

Greenbelt City Council  
Work Session

WMATA Trail Extension

Monday, September 18, 2017  
8:00 PM

Council Room

## Memorandum

**TO:** Nicole Ard, City Manager  
**FROM:** Jessica Bellah, Community Planner  
**VIA:** Terri Hruby, Acting Director Planning and Community Development  
**DATE:** September 12, 2017  
**RE:** Progress Meeting - WMATA Trail Connection

### Background

For several years the City has been working to design a hiker/biker trail between the residential community known as Greenbelt Station (often referred to as the South Core) and the Greenbelt Metro Station (referred to as the North Core). The purpose of the trail is to provide an interim direct connection between the Metro Station and the South Core community since the timeline for development of the North Core area is not known. Given environmental constraints and the topography of the area, a large section of the trail must be constructed on land owned by WMATA. A legal agreement between WMATA and the City must be reached regarding the operation and maintenance of the trail and its design is subject to WMATA review and approval.

For the past two years, the trail project experienced significant delay related to renewed development efforts of the North Core in association with the FBI Headquarters relocation. Ultimately the GSA's procurement process was cancelled in spring 2017 and WMATA agreed to move forward with their review of the interim trail project. The development timeline for the North Core is again unknown; however, a developer could begin construction on the approved infrastructure site plan with relatively short notice. Development of the North Core would impact the interim trail route.

In May, WMATA's Office of Joint Development and Adjacent Construction provided preliminary consolidated comments on the submitted design plans and a draft proposed legal agreement. Staff has been working internally with the South Core developers and our legal counsel to respond to these comments and the draft connection agreement. This memo contains a summary of those comments and outlines next steps for this project.

### Design Comments and Major Issues

Some of WMATA's comments relating to the trail's design are relatively minor and can be incorporated into the final design with some additional cost. Satisfying other comments requires larger changes that significantly increase the project's scope of work and future maintenance commitment of the City. Discussion of the major issues is outlined below:

## A. Traffic Signal

WMATA is requiring the installation of a pedestrian actuated traffic signal at the access road crossing. It is their belief that this signal is necessary to warn/stop traffic and that the traffic signal must include dedicated camera surveillance. Whether a signal is warranted is normally determined by an engineering study conducted by a qualified traffic engineer. A prior traffic engineering study considered the speed, volume, and conditions of the access road and did not find that a traffic signal was warranted. Traffic signals are expensive to design, install, and maintain. Improper or unjustified placement of traffic control signals can actually reduce the safety for vehicles and pedestrians, increasing certain types of accidents such as rear-end collisions.

Staff agrees with WMATA's technical review staff that a robust crossing with early warning signage is needed at the access road, but strongly disagrees that a traffic signal is necessary. It is staff's opinion that there are alternatives to a traffic control signal that would both provide a safer and a more efficient crossing point. Staff believes installation of a solar powered Rectangular Rapid Flash Beacon (RRFB), such as the one installed on Crescent Road at St. Hughs, would be more effective and more appropriate for the interim trail connection. According to the Federal Highway Administration a RRFB can produce greater driver yield rates than traditional methods partly because of the novelty and unique nature of the stutter flash used. They also are shown to be very effective for multilane crossings like the access road. Staff further recommends that a raised top crosswalk would provide a physical protection for trail users, more so than a traffic signal would be able to provide.

These ideas were verbally raised with WMATA staff during preliminary meetings; however, WMATA staff remains insistent that a traffic signal is necessary. This item is the greatest barrier to moving forward with the project from a financial, a design, and maintenance perspective.

## B. Alignment shift

Based on site meetings with WMATA, the trail alignment will be shifted west prior to crossing the northern access road. This is necessary to meet ADA grade requirements at the crossing point and address sightline concerns. Additional cost will be incurred for the greater trail length and additional required grading.

This shift also requires construction of sidewalk or trail within the existing WMATA parking facilities. WMATA has indicated that the sidewalk/trail could be located in existing grassy medians and that an underutilized bus bay could be retrofitted with a ramp for route access.

## C. Electrical Power Source

WMATA has indicated that the trail's power source must be supplied from a separate service utility line. Preliminary meetings with Pepco indicate that a separate power line would need to be supplied from south of the trail prior to the Narragansett Run crossing where it would

transition to a private line. The line would need to span ~2,200 ft. from the connection point to the requested traffic signal. Staff is working with Woodlawn toward developing a more detailed cost and scope estimate for this item but it requires greater finalization of the design plans.

#### D. Engineering

Additional professional service work is needed to respond to WMATA's technical questions and develop new engineered plans. This includes development of a storm water management concept plan, a sediment control plan, a tree conservation plan, creation of profile and cross sections, grading and drainage plans, electrical and lighting site plan with photometrics, and updates to existing plans in response to WMATA comments and questions. New studies are required to address comments and alignment changes including additional surveying as well as a traffic control and traffic signal warrant study. Environmental reviews will need to be undertaken by County and State agencies before a permit level plan can be developed.

#### E. Cost

Staff has been working with Woodlawn Development to update the trail's cost estimate in response to WMATA comments. The current cost estimate is incomplete and cannot be calculated until we are able to finalize the design plans more.

At this time, the current project estimate is approximately \$1.2 million. Based on the language and exhibits of the Development Agreement, Woodlawn Development is obligated to provide \$516,000 toward funding the trail. Additional funding to cover increased costs of the project is required.

#### F. Maintenance Responsibility

Throughout WMATA's comments and the draft connection agreement, WMATA states that the City would be responsible for maintaining all aspects of the project, including access roadway striping, snow removal, lighting, CCTV, emergency phones, landscaping, etc. The wording of WMATA's comments indicates that this responsibility would be for the entire length of the new trail, potentially including retrofitted areas of the existing developed WMATA parking area. Staff recommends that City maintenance responsibility should not extend past the point where the trail connects to the WMATA access road.

Additional discussion between staff and WMATA review staff is needed to clarify and reach agreement on maintenance responsibilities and maintenance boundaries of the project. Staff's understanding is that the connection agreement is the mechanism to establish maintenance responsibilities, however, the language of the connection agreement lends itself toward having a more final design plan in place.

## Connection Agreement

WMATA provided a draft connection agreement which has been reviewed by staff and the City's legal counsel. Staff is preparing a response with requested revisions. However, since the connection agreement refers to a specific set of plans, which plans have not been prepared or finalized, it is not prudent to accept responsibility for certain construction, operation and maintenance responsibilities at this time, as the City does not know the full extent of the obligations to which it would be agreeing. It is necessary to keep working toward a feasible trail design at the same time as we negotiate the agreement.

The current version of the agreement generally provides for a long term license of the trail with an initial twenty (20) year term and two ten (10) year renewal options. Based on staff's research, this is very typical of agreements reached between municipalities, counties and WMATA on similar trail projects. The City usually prefers to establish easements for permanent trails to protect the financial investment made by the City and ensure a long term benefit is gained. Because of the nature of this agreement being for an **interim** trail, the possibility for North Core area development in ways we can only imagine, and the existing agreements between WMATA and their joint development partners, the connection agreement crafted for this trail has to contend with several possible development scenarios which need to be outlined in the agreement.

More work and discussion between the City and WMATA is needed.

## Steps Forward and Alternatives

WMATA has expressed that it will continue working with the City to discuss the trail design and the connection agreement, despite the fact that working from an evolving site plan is outside of their typical process. To proceed with the project in its current form, staff has outlined the following next steps and timeline:

- 1) Provide edited draft connection agreement to WMATA staff for review – September 29, 2017
- 2) Provide responses to WMATA's preliminary design comments – September 29, 2017
- 3) Request meeting with WMATA staff to discuss major issues and continue negotiations toward agreement on a mutually acceptable trail design and connection agreement – Fall 2017
- 4) Identify additional funding source for:
  - a. Professional Services – TBD
  - b. Construction – TBD

One of the major factors that the City must consider is that if/when the North Core is developed, almost 80% of the trail connection would have to be demolished and reconstructed on a different alignment during construction of the North Core project. That makes the financial

investment in requirements like the traffic signal and other utilities a significant hurdle for justifying the cost of a potentially short-term trail connection.

Staff believes there are two possible alternative scenarios to improving the transportation link between the Greenbelt Metro Station and the South Core community.

#### A. Reduce Trail Scope

Re-designating and redesigning the trail as a non-commuter daylight connection could reduce the significant financial investment associated with providing electrical service for lights, cameras, call-boxes, and the requested traffic signal. Given the interim nature of the trail, these features have a high cost burden relative to a potentially short-term benefit.

WMATA would need to agree to a trail connection without these features.

#### B. Explore Alternative Transportation Routes

It may be that the fiscal and design constraints of the WMATA trail project are such that a feasible interim transportation connection on this route is not justifiable as a potentially short-term amenity.

In an alternative scenario, the City could focus on making improvements to the existing Indian Creek Trail to serve as the main transportation commuter route. While it is clear that at ~1.68 miles in length, the Indian Creek Trail route does not provide the same access the ~0.8 mile WMATA Trail route would provide, it could serve as a feasible alternative route for bicycle connectivity. In order to serve the pedestrian population, the City could work aggressively toward the implementation of sidewalks on the western side of Cherrywood Lane. This would open the door for expanding bus stop locations near the Cherrywood Lane trail head and expanding transit access to the community.

Particular improvements to be explored for the Indian Creek Trail include the incorporation of lighting to support commuter traffic hours and concentration on implementing Cherrywood Lane's western sidewalk.

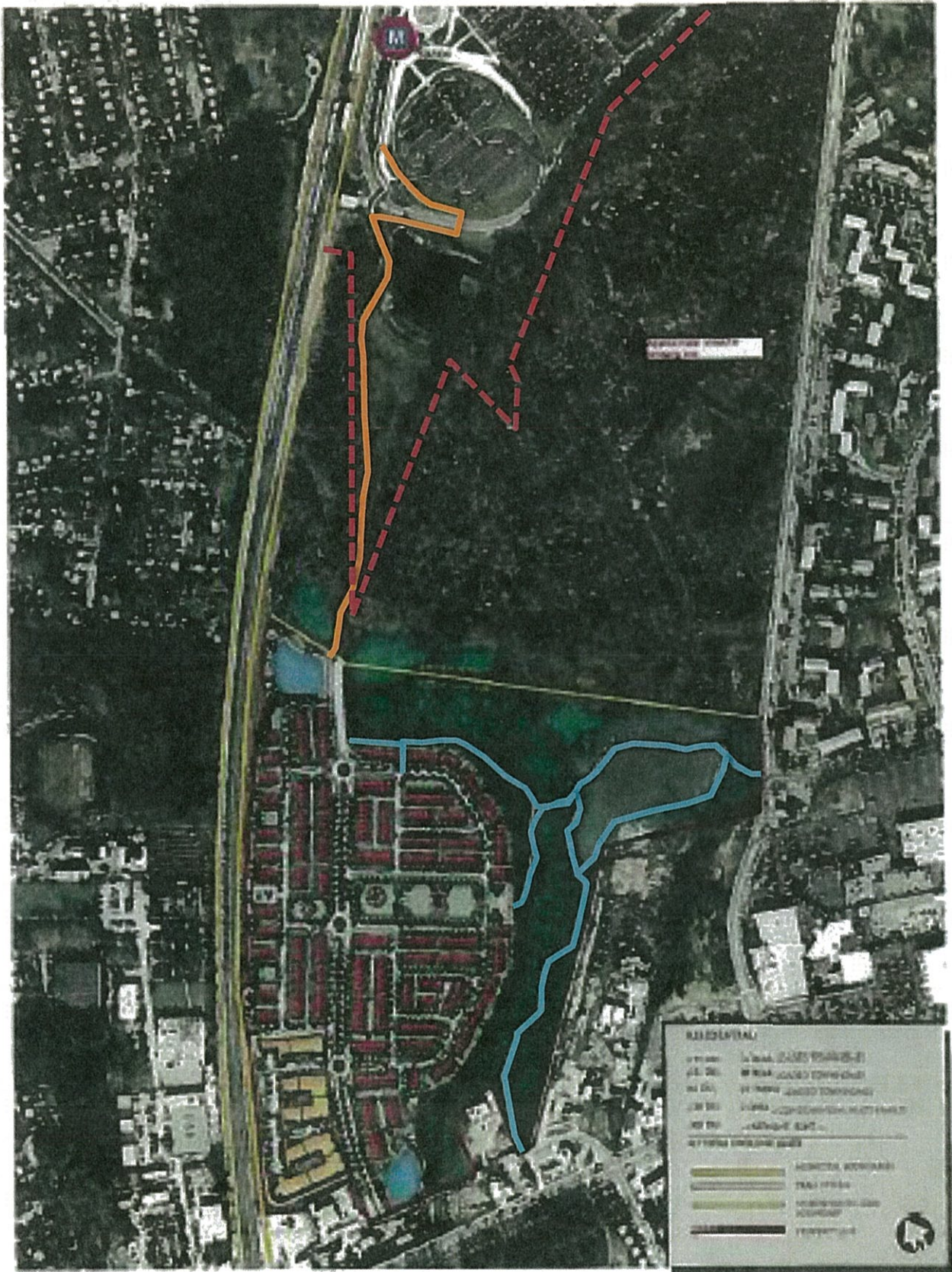
## Summarized WMATA Trail Design Comments and Draft Response

WMATA Comment	Recommended City Response	Estimated Additional Cost
<u>Professional Services</u>		
<ul style="list-style-type: none"> <li>Respond to technical questions, resubmit with plan edits, and submit new plans. Includes field work and geotechnical</li> </ul>	<ul style="list-style-type: none"> <li>Reach agreement on major issues prior to re-engineering fine grade details were able, North Core developer can provide results from their geotechnical work. Additional work as needed.</li> </ul>	\$ 87,250
<ul style="list-style-type: none"> <li>Provide full traffic signal</li> </ul>	<ul style="list-style-type: none"> <li>Traffic Study should include evaluation of alternatives to the traffic signal. Request WMATA visit St. Hughs site and consider proposed alternative solutions.</li> </ul>	\$ 19,500
<u>Boardwalk</u>		
<ul style="list-style-type: none"> <li>Alter boardwalk rail design for ADA wheelchair compliance</li> </ul>	<ul style="list-style-type: none"> <li>Acknowledged</li> </ul>	\$ 8,600
<ul style="list-style-type: none"> <li>Several technical questions regarding design and use</li> </ul>	<ul style="list-style-type: none"> <li>Boardwalk is not designed for vehicular use and path will be restricted to pedestrian and bicycle access only, except that emergency vehicles may enter from northern trail entrance.</li> </ul>	Upgrade to accommodate vehicles \$210,000 - \$250,000
<u>Trail Realignment</u>		
<ul style="list-style-type: none"> <li>Relocate access road crossing away from Traction Power Sub-Station. Locate new crossing closer to SWM pond for improved grades and sight distances. Provide fence barrier on length of access road. Trail may connect to underutilized bus bay.</li> </ul>	<ul style="list-style-type: none"> <li>Acknowledged                             <ul style="list-style-type: none"> <li>Additional grading and materials required.</li> <li>Design requires retrofit of existing WMATA facilities and additional trail length. (requires agreement on maintenance responsibility)</li> </ul> </li> </ul>	\$62,000  TBD
<ul style="list-style-type: none"> <li>Build trail crossings as underground passage per North Core development plans</li> </ul>	<ul style="list-style-type: none"> <li>It is not possible to build to North Core development plans under current development scenario and environmental constraints.</li> </ul>	
<u>Environmental Review</u>		
<ul style="list-style-type: none"> <li>Submit approved SWM plan with MDE and County agency review comments</li> </ul>	<ul style="list-style-type: none"> <li>Reach agreement on major issues prior to developing new plans and seeking comments. New Environmental Site Design Rules will affect requirements.</li> </ul>	TBD

<p><u>Traffic Signal and Electrical</u></p> <ul style="list-style-type: none"> <li>• Provide full traffic signal and warrant analyses that includes existing and future pedestrian and traffic projections, placement and phase sequencing</li> <li>• Install dedicated surveillance camera</li> </ul>	<ul style="list-style-type: none"> <li>• Requires warrant study. City contend that study should consider alternative proposed by City. Clarification is needed on whose projections are to be used for traffic analysis.</li> </ul> <p>Details of power requirements and maintenance TBD.</p> <ul style="list-style-type: none"> <li>• Details of camera systems TBD</li> </ul>	<p>\$ 85,000</p> <p>TBD</p> <p>TBD</p>
<p><u>Misc. Comments</u></p> <ul style="list-style-type: none"> <li>• Install way finding and contact signage, trash receptacle</li> <li>• Build to WMATA standards</li> <li>• Coordination and plan review contingent on execution of connection agreement, agreement on maintenance and operation, and commitment to fund WMATA staff costs for review.</li> <li>• Recommendation that Memorandum of Understanding be developed to identify all involved parties, funding sources, impacts on pending projects, maintenance responsibilities specifically the traffic signal</li> </ul>	<ul style="list-style-type: none"> <li>• Acknowledged – maintenance requirement need to be evaluated</li> <li>• Staff recommends that portions of trail under City maintenance obligation be built to City standards. Retrofitted WMATA facilities to be built to WMATA standards as provided by WMATA.</li> <li>• Connection agreement references specific plans, therefore plans must be further developed prior to execution of connection agreement. More information is required regarding review fees and incurred costs. The City requests continued discussion of trail plan design concurrent to connection agreement negotiation.</li> <li>• MOU development will add additional time to project but may better establish mutually agreeable process and timeline for moving forward with project. City to request meeting with WMATA personnel to discuss this item and establish process.</li> </ul>	<p>\$7,000</p> <p>TBD</p> <p>Real Estate Permit \$3,500</p> <p>Additional Fees TBD</p>







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NOT TO SCALE

# Bike/Pedestrian Connection Routes

**Legend**

- Indian Creek Trail Route
- WMATA Trail Route

~ 0.8 Miles

~ 1.68 Miles

Google Earth

2000 ft

