

**WORLD TRADE CENTER SITE**  
**RESOURCE PROTECTION PLAN FOR CONSTRUCTION OF THE WTC**  
**TRANSPORTATION HUB PROJECT**  
**(SEPTEMBER 2005)**

**1.0 INTRODUCTION**

Consistent with the Stipulations of the executed Memorandum of Agreement (MOA) pursuant to Section 106 of the National Historic Preservation Act, this Resource Protection Plan (RPP) was developed by the Port Authority of New York and New Jersey's (PANYNJ) Priority Capital Programs Department (PCP) in consultation with its Project Historical Architect (PHA). The provisions of this RPP will be implemented by PANYNJ's Construction Contractor under the direction of PANYNJ in consultation with its PHA. Stipulation I.F of the MOA for the World Trade Center (WTC) Transportation Hub-WTC PATH Terminal and Pedestrian Connections (the "Project"), executed among the Federal Transit Administration (FTA), PANYNJ, New York State Office of Parks, Recreation and Historic Preservation (SHPO) and the Advisory Council on Historic Preservation (ACHP) in April 2005, requires PANYNJ to develop and implement a RPP for protection of the WTC Site historic elements, as defined in the Determination of Eligibility for the WTC Site on March 31, 2004, that are to remain in situ from inadvertent damage during construction activities of this Project. This Stipulation also calls for the involvement of a PHA in the design and construction phases of the Project.

Section 2.0 of this RPP establishes the participation of a PHA in the design and construction of the Permanent WTC PATH Terminal. It also describes the PHA's qualifications and responsibilities during the design and construction phases of the Project. This RPP applies only to historic elements within the WTC Site, as defined in Stipulations I.B, I.C, I.D, I.E, I.F, V.B and VI of the MOA. In accordance with the MOA, PANYNJ will develop a separate Construction Protection Plan (CPP) for historic properties outside the confines of the WTC Site that are identified in the Project's Final Environmental Impact Statement (FEIS). The CPP will be a separate document prepared by PANYNJ and the PHA, in consultation with SHPO and in coordination with the Lower Manhattan Development Corporation (LMDC) and, as appropriate, with the Metropolitan Transportation Authority / New York City Transit (MTA/NYCT), prior to performance of construction within 90 feet of these off-site historic properties.

Section 3.0 of this RPP describes the construction procedures of the Project related to the historic elements of the WTC Site, as defined in the Stipulations of the MOA cited above. It outlines procedures for inspecting and reporting the existing conditions of the WTC Site's historic elements, establishes protection procedures and a monitoring program, and establishes and monitors construction methods. Finally, it establishes methods and materials to be used for any repairs to historic elements.

Section 4.0 of this RPP describes the compliance process and procedures in place to track and report on levels of compliance with the RPP and the MOA, including the resolution of unanticipated effects on historic elements.

Those WTC Site resources outlined in the Coordinated Determination of Eligibility (DOE) that are not expected to be adversely affected by the project, will also be considered by this RPP, and would received an appropriate level of resource protection (in accordance with the posting and comment period protocols specified in the MOA), if it is determined by the Engineer, in consultation with the PHA, that the proximity of the specific project construction activities to the resource warrants such action.

## **2.0 PROJECT HISTORICAL ARCHITECT**

### **2.1 Qualifications and General Responsibilities**

The PHA will meet the U.S. Secretary of the Interior's professional qualifications standards (48 F.R. 44716) in historic preservation. The PHA will advise PANYNJ as a member of its Environmental Consultant Team for the Project. The PHA will provide professional advice and counsel to the Chief Engineer of PANYNJ or the Engineer's designee (Engineer) regarding the management and protection of historic elements within the WTC Site during construction of this Project. Such professional advice and counsel will also assist PANYNJ in its fulfillment of the provisions of the Project's MOA.

### **2.2 Design Phase Responsibilities**

#### *Pre-Construction Inspection*

The PHA will review existing site documentation (such as the Historic American Buildings Survey/Historic American Engineering Record [HABS/HAER] documentation) and conduct a preconstruction inspection of those historic elements at the WTC Site cited in the MOA's Stipulations (listed above) that may be affected by construction, to determine existing material and structural conditions. The PHA will present the results of this inspection in a report to the Engineer. The report (which may include one or more of the following: text, color photographs, and other graphics, as appropriate) will describe existing material and structural conditions of each historic element, and will provide initial recommendations for remediation and/or for securing areas of concern prior to the commencement of construction activities within the affected area of the WTC Site.

#### *Review of Design Documents*

The PHA will review and provide comment to the Engineer on design plans at the preliminary (35%) and pre-final (75%) stages regarding treatment of historic WTC Site elements. Such review and comment will specifically cover *but will not be limited to* design plans for the following elements, which are called out in Stipulations I.B, I.C, I.D and I.E, respectively, of the MOA:

- Tower perimeter column base remnants outlining North Tower and South Tower footprints and the tower footprint areas affected;
- E subway entrance;
- East and west slurry walls; and
- Steel beams in cross form.

The PHA will review design plans involving these elements prior to submission of these design plans to SHPO, National Park Service (NPS) and Consulting Parties, which submission is specified in the Project MOA, and will provide comments to the Engineer for consideration, in accordance with the Stipulations of the MOA.

## **2.3 Construction Phase Responsibilities**

### *Review of Contractor-Generated Documents*

The PHA will review Contractor-Generated submittals that affect historic elements of the WTC Site, including but not limited to documents concerning construction sequencing, staging, shoring, phasing and transportation and will provide comments to the Engineer for consideration, in accordance with the Stipulations of the MOA.

### *Construction Oversight*

The PHA will conduct periodic site reviews to monitor the progress of construction and the level of compliance with the measures for protection of historic site elements contained in approved Contract Documents and the Contractor-Generated submittals (cited in Section 3.3 below). The PHA will submit a site review report to the Engineer, with recommendations as appropriate to ensure protection of historic site elements over the remainder of the construction process. The PHA will attend construction meetings scheduled at the direction of the Engineer and will provide to the Engineer meeting notes, observations and recommendations as appropriate regarding management and protection of historic site elements.

The PHA will provide recommendations to the Engineer regarding repairs, mitigation or remedial actions that may be necessary to address inadvertent damage to historic elements of the WTC Site as further described in Sections 3.5 and 3.6.

### *Relocation of Historic Site Elements*

If the Engineer, in consultation with the PHA, determines that historic elements of the WTC Site must be temporarily relocated in order to protect them from damage during construction of the Project, the Engineer will prepare (with review and concurrence from the PHA, and in consultation with SHPO) a plan for (a) removal of the elements in a manner that maintains their integrity of materials and workmanship; (b) safeguarding the removed elements while relocated to Hangar 17 at John F. Kennedy International Airport or any other agreed upon location, as cited in Stipulation VI.2 of the MOA; (c) returning the elements to the WTC Site, based on criteria to be developed by PANYNJ and reviewed by the Engineer and the PHA in consultation with ACHP and SHPO. (SHPO will have 30 calendar days to comment.)

## **3.0 CONSTRUCTION PROCEDURES AND CONTRACTOR REQUIREMENTS**

### **3.1 General Requirements**

Contractors are responsible for compliance with all requirements, as discussed in this section, for protection of historic WTC Site elements that each construction contract states must remain undamaged and in situ during construction. Contractors will require that each subcontractor be in compliance with the requirements for protection of historic elements of the WTC Site. Contractors will cooperate fully in implementing any project-specific procedures and guidelines developed by the Engineer or the PHA regarding protection of historic WTC Site elements. Contractors will identify their respective staff responsible for issues relating to protection of historic WTC Site elements.

Contractors will follow the protocol outlined in their respective construction contracts to ensure that the necessary methods, practices, procedures and resources essential to be employed throughout the design and construction of the Project will conform with the Stipulations of the MOA.

The Contractor will be notified by the Engineer (in consultation with the PHA) when non-compliance with WTC Site historic element protection requirements is observed. Conversely, if the Contractor observes any non-compliance with site element protection requirements, they are required to immediately

notify the Engineer. In all cases, the Contractor will be required to immediately implement and maintain corrective actions.

### **3.2 Inspection of Existing Conditions of Historic Elements**

The Contractor will inspect the existing conditions of all historic elements on the WTC Site, including, but not limited to: 1) the historic tower perimeter column base remnants outlining the North and South Tower footprints and the footprint areas within the outlines, 2) the E subway entrance, 3) the east and west slurry walls and 4) the steel beams in cross form.

### **3.3 Establishment of Protection Procedures**

#### *General Submittal Requirements*

The Contractor conducting work on the WTC Site will submit documents pertaining to protection of historic elements to the Engineer for review and approval. (The PHA will provide consultation to the Engineer on this document). The Contractor will not locate any equipment or deliver any materials or commence any work whatsoever that may impact historic elements on the WTC Site until the said documents are approved.

Each Contractor-Generated Submittal will include the following information:

1. General location map of the WTC Site showing where work on the Contract will be performed, including notation on the map of location of the historic element(s).
2. Listing of materials, products or construction equipment to be used in the course of the Contract that will or may come in contact with any of the WTC Site's historic elements, and the proposed methods to be employed to prevent any damage to said historic elements.

In the event that the Contractor identifies potentially more effective and/or efficient methods of protection as construction proceeds, the Contractor will propose said measures for consideration by the Engineer in consultation with the PHA. Approved adjustments and modifications will be documents.

#### *Performance Specifications for Historic Elements at the WTC Site*

#### *Protection of the Historic Tower Perimeter Column Base Remnants and Areas within the Tower Footprints*

The Contractor will be responsible for providing protection to the historic tower perimeter column base remnants and the areas within the tower footprints as indicated in the Contractor-Generated submittals, consistent with the MOA Stipulation. Specifically, the Contractor's protection measures will be sufficiently designed and installed to meet the following performance specifications:

- The protection will be of material(s) of sufficient thickness to prevent damage to the concrete slabs within the tower footprint areas or the historic column base remnants, such as vehicular tires, rollers and tracks as well as spillage of any type emanating from construction vehicles or equipment. No construction activity that may damage the historic tower perimeter column base remnants and areas within the tower footprints will occur in areas without protection.
- The protection will be designed and installed to permit a smooth, drivable transition at the base of the existing access ramp that will not create bumping, ground vibration or load shifting when vehicles drive over it.
- The protection will be designed and installed to shed rainwater and melting snow toward the sides of the protection.

- The protection will not be affixed to the surface of the concrete slabs within the tower footprint areas or the historic column base remnants in any manner that may cause damage to the element.
- The Contractor will supplement the amount of protection in areas determined appropriate by the Engineer (in consultation with the PHA). Such areas may, at the Engineer's discretion, include locations where vehicles are or where equipment and materials and construction debris are stored, or where scaffolding or hoisting equipment are placed.
- Protective measures will be implemented following HABS/HAER documentation, in order to protect the footprint areas and historic column base remnants. These measures may include use of clean rounded gravel or a more effective protective material/system that achieves the above performance specifications.

#### Temporary or Permanent Removal of Historic Column Base Remnants

Pursuant to Stipulation VI of the MOA, a detailed plan will be developed by PANYNJ, in consultation with the PHA, for use by the Contractor, for safely and carefully removing and, where appropriate, subsequently reinstalling the historic column base remnants. The plan will also include a discussion of how to protect, safely transport and store removed historic column base remnants. The plan would address acceptable techniques to be submitted by the contractor for review and approval by the Engineer (in consultation with the PHA), such as, but not limited to: concrete removal limits and procedures, including the use of saw-cutting and pneumatic tools; steel removal and lifting procedures, including use of drills, slings and wedges; protection of the excavated removal areas, including use of temporary liners and fill, etc. This plan will be provided by PANYNJ to SHPO for review. The PANYNJ currently anticipates that this plan will be implemented as a discrete construction package that will be posted at the preliminary (35%) and pre-final (75%) design levels. The Engineer will not issue approval and authorization to proceed until comments have been received from SHPO.

Consistent with this plan, the Contractor will exercise great care in removing the historic column base remnants according to the following goals:

- The in-place protection of the concrete slabs and the historic column base remnants (as described above) will remain in place until immediately prior to the removal work for the individual historic column base remnant is scheduled to commence. Only those historic column base remnants actually in the process of being removed will be exposed at any given time.
- Only the minimum amount of protection around the actual historic column base remnant necessary to gain access will be removed. All surrounding concrete slab areas will remain completely protected.

Returning of the elements to the WTC Site will be based on criteria to be developed by PANYNJ and reviewed by ACHP and SHPO.

#### Protection of the E Subway Entrance

As noted in Stipulation I.C.1 of the MOA, the new pedestrian connection between the Terminal and the Metropolitan Transportation Authority/New York City Transit (MTA/NYCT) E subway will be designed to incorporate the existing E subway entrance, in its current location, in a manner that retains existing materials and features of this entrance, including, but not limited to, the handrails, travertine flooring, including the existing steps and doors separating the E train from the pedestrian connection, and overhead signage, to the extent possible and consistent with current building codes and Americans with Disabilities Act (ADA) requirements. This design will include, at a minimum, a plaque identifying the historic features of the E subway entrance.

As noted in Stipulation I.C.2 of the MOA, if during the construction of the new pedestrian connection between the Terminal and the E subway it is determined that the existing E Subway entrance doors need to be removed, then they will be removed in accordance with Stipulation VI of the MOA.

The Contractor will exercise great care in conducting work in the vicinity of the new pedestrian connection between the Terminal and E subway, and will work according to the following goals:

- Existing finishes (including ceilings, walls, handrails and floors) will be protected by installing a protective system, such as a membrane sheet, and covering with an impervious board, such as CDX grade plywood or masonite, with all joints taped. The Contractor will not fasten or apply any materials that may cause damage to the historic finishes; rather, the Contractor will use carefully trimmed framing elements, wedges and shims at the floor and ceiling levels. The Contractor will also box out the locations of all protruding elements, such as baseboards and handrails.
- As required, the Contractor will carefully protect or disassemble the E subway entrance doors and related hardware. The Contractor will also construct specially sized plywood enclosures for each door. Then, the Contractor will wrap each door and its aforementioned appurtenances in a heavy blanket, covering all sides and surfaces of the door, and place each door into the plywood enclosure, securing it and labeling it on all sides. The Contractor will relocate each door to Hanger 17, or other location designated by the Engineer in consultation with the PHA.
- Should the Engineer require temporary doors at the locations of the removed historic doors, the Contractor will construct protective plywood frames around the existing door frames and use heavy blankets against the historic materials in order to prevent damage from the plywood against them. The Contractor will not install any anchorages, nails, screws or other types of fasteners into the historic wall surfaces or the historic door frames. The Contractor will secure new door frames soundly into the openings using carefully trimmed wood framing elements and wedges and shims.
- The Contractor will carefully disassemble all protection measures at the completion of the work after receiving approval from the Engineer, in consultation with the PHA.

#### East and West Slurry Walls for the Project

As noted in Stipulation I.D.1 of the MOA, the design for the Project will provide visibility from within the Terminal to a portion of the east or west slurry wall if all of the following criteria are met:

- The condition of the slurry wall evokes the image now understood to represent the historic nature of the wall (e.g., tiebacks are part of the area to be exposed; tiebacks project beyond the re-established slurry wall).
- The exposure provided would enable a view of the slurry wall that is clear, recognizable and respectful of the slurry wall.
- The exposure would not pose a safety hazard to the public from exposed finishes of the wall or its components.

The MOA provides for a design of the east–west pedestrian connector to include a location from which members of the public using the connector may, at a minimum, view a plaque and photograph of the west slurry wall.

When constructing any connectors or other aspects of the Project that come in contact with either the east or west slurry wall, the Contractor will implement the necessary protection measures to ensure that those

portions of the east and west slurry walls listed in the MOA to remain visible and appreciable to the public as a result of this Project are protected from damage arising from construction activities, movement of equipment and materials, and materials storage.

#### Steel Beams in Cross Form

Stipulation I.E of the MOA states that PANYNJ will relocate the steel beams and crossbeam mounted on a pedestal and currently situated within the WTC Site near Church Street to Hanger 17 or an alternate location in accordance with Stipulation VI, where the object will remain in the custody and control of PANYNJ until its final disposition.

For the purposes of this RPP, that location will be assumed to be Hanger 17. Prior to the relocation of this element, the Contractor will submit for review and approval by the Engineer, in consultation with PHA, a protection plan for the steel beams in cross form, which delineates:

- the means and methods of releasing its pedestal from the surrounding ground surfaces;
- the means and methods of safely hoisting this element, including the concrete pedestal, and placing it securely onto the bed of a truck for transport;
- the means and methods of safely fastening this element and covering it on the truck bed; and
- the means and methods of safely hoisting this element and placing it securely at the designated location at Hanger 17 (or other location).

#### Review and Approval of Contractor-Generated Submittals

##### 35% and 75% Review

Consistent with the Stipulations of the Project MOA as set forth under Stipulations I.B.2, I.C.1 and I.D.1, PANYNJ will follow the process described below.

1. Design plans for the treatments will be developed in consultation with SHPO and submitted at the preliminary (35%) and pre-final (75%) review for SHPO's comments. NPS and the Consulting Parties will be given the opportunity to comment on the treatment design plans.
2. Design plans will be made available, subject to Stipulation IX.D of the Project MOA, to the Consulting Parties and the public via the PANYNJ website at [www.panynj.gov/pathrestoration](http://www.panynj.gov/pathrestoration). The Consulting Parties will be informed of the availability of the plans by electronic notification as plans are posted on the project website, and the Consulting Parties will have 21 days to comment on the plans. PANYNJ will provide paper copies of such plans to Consulting Parties upon request.
3. The review of the plans will focus on the treatments pertaining to the specific elements identified in Stipulations I.B.2, I.C.1 and I.D.1 of the Project MOA.
4. If SHPO makes substantive comments during the pre-final design review, SHPO may request the opportunity to concur on the final design as described below.
5. SHPO will respond within 30 calendar days or earlier to the design plans at each stage of completion as described above.
6. Prior to approval of submitted plans and specifications, PANYNJ will consider and respond to all comments received from SHPO and Consulting Parties within the specified comment period. If SHPO does not respond within the comment period, PANYNJ may assume that SHPO concurs with the submitted plans and specifications.

### 100% Design Review

Historic element protection measures may be accomplished through techniques to be submitted by the Contractor for review and approval by the Engineer (in consultation with the PHA). The Contractor will submit the Contractor-Generated submittals described above to the Engineer. The Engineer will forward the Contractor-Generated submittals to the PHA for review and comment. The Engineer will not approve Contractor-Generated submittals without concurrence from the PHA.

If SHPO makes substantive comments during the pre-final (75%) design review, and requests the opportunity to concur on the final design, PANYNJ will forward Contractor-Generated submittals to SHPO. SHPO will respond within 30 calendar days or earlier on the final design plans. If SHPO does not respond within the comment period, PANYNJ may assume that SHPO concurs with the submitted plans and specifications.

A monitoring program will be initiated immediately after the award of Contract. The Contractor will submit the Contractor-Generated submittals, described above, and will not proceed with work that may affect WTC Site historic elements identified in said submittals until approved by the Engineer, in consultation with the PHA.

### **3.4 Establishment of a Monitoring Program**

The Contractor will submit the Contractor-Generated submittals, and will not proceed with work that may affect WTC Site historic elements identified in said submittals until approved by the Engineer, in consultation with the PHA, as discussed in Section 3.3.

Prior to construction, the Contractor will meet with the Engineer and the PHA to establish a program to periodically inspect and examine all protection measures in place, to verify that they remain in compliance with the MOA and this RPP.

Prior to construction, the Contractor will provide for the approval of the Engineer, in consultation with the PHA, an Emergency Remediation Plan, which outlines procedures to be followed should an unforeseen condition or unanticipated damage arise that compromises or places at risk any historic elements on the WTC Site. Once said Plan is approved, the Contractor will set aside the relevant materials, products and equipment in a safe and easily accessible location on-site, so that they may be quickly dispatched and properly employed should the need arise. The PANYNJ may make the approved Emergency Remediation Plan available to consulting parties upon request.

### **3.5 Establishing and Monitoring Construction Methods**

#### *Routine Monitoring*

During the course of construction, the PHA will meet with the Contractor at the direction of the Engineer to examine the protection measures, and to examine specific issues that may arise during the course of the Contract.

At each site visit, the PHA and the Contractor will inspect all protection measures in place and verify that they remain intact and that they have performed as required since the previous inspection. Additional items to be examined are:

- progress achieved since the previous inspection, and how the protection measures performed, and if they did not perform as required, what adjustments or changes should be made to bring them into compliance with the requirements of the MOA and this RPP;

- upcoming scheduled work activities, and review of whether the existing protection will be capable of accommodating said activities, and if not, what supplemental measures need to be implemented to provide commensurate levels of protection; and
- foreseeable work activities that were not anticipated in the original Contractor-Generated submittals, and review of whether the existing protection will be capable of accommodating said activities, and if not, what supplemental measures need to be implemented to provide commensurate levels of protection.

#### *Unforeseen Conditions and Unanticipated Damage*

Should an unforeseen condition arise or unanticipated damage occur during construction that compromises the integrity of the in-place protection measures, or adversely affects any historic elements on the WTC Site, the Contractor will cease all work in the affected area immediately and implement the relevant measures outlined in the Emergency Remediation Plan, described above. As soon as possible thereafter, the Contractor will notify the Engineer and the PHA to review:

1. the situation that arose;
2. its cause, if known;
3. mitigation measures implemented; and
4. recommendations for further intervention, if any.

At that time, the Engineer, in consultation with the PHA, will determine whether the Contractor may resume work in the affected area, or whether additional remediation measures are required. Also at that time, the PHA, in consultation with the Engineer and the Contractor, will determine whether to conduct a supplemental site visit to examine the situation:

- If not, the situation will be reviewed at the next regularly scheduled construction meeting or site visit, and noted in the minutes thereof; and
- If so, the Engineer and/or the PHA (as appropriate) will meet on-site with the Contractor to review the situation and issue instruction to the Contractor on the needed supplemental remediation and mitigation measures. The PHA or the Engineer (as appropriate) will also notify SHPO in writing of the situation and steps taken to remediate and mitigate it. Finally, at the next regularly scheduled construction meeting or site visit, the Contractor will re-examine the Emergency Remediation Plan and revise it, as required, to accommodate the lessons learned from the situation.

### **3.6 Establishing Methods and Materials to Be Used for Repairs**

As previously discussed in Section 3.3, the Contractor will submit the Contractor-Generated submittals, described above. The submittals will contain a listing of materials, products or equipment to be used in the course of the Contract that will or may come in contact with any of the WTC Site's historic elements and the proposed methods to be employed to prevent any damage to said historic elements. The Contractor will not commence any work on the WTC Site that impacts the historic elements until the Engineer, in consultation with the PHA, approves the Contractor-Generated submittals.

During the course of construction, the Engineer and the PHA (as appropriate) will review the Contractor's employed methods and materials for installing new construction in the vicinity of the WTC Site's protected historic elements and the measures being taken to continue to protect said elements. In the event that the Contractor identifies potentially more effective and/or efficient methods of protection, the

Contractor will propose said measures for consideration by the Engineer in consultation with the PHA. Approved adjustments and modifications will be documented.

Should an unforeseen condition arise or unanticipated damage occur during construction that adversely affects historic elements on the WTC Site (see Section 3.5), the Contractor will cease all work in the affected area immediately and implement the relevant measures outlined in the Emergency Remediation Plan, as described above, including the installation of repair materials and procedures as developed in consultation with the PHA. All repair work will be done in such a manner as to minimize the adverse impact on the intact historic elements. The Contractor will not remove any damaged, marred or otherwise unsalvageable historic elements from the WTC Site until review and approval is given by the Engineer, in consultation with the PHA.

#### **4.0 CONTROLS FOR MANAGEMENT OF HISTORIC WTC SITE ELEMENTS**

##### **4.1 Compliance Process**

Compliance with the RPP will be achieved through:

- incorporation of all applicable requirements for historic WTC Site element protection into project design specifications, construction planning and construction Contract documents;
- observation of all construction activities and their cumulative effect on historic WTC Site elements;
- communication with FTA, SHPO and Consulting Parties;
- establishment of procedures, responsibilities and accountability for Project-wide environmental compliance, specifically including compliance with requirements for protection and treatment of historic WTC Site elements, and problem resolution;
- involvement of the PHA throughout the design, construction planning and construction processes, and involvement of other consultants with technical expertise and problem-solving capability as required by the Engineer.

##### **4.2 Compliance Tracking and Reports**

The Project MOA and Project Environmental Impact Statement (EIS) identify and describe measures and commitments for treatment of the WTC Site and historic elements. These measures and commitments will be incorporated into construction planning and field implementation. Compliance will be tracked with the active and ongoing participation (including periodic monitoring) and professional counsel of the PHA. Compliance will be reported in accordance with Stipulation IX.C of the Project MOA.

##### **4.3 Resolution of Unanticipated Effects on Historic Elements**

In the event the PHA determines that construction activities of the Project will affect or has affected a historic element in an unanticipated manner, the Engineer (in consultation with the PHA) will stop Project construction in the vicinity of the affected resource and will take reasonable measures with respect to the Project, to avoid harm to the resource. Additional measures may be taken to secure the job site if it is determined that unfinished work in the vicinity of the affected historic element will cause major safety or security concerns. The Contractor will not restart work in the area of the affected historic element until the Engineer has granted clearance, after receiving word from the PHA that the unanticipated effect on the historic element has been resolved through avoidance, changes in construction methods, protection or other measures.

The process of resolving unanticipated effects on historic elements may include but not be limited to:

- preparation of a treatment or mitigation plan, as described above, for review by the Engineer and the PHA in consultation with SHPO;
- A 14-calendar-day review and comment period on the developed treatment or mitigation plan, described above, by SHPO;
- implementation of the agreed-upon treatment or mitigation plan; and
- approval for the Contractor to resume construction following consultation with the Engineer (in consultation with the PHA) to communicate the implementation of the plan and to receive concurrence that the unanticipated affect on the historic element has been resolved.

- End of Document -