to achieve its system-wide goals of supporting ridership growth and network expansion, it will become even more important that its bus garages--particularly those which serve the core Metrobus market--can accommodate Metrobuses in larger volumes as well as those of modern varieties. However, because the existing Southern Avenue Bus Garage cannot physically support a growing and changing bus fleet, it cannot help meet these system-wide goals. Therefore, the replacement of the Southern Avenue Bus Garage is necessary to address the current facility's deficiencies and to promote WMATA's system-wide goals and general operations.

1.4 Program Requirements

The new facility would have the capacity to accommodate a fleet of up to 250 Metrobuses. In addition to parking and storage facilities for the Metrobuses, other program requirements in the new facility include the following:

- Maintenance and administrative building;
- Employee parking;
- Service lane facility where fueling, washing, and fare box collections are conducted;
- CNG fueling facility;
- Perimeter and other landscaping;
- Security fencing or other security measures; and
- Storm water management measures.

1.5 Scope of the Environmental Assessment

This Environmental Assessment (EA) has been prepared according to the requirements of the National Environmental Policy Act (NEPA) (42 United States Code (USC) 4332(2)(c), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508), the joint Federal Highway Administration/Federal Transit Administration regulations (23 CFR Part 771), and other regulations regarding environmental permitting and approval for the project. WMATA proposes to undertake the project with the use of Federal funds. FTA will use the NEPA documentation to consider the potential effects of the proposed project on social, economic and environmental factors and impacts on identified resources.

The NEPA process provides a transportation planning decision-support framework to consider the extent of the problem to be solved, potential design solutions to serve identified needs, project costs, and potential benefits of proposed transportation alternatives. In addition, the process provides for the public consideration of potential effects of the proposed project on both the human and natural environments for all alternatives under consideration. Collectively, these issues are discussed in a public forum to provide sufficient information to citizens, the business community, resource agencies, local governments and decision-makers to consider the effects on social, economic, environmental, and transportation factors prior to selecting a course of action. This EA has been prepared to facilitate that public discussion by describing the purpose and need for the proposed project, alternatives considered, and environmental consequences. Following consideration of the EA, along with the comments and insights received from public involvement and agency coordination, FTA will issue an environmental finding on the proposed project based on the significance of the potential impacts identified. This finding will guide future project planning, design, and implementation activities. If, on the basis of the EA, FTA concludes that there is potential for significant impacts to the environment that cannot be mitigated to the point of no significance, then an Environmental Impact Statement (EIS) would be required to better assess the extent of the impacts and consider a wide range of alternatives to reduce those impacts. If FTA concludes on the basis of the EA that the project qualifies for a Finding of No Significant Impact (FONSI), then an EIS will not be required and the project will become eligible to advance into Preliminary Engineering and Project Development.

1.6 Organization of the Environmental Assessment

The environmental assessment is organized into five chapters:

- Chapter 1 provides an introduction to the project and description of the purpose and need for the project;
- Chapter 2 presents a detailed description of the proposed action, including alternatives, that would address the purpose and need;
- Chapter 3 presents the existing environmental conditions potentially affected by the project, the environmental impacts that may result from implementation of the project, and the mitigation measures to address those impacts considered to be adverse;
- Chapter 4 presents WMATA's public and agency consultation and coordination activities for the project;
- Chapter 5 provides a list of acronyms and terms used in the EA; and
- Chapter 6 provides a list of references used in preparing the EA.

2.0 Alternatives Considered

This chapter provides descriptions of the alternatives under consideration and evaluation in this Environmental Assessment (EA). In total, four alternatives are presented, including the No Build Alternative and three Build Alternatives. The Build Alternatives include three separate locations for the construction and operation of a new WMATA bus garage that would replace the existing WMATA Southern Avenue Bus Garage. Each alternative is described in detail in Sections 2.1 and 2.2 below. A preferred alternative will be selected after public hearings planned for July 2011.

2.1 No Build Alternative

The No Build Alternative provides a baseline against which a comparison of each alternative can be made. Under a No Build Alternative, minor improvements and maintenance of facilities and equipment can be accommodated.

The existing Southern Avenue Bus Garage is located near the intersection of Southern Avenue and Marlboro Pike in Prince George's County, Maryland. The current site is approximately 6 acres in size and is situated in an urban setting, surrounded by commercial and residential uses. **Figure 1-1** shows the location of the existing Southern Avenue Bus Garage.

The existing facility was built in 1922 and was last rehabilitated in 2000. The site has a single maintenance building that extends from Southern Avenue to Boones Hill Road and a separate fueling station. Fare box collection and washing facilities are located within the single maintenance building. Administrative and operations staff offices are also included in the same building. The current facility serves a fleet of 130 standard diesel buses, although the facility was built to efficiently service 103 buses. Some employee parking is provided on-site; the remaining employee parking is provided off-site through leasing agreements with commercial property owners nearby. Buses and employees both access the site from Boones Hill Road.

2.2 Build Alternatives

Three build alternatives are being considered for the replacement of the existing Southern Avenue Bus Garage. Each site is a separate location and each has its own proposed site layout that would meet program requirements described in Chapter 1. Below is a description of each proposed build alternative.

2.2.1 Build Alternative A (Rena Road)

Build Alternative A is located in Prince George's County, Maryland, northwest of the Joint Base Andrews Naval Air Facility and southwest of the intersection of Suitland Parkway and the Capital Beltway (I-95/I-495). The closest intersection is Rena Road and Forestville Road. The proposed 36-acre development is part of a larger 83-acre industrial development complex known as Andrews Federal Campus. Vacant land, which is proposed as part of the larger industrial development, exists to the north of the site; the Forest Village Apartment complex is located adjacent to and east of the site; a wooded area exists south of the site; and municipal facilities exist to the west of the site (Morningside Elementary School, which is vacant and Benjamin D. Foulois Creative and Performing Arts Academy). **Figure 2-1** shows the location of Build Alternative A.

Figure 2-1: Location of Build Alternative A

The site proposed for Build Alternative A is located within an approved industrial park, known as Andrews Federal Campus. The overall development of the Andrews Federal Campus is not covered under this EA. Only the portion of the industrial park that would be developed for the purposes of a WMATA facility is assessed in this document. Construction has begun on the overall industrial park; however, the site proposed for the WMATA facility is currently undeveloped and heavily wooded. As part of the development of the Andrews Federal Campus, Rena Road would be extended by the developer to provide the primary access to the industrial park. This county approved roadway extension would provide the primary access for the WMATA facility located within the industrial park. Therefore the extension of Rena Road is not considered as a project-related impact. However, traffic generated by the WMATA site is considered as a project-related impact and is documented in this EA. Error! Not a valid bookmark self-reference. shows the approved Andrews Federal Campus and **Figure 2-3** shows the approved industrial park in relation to the proposed WMATA facility site.

Emergency access would be provided via a planned utility easement (water main) for the industrial park. The utility easement is also within a county platted extension of Ames Street. As part of the industrial park development, the water main would be extended to provide water to the entire site. This extension requires the developer to clear the easement/roadway alignment. The developer would not pave this easement unless the site is selected for the WMATA facility. Therefore, WMATA considers the paving of this utility/roadway easement for unrestricted emergency access a project-related impact and is documented in this EA. (See **Figure 2-2**).

Build Alternative A includes a combined maintenance and administration building that contains approximately 103,300 square feet of total space on the first floor and approximately 17,000 square feet on the second floor. The building would provide for fare collection, fueling (standard and CNG buses), wash facilities, maintenance bays, and parts storage. The site could accommodate up to 276 bus parking spaces and 320 employee parking spaces. Additional parking for 10 support vehicles would be adjacent to the employee parking on the eastern side of the site. Stormwater management would be provided via a shared on-site facility as part of the larger 83-acre development. A guard booth and security fencing along the perimeter of the site would be provided. **Figure 2-4** provides the proposed site concept plan for Build Alternative A.

2.2.2 Build Alternative B (Westphalia Road)

Build Alternative B is located in Prince George's County, Maryland, generally northeast of the intersection of the Capital Beltway (I-95/I-495) and Pennsylvania Avenue. This site is located within the Penn-East Business Park at 8711 Westphalia Road. The site consists of approximately 52.5 acres of partially developed land with a large, two-story industrial/administrative office building, 295 parking spaces, and supporting infrastructure, such as electric, water, sewer, gas and storm water management facilities. The site also contains heavily wooded areas. North of the site are Westphalia Road and a residential development (Chester Grove); east and south of the site is heavily wooded, undeveloped land; and west of the site is an industrial area. **Figure 2-5** shows the location of Build Alternative B.

As proposed, Build Alternative B will use and rehabilitate the existing facilities and infrastructure on the site. The existing surface parking area would be reconfigured for 275 spaces for employee use. New surface parking for 250 standard Metrobuses would be added east of the employee parking. The existing shop and warehouse space would be converted and expanded upon to accommodate for operations and bus maintenance. A new building would be constructed to accommodate Metrobus fueling and washing. The existing building would be expanded to accommodate body repairs and paint. The first floor of the existing building would be renovated for administration, training, and other uses. Most of the existing buffer of trees along the western edge of the property and more than half of the existing buffer of trees in the southern portion of the site would remain. New fencing and guard booths would be built for facility security. An emergency access would be provided within the proposed site, parallel to the eastern property boundary. The emergency access road would connect to Westphalia Road, east of the main entrance. **Figure 2-6** provides the site concept plan for Build Alternative B.

Figure 2-2: Planned Andrews Federal Campus

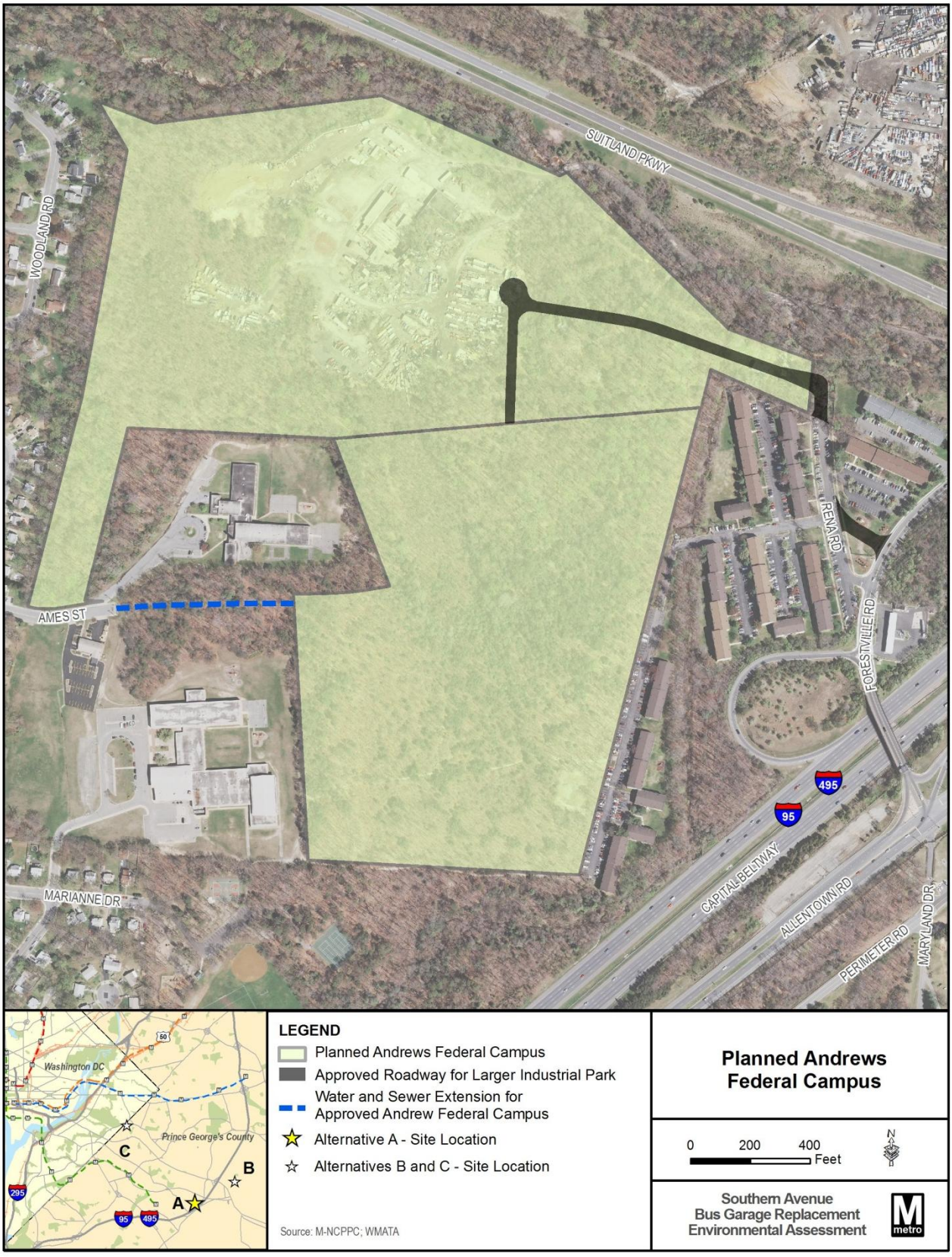


Figure 2-3: Alternative A within Planned Andrews Federal Campus

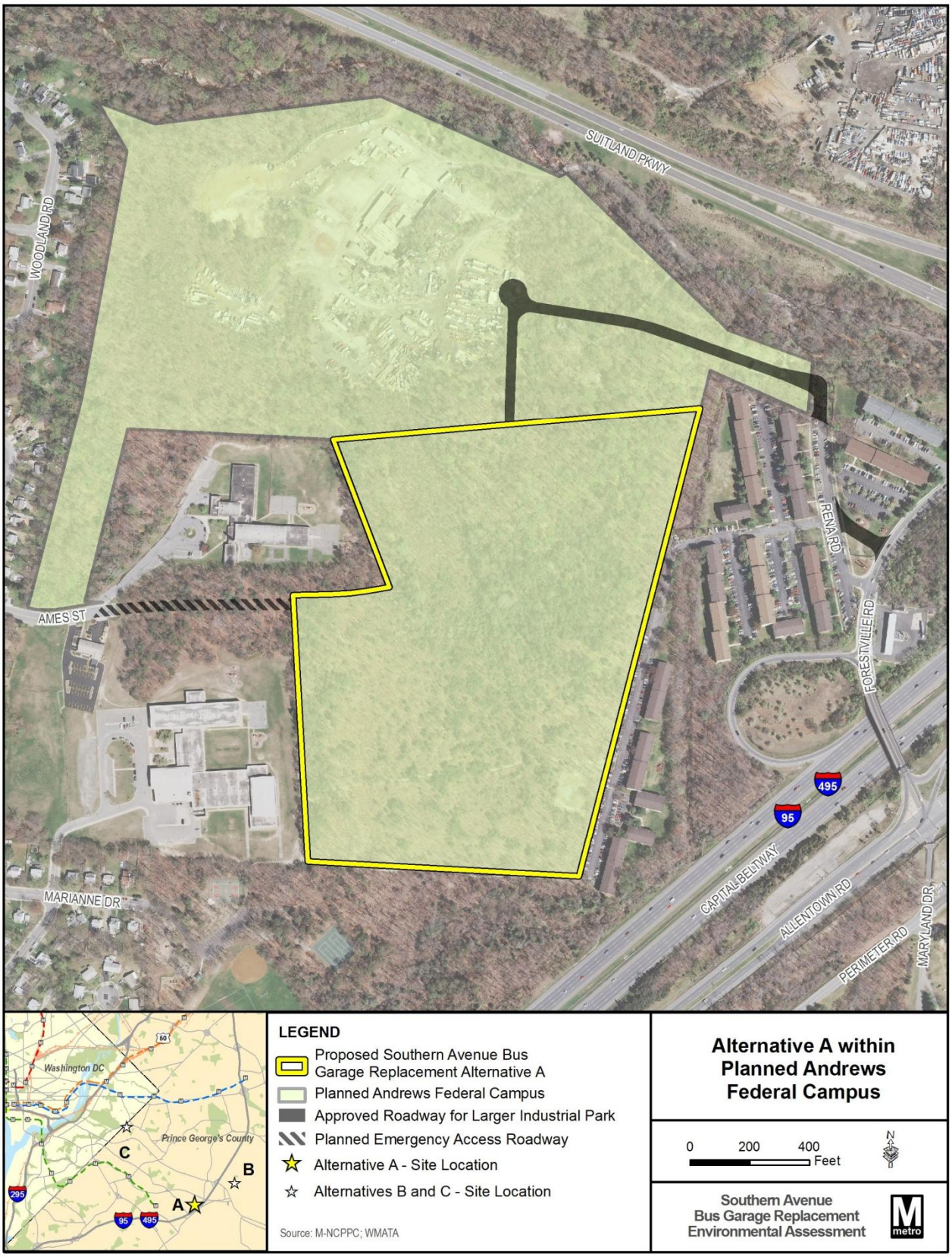


Figure 2-4: Build Alternative A Proposed Concept Plan

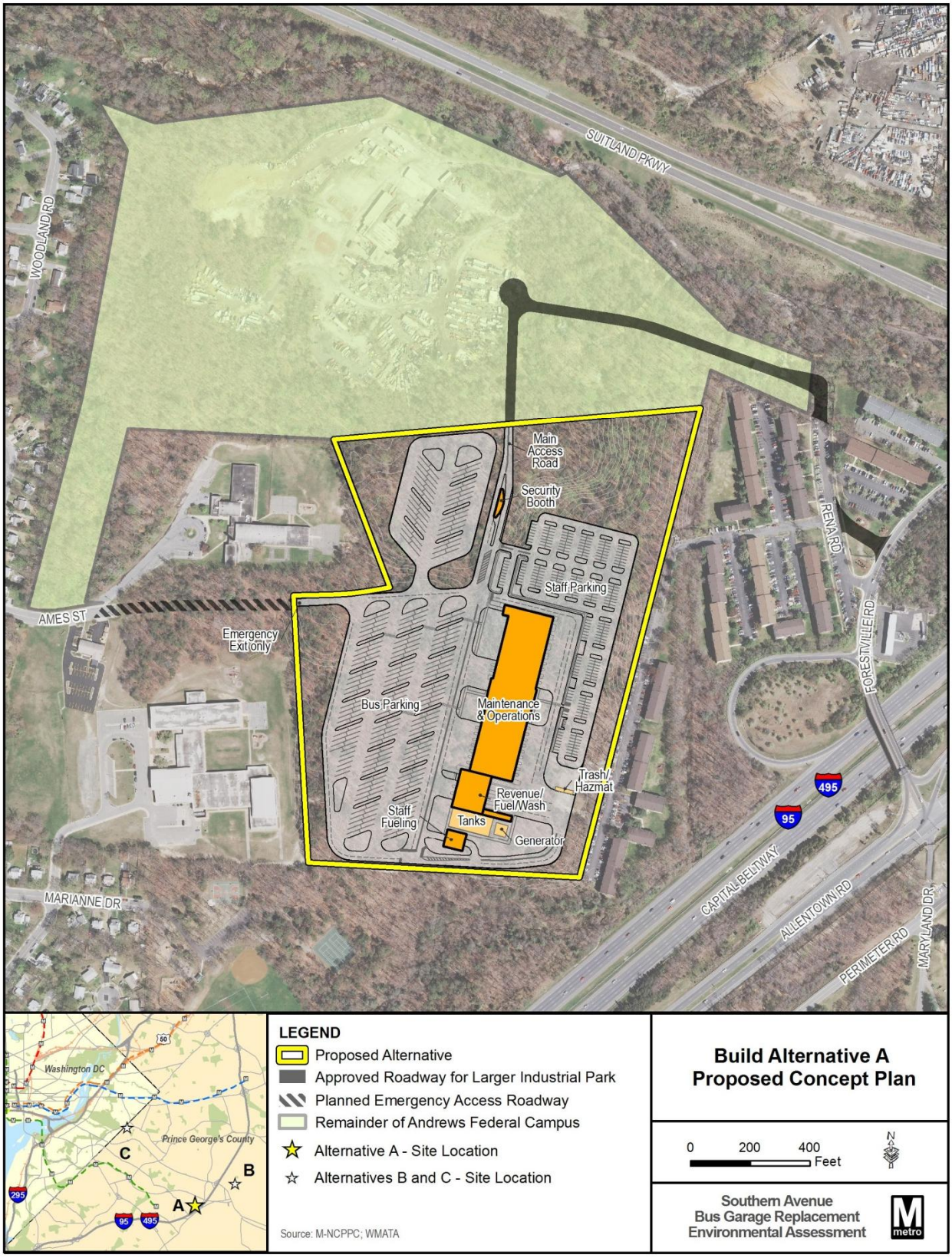


Figure 2-5: Location of Build Alternative B

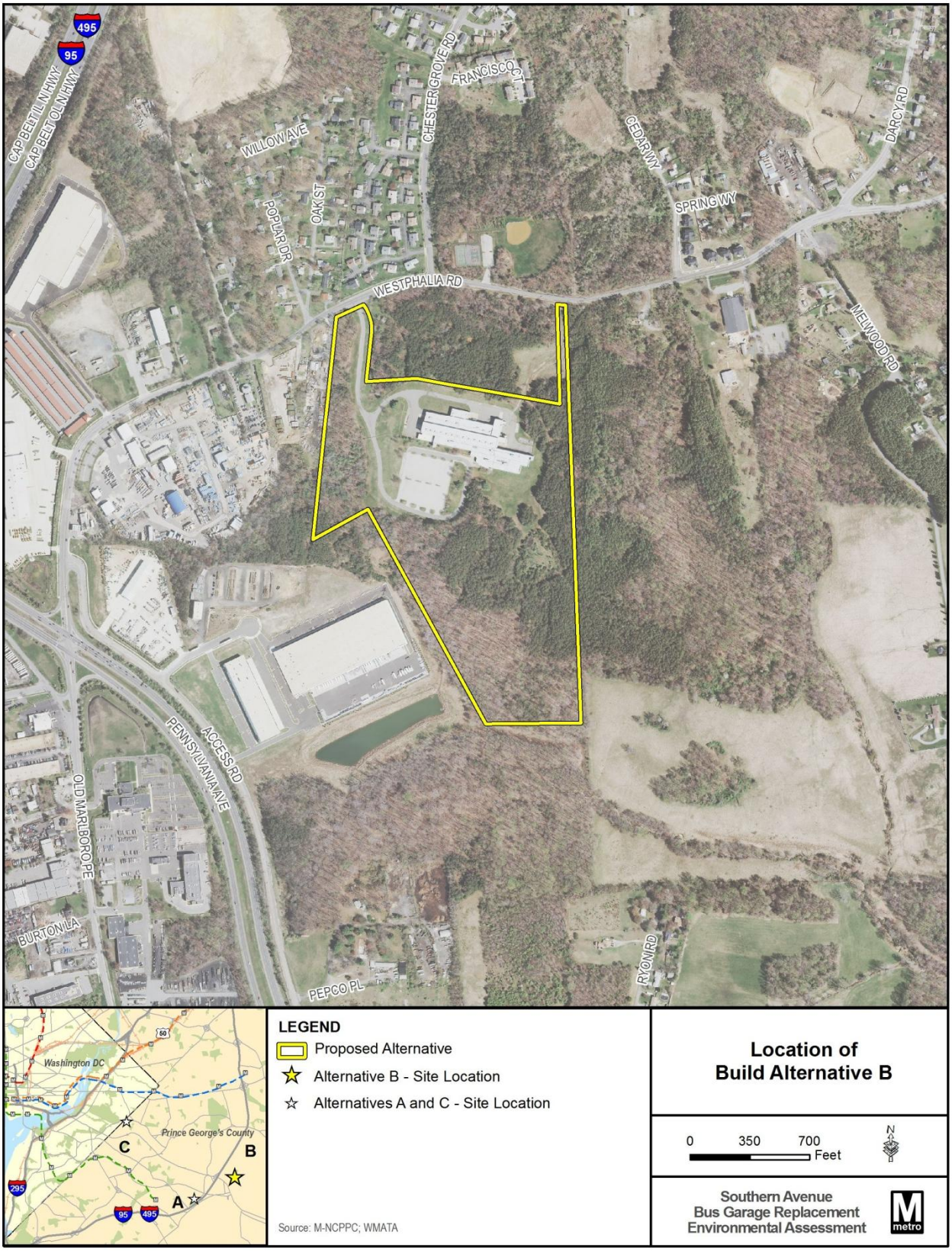
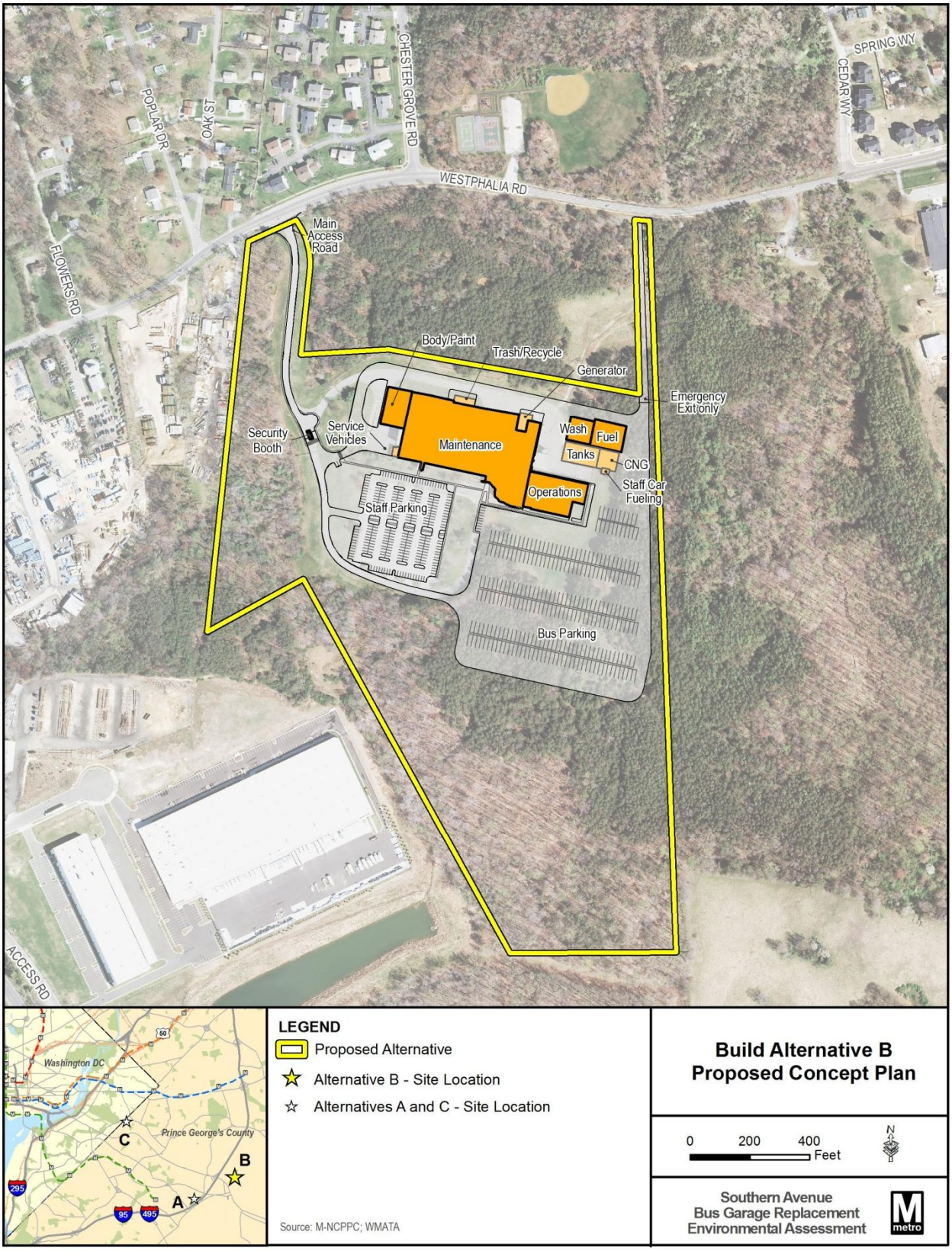


Figure 2-6: Build Alternative B Proposed Concept Plan



2.2.3 Build Alternative C (Rebuild in place – Southern Avenue)

Build Alternative C is at the same location as described for the No Build Alternative (See **Figure 2-7**). Under this build alternative, the existing bus garage would be demolished and rebuilt on an expanded site of approximately 8.2 acres. Expansion of the site would require property acquisition of ten adjacent parcels of land and a small road currently used for WMATA emergency access as shown in **Figure 2-8**. During construction, all functions of this facility would be temporarily relocated to the Shepherds Parkway Bus Garage until completion.

Build Alternative C proposes a new three-story structure to house operations, maintenance, administration, bus and employee parking, and first floor commercial space fronting Marlboro Pike. A separate building would be provided for fueling and washing. The site accommodates parking for 250 standard buses, 376 employee spaces, and 27 commercial parking spaces to serve the proposed ground-floor commercial spaces along Marlboro Pike. (The proposal includes ground-level commercial space to be consistent with the Marlboro Pike Master Plan.) Access for buses would be provided via Boones Hill Road. A separate employee entrance is proposed from Southern Avenue, just north of Quinn Street. Emergency access would be provided at a point along Marlboro Pike and west of Boones Hill Road. **Figure 2-9** provides the concept plan for Build Alternative C.

Figure 2-7: Location of Build Alternative C

Figure 2-8: Alternative C Acquisitions

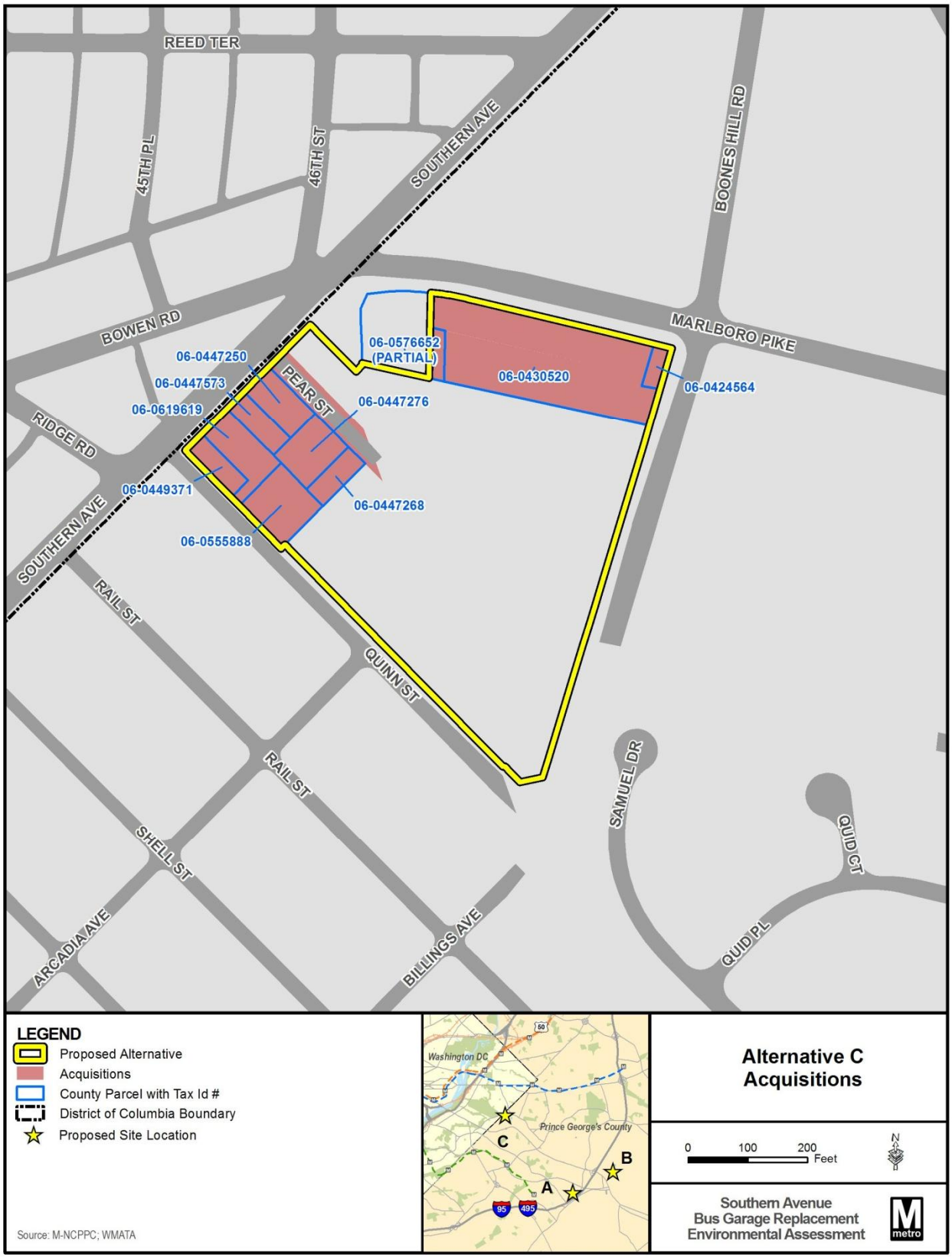


Figure 2-9: Build Alternative C Proposed Concept Plan