



Washington Metropolitan Area Transit Authority

***Approval of WMATA
Compact Public Hearing
and Release of Public
Hearing Staff Report for
Proposed Environmental
Assessments and
Refinements to the
Dulles Corridor Rapid
Transit Project***



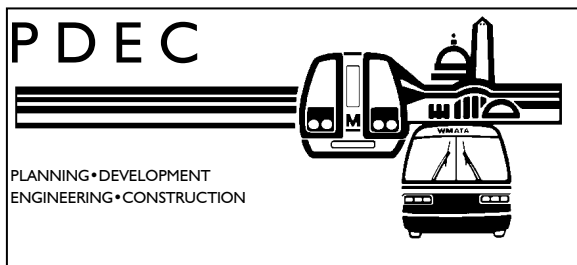
Presented to the Board of Directors:

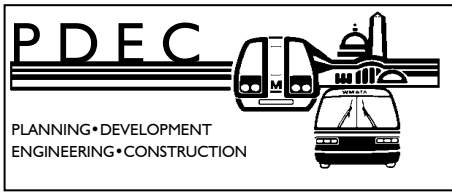
Planning & Development Committee

by

The Office of Construction

January 5, 2006

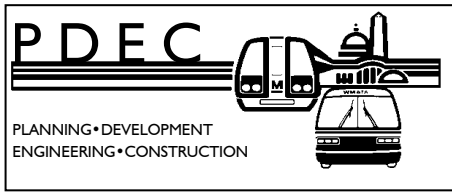




I. Purpose

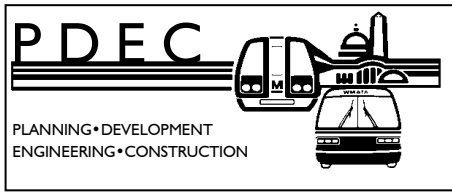
At the request of Virginia Department of Rail & Public Transportation (DRPT), obtain the concurrence of the Planning & Development Committee and recommend to the Board of Directors approval of the following actions:

1. Authority to conduct a Public Hearing on several proposed refinements to the design and General Plans (GP) for the Wiehle Avenue Extension,
2. Authorize the GM/CEO to release the Environmental Assessment (EA) when ready, and
3. Authorize the GM/CEO to release the Public Hearing Staff Report for EA refinements to the General Plans, when available.



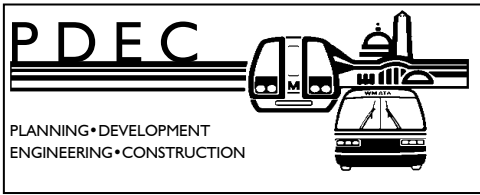
II. Background

- September 16, 2004: Board of Directors approved the Locally Preferred Alternative (LPA) alignment, Final GP and Environmental Impact Statement (EIS), for acceptance of the project into the Adopted Regional System (ARS), subject to seven conditions.
- June 24, 2005: DTP submitted a capital cost estimate developed from a 50% PE design effort. The estimate was 20% higher than the project budget.
- August 10, 2005: A revised DTP capital cost estimate was submitted. The revised estimate was predicated on PE refinements (design deviations) and GP revisions. The estimate represented a 27% decrease in the previous estimate. Forty PE refinements and GP revisions have been identified.



II. Background (continued)

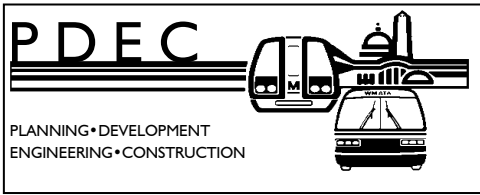
- August 12, 2005: FTA FY '07 New Starts update included these caveats:
 - The PE refinements (design deviations) will require final WMATA approval as required by DRPT and DTP Agreement and the WMATA Board of Directors, if needed.
 - The Financial Plan submitted for WMATA elements must be updated to reflect the revised project.
 - WMATA's willingness to consider the PE refinements (design deviations) and/or scope changes is conditioned upon:
 - Safety Certification to acceptable safety standards
 - Securing any and all code official approvals



III. Project Overview

DRPT has proposed several refinements to the General Plans, including:

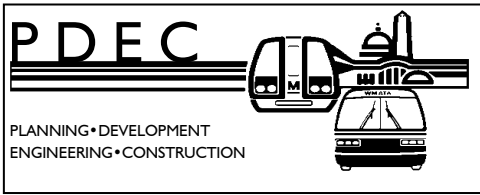
- **Shift alignment to the median of Route 7**
 - Minimize property impacts
 - Shorter and shallower tunnel section
 - Raise Tysons Central 7 station from below ground to at-grade
- **Reconfiguration of Route 7**
 - Service roads replaced with travel lanes
 - Median widened to fit stations and guideway
- **Optimize use of standard track centers**
 - Inbound and Outbound guideways share support columns
 - Replaced pocket track with double crossover



III. Project Overview (cont'd)

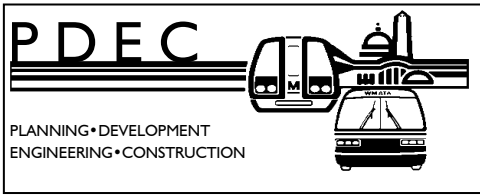
- **Refinements to station designs:**

- Full platform canopy reduced to that required to cover escalators elevators and stairways (approximately ½ coverage),
- Street level entrance elevators reduced to one per entrance, eliminating redundancy,
- Reduced number of escalators at street level entrances,
- Pedestrian bridge widths narrowed from 23 feet to 12 feet.
- At-grade mezzanine instead of aerial mezzanine at Tysons Central 123 Station, and
- Eliminate off-street bus bay, and replace with curb-side bus bays at Tysons West station.



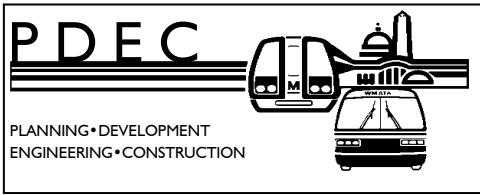
III. Project Overview (cont'd)

- Alternative aerial guideway structures aesthetically different from those used on existing system.
- Reduce traction power system feeder redundancy and reliability.
- Addition of a stormwater management pond at the West Falls Church S&I Yard.
- Eliminate Expansion of West Falls Church Yard S & I Shop Building.



IV. PE Refinements/Deviation Process

- On June 11, 2004 DRPT entered into an agreement with the Dulles Transit Partners, LLC (DTP), a limited liability firm of Bechtel Infrastructure Corp and the Washington Group to perform preliminary engineering services. The agreement provides, among other items, for deviations to the GP and WMATA Design Criteria subject to the following conditions:
 - Being equivalent in safety standards
 - Recognized best industry practice
 - Will not increase operating and life-cycle costs
 - Likely to achieve a reasonable capital cost savings
- DTP is still working to satisfy the four conditions above for approving PE deviations. It is likely that design efforts to satisfy many of the PE deviations will extend into the Final Design Phase of the Project, beyond the EA process. To allow the project to proceed on schedule, WMATA has conditionally approved the PE deviations.



IV. PE Refinements/Deviation Process (continued)

- WMATA has not analyzed the revised project scope for increased operating and life cycle cost. This analysis is contingent upon DTP satisfying the four elements of the Agreement.
- Because the project will be implemented by a design-build contract, the information necessary for final staff recommendation on these design/deviations will not be available until later.



V. Recommendations

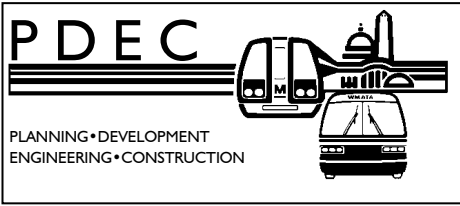
That the Planning & Development Committee recommend Board Authorization for:

1. Authority to conduct a Public Hearing on several proposed refinements to the design for the Wiehle Avenue Extension,
2. Authorize the GM/CEO to release the Environmental Assessment (EA) when ready, and
3. Authorize the GM/CEO to release the Public Hearing Staff Report for EA refinements to the General Plans, when available.



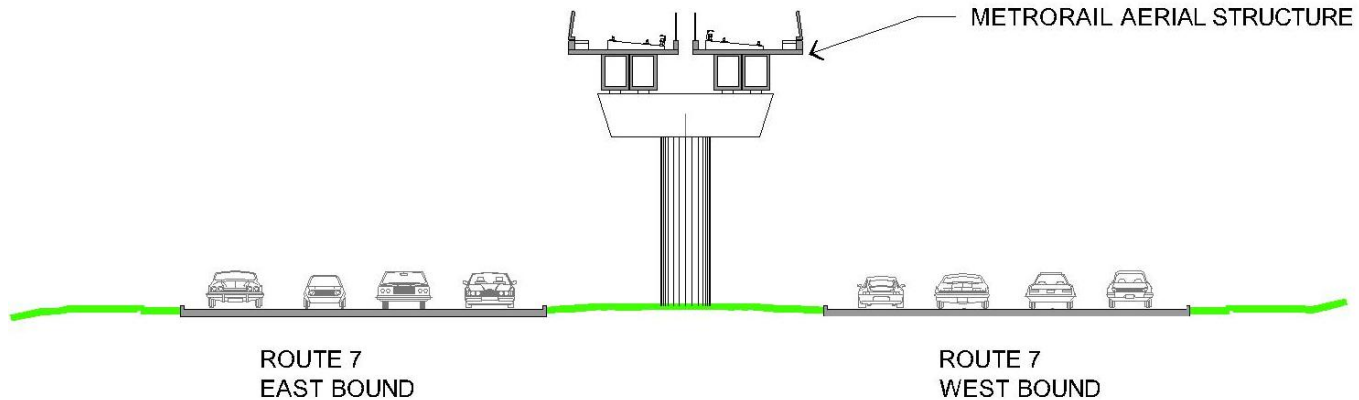
VI. Next Steps

1. Board approval of the recommended authorizations and associated Board Resolution at January 19, 2006 Board Meeting;
2. Release of the Environmental Assessment – February 2006;
3. Public Hearing: March 2006;
4. Release of the Public Hearing Staff Report for EA Refinements to the General Plans for public comment: April/May 2006; and
5. Board approval of Supplemental Public Hearing Staff Report and Staff recommendations: August 2006.

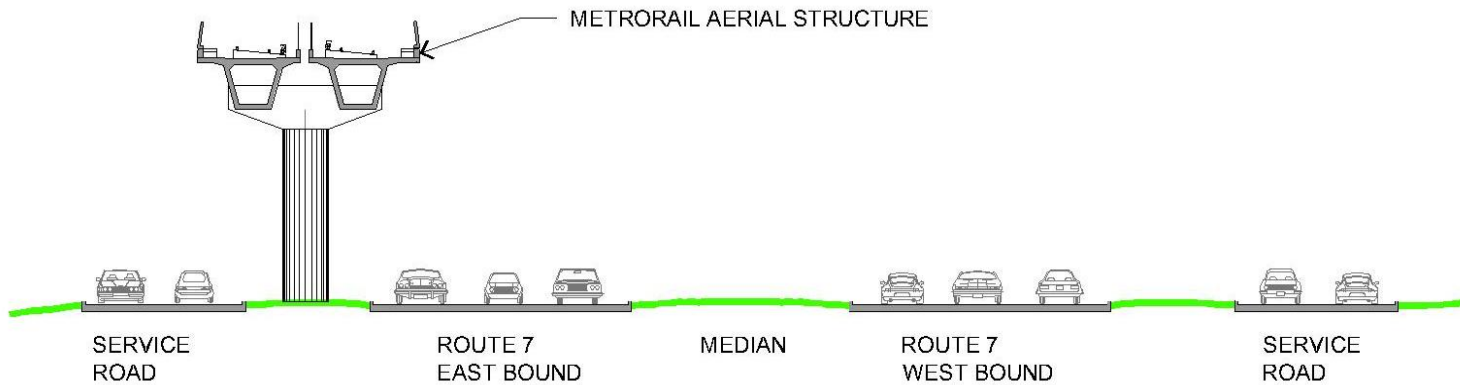


Appendix

Appendix



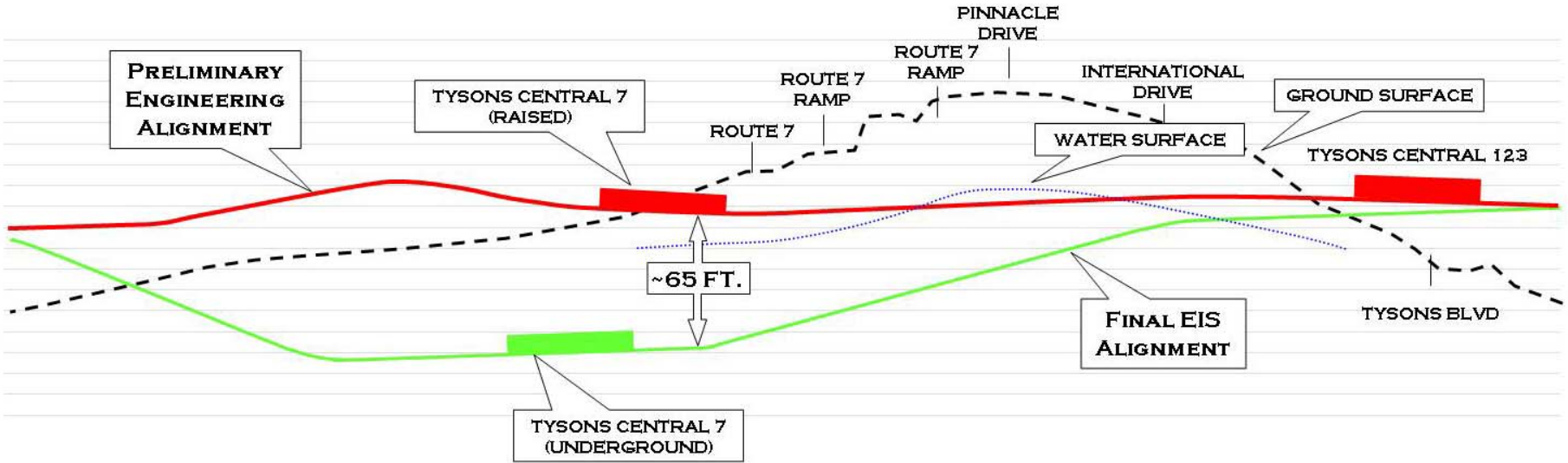
Cross-Section at Route 7 – Preliminary Engineering



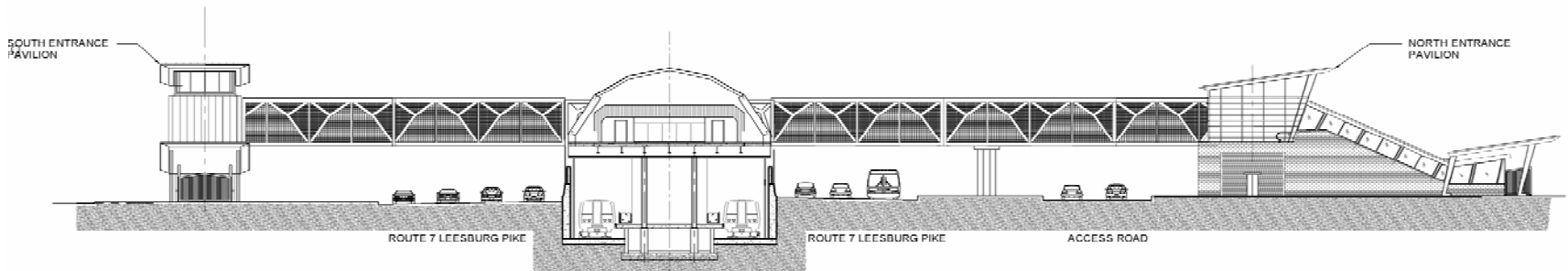
Cross-Section at Route 7 Final EIS

Shift Alignment to Median of Route 7/Reconfiguration of Route 7

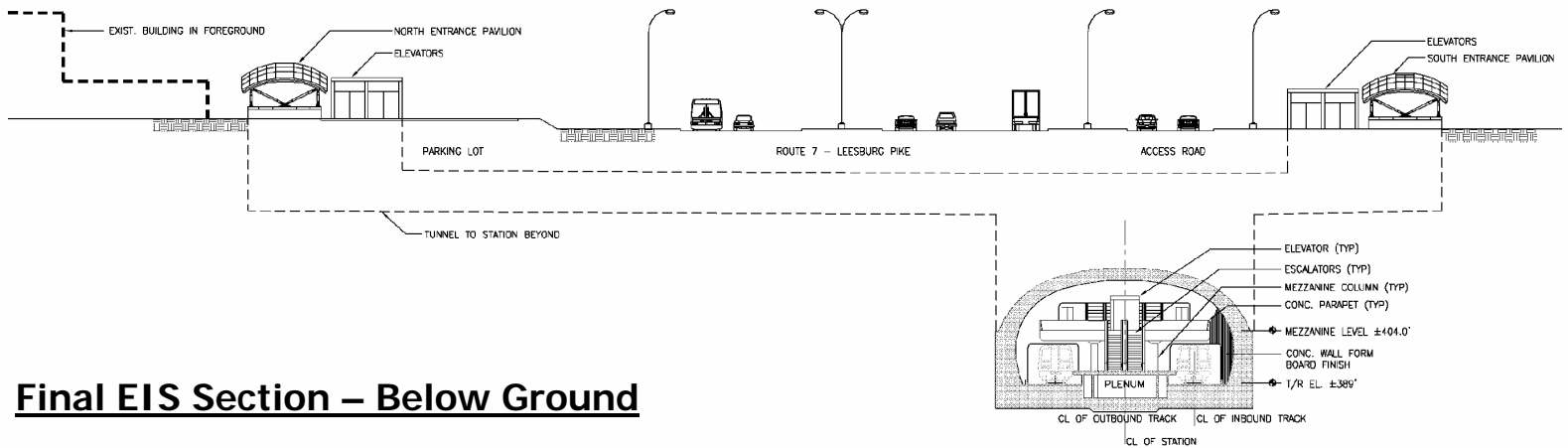
Appendix



Appendix

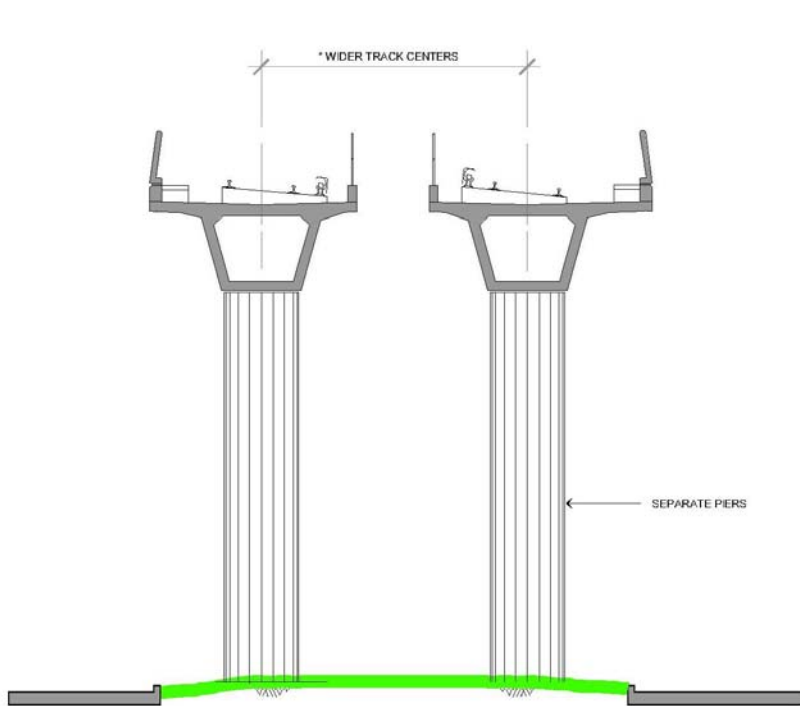


Preliminary Engineering Section – At-Grade



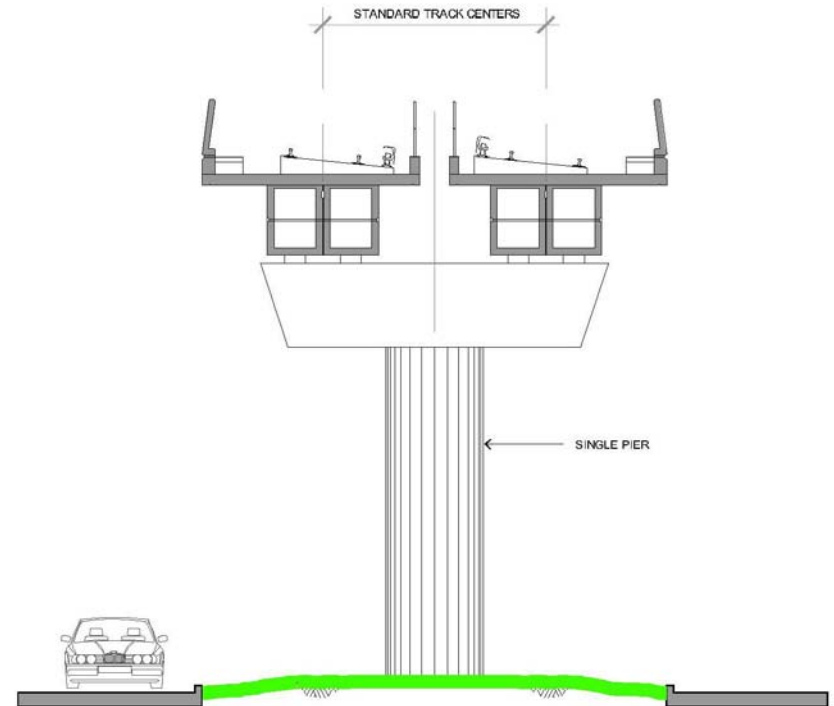
Final EIS Section – Below Ground

Appendix



*Wider centers required in-bound and out-bound of stations, and at pocket tracks

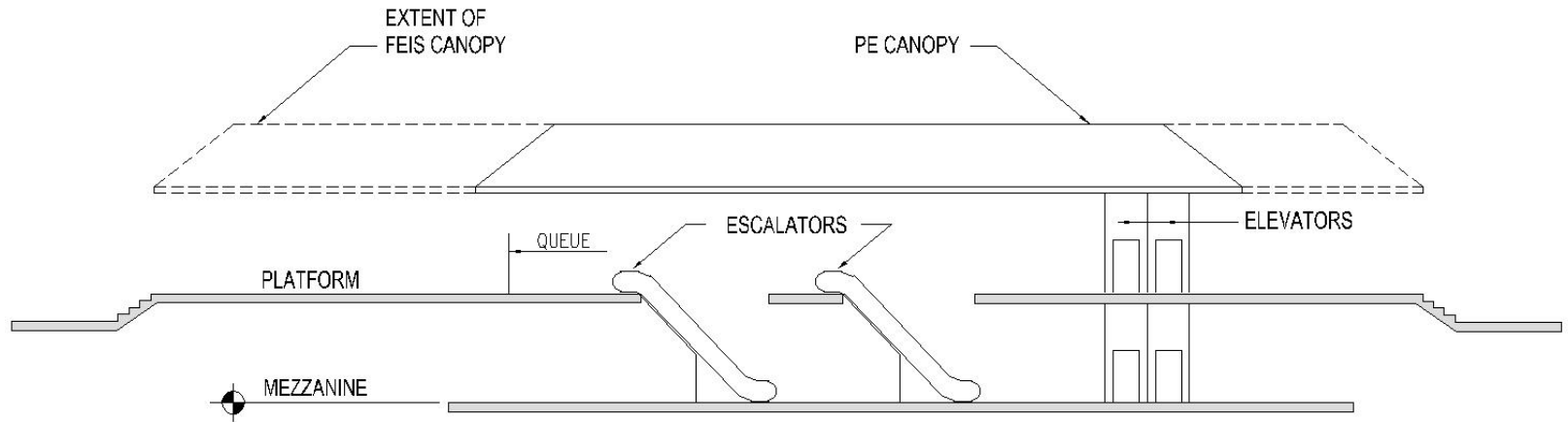
Final EIS Section



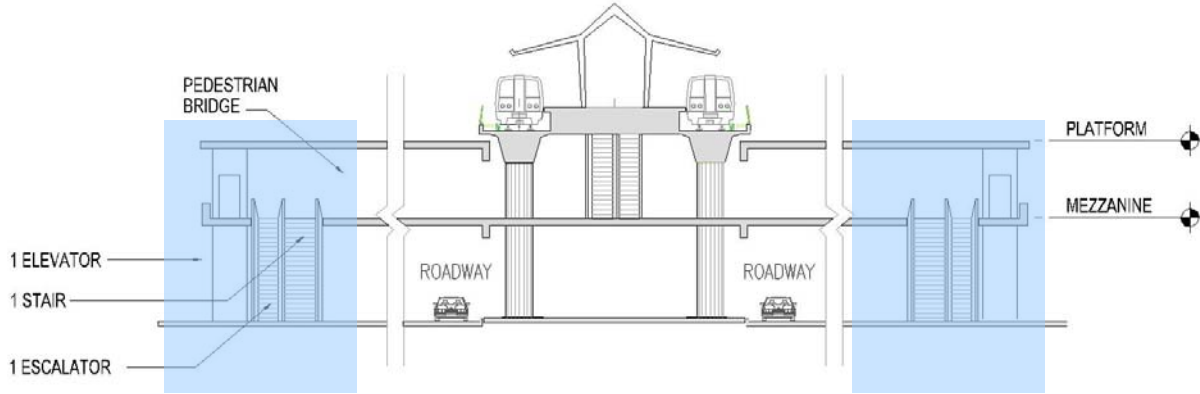
PE Section

Optimize use of Standard Track Centers

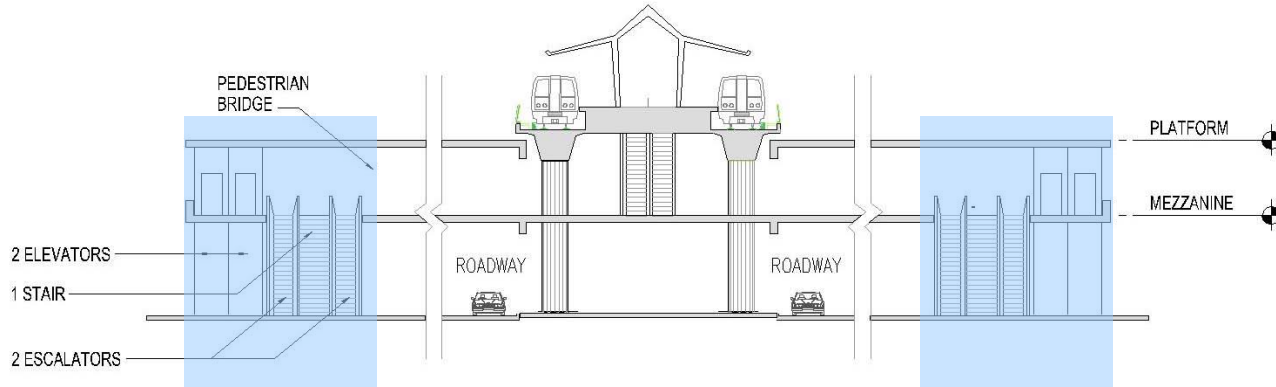
Appendix



Appendix



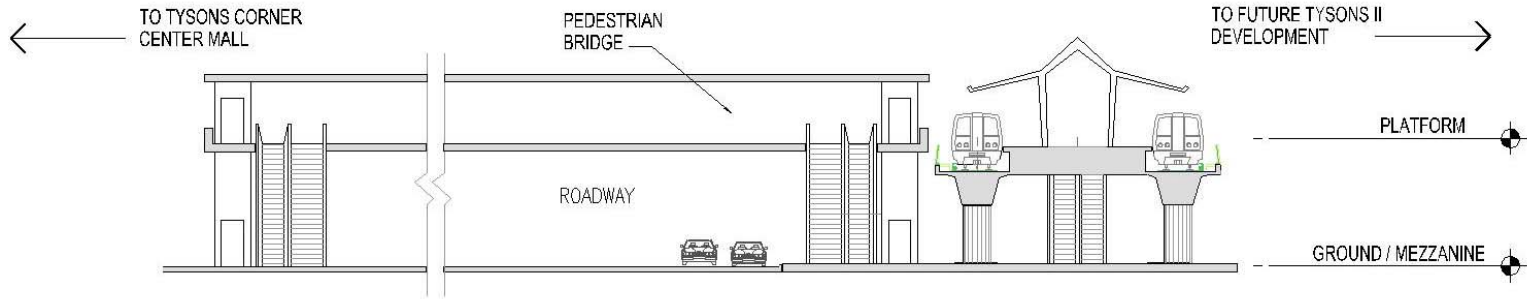
Typical Station Cross-Section – Preliminary Engineering



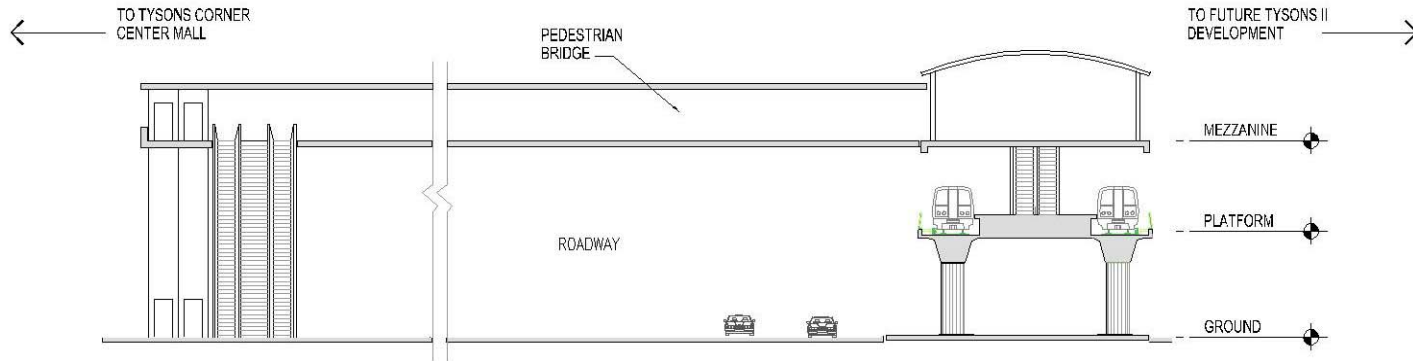
Typical Station Cross-Section – Final EIS

Station Refinements – Elevators and Escalators Reduced

Appendix

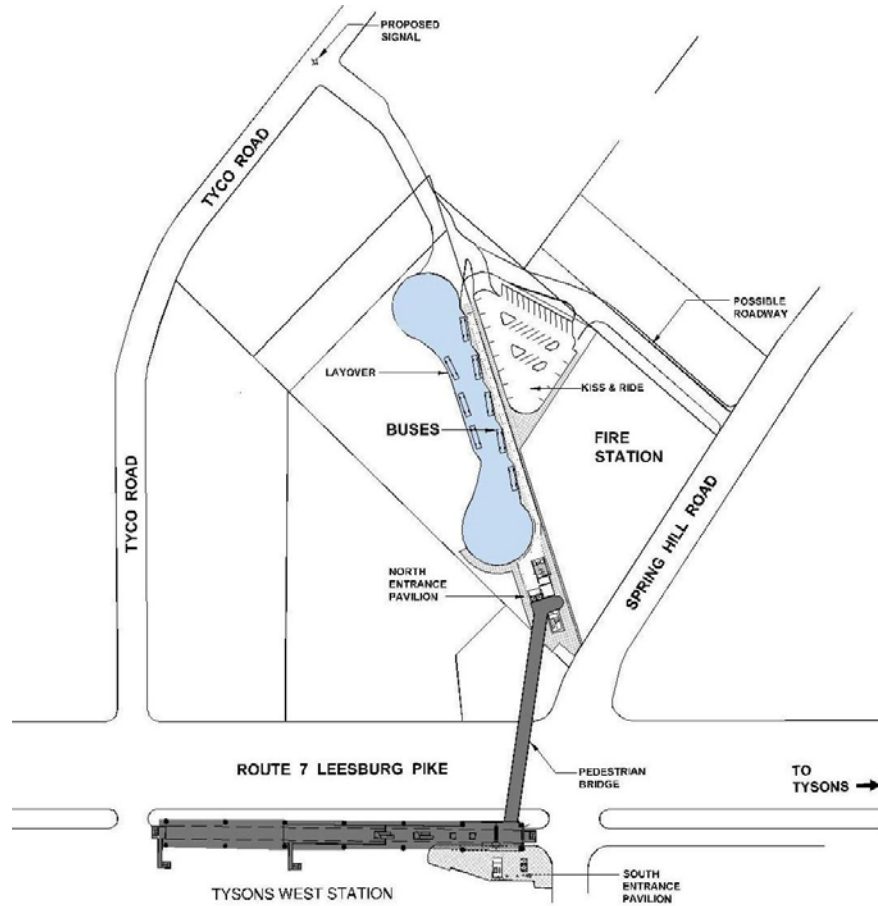


Route 123 Station Cross-Section – Preliminary Engineering

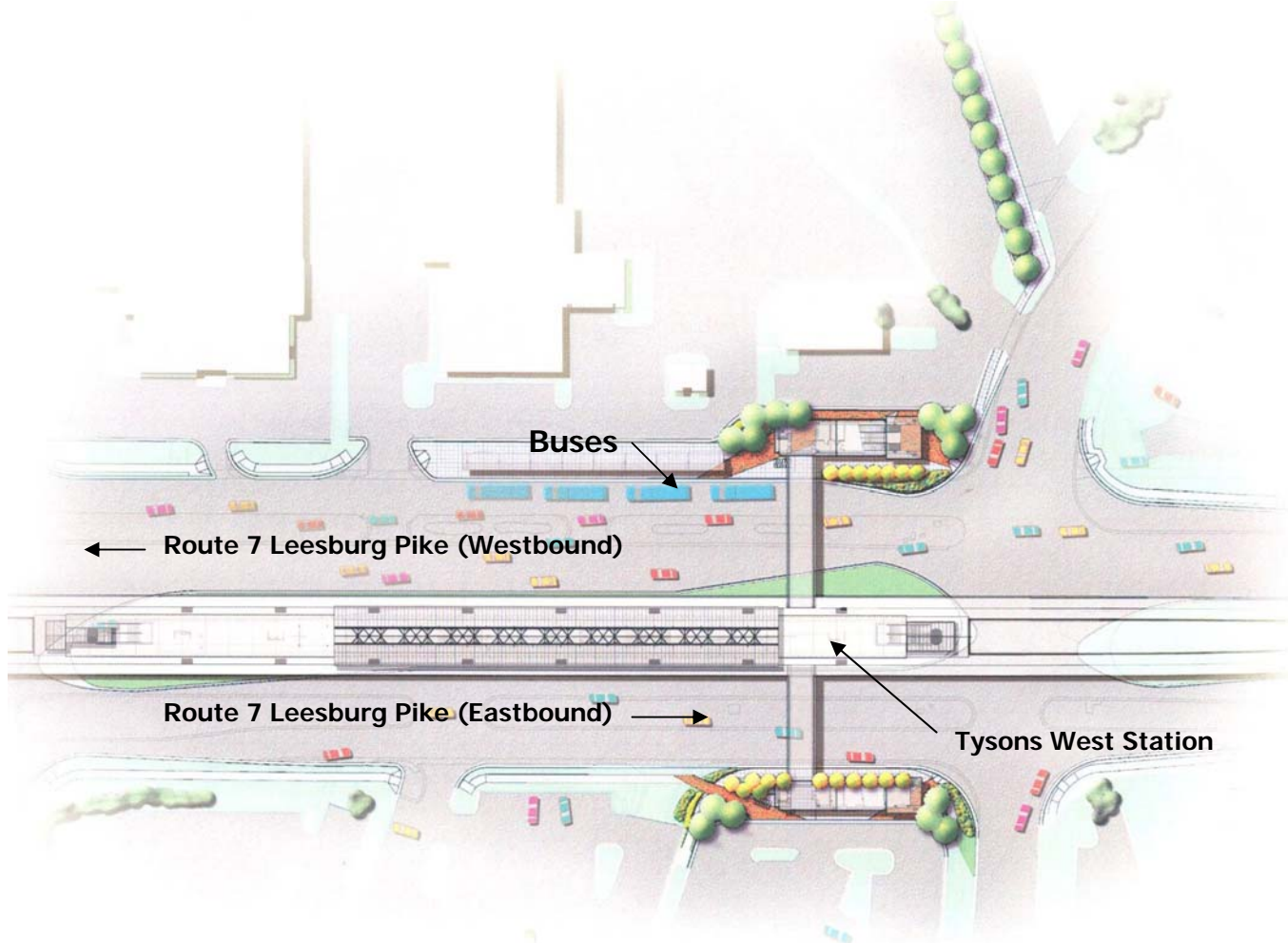


Route 123 Station Cross-Section – Final EIS

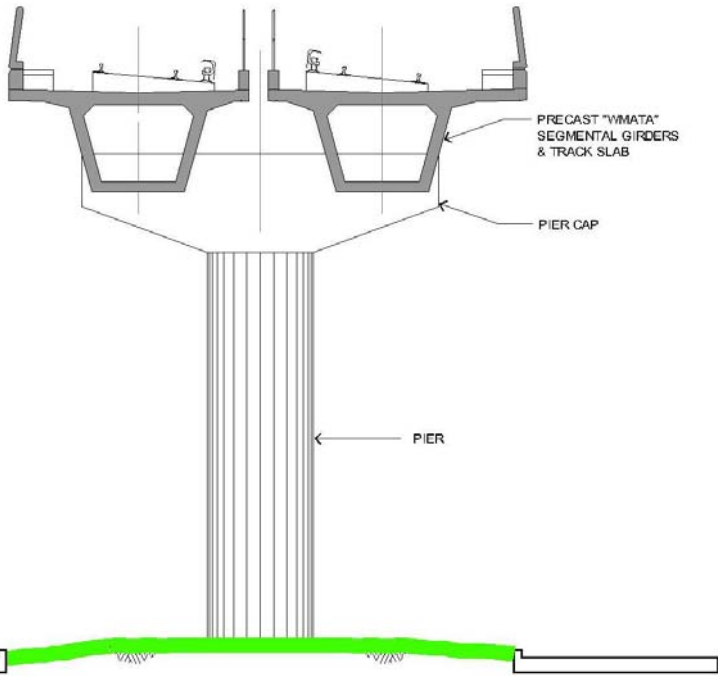
Appendix



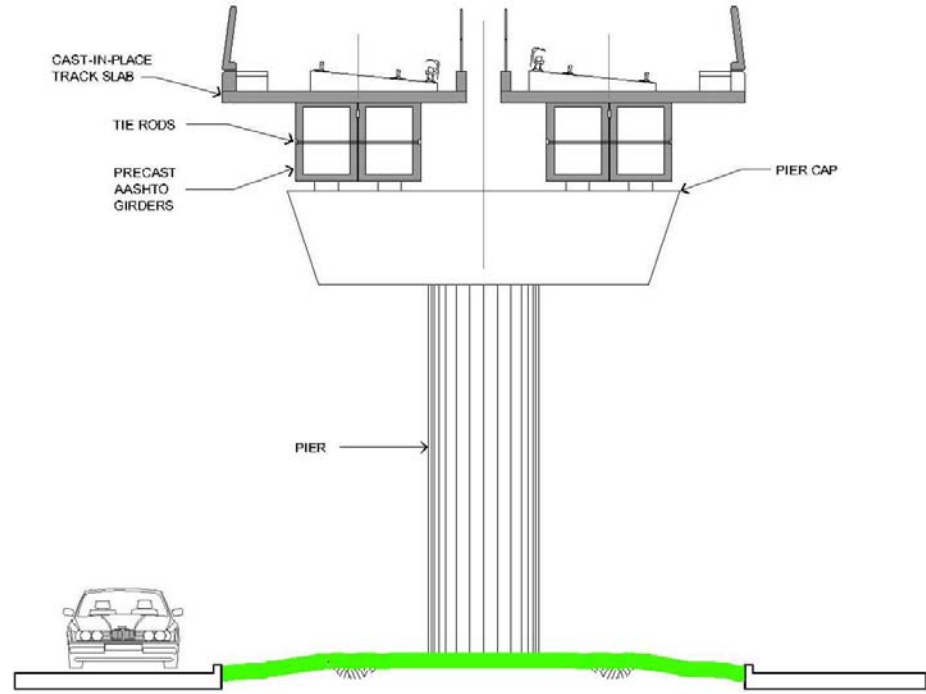
Appendix



Appendix



Section – Final EIS



Section – Preliminary Engineering



(Board Copy)
Washington Metropolitan Area Transit Authority
METRO ELECTRONIC ACTION DOCUMENT

IDENTIFICATION			
MEAD ID:	98907	ACTION:	N/A Transit Service Change
AWARD VALUE:	(Not yet awarded)	CONTRACT: (Proposed)	
FUND SOURCES: (View)	Systems Expansion Program	CONTRACTOR:	
LAST MODIFIED:	12/14/2005		

DESCRIPTION	
SUBJECT:	Dulles Corridor; Public Hearing Authorization for Proposed General Plans Refinements
PURPOSE:	To obtain the concurrence of the Planning and Development Committee and the approval of the Board of Directors, as set forth in the attached resolution, to: 1. Hold a WMATA Compact Public Hearing jointly with the Commonwealth of Virginia on several proposed refinements to the design for the Wiehle Avenue Extension that was approved by the Board of Directors in September 2004, 2. Authorize the General Manager/Chief Executive Officer (GM/CEO) to release the Environmental Assessment, and 3. Authorize the GM/CEO to release the Public Hearing Staff Report for the Environmental Assessment and Proposed Revisions to the General Plans/Modifications to the Adopted Regional System, as soon as the report is available.
TRANSIT SERVICE CHANGE CATEGORIES	

ORIGINATION					
INITIATOR			DEPARTMENTAL APPROVAL		
DANIEL KORZYM on 10/12/2005			Approved by SALPEAS , PANAGIOTIS 10/21/2005		
PHONE:	202-962-	OFFICE:	CONS	DEPT:	Capital Projects Manageme

COORDINATION (ROUTING)		
OFFICE	NAME	ACTION/DATE
(4110)	SALPEAS, PANAGIOTIS	Approved w/ Comments 10/21/2005
CONS (4210)	HAGGINS, JAMES	Approved 10/14/2005
LAND (7310)	MALASKY, GARY	Approved 10/17/2005
OLIA (3131)	HICKS, BEA	Approved 10/21/2005
PRMT (7410)	JACKSON, LUCY	Approved 10/24/2005

FINAL APPROVALS	
OFFICE	NAME/ACTION
PLN DEV CMTE	Approved w/ Comments for by PANAGIOTIS SALPEAS on 10/21/2005
OPER CMTE	Approved w/ Comments for OPAS by JAMES HUGHES on 12/23/2005
BEMR	Approved for. by HAROLD BARTLETT on 12/27/2005
GM	GMGR CEO <i>P. Salpeas</i>
BOARD	BOARD WMATA (Not Yet Approved)



Washington Metropolitan Area Transit Authority
METRO ELECTRONIC ACTION DOCUMENT

NARRATIVE

DISCUSSION:

As preliminary engineering for the Dulles Corridor Metrorail Project has advanced, the Commonwealth of Virginia Department of Rail and Public Transportation (DRPT) has proposed several refinements to the design for the Wiehle Avenue Extension that was approved by the Board of Directors in September 2004. These refinements include:

- 1) A shift of the alignment from the southern edge to the median of Route 7,
- 2) Reconfiguration of Route 7 travel lanes and replacement of service roads with an additional travel lane in each direction,
- 3) Narrower track centers (outside of station areas),
- 4) Simplified station designs,
- 5) Simplified aerial guideway structures and architectural treatments,
- 6) Use of at-grade mezzanines instead of aerial mezzanines at some stations,
- 7) Shorter and shallower tunnel section and shift of portal location on Route 7,
- 8) Alternative design for retaining walls,
- 9) Alternative design for the Tysons Central 7 station,
- 10) Relocation of Tysons West station's bus bays,
- 11) Redesigned traction power system, and
- 12) Revised design for the connection with the existing WMATA Orange Line.

Because these refinements may result in changes to the Project's previously-documented environmental impacts, FTA has asked DRPT to prepare an Environmental Assessment (EA) to evaluate potential environmental impacts associated with the current preliminary engineering design and to ensure compliance with the National Environmental Policy Act of 1969 (NEPA). In preparing the EA, DRTP has requested WMATA's participation and support to ensure applicable WMATA Compact requirements are met.

The Comprehensive Agreement to develop the Dulles Corridor Rapid Transit Project requires that any requested Deviation:

- 1) Is equivalent in safety with the relevant standards or plans and specifications;
- 2) Is recognized as good industry practice for comparable facilities;
- 3) Will not cause any material increase in operating and life-cycle costs for the completed project; and
- 4) Is reasonably likely to achieve the estimated cost impact, including any savings.

At such time as the financial plan for this extension is forwarded to the Board of Directors for approval, in accordance with the provision of Board Resolution 2004-45, it shall include information on any additional costs that may be associated with the final proposed refinements.

DRPT will lead preparation of the EA, conduct community outreach activities, and lead coordination efforts with FTA and other agencies. After the public hearings and associated reviews of its record, a formal NEPA decision on the design refinements will be issued by the FTA.

WMATA would work with DRTP and its consultants regarding all Wiehle Avenue Extension EA-related issues.

The timely completion of the Environmental Assessment and any required WMATA Compact public hearings are critical to maintaining the Project's implementation schedule.

To facilitate timely completion of the review process, the Public Hearing Staff Report should be released for public review as soon as possible. The Supplemental Public Hearing Staff Report Supplement and staff recommendations will be submitted to the Board of Directors for approval when the documents are ready.

ALTERNATIVES:

The Board of Directors may decline to approve a WMATA Compact public hearing. Refinements to the General

Plans may not be incorporated into the final design until a hearing is completed. WMATA will not be able to advance its participation in the project until a public hearing on the refinements is completed.

The Board of Directors may decline to authorize the GM/CEO to adopt the Environmental Assessment. WMATA will not be able to take comments on the document until it is released.

The Board of Directors may decline to authorize the GM/CEO to release the Public Hearing Staff Report. WMATA will not be able to advance the Compact Public Hearing Process until the report is released.

Any of the delays outlined above likely would jeopardize WMATA's participation in the project. The approval and the authorizations described above do not commit WMATA to final participation in the Wiehle Avenue Extension project beyond any commitments already made.

PRIOR APPROVALS:

On August 12, 1999 the Board of Directors authorized the GM/CEO to negotiate and execute an agreement with DRPT for WMATA to provide technical management of the preliminary engineering and the environmental review of the Project (reference Board Resolution 1999-47).

On December 9, 1999 the Board of Directors authorized the GM/CEO to execute and file grant applications for Federal funds for the preliminary engineering and the environmental review of the Project (reference Board Resolution 1999-73).

On April 27, 2000 the Board of Directors approved an amendment to the FY2000 reimbursable budget of three positions and to include in the FY2001 proposed SEP budget the addition of twelve positions to support the Office of Extensions through the preliminary engineering and the environmental review of the Project.

On May 25, 2000 the Board of Directors established a policy on the financing of the capital costs and operation of rail extensions, including new stations, to the 103-mile Adopted Regional System (reference Board Resolution 2000-35).

On July 27, 2000 the Board of Directors authorized the GM/CEO to execute a grant application and a grant agreement for the procurement of buses for service in the Dulles Corridor for Phase II and for the SmartMover program, as requested by the Commonwealth of Virginia (reference Board Resolution 2000-49).

On May 17, 2001, conditioned upon staff presentation of financial planning data, the Board authorized the GM/CEO to approve the Draft EIS and the proposed General Plans for the purpose of the public hearings and for the staff to hold the public hearing on these documents, as soon as the documents are available. The General Manager/Chief Executive Officer was also authorized to release the Public Hearings Report for public review, as soon as the Report is available.

On April 18, 2002, the Board of Directors approved the 95% Draft EIS for submittal to the FTA for review and comment (reference MEAD # 31690).

On June 21, 2002, the GM/CEO approved the public hearings documents and signed the Draft EIS.

On October 1, 2002, the GM/CEO approved the Public Hearings Report for the release for public review.

On November 21, 2002, the Board of Directors selected the Locally Preferred Alternative and amended the ARS, for planning purposes, for the Dulles Corridor Rapid Transit Project (reference Board Resolution 2002-54).

On July 17, 2003, the Board of Directors amended the IAWP and SEP budgets for additional environmental review and authorized the GM/CEO to amend the Federal grant on behalf of DRPT. After negotiations with the WMATA consultant and with the addition of WMATA staff costs, the budget amendment was \$5.65 million, which DRPT accepted (reference Board Resolution 2003-40).

On September 25, 2003, the Board of Directors authorized the GM/CEO to approve the Supplemental Draft EIS and the revised General Plans for the purpose of the public hearings and for the staff to hold the public hearings on these documents, as soon as the documents are available. The GM/CEO was also authorized to release the Public Hearings Report for public review, as soon as the Report is available, subject to later submission of the final Staff Report to the Board for its action (reference Board Resolution 2003-45).

On October 17, 2003, the GM/CEO approved the public hearings documents and signed the Supplemental Draft EIS.

On February 6, 2004, the GM/CEO approved the Public Hearings Report for the release for public review.

On April 15, 2004, the Board of Directors revised the Locally Preferred Alternative for construction phasing and other Project changes and amended the ARS, for planning purposes, for the Dulles Corridor Rapid Transit Project (reference Board Resolution 2004-15).

On April 15, 2004, the Board of Directors also authorized the GM/CEO to sign the Second Agreement with DRPT for WMATA's role of technical manager of PE and amended the IAWP, SEP, and Operating budgets to increase staff in support of PE technical management (reference Board Resolution 2004-15).

On April 15, 2004, the Board of Directors also authorized the staff to hold a post-hearing conference(s) on alternative site plans and locations for the Tysons West Station, a tiebreaker station and a traction power substation. The GM/CEO was also authorized to release the Post-Hearing Conference Report for public review, as soon as the Report is available, subject to later submission of the final Report to the Board for its action (reference Board Resolution 2004-15)

On April 26, 2004, the GM/CEO approved the post-hearings conference documents.

On July 3, 2004, the GM/CEO approved the Post-Hearing Conference Report for the release for public review.

On September 16, 2004, the Board of Directors approved the Final EIS and final General Plans subject to fulfillment of Adopted Regional System Contingencies identified in Board Resolution 2004-45; and the Board approval of any recommended changes in the LPA resulting from continuing coordination of the FTA, DRTP, and WMATA staff (reference Board Resolution 2004-45)

IMPACT ON FUNDING:

This action in itself has no impact on funding.

AFFIRMATIVE ACTION REQUIREMENTS:

None applicable to this action.

RECOMMENDATION:

That the Planning, Development and Administration Committee recommend and the Board of Directors approve the following, as set forth in the attached resolution:

1. Authorization for a WMATA Compact Public Hearing to be held jointly with the Commonwealth of Virginia on several proposed refinements to the design for the Wiehle Avenue Extension that was approved by the Board of Directors in September 2004,
2. Authorization for the GM/CEO to release the Environmental Assessment, and
3. Authorization for the GM/CEO to release the Public Hearing Staff Report for the Environmental Assessment and Proposed Revisions to the General Plans/Modifications to the Adopted Regional System, as soon as the report is available.

PRESENTED AND ADOPTED:

**SUBJECT: DULLES CORRIDOR – AUTHORIZATION TO HOLD PUBLIC HEARING
AND TO RELEASE PUBLIC HEARING STAFF REPORT**

**PROPOSED
RESOLUTION
OF THE
BOARD OF DIRECTORS
OF THE
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY**

WHEREAS; The Board of Directors (the “Board”) has adopted a regional rapid transit system referred to as the Adopted Regional System (ARS); and

WHEREAS, On April 15, 2004, Board Resolution 2004-15 amended the ARS to add, for planning purposes, the Metrorail Build Alternative of the Project from the Orange Line in Fairfax County, with an interim terminus at Wiehle Avenue in Fairfax County, and then to the terminus at Route 772 in Loudoun County, to be constructed in two phases contingent upon the fulfillment of the following conditions identified as the “ARS Contingencies”:

- 1. Satisfactory completion of the FEIS;**
- 2. Issuance of a Record of Decision by the Federal Transit Administration (FTA):**
- 3. Board approval of a final financial plan for the construction, acquisition and operation of the new facilities;**
- 4. Execution of implementing financial commitments between DRPT and funding sources in the form of local funding agreements and the Federal full funding agreement;**
- 5. WMATA’s determination that the Project has been completed in accordance with the Final Environmental Impact Statement (FEIS), approved General Plans and all WMATA system requirements and that the Project, as built and tested, is suitable for acceptance into the ARS;**
- 6. Conveyance to WMATA by DRPT of a property interest in the Project property adequate to assure WMATA’s continuing control of the Project property throughout the useful life of the Project; and**
- 7. Any indemnification obligation from WMATA to Toll Road Investors Partnership II, the Metropolitan Washington Airports Authority, or any other entity associated with the Project is subject to Board approval and any indemnification obligation provided**

by DRPT to Toll Road Investors Partnership II, Metropolitan Washington Airports Authority, or any other entity associated with the Project will be subject to a determination by WMATA that such indemnification does not create a liability or potential liability for WMATA; and

WHEREAS, On September 16, 2004, the Board approved the final Team recommendations resulting from the post-hearing conference, which recommendations included revised locations (a) for the Tysons West Station, (b) for the Tie Breaker Station #2, and (c) for the Traction Power Substation #2 ; and

WHEREAS, On September 16, 2004, the Board approved the FEIS and final General Plans in Board Resolution 2004-45; and

WHEREAS, The Virginia Department of Rail and Public Transportation (DRPT) and WMATA entered into preliminary engineering for the segment from the Orange Line to the interim terminal at Wiehle Avenue, known as the "Wiehle Avenue Extension;" and

WHEREAS, As preliminary engineering for the Wiehle Avenue Extension has advanced, proposed changes to the design, listed in Attachment A hereto, have been identified; now, therefore, be it

RESOLVED, That the Board of Directors authorizes a WMATA Compact public hearing, to be held jointly with DRPT on the proposed refinements to the design for the Wiehle Avenue Extension as described in Attachment A hereto; and be it further

RESOLVED, That the proposed design deviations described in Attachment A hereto have been conditionally approved at this time, with final approval contingent on a determination by WMATA that the proposed design deviations:

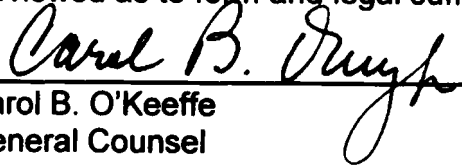
- a. are equivalent in safety with relevant standards or plans and specifications;
- b. are recognized as good industry practice for comparable facilities;
- c. will not cause any material increase in operating and life-cycle costs for the completed project; and
- d. are reasonably likely to achieve the estimated cost impact, including any savings; and be it further

RESOLVED, That the Board of Directors authorizes the GM/CEO to release the Environmental Assessment associated with these refinements when it is ready; and be it further

RESOLVED, That the Board of Directors authorizes the GM/CEO to release the Public Hearing Staff Report for public review, as soon as the report is available; and be it finally

RESOLVED, That this Resolution shall be effective immediately.

Reviewed as to form and legal sufficiency



Carol B. O'Keeffe
General Counsel

Attachment A
DULLES CORRIDOR METRORAIL PROJECT
Preliminary Engineering Design Refinements
Summary of Changes from the Final EIS/General Plans

ID	Design Refinement
ALIGNMENT	
AL-1	Shift the Route 7 portion of the alignment and stations (Tysons Central 7 and Tysons West) from the south side (service road) to the median between Route 123 and the Dulles Toll Road.
AL-3	Lower the alignment approximately 10 feet between the Tysons East Station and Tysons Central 123 stations.
AL-4	Raise and shorten the Tysons tunnel segment and replace the underground Tysons Central 7 station with an at-grade station in the median of Route 7. West of the Tysons Central 7 station, replace underground alignment section with aerial alignment in the median of Route 7.
AL-5	Adjust the alignment along the Dulles Connector Road and Dulles International Airport Access Highway to more closely follow the existing grade.
AL-6	Replace pocket track near the Tysons West station with double crossover in same location.
GUIDEWAY	
GW-1	Utilize AASHTO Box Girders for the O1 alignment (except over traffic) and the Tysons East and Tysons West tangent alignments.
AT-GRADE	
AG-1	Reduce the height of retaining walls in association with alignment changes to more closely follow the existing grade.
TYSONS EAST STATION	
TE-1	Shift station platform 200 feet west to avoid stream impacts and to reduce height of structure supporting station.
TE-2	Redesigned station canopy with reduced coverage (300 feet long).
TE-3	Redesigned pedestrian bridge with reduced width (12 feet) and with mesh enclosure instead of glazing.
TE-4	Deletion of second elevator at south station entrance.
TYSONS CENTRAL 123 STATION	
TC-1	Relocate mezzanine from elevated position above platform, to street-level location below the platform; pedestrian bridge decouple from mezzanine.
TC-2	Bus bays relocated from Route 123 to Tysons Boulevard
TC-3	Redesigned station canopy with reduced coverage (300 feet long).
TC-4	Redesigned pedestrian bridge with reduced width (12 feet) and with mesh enclosure instead of glazing.
TC-5	Deletion of second elevator at the pedestrian bridge south and north entrances.
TC-6	Deletion of second escalator at the pedestrian bridge south and north entrances.
TYSONS CENTRAL 7 STATION	

Attachment A
DULLES CORRIDOR METRORAIL PROJECT
Preliminary Engineering Design Refinements
Summary of Changes from the Final EIS/General Plans

ID	Design Refinement
T7-1	Replace the underground Tysons Central 7 station with an at-grade station in the median of Route 7 (no change to station entrance locations)
T7-2	Replace underground pedestrian walkways with pedestrian bridges.
T7-3	Eliminate underground station ventilation equipment.
T7-4	Redesigned station canopy with reduced coverage (300 feet long).
T7-5	Redesigned pedestrian bridge with reduced width (12 feet) and with mesh enclosure instead of glazing.
T7-6	Delete second elevator at the south and north station entrances.
T7-7	Delete second escalator at the south and north station entrances.
TYSONS WEST STATION	
TW-1	Bus bays relocated from interior parcel to east side of Route 7 (kiss and ride lot location unchanged).
TW-2	Reduce length of pedestrian bridge connection to north side of Route 7
TW-3	Redesigned station canopy with reduced coverage (300 feet long).
TW-4	Redesigned pedestrian bridge with reduced width (12 feet) and with mesh enclosure instead of glazing.
TW-5	Deletion of second elevator at the south and north station entrances.
WIEHLE AVENUE STATION	
WA-1	Rotate orientation of parking garage and north side bus bays.
WA-2	Redesigned station canopy with reduced coverage (300 feet long).
WA-3	Redesigned pedestrian bridge with reduced width (12 feet) and with mesh enclosure instead of glazing.
WA-4	Delete second elevator at the south and north station entrances.
YARD & SHOP	
Y-1	Eliminate expansion of the existing shop building and associated roadway reconstruction, utility relocation, and systems.
SYSTEMWIDE	
SY-1	Use trackside cable troughs instead of concrete ductbanks.
SY-2	Use future yard site (Y-15) on Dulles Airport property for storage/placement of excavated soil.
SY-3	Optimize traction power design and reevaluate substation requirements.
WEST FALLS CHURCH YARD	
WFC-1	Eliminate enlargement of the West Falls Church S&I Shop
WFC-2	Construct a stormwater management pond at the West Falls Church Yard.