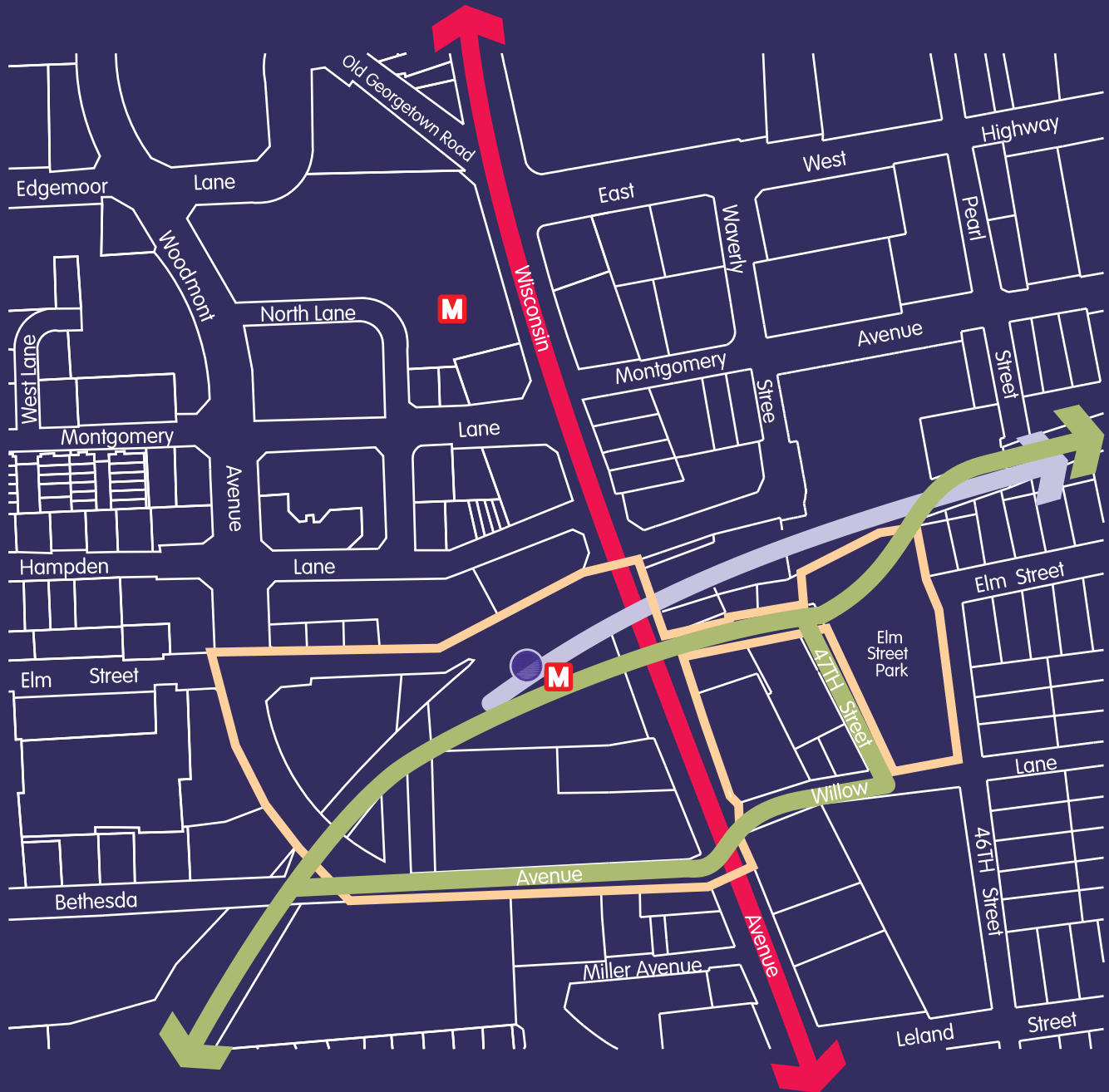




# Bethesda



## *Purple Line Station Plan* Minor Master Plan Amendment



Planning Board Draft

December 2013



# Bethesda



## *Purple Line Station Plan*

Minor Master Plan Amendment

## Introduction

### *A Vision of Transit Future*

With an improved Purple Line Station, the south entrance to the Bethesda Red Line Metro Station, and the Capital Crescent Trail literally under one roof, the Minor Master Plan Amendment Area has the potential to become the new “best address” of the Bethesda Central Business District (CBD). This Area, chiefly the block bound by Wisconsin Avenue, Elm Street, Woodmont Avenue, and Bethesda Avenue, is the eastern gateway to the popular and successful Bethesda Row – the primary center of activity in the CBD – and a key component of the Wisconsin Avenue commercial corridor. The addition of this multi-modal transit hub will enhance the level of activation, access, and amenity for residents, businesses, and visitors.

This Minor Master Plan Amendment envisions an urban multi-modal transit station that is integrated into the life of Bethesda. Thousands of transit riders will use the station to come to Bethesda to live, work, and play and to go elsewhere from Bethesda to access the many rich benefits of the region. Hundreds of cyclists will use the Capital Crescent Trail (CCT) to get to the many centers and neighborhoods between Silver Spring and Georgetown.

Every day this station will bring thousands of people to Wisconsin Avenue, Elm Street, Woodmont Avenue, and Bethesda Avenue. This foot and bicycle traffic will make the station location the pre-eminent address in the CBD. With the redevelopment envisioned by this Plan, it will be anchored by a signature building at this “100 percent corner,” a source of renewed growth and activity for the surrounding business, lifestyle, and entertainment district.

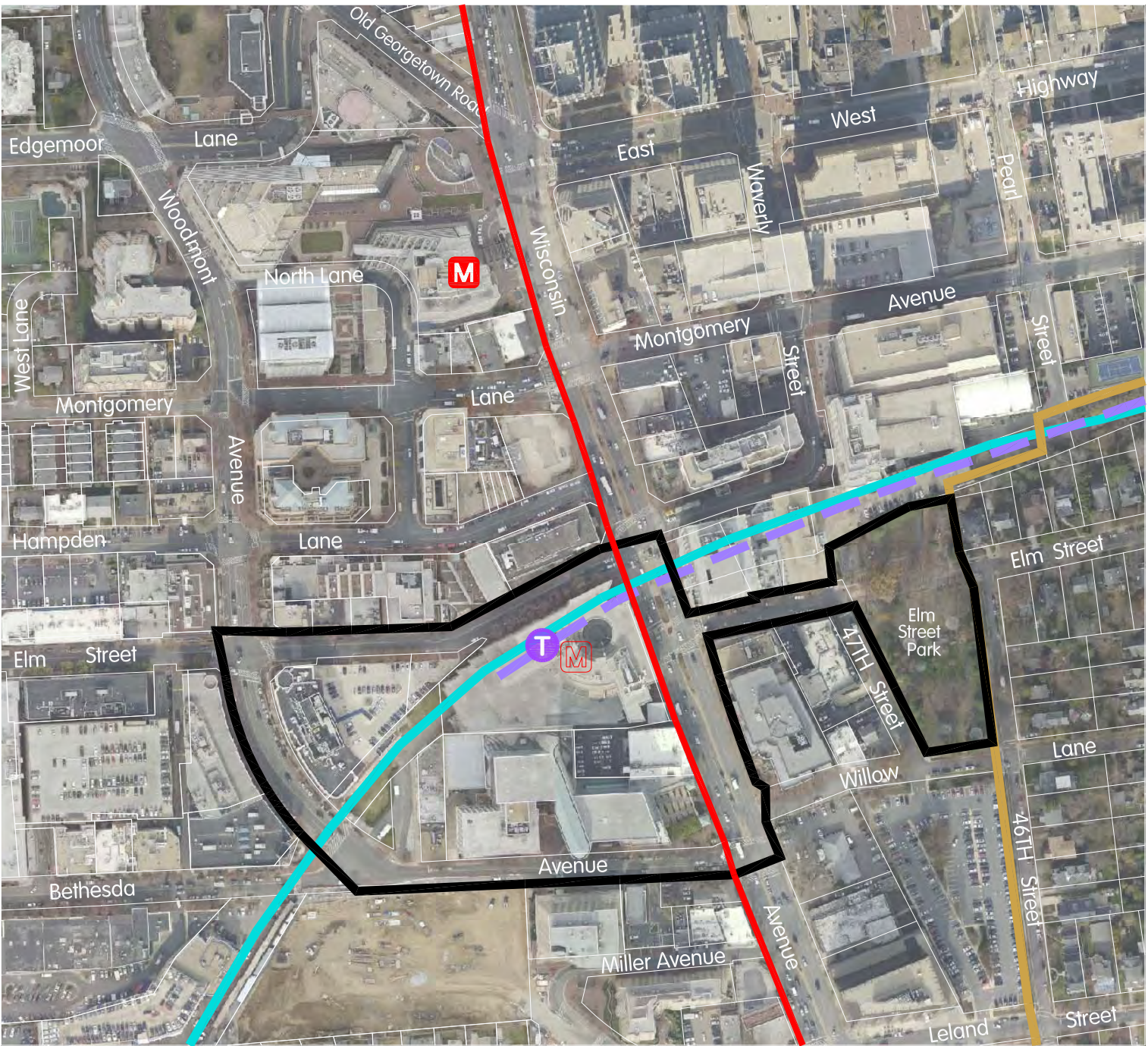
The Plan vision for the corner of Wisconsin Avenue and Elm Street showcases a generous and welcoming plaza at the ground floor of a signature building, where commuters have easy direct access to the Purple Line station and, via high-speed elevators, to the Red Line Metro station below. The spacious Purple Line station would be welcoming and easy to navigate, with a large open platform and plenty of room for the projected ten thousand plus daily riders. Getting to the Red Line station would be efficient and streamlined. One level below the street, cyclists will be able to rapidly move through the CBD to get to work, play, or home, in an environment free of automobiles.









From Woodmont Avenue, pedestrians would walk past the many shops, cafes, and restaurants, into the landscaped Woodmont Plaza and directly into the Purple Line station. Cyclists would have a direct route through the plaza into a short tunnel that comes out just the other side of Wisconsin Avenue, with an easy ride through Elm Street Park and on towards Rock Creek Park and Silver Spring.



Businesses around the station would benefit from greatly increased pedestrian traffic, with more eyes on shop windows. Offices, hotels, and apartments around the station block will command premiums for their proximity to the multi-modal station, the CCT, and the Bethesda Row entertainment district.



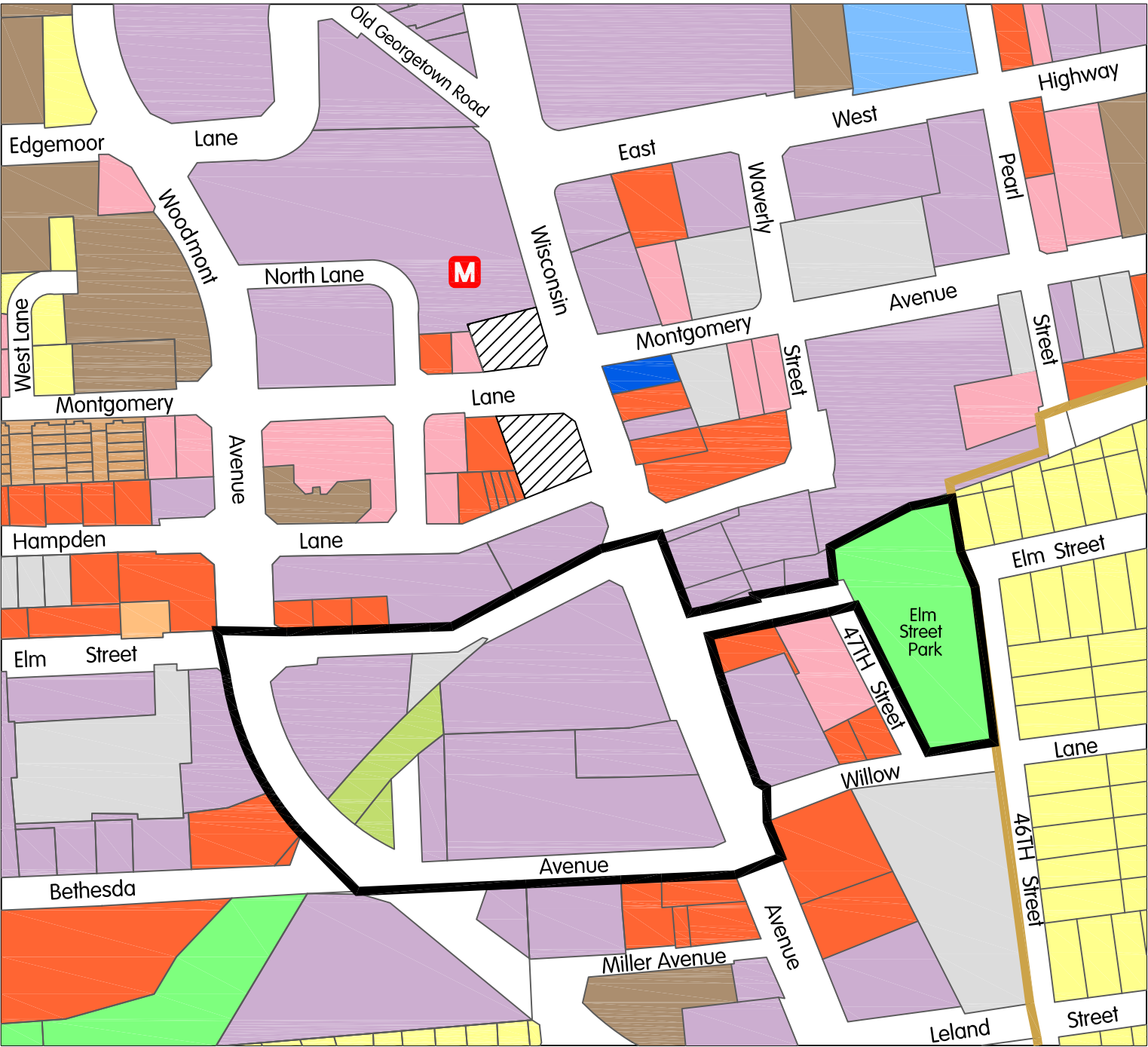
# Existing Conditions



	BPLS Plan Boundary		Red Line
	Bethesda CBD Plan Boundary		Metro Station
	Capital Crescent Trail		Proposed Metro Station South Entrance
	Purple Line		Planned Purple Line Station

# Existing Land Use



BPLS Plan Boundary

Bethesda CBD Plan Boundary

Single-Family

Multi-Family

Townhomes

Mixed-Use

Commercial

Office

Automotive

Government

Civic

Parkland

Private Open Space

Parking

Vacant

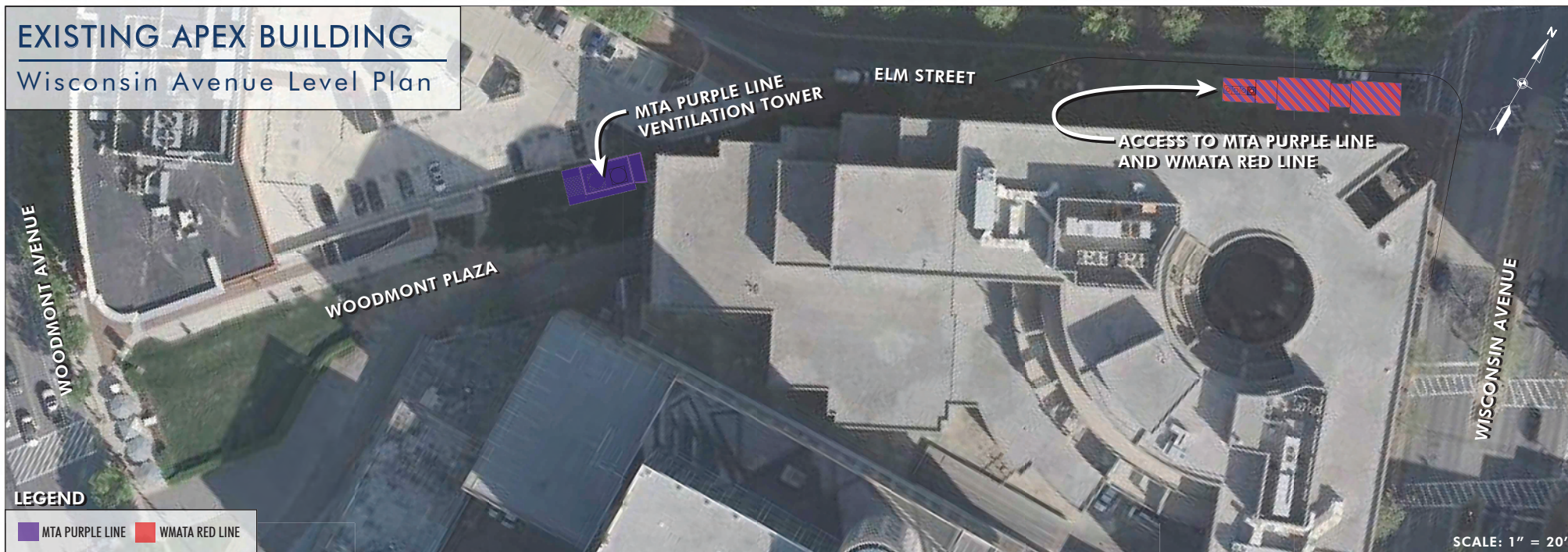
Metro Station

0 300'



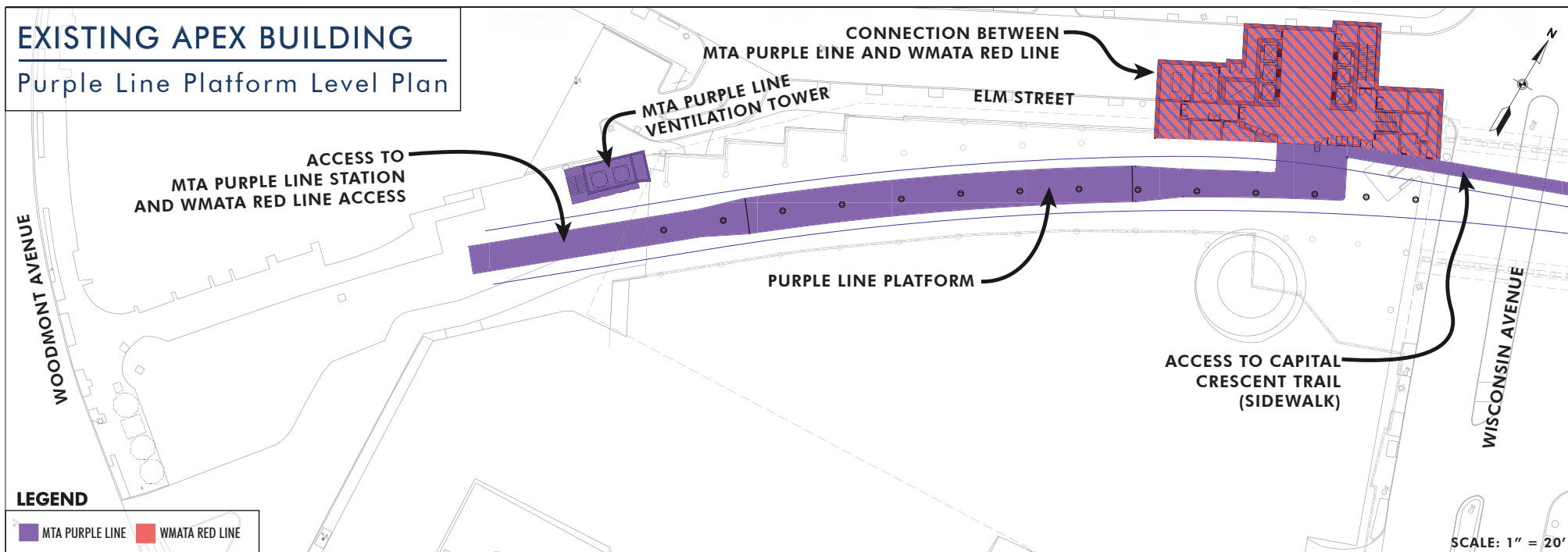
## EXISTING APEX BUILDING

### Wisconsin Avenue Level Plan



## EXISTING APEX BUILDING

### Purple Line Platform Level Plan



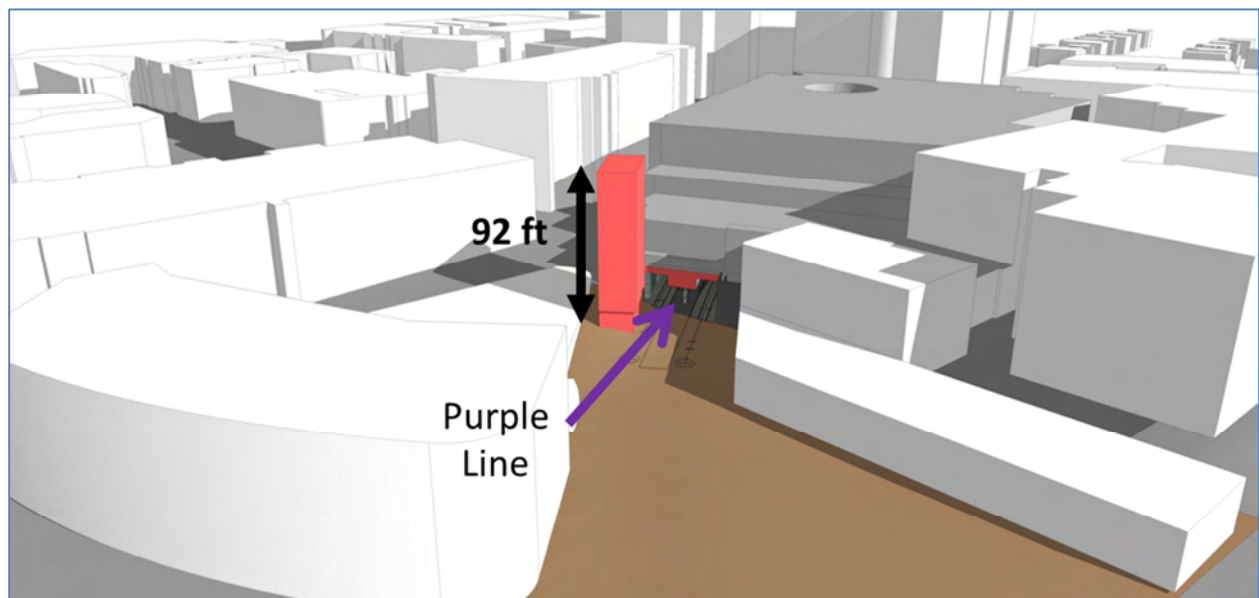
This is a vision of a new multi-modal transit station that provides room for Bethesda to grow, creating new opportunities for businesses, residents, and visitors.

### *Station Default*

Almost 30 years ago, when the existing Apex Building was constructed over the Georgetown Branch right-of-way, it was designed to accommodate some form of transit station. But today, the Maryland Transit Administration's (MTA) default designs for what is now the Bethesda Purple Line station, while fitting with the space made available by the original Apex Building design, will not be able to fully implement the exciting vision this Plan proposes. The default designs are constrained by the limits of the existing conditions, particularly the configuration of the current tunnel and the Apex building support structures.

The Purple Line tracks will be located within the existing tunnel – now used as a bicycle path – that runs east from Woodmont Plaza, under the Apex building, Wisconsin Avenue, and the Air Rights building. The physical limitations of this tunnel will negatively impact the quality of service provided by the station:

- the tunnel forces a narrower platform that constrains the number of people that can fit on it at one time;
- the platform is interrupted by numerous structural columns supporting the Apex building above, impeding circulation for riders;
- the tunnel is curved, necessitating a curved station platform that creates gaps between the train cars and the platform;
- the narrowness of the existing tunnel requires the station platform to be located closer to Woodmont Plaza, resulting in “over-run” tracks extending 100 feet into the plaza, near the existing movie theatre and eateries;
- a free-standing metal ventilation tower – about the size of a 90' high townhouse– must be located in Woodmont Plaza.



*Aerial View of Vent Tower Impact*



With only a minimum amount of space in the existing tunnel for the Purple Line station, the new south entrance to the Red Line Metro station must be located underneath Elm Street, within the public right-of-way. This location negatively impacts the quality of service of the station:

- commuters will have limited direct access from the street to the Metro station, and may have to travel one level down for additional elevators;
- stair and elevator access from street level to the Metro elevators below will be located in a sidewalk bump-out on Elm Street, creating potential bottle-necks that significantly disrupt the pedestrian use of Elm Street;
- riders transferring between the Red Line and Purple Line will have to cross the train tracks at track level, creating potential conflicts between trains and riders.



*Rendering of Elm Street Elevators*

Finally, with no room in the existing tunnel for the CCT, cyclists will be forced to use a surface route along busy Bethesda Avenue and across the heavily trafficked Wisconsin Avenue.

This default design provides adequate service while minimizing costs, but would be challenged to accommodate the future growth that would be expected of a successful and attractive transit center in downtown Bethesda.

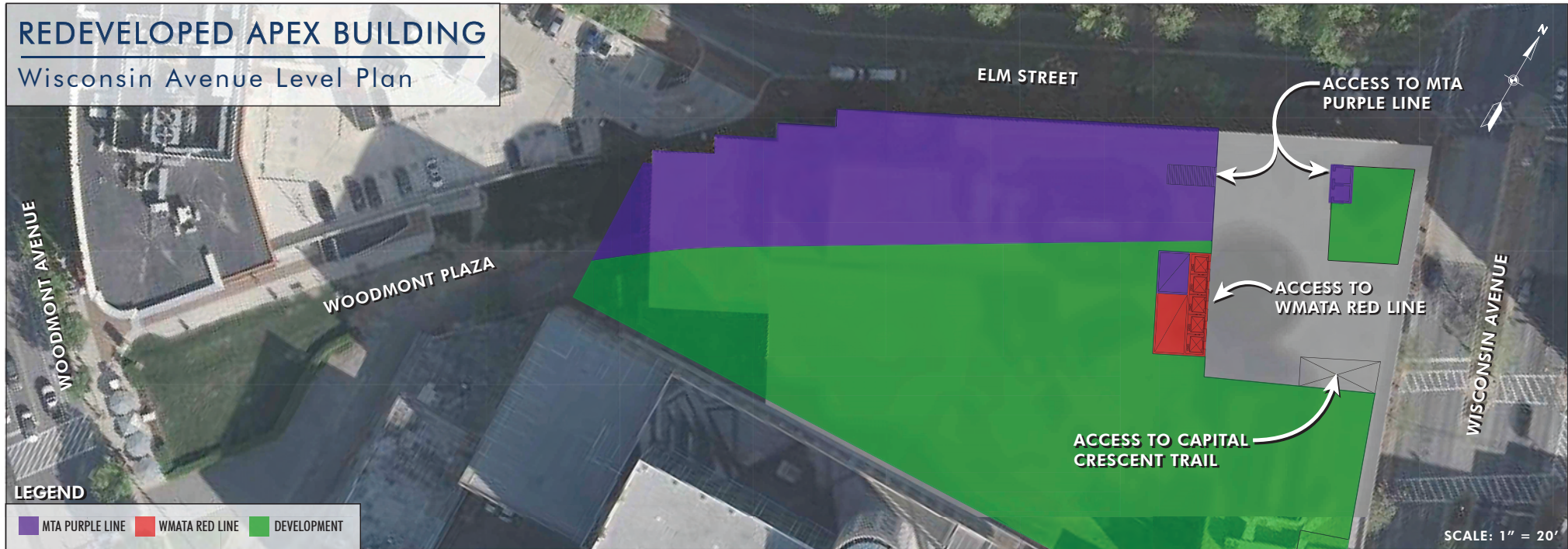
#### *(Re)Developing a Better Alternative*

In coordination with the Planning and Parks Departments and regional, state, and local transportation agencies, MTA has developed an alternative station design that better realizes the Plan vision. But the vision and its many public benefits will not be realized unless the station site, the location of the existing Apex building, is redeveloped in coordination with the construction of the Purple Line, expected to begin by the end of 2015.



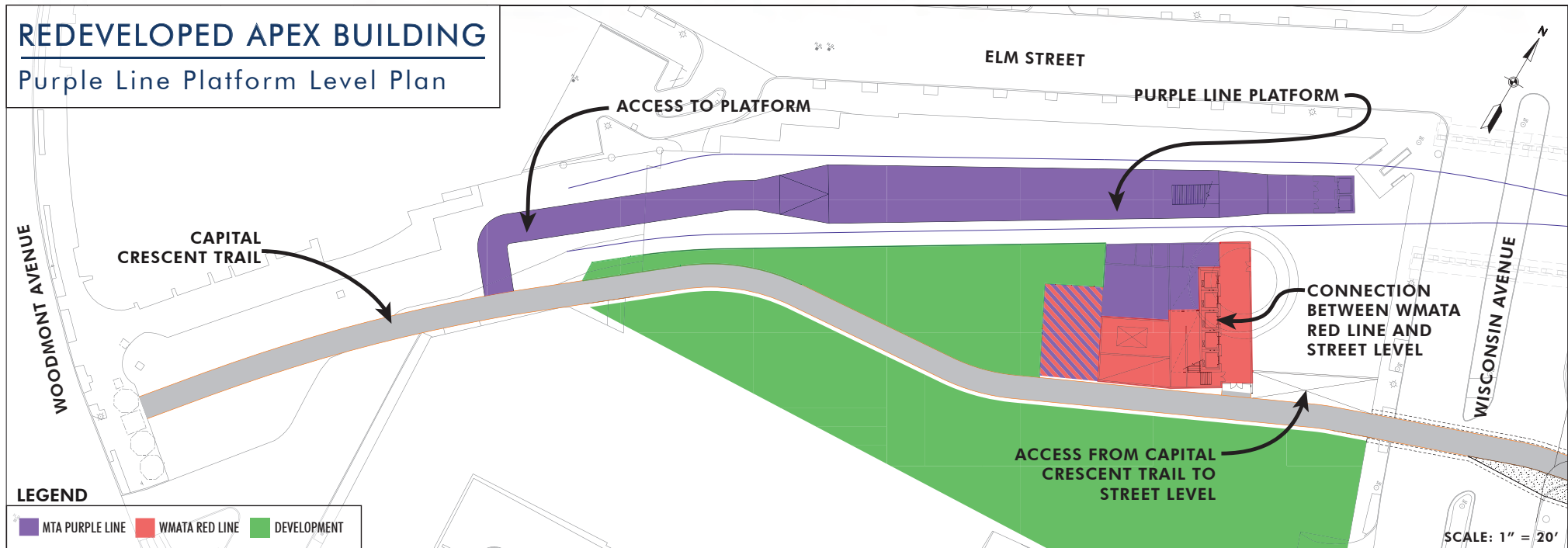
## REDEVELOPED APEX BUILDING

### Wisconsin Avenue Level Plan



## REDEVELOPED APEX BUILDING

### Purple Line Platform Level Plan



The alternative design significantly improves the quality of the service provided by the station:

- the Purple Line platform would be larger and, without interrupting columns, would provide more room for riders and trains;
- the Purple Line station platform would be straight, eliminating gaps between the train and the platform;
- the Red Line Metro south entrance would be located within the new building with access to high-speed elevators directly from the street;
- CCT users would have a choice to cross Wisconsin Avenue either in a new tunnel or at street level;
- the 90' ventilation tower would be incorporated into a new building and the over-run tracks can be significantly shortened, leaving more of Woodmont Plaza available for public enjoyment;
- the station can accommodate space for full-service bike storage (i.e., a "bike station").

This alternative design moves well beyond an adequate solution to provide a high quality transit experience that will be attractive, highly functional, and able to serve Bethesda now and in the future.

## **Realizing the Vision**

### *Land Use and Zoning*

To encourage redevelopment of the Apex Building to allow for the realization of a superior multi-modal transit station and a new tunnel for the CCT, the Plan recommends significant additional density on the Apex building site. The Plan recommends rezoning the Apex site from CBD-2 (FAR 5.0, max. height 143') to CR 8.0, C 7.5, R 7.5, H 250.

This added density and building height are consistent with those recommended in the 1994 *Bethesda CBD Sector Plan* for the area around the north entrance of the Red Line Metro Station, under the CBD-3 zone (FAR 8.0, max. height 200'). The Plan recommends a maximum building height of 250' to allow greater flexibility in accommodating on the Apex site the numerous program elements of the improved station and trail described above. Alternatively, if the site redevelops after construction of the default station design, the Plan recommends a maximum height of only 200'.

The CR zone provides both a standard and an optional method of development. The standard method limits overall density to a 0.5 FAR, while the optional method creates incentives to provide public benefits, thereby qualifying for additional density. Public benefits provided under the optional method are drawn from seven categories outlined in the Zoning Ordinance. The top priority public benefits for this Plan area are the provision of space on the Apex Building site necessary for planning, construction, and operation of the "major public facilities" of the improved transit station and the CCT tunnel. This does not preclude consideration of other benefits, as listed in the CR Zone, to achieve the maximum permitted FAR. All public benefits requested by the developer will be analyzed to make sure they are the most suitable for the Plan area, that they are consistent with the Plan's vision, and that they satisfy the

changing needs of the area over time. For example, if the Apex Building site is redeveloped after construction of the default station design, to achieve the maximum FAR the requested public benefits would need to be significant and commensurate with the major public facilities recommended above.

The configuration of the Apex site and its relationship to the transit station and existing development on the block may limit the amount of density that can be accommodated on the site. The increase in density recommended in the Plan is thus further intended to encourage joint redevelopment with abutting properties on the block, and properties confronting the Apex Building site across Elm Street and Wisconsin Avenue. Under a joint redevelopment scenario, allowable density from multiple sites within one redevelopment project can be combined and redistributed among the sites, as long as the height limitations of the zones are not exceeded. Coordinated redevelopment that looks at the Plan Area as a whole will take maximum advantage of these unique circumstances, resulting in a better and more efficient design, with more inviting open space connections and a better mix of activating uses that is more economical to build. To facilitate this joint redevelopment, the Plan recommends rezoning the remaining properties on the block from CBD-2 to CR 5.0, C 5.0, R 5.0, H145, or to the equivalent zoning approved under the pending Zoning Code Rewrite, whichever is greater.

A key component of redeveloping the station site will be the station entrances, at the corner of Wisconsin Avenue and Elm Street, and in Woodmont Plaza, at the intersection of Bethesda and Woodmont Avenues. These spaces serve not only as critical access points to the transit station, but also as gateways to Downtown Bethesda. These spaces should be functional, welcoming, and activated by retail and entertainment uses and building entrances.

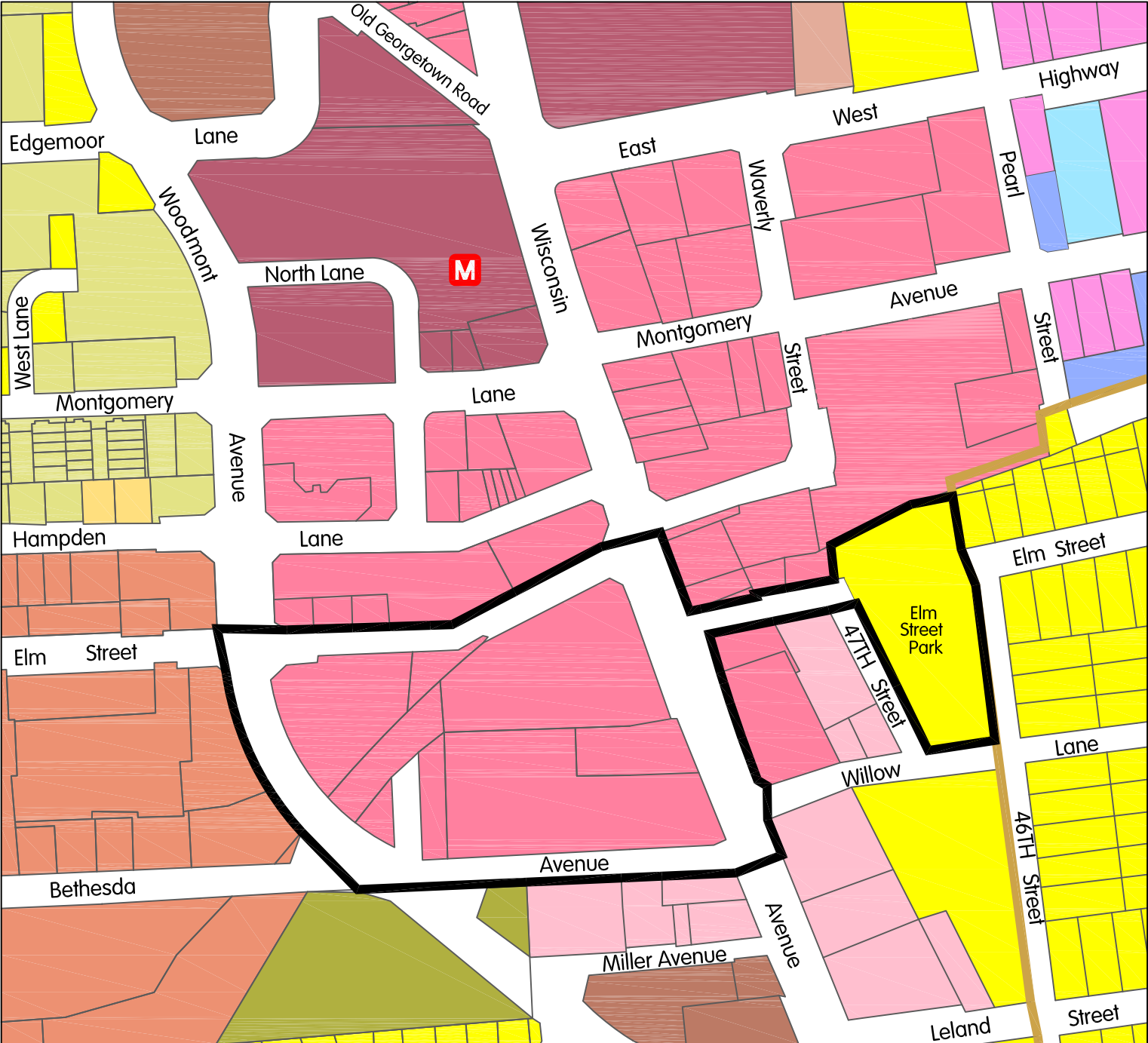
#### *Beyond Land Use and Zoning: Visionary Partners*

The Planning Department hired Bolan Smart Associates to review the public and private costs of realizing the alternative station designs within the 2015 timeframe set by MTA. Their analysis, which is included in the appendix, shows that, from the perspective of the owner of the Apex building, the increased economic value of additional density on the Apex site is largely offset by the significant cost associated with relocating the existing tenants, including the building owner and an established, though aging, movie theatre, and the additional private costs related to construction of the Purple Line station. Although additional zoning may incentivize redevelopment, additional measures, beyond those available to the Planning Board, are necessary to help guarantee redevelopment on MTA's timetable.

Planning staff has worked closely with the Montgomery County Department of Economic Development (DED) and others to explore additional tools to incentivize redevelopment. Beyond or in concert with joint redevelopment of the block, these include financing based on significant anticipated increases in property taxes, as well as participation of the public-private partnership ("P3") that MTA is exploring for the construction and operation of the Purple Line. This Plan supports those efforts.



# Existing Zoning



BPLS Plan Boundary

Bethesda CBD Plan Boundary

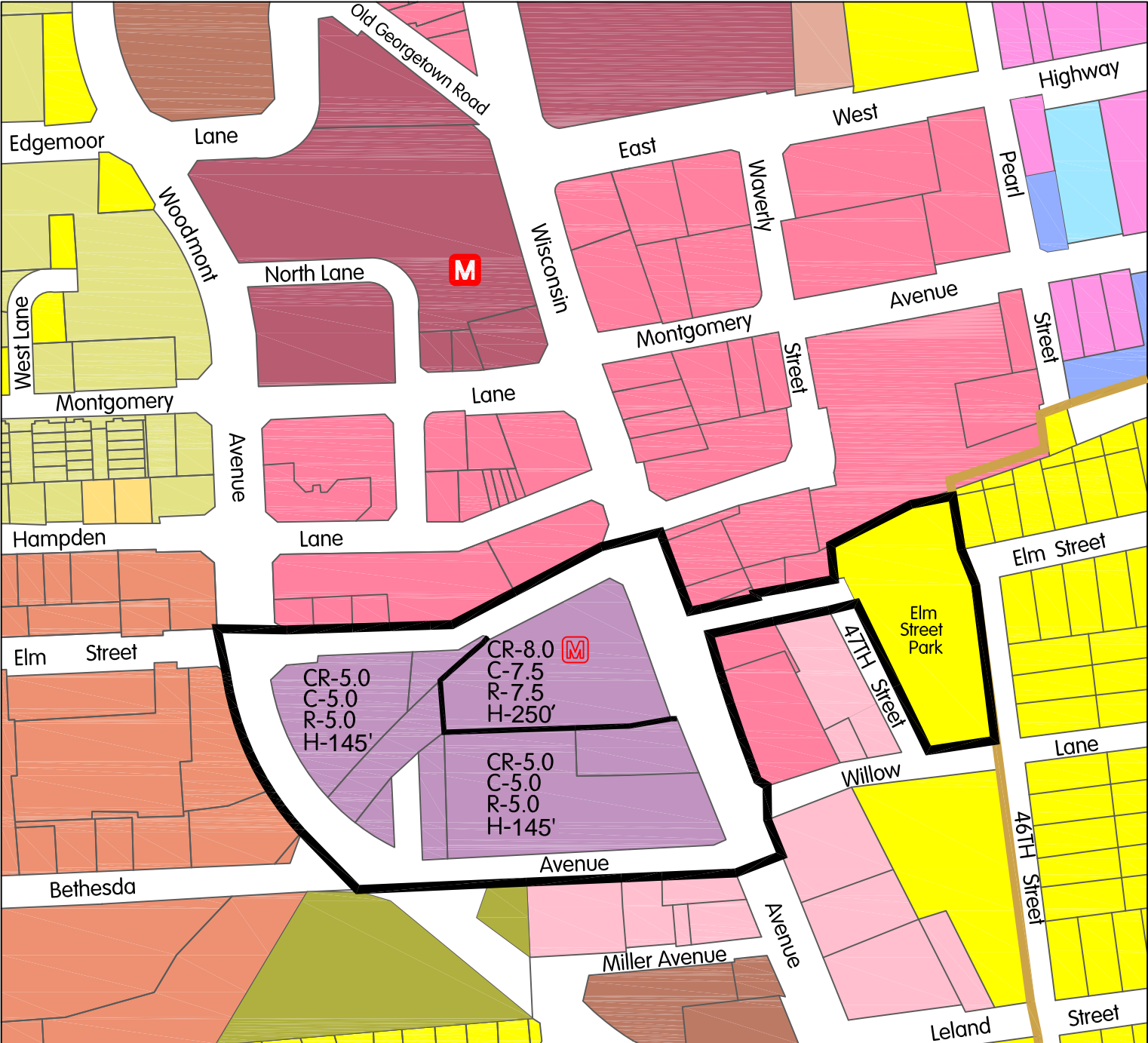
M














Metro Station

<div></div> CBD-1	<div></div> C-2	<div></div> TS-M
<div></div> CBD-2	<div></div> C-O	<div></div> TS-R
<div></div> CBD-3	<div></div> C-T	<div></div> O-M
<div></div> CBD-R1	<div></div> R-10	
<div></div> CBD-R2	<div></div> R-60	



# Proposed Zoning



- |  |                            |   |                                       |
|--|----------------------------|---|---------------------------------------|
|  | BPLS Plan Boundary         |    | Metro Station                         |
|  | Bethesda CBD Plan Boundary |    | Proposed Metro Station South Entrance |
|  | CBD-1                      |    | C-2                                   |
|  | CBD-2                      |    | C-O                                   |
|  | CBD-3                      |    | C-T                                   |
|  | CBD-R1                     |    | R-10                                  |
|  | CBD-R2                     |    | R-60                                  |
|  |                            |  | TS-M                                  |
|  |                            |  | TS-R                                  |
|  |                            |  | O-M                                   |
|  |                            |  | CR                                    |

## **Making the Connections: Transit and Bikeway Recommendations**

### *Transit Station*

The Plan makes station area recommendations under two scenarios, depending on whether the Apex Building is demolished before or after construction of the Purple Line.

#### The Apex building is demolished before Purple Line construction

If the Apex Building is demolished before the Purple Line is constructed, for MTA's concept design the Plan recommends the following:

- the property owner provide easements on the Purple Line platform level and Wisconsin Avenue level to accommodate the station;
- station platforms located under a future building on the Apex site;
- station and tracks on a straight alignment;
- stairs providing pedestrian and bicycle connections between Wisconsin Avenue and the Purple Line platform ;
- high-speed elevators for a new south entrance to the Bethesda Red Line Metro station that provide a pedestrian and bicycle connection to Wisconsin Avenue and the Purple Line platform;
- a travel time study and a pedestrian level of service study for Red Line passengers to determine whether the elevators stop at Wisconsin Avenue and / or the Purple Line level;
- a walkway providing a pedestrian and bicycle connection to Woodmont Avenue via Woodmont Plaza;
- over-run tracks extending west from the station platform into the Woodmont Plaza for not more than 30 feet from the tunnel's western end;
- incorporating ventilation equipment into the new building;
- a minimum 10,000 sf. space reserved for a full-service bicycle storage facility located adjacent to the CCT tunnel route, the Purple Line platform, and the Red Line entrance. At a minimum, this facility should offer a range of bicycle parking options (e.g., short v. long term; minimum security v. higher security), shower and changing facilities, and bicycle repair.

#### The Apex building is demolished after Purple Line construction

If the Apex Building is demolished after the Purple Line is constructed, for MTA's concept design the Plan recommends the following:

- the property owner provide easements on the Purple Line platform level and Wisconsin Avenue level to accommodate the station;
- station platforms under the Apex Building;
- station and tracks on a curved alignment;
- stairs for pedestrian connection between Elm Street and the Purple Line platform;
- high-speed elevators for a new south entrance to the Bethesda Red Line Metro station that provide a pedestrian and bicycle connection between Elm Street, the Purple Line platform, and the Red Line mezzanine;
- a walkway providing a pedestrian and bicycle connection to Woodmont Avenue via Woodmont Plaza ;



- a pedestrian connection in the existing tunnel east to the CCT via a 5-7'-wide sidewalk on the north side of the tracks;
- over-run tracks extending west from the station platform into Woodmont Plaza for not more than 100 feet from the tunnel's western end;
- ventilation equipment to be incorporated into a redeveloped Federal Realty site or in Woodmont Plaza;
- a minimum 10,000 sf. space reserved for a full-service bicycle storage facility located adjacent to the CCT tunnel route, the Purple Line platform, and the Red Line entrance. At a minimum, this facility should offer a range of bicycle parking options (e.g., short v. long term; minimum security v. higher security), shower and changing facilities, and bicycle repair.

### *Capital Crescent Trail*

The CCT is a master-planned shared use path that runs through Bethesda and is proposed to connect to the Silver Spring Transit Center. Between Elm Street Park and Woodmont Avenue the trail branches into a tunnel route under Wisconsin Avenue and a surface route that crosses Wisconsin Avenue at grade. The two branches converge at the intersection of Woodmont Avenue and Bethesda Avenue, and the trail continues to Georgetown via an existing, hard-surface park trail. Early CCT plans showed the CCT sharing a tunnel with the Purple Line. In 2012, the County Council decided not to proceed with the tunnel as then envisioned, because of cost and liability issues associated with having the trail and the Purple Line in the same tunnel under the Apex Building. This meant that all trail users would have to use a surface route.

An alternative design of the Purple Line station that includes redevelopment of the Apex Building would result in a wider space under the building, with room for the CCT in its own tunnel as well as on local streets. However, the Plan recommends this route under any redevelopment of the Apex Building site, whether with the improved or the default station design. The Plan encourages flexibility in the alignment of the CCT route through the Apex Building property to facilitate coordination of building, station, and trail elements.

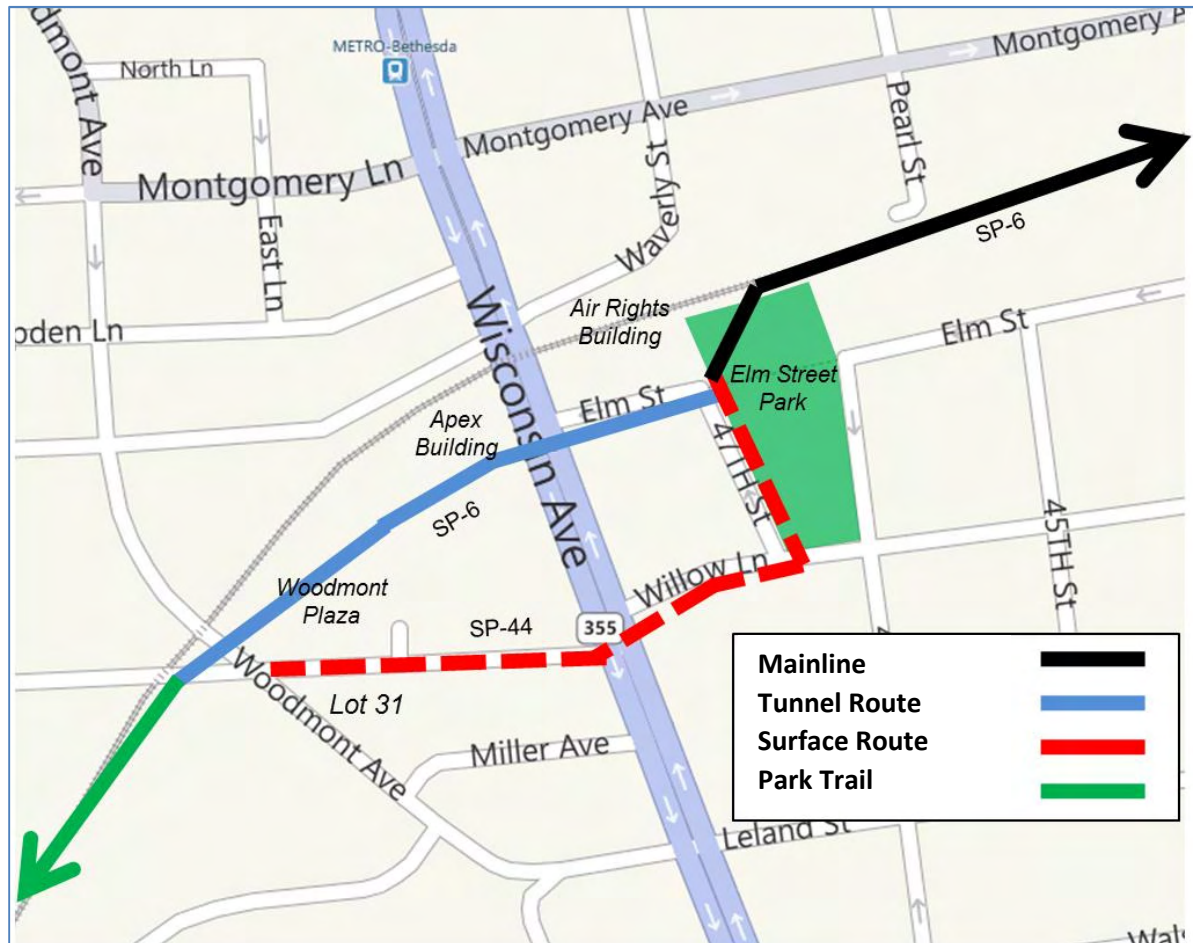
The Plan recommendations segment the CCT into the Mainline, Tunnel Route, and Surface Route. The Plan recommends construction of the mainline and the surface and tunnel routes to function as complementary transportation choices to serve a variety of needs. Each segment is described below.

### Capital Crescent Trail Mainline

In the Plan area, the CCT mainline (SP-6) runs from the northern edge of Elm Street Park (just south of the Purple Line) southwest to the intersection of Elm Street and 47<sup>th</sup> Street, where it branches into the Tunnel Route and the Surface Route. The Plan recommends as key features of the CCT mainline within the Plan area:

- a smooth transition into Elm Street Park, avoiding sharp turns;
- a trail 11' wide with 2' shoulders through the northern portion of Elm Street Park, subject to grading analysis;

- an identifiable junction with the Tunnel Route and Surface Route in Elm Street Park at the corner of Elm Street and 47<sup>th</sup> Street;
- stormwater management and grading impacts associated with the CCT and/or Purple Line improvements within Elm Street Park to be included as part of the overall Purple Line stormwater management plan and designed so as not to reduce the useable area of the park available for existing and planned recreational facilities.



*Capital Crescent Trail Route Segments*

#### Capital Crescent Trail Tunnel Route

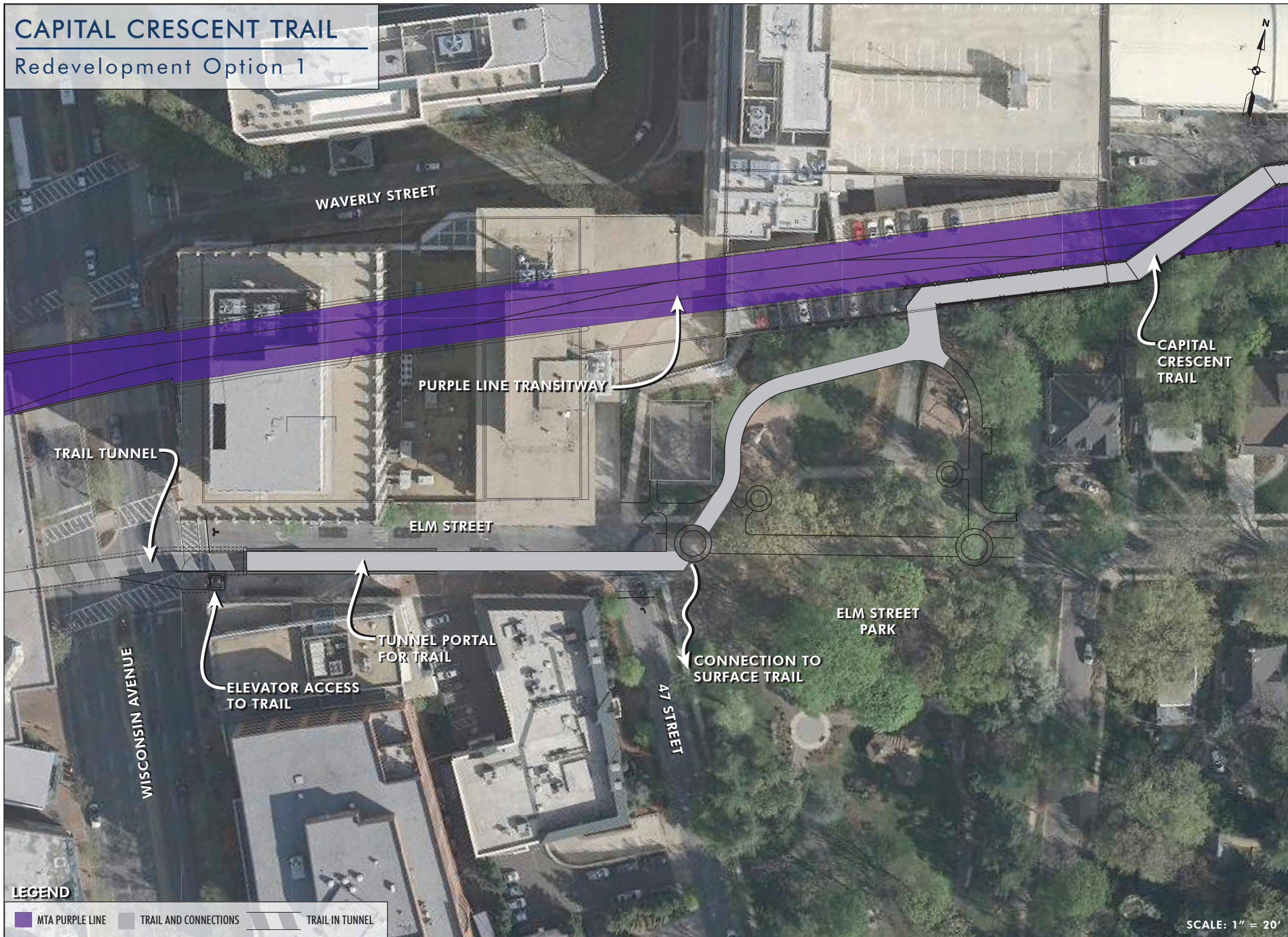
The CCT Tunnel Route (SP-6) would run from the intersection of Elm Street and 47<sup>th</sup> Street to Woodmont Avenue in a new tunnel beneath Wisconsin Avenue. The Plan recommends as key features of the Tunnel Route:

- a marked at-grade crossing of 47<sup>th</sup> Street that prioritizes trail users, with physical identifiers (such as a raised crosswalk) conveying a transition zone;
- a minimum 15'-wide trail on the south side of Elm Street between 47<sup>th</sup> Street and Wisconsin Avenue with ADA-compliant transitions from street level to tunnel level;
- a new tunnel (minimum 10' vertical clearance and 16' width) under Wisconsin Avenue south of the Purple Line station ;



# CAPITAL CRESCENT TRAIL

## Redevelopment Option 1





- a trail between Wisconsin Avenue and Woodmont Plaza (minimum 14' vertical clearance and 16' width) that limits conflicts with non-trail users and is visible from other areas of the station by non-trail users. As stated above, the Plan encourages flexibility in the alignment of the CCT route through the Apex Building property to facilitate coordination of building, station, and trail elements.

To encourage ease of use, the Plan recommends that the Tunnel not exceed a 5 percent slope, to the greatest extent practicable. The recommended tunnel concept is constrained at its eastern portal by a driveway serving 4610 Elm Street, potentially resulting in an 8 percent slope where the tunnel comes to grade. In order to be fully compliant with the Americans with Disabilities Act (ADA), this slope may require an elevator at the southeast corner of Wisconsin Avenue and Elm Street to service the tunnel. To avoid this, the Plan recommends either closing or relocating the 4610 Elm Street driveway, which the County should explore with the property owner.

#### Capital Crescent Trail Surface Route

The CCT Surface Route (SP-44) would run from the intersection of Elm Street and 47<sup>th</sup> Street to Woodmont Avenue, crossing Wisconsin Avenue at grade. The Plan recommends as key features of the Surface Route:

- a trail along the west side of Elm Street Park that consists of an 11' shared-use path separated from 47<sup>th</sup> Street by a 5' buffer, to be located within the 47<sup>th</sup> Street right-of-way and/or Elm Street Park;
- a trail along the south side of Willow Lane that includes an 11'-wide two-way cycle track<sup>1</sup> for bicyclists and a sidewalk for pedestrians;
- a safer and more convenient protected crossing at the intersection of Wisconsin Avenue, Willow Lane, and Bethesda Avenue;
- a trail along the north side of Bethesda Avenue that includes an 11'-wide two-way cycle track for bicyclists and a minimum 10'-wide sidewalk for pedestrians;
- consolidated driveways on the north side of Bethesda Avenue to minimize conflicts between trail users and vehicles using driveways;
- sufficient queuing space for trails users and non-trail users at all intersections.

#### *Improving the User Experience*

The branding of the tunnel and surface routes for the CCT should be consistent with the mainline trail between Bethesda and Silver Spring, including lighting, signage, surface treatments, furniture, and pavement markings. As a segment of the trail where usage is expected to be the highest, continuous lighting on the trail is a priority. Lighting spillover into

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<sup>1</sup> Cycle tracks include the following characteristics:

- maintain horizontal separation with a buffer between the sidewalk and cycle track and a minimum 3 foot buffer between the cycle track and street;
- maintain vertical separation between cycle track, roadway, and pedestrian space; and
- maintain visual continuity and be differentiated from the pedestrian space by utilizing an asphalt surface along with a unique paver or concrete treatment, or by utilizing a green marking.

adjacent homes should be minimized by installing fixtures that prevent the light from rising above the level of the fixture and from extending beyond the desired area.

#### *Issues to be addressed in Future Plans*

##### Bethesda CBD Sector Plan Update

- CCT crossing of Woodmont Avenue and Bethesda Avenue intersection;
- transfers between the Purple Line and bus routes that currently stop only at the bus loop at the current Bethesda Metro station.

#### **Outreach**

Within the limited timeframe afforded by MTA's schedule, staff has sought to engage the public in the development of the staff draft recommendations. Staff maintains a dedicated Plan website ([www.montgomeryplanning.org/bethesdapurpleline](http://www.montgomeryplanning.org/bethesdapurpleline)) updated with new information, including MTA's latest plans, and an opportunity to leave comments. Staff regularly updates interested parties via e-mail and more on twitter (@bethesdaPlanner, #bethesdapurpleline). The Plan has also received a fair amount of media coverage.

In early September, staff held a series of well-publicized Open House meetings at the Bethesda Chevy Chase Regional Services Center. Attended by 50-75 people, the meetings provided face-to-face opportunities for the public, media, and elected officials to see the new design alternatives, ask questions, and share thoughts.

The comments received from our outreach efforts indicate strong support for both the improved Purple Line station design, including the larger platform and the potential for long-term bike storage, and the new CCT tunnel. Safety and security were also of particular concern for the Purple Line Station, the CCT tunnel, and the CCT surface route, specifically:

- the length and curve of the tunnel;
- the slope of the tunnel as it comes back to street level;
- the tunnel will be safer than the surface route;
- the surface route should be designed for safety and marked clearly;
- lighting and security within the tunnel.

Other comments indicated the interest in an upgraded movie theatre, increased building height on this site and the CBD in general, pedestrian access to the Purple Line Station from the east, and consideration for future upgrade to heavy rail.

Analysis of the costs of redevelopment and of the CCT tunnel options was not complete by the time of the Open Houses and was therefore not presented. It is included in the appendices to this Plan.





Planning Board Draft

December 2013



# Bethesda



*Purple Line Station Plan*

Minor Master Plan Amendment



M-NCPPC

Montgomery County Planning Department

[montgomeryplanning.org](http://montgomeryplanning.org)



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