May 1, 2008

Donna Laidley  
Federal Transit Administration  
55 Broadway  
Cambridge, MA 02142

Re: Science Park Station, Boston, MA, Accessibility Improvements Project  
Historic and Archaeological Resources Assessment

Dear Ms. Laidley:

The Massachusetts Bay Transportation Authority is proposing accessibility improvements at Science Park Station in Boston. Enclosed for your review and comment is a Technical Memorandum, Science Park Station Historic and Archaeological Resources Assessment, regarding the proposed Area of Potential Effect (APE) for the project and the State Register and National Register of Historic Places status and eligibility evaluation of cultural resources within the APE. The Technical Memorandum was prepared by PAL, the cultural resources consultant for the project.

The MBTA requests the FTA's concurrence with our APE determination and eligibility of resources as identified in the Technical Memorandum.

A copy of this Technical Memorandum has also been provided to the Massachusetts Historical Commission (MHC) and Boston Landmarks Commission (BLC).

If you have any questions or need any additional information, please do not hesitate to call me at 617.222.1580.

Sincerely,

[Signature]

Holly Palmgren  
Manager of Environmental Construction

Enclosure
cc: Andrew Brennan, MBTA  
Ann Lattinville, MHC (with enclosure)  
Marjorie Madden, MBTA  
Boston Landmarks Commission (with enclosure)  
David Ryan, DMJM Harris  
Virginia Adams, PAL  
Audrey Stuart, DMJM Harris
May 30, 2008

The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

Holly Palmgren
Manager of Environmental Construction
MBTA
10 Park Plaza
Boston, MA 02116

RE: Science Park Station Upgrades, Boston, MA. MHC #RC.43434

Dear Ms. Palmgren:

Staff of the Massachusetts Historical Commission have reviewed the technical report, *Historic and Archaeological Resource Assessment MBTA Science Park Station Project Boston, Massachusetts*, submitted by the PAL, for the project referenced above. The proposed project consists of design, engineering and construction phase services for the Light Rail Accessibility improvements to the Science Park Station on the Green Line in Boston.

MHC has previously commented in January 2008 that the area of potential effect determination for the project by the Federal Transit Administration (FTA) is logical and should be integrated into project planning with MBTA for the project. MHC looks forward to reviewing the determination of effect by FTA for the project.

MHC also looks forward to reviewing an archaeological sensitivity assessment and additional information (scaled existing and proposed conditions project plans, soil boring logs, historical and modern utility maps, etc.) in order to provide scoping recommendations for archaeological survey, if any, that may be proposed for the project. Archaeological surveys should be conducted under State Archaeologist's permit regulations (950 CMR 70) and include an approved research design and methodology which takes into account the disturbed urban contexts within the area of potential effect for the project, as noted in the technical report.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800) and M.G.L. Chapter 9, Sections 26-27C (950 CMR 71). If you have immediate questions or require additional information please contact Ann Lattinville, Director of Architectural Review or Jonathan K. Patton, Archaeologist, at this office.

Sincerely,

[Signature]

Brona Simon
State Historic Preservation Officer
Executive Director
Massachusetts Historical Commission

xc: Donna Laidley, FTA
Peter Butler, FTA
David Ryan, DMJM Harris
Audrey Stuart, DMJM Harris
Deborah C. Cox, PAL, attn: Virginia Adams
Ellen Lipsey, Boston Landmarks Commission
Ellen Berkland, City Archaeologist, BLCC/Environmental Dept.
Cambridge Historical Commission

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.sec.state.ma.us/mhc
Ms. Holly Palmgren  
Manager of Environmental Construction  
Massachusetts Bay Transportation Authority  
Ten Park Plaza  
Boston, MA 02116

Re: Science Park Station  
Area of Potential Effect

Dear Ms. Palmgren:

This letter is in response to your request of May 1, 2008 concerning proposed accessibility improvements at the Science Park Station and proposed Area of Potential Effect (APE). The APE as defined in your submission seems adequate.

The Federal Transit Administration (FTA) looks forward to receiving the necessary documentation in accordance with the National Environmental Policy Act along with Section 106 of the National Historic Preservation Act determination.

If you have any questions, please contact Donna Laidley at 617-494-2484. The FTA looks forward to continuing to work with the MBTA on this transit improvement.

Sincerely,

Mary Beth Heilo  
Richard H. Doyle  
Regional Administrator
Attachment B  Memorandum of Agreement
Memorandum of Agreement
between the
Federal Transit Administration
and the
Massachusetts State Historic Preservation Officer
Pursuant to 36 CFR § 800
regarding the
MBTA Green Line Science Park/West End Station Accessibility Improvements Project
Boston, Massachusetts

WHEREAS, the U.S. Department of Transportation, Federal Transit Administration (FTA) has determined that the proposed Massachusetts Bay Transportation Authority (MBTA) Green Line Science Park/West End Station Accessibility Improvements Project in Boston, Massachusetts will have an adverse effect upon the Charles River Basin National Register Historic District, in Boston and Cambridge, a property that is listed in the National Register of Historic Places; will have an adverse effect upon the Lechmere Viaduct, in Boston and Cambridge, a contributing element within the District that has been determined individually eligible for National Register listing; and will also effect the Science Park/West End Station in Boston, pursuant to 950 CMR 71.05(a) a property that has been determined by consensus to meet the criteria of eligibility for listing in the National Register of Historic Places under Criteria A and C at the local level (36 CFR 60); and

WHEREAS, the FTA has consulted with the Massachusetts State Historic Preservation Officer (MASHPO) pursuant to 36 CFR § 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the Massachusetts Bay Transportation Authority (MBTA) the Boston Landmarks Commission (BLC) and the Cambridge Historical Commission (CHC) have participated in the consultation and have been invited to concur in this Memorandum of Agreement;

NOW, THEREFORE, the FTA and the MASHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

Stipulations

The FTA will ensure that the following measures are carried out:

1. Archival Photographic Documentation

   (a) Prior to any demolition or construction activities associated with the project, the FTA shall ensure that a qualified historic preservation consultant prepares archival photographic documentation of the MBTA Science Park/West End Station and the area of the Lechmere Viaduct that will be altered. The documentation shall include printed digital photographs, a CD-R, and technical documentation prepared according to the attached Photographic Documentation Technical Requirements for Digital Images (hereafter attached as Appendix A). The scope of the photographic documentation will be developed in consultation with the MASHPO, the BLC, and the CHC. It will include the MBTA Science Park/West End Station, the area of the Lechmere Viaduct that will be altered, and views of those resources from within the Charles River Basin Historic District. All documentation shall be enclosed in suitable archival-quality enclosures within an archival-quality box.
(b) Unless otherwise agreed to by the MASHPO, the FTA shall ensure that the original archival photographic documentation is completed, delivered to and accepted by the MASHPO prior to commencement of demolition or construction activities. Upon acceptance by the MASHPO, FTA shall then submit copies of the archival documentation to the following repositories: the Massachusetts State Archives, Historic New England, Boston Public Library, Bostonian Society, and Cambridge Historical Society. FTA shall provide a copy of the archival documentation transmittal letters to the MASHPO.

2. New Construction and Rehabilitation

Science Park/West End Station

The FTA shall ensure that the designs of the alterations to the Science Park/West End MBTA Station are compatible with the surrounding properties and are responsive to the recommended approaches to new construction and rehabilitation set forth in the Secretary of the Interior’s Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992). The FTA shall ensure that the design plans and construction specifications for the Science Park/West End MBTA Station are submitted to the MASHPO, BLC, and CHC prior to construction for their review and comment.

Lechmere Viaduct

The FTA shall include in the design plans measures to protect and enhance the historic architectural character of the Lechmere Viaduct, including removal of vegetation on the surfaces of Pier One, minimal cleaning of work areas, restoration of ornamental features that will be altered by the project (the four-foot high balustrade and ornamental horizontal band below) between Piers One and Two on both north and south elevations, and masonry conservation (cleaning, repair, and reconstruction). Work on the Lechmere Viaduct will be limited to the area between Piers One and Two on the north and south elevations. An architectural materials conservator will be consulted regarding changes to the Lechmere Viaduct masonry. The general contractor that is awarded construction of the project will engage an architectural conservator that meets the National Park Service’s standards set forth at 36 CFR Part 61 regarding qualifications for preservation.conservation professionals (http://www.nps.gov/history/local-law/gis/html/table_of_contents.html ). The conservator will meet the NPS professional standards and have demonstrated experience performing conservation work within the guidelines of the American Institute for Conservation Code of Ethics and Guidelines for Practice. The MASHPO, BLC, and CHC will review and approve the qualification requirements for the architectural conservator.

Conservator consultation will include, but not be limited to, color and texture for balustrade reconstruction and field review of samples and mock-ups. The new balustrade color is recommended to be slightly lighter than the existing concrete. The conservator will be consulted in order to best compensate for potential “color differences” and to suggest realistic measures to protect existing concrete in areas outside of the project work limits from demolition spalls and prevent it from cracking during the use of heavy equipment. The conservator will also be consulted in employing cost-effective passive/non-intrusive methods of cleaning the 100-year old concrete surfaces of Pier One, Pier Two, and the span between them that are visible from the exterior of the viaduct. All work will be completed in accordance with the Secretary of the Interior’s Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1992) and Preservation Brief 15, Preservation of Historic Concrete (U.S. Department of the Interior, National Park Service, 2007). The MASHPO, BLC, and CHC will be notified and afforded an opportunity to review and approve cleaning and masonry samples and will perform sites visits within 14 days of notification.
The FTA shall ensure that the design plans and construction specifications for the Lechmere Viaduct are submitted to the MASHPO, BLC, and CHC prior to construction for their review and comment and will provide an opportunity for field review of samples and mock-ups.

3. Historical Interpretation

(a) The MBTA Design Department, following MBTA design protocol review, will develop an Interpretive Display to be located at the Science Park/West End MBTA Station. The MBTA Design Department will develop the concept and content of the display panels and will coordinate with the MBTA Design Consultant to incorporate the construction and installation of the interpretive panels into the contract. At a minimum, the contents of the interpretive display will be on weather and vandal-resistant panels, and the panels specifications will be in accordance with the MBTA enamel panel specifications, which meet and exceed National Park Service standards for permanent outdoor interpretive signage (www.nps.gov/hfc/products/waysides/way-product-panels.htm). The interpretive display shall discuss the history of the Science Park/West End Station, the adjacent Lechmere Viaduct, elevated railway, Boston Museum of Science and Charles River Basin within their appropriate historic contexts using text, photographic images, and maps. Draft plans, renderings, and specifications, including the proposed text and illustrations of the interpretive display will be prepared for review prior to preparation of the final design. The panels will be installed within the Science Park/West End Station in a location that is convenient, safe, and accessible for passenger viewing.

(b) The MBTA shall seek and take into account the MASHPO’s, MBTA’s BLC’s, and CHC’s comments on the draft plans, renderings, and specifications for the Interpretive Display prior to final design.

4. Site Restoration

The FTA shall ensure that the construction site work zone is restored to the condition immediately prior to construction, including but not limited to pavement, curbs and plantings.

5. Administrative Provisions

Dispute Resolution

If at any time during the implementation of this Memorandum of Agreement (MOA), the MBTA or the MASHPO objects to any actions proposed or the manner in which the terms of this MOA are implemented and cannot resolve the issue between them, they shall immediately notify and consult with FTA in order to resolve the objection. If, within 30 days of such written notice, FTA determines that such objection(s) cannot be resolved, FTA will forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation (Council). Within 30 days after receipt of all pertinent documentation, the Council will either:

- Provide FTA with recommendations, which FTA will take into account in reaching a final decision regarding the dispute; or
- Notify FTA that it will comment pursuant to 36 CFR Section 800.7(b) and Section 110(1) of the National Historic Preservation Act and then proceed to comment. Any Council comment provided in response to such a request will be taken into account by FTA in accordance with 36 CFR Section 800.6(a)(1)(C)(ii) with reference to the subject of the dispute.

If the Council does not provide comments regarding the dispute within 30 days after receipt of adequate documentation, FTA may render a decision regarding the dispute. In reaching its
decision, FTA will take into account all comments regarding the dispute from the parties to the MOA.

Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; FTA’s responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

FTA will notify all parties of its decision in writing before implementation of that portion of the undertaking that was subject to dispute. FTA’s decision will be final.

Amendments and Noncompliance

Any signatory to this MOA who determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that party shall immediately consult with the other signatories to the agreement to develop an amendment to this MOA pursuant to 36 CFR §§800.6(c)(7) and 800.6(c)(8). The amendment will be effective on the date a copy signed by all of the original signatories is filed with the Council. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with stipulation below regarding duration.

Termination

If an MOA is not amended following the consultation set out in this stipulation, it may be terminated by any signatory. Within 30 days following termination, FTA shall notify the signatories if it will initiate consultation to execute an MOA with the signatories under 36CFR §800.6(c)(1) or request the comments of the Council under 36 CFR §800.7(a) and proceed accordingly.

Duration

If the terms of this MOA have not been implemented by December 30, 2011, this MOA shall be considered null and void. In such event, the FTA shall so notify the parties to this MOA, and if it chooses to continue with the undertaking, shall reinitiate review of the undertaking in accordance with 36 CFR Part 800.

Execution of this MOA by the FTA and the MASHPO and implementation of its terms evidences that the FTA has afforded the Council an opportunity to comment on the proposed MBTA Green Line Science Park/West End Station Accessibility Improvements Project and its effects on historic properties and that the FTA has taken into account the effects of the undertaking on historic properties.

FEDERAL TRANSIT ADMINISTRATION

By:________________________________________________________ Date:______________

MASSACHUSETTS HISTORICAL COMMISSION

By:________________________________________________________ Date:______________

Brona Simon, Executive Director
Massachusetts State Historic Preservation Officer
Concur:

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
By: ________________________________ Date: ________________
   Daniel Grabauskas
   General Manager

BOSTON LANDMARKS COMMISSION
By: ________________________________ Date: ________________
   Ellen Lipsey
   Executive Director

CAMBRIDGE HISTORICAL COMMISSION
By: ________________________________ Date: ________________
   Charles Sullivan
   Executive Director
Attachment C  List of Preparers
List of Preparers

Federal Transit Administration

The Federal Transit Administration (FTA) is the lead agency responsible for the development of this Environmental Assessment (EA). Peter Butler, Director of the Office of Planning and Program Development, led the review.

Massachusetts Bay Transportation Authority

Andrew D. Brennan is the director of Environmental Affairs for the Massachusetts Bay Transportation Authority (MBTA). Mr. Brennan is responsible for all of the Authority’s environmental planning, permitting, and environmental compliance activities. Mr. Brennan formerly served as the Chief of Staff to the Executive Office of Environmental Affairs, overseeing policy and program development for the Executive Office.

Marjorie B. Madden is Senior Project Manager for the MBTA in the Design and Construction Directorate. Ms. Madden is responsible for overseeing design development and managing civil/transportation construction projects. Ms. Madden holds a Bachelor of Science degree in Civil Engineering from the University of Massachusetts and a Master of Science degree in Civil Engineering from Northeastern University.

AECOM

Joanne M. Haracz is responsible for oversight and review of the EA document preparation. Ms. Haracz holds a Bachelor of Science in Biology from Boston College and a Master’s degree in Regional Planning from the University of Massachusetts at Amherst. She has experience in environmental assessment, permitting and natural resource management, and land use planning.

Stephanie D. Kirschner is responsible for the management of the EA document preparation, including incorporation of technical analysis and coordination with subconsultants. Ms. Kirschner holds a Bachelor of Arts degree in Geology from Boston University and a Master of Urban Planning from New York University. She has experience in environmental assessment and permitting.

The Public Archaeology Laboratory, Inc. (PAL)

Virginia H. Adams, as Senior Architectural Historian, is responsible for the cultural resources sections of the EA, including the technical oversight of archival research and resource assessment for the project. Ms. Adams holds a Bachelor of Arts degree in Art History and a Master of Arts in Anthropology from Brown University. She has extensive experience in architectural survey, research, evaluation, and documentation, as well as historic preservation planning.
Advisory Council on Historic Preservation, 36 CFR 800.


Boston Region Metropolitan Planning Organization (MPO)


CDW, Consultants, Inc.


City of Boston Air Pollution Control Commission
Regulations for the Control of Noise in the City of Boston.

Commonwealth of Massachusetts
Regulations for the Removal, Containment or Encapsulation of Asbestos (453 CMR 6.00).

Council on Environmental Quality (CEQ)
1997 Environmental Justice Guidance under NEPA.

Department of the Interior U.S. Fish and Wildlife Service
Federally Listed Endangered and Threatened Species in Massachusetts.

1966 Department of Transportation
Section 4(f) of the Department of Transportation Act of 1966.

2007 DMJM Harris/AECOM. Science Park Station Accessibility Improvements – Passenger Circulation Studies.


1982 Federal Emergency Management Agency Flood Insurance Rate Map
FEMA FIRM map for the City of Boston, Massachusetts, Suffolk County. Community Panel Number 250286 0004 C, Panel 4 of 31. Effective Date: April 1, 1982.


1998 Massachusetts Clean Waters Act, Chapter 21, ss. 2356.

2008 Massachusetts Contingency Plan (MCP), 310 CMR 40.0000. Effective February 14, 2008.

Massachusetts Department of Environmental Protection (DEP).


Massachusetts Surface Water Discharge Permit Program, 314 CMR 3.00.


1972 Regulations for the Control of Air Pollution (310 CMR 7.11). Effective June 1, 1972.

2008 Massachusetts Waterways Regulations (Chapter 91), 310 CMR 9.00, October 2008.

National Environmental Policy Act


1966 National Historic Preservation Act (NHPA) Section 106 of the National Historic Preservation Act (NHPA) of 1966 as amended.

1983 Occupational Safety and Health Administration (OSHA). Occupational Noise Exposure Hearing Conversation Amendment [FR 48 (46), 97389785].

Public Archaeology Laboratory (PAL), Inc.

Secretary of the Interior’s Standards and Guidelines for Identification, 48 FR 44720-23.


2008 State of Massachusetts’ Natural Heritage and Endangered Species Program (NHESP). NHESP Priority Habitats of Rare Species and Estimated Habitats of Rare Wildlife and NHESP Priority Habitats of Rare Species.


1997 U.S. Department of Transportation, Order to Address Environmental Justice.