**PENNSYLVANIA TURNPIKE (I-276)/ INTERSTATE 95 INTERCHANGE PROJECT**
**BUCKS COUNTY, PENNSYLVANIA**
**BURLINGTON COUNTY, NEW JERSEY**


# RECORD OF DECISION

US Department of Transportation
Federal Highway Administration
Pennsylvania Division

Commonwealth of Pennsylvania
Pennsylvania Turnpike Commission

Commonwealth of Pennsylvania
Pennsylvania Department of Transportation

December 31, 2003

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## BUCKS COUNTY, PENNSYLVANIA
## BURLINGTON COUNTY, NEW JERSEY

## I. DECISION

The Selected Alternative for the Pennsylvania Turnpike (I-276)/ Interstate 95 (I-95) Interchange Project is Project Alternative 1, consisting of the combination of Modified Plaza West, Single Loop A Interchange, and Delaware River Bridge South. This alternative was identified as the Recommended Preferred Alternative in the Draft Environmental Impact Statement /Draft Section 4(f) Evaluation (Draft EIS) and as the Preferred Alternative in the Final Environmental Impact Statement /Final Section 4(f) Evaluation (Final EIS) *(See Figure A and Appendix A of the Final EIS)*.

- Modified Plaza West is a mainline barrier toll plaza (conventional full width configuration) that incorporates E-*ZPass*. This plaza would be the new eastern terminus of the Pennsylvania Turnpike Toll System.
- The Single Loop A Interchange includes ramps to make a direct, high-speed, fully-directional connection between I-95 and I-276.
- The Delaware River Bridge South introduces a second, parallel structure located adjacent to and just south of the existing Delaware River Turnpike Bridge, thus allowing the use of both bridges as a one-way pair in the design year.
- Increases in vehicular capacity (additional lanes) are also proposed on both interstate highways within the project limits to accommodate forecasted 2025 traffic volumes.

Project Alternative 1 is the Selected Alternative based upon its ability to address the identified project needs, the consideration of engineering parameters, the assessment of anticipated environmental effects, public input, and resource agency input. Further, the testimony and comments received at the Public Hearing, written comments received on the Draft EIS during the comment period, and written comments received on the Final EIS were also considered. The following reasons summarize the substantive considerations:

- Moderate impacts to wetlands, lowest impacts to forested wetlands
- Lowest impacts to floodplains
- Moderate impacts to forestland
- Lowest impacts to rangeland
- Lowest number of surface water crossings
- Lowest impacts to intermittent streams
- No impacts to farmlands

- Minor impacts to Section 4(f) properties
- Lowest number of commercial property displacements
- Lowest number of residential property displacements
- Favored by a majority of the public officials and the general public
- Favored by a majority of the Community Advisory Committee (CAC)
- Favored by a majority of the Community Economic Impact Review Group (CEIRG)

In compliance with the National Environmental Policy Act (NEPA) of 1969, (as amended), 40 CFR Parts 1500-1508, the Federal Highway Administration (FHWA) regulations (23 CFR Part 771), and 49 USC 303, a Draft EIS was approved on April 6, 2001 and circulated for comment from May 11, 2001 through July 2, 2001. The Pennsylvania Turnpike Commission (PTC), the Pennsylvania Department of Transportation (PENNDOT) and the United States Corps of Engineers (USCOE) held a Joint Public Hearing on June 12, 2001. The Final EIS was circulated for review from July 11, 2003 to August 15, 2003. The Final EIS addressed all substantive comments received on the Draft EIS and at the Public Hearing. Comments received on the Final EIS are summarized in Section VI of this Record of Decision (ROD) and are addressed in the ROD Basis Report.

## II. ALTERNATIVES CONSIDERED

Two pieces of legislation helped to define the need for a direct I-276/I-95 interchange connection: the 1982 Federal Surface Transportation Assistance Act (STAA) and the 1985 Pennsylvania Act 61. The following summarizes the study area transportation needs for Design Year 2020, as presented in the *Pennsylvania Turnpike/Interstate 95 Interchange Project Needs Study* (PTC, 1993):

- Inadequate I-276 and I-95 linkage for system continuity
- Lack of I-95 continuity through the Mid-Atlantic Region
- Inadequate capacity for the current I-276 and I-95 connections
- Inadequate capacity of I-276 and I-95
- Prolonged study area travel times and delays

Throughout the transportation planning and project development process, a wide range of alternatives that meet the project needs was considered using appropriate levels of environmental and engineering analysis. Figure III-2 of the Final EIS provides a flow chart summarizing the progression of alternatives development and analysis for the I-276/I-95 Interchange Project.

Alternatives development and analysis for the I-276/I-95 Interchange Project included a Congestion Management Systems (CMS) Evaluation and a Major Investment Study (MIS). Consistent with federal regulations, various transportation modes were considered for their feasibility in meeting the project need. The No-Build, Mass Transit, and Transportation Systems Management (TSM) alternative modes were evaluated and determined to not meet the project needs. The “Build with Widening” alternative, consisting of a direct connection between I-276 and I-95 along with related interstate

widening, proved to be the only reasonable transportation alternative mode that satisfies the five project needs identified above. The Final EIS contains additional detail supporting this determination.

The Build with Widening alternative mode would provide a direct interchange between I-276 and I-95. It would also include widening of I-276 from four lanes (two lanes in each direction) to six lanes (three lanes in each direction), and the widening of I-95 in the vicinity of the proposed interchange to accommodate interchange ramps and merge lanes.

Consistent with the National Environmental Policy Act, a range of reasonable transportation Alternatives was identified and evaluated as part of the I-276/I-95 Interchange Project. These are described in Section III of the Final EIS, and documented in the *Pennsylvania Turnpike/Interstate 95 Interchange Project Final Phase I Preliminary Alternatives Analysis Report* (PTC, 1998) and the *Pennsylvania Turnpike/Interstate 95 Interchange Project Phase II Detailed Alternatives Analysis Summary* (PTC, 1998). These Alternatives include those considered as part of the Preliminary Alternatives Analysis and the Detailed Alternatives Analysis, the latter of which included the analysis of alignments to further avoid and/or minimize project impacts. Because the main intent of the proposed action was to provide an interchange or link between two functioning interstate roadways, the build alternatives were located in close proximity to the existing facilities.

As detailed in Section III of the Final EIS, the study area was divided into three separate project elements: Toll Plaza, Interchange, and Bridge (Figure ES-3). The Toll Plaza Element would entail the construction of a new barrier toll plaza to serve as the eastern terminus of the Pennsylvania Turnpike toll collection system. The Interchange Element would contain the fully directional connection between I-276 and I-95. The Bridge Element would involve the construction of a second, parallel Delaware River Turnpike Bridge to accommodate predicted future traffic volumes. The division points between the three project elements were chosen so the elements could be independently designed and constructed, yet be compatible with one another in the development of conceptual engineering designs. The following is a brief description of the Alternatives studied in detail in the Draft and Final EIS.

### A. Toll Plaza Element

Four Build Alternatives in the Toll Plaza Element were studied. The Standard Toll Plaza Alternative was not carried forward for study in the Detailed Alternatives Analysis Phase primarily due to socioeconomic impacts. The Split Plaza West Alternative was not carried forward for detailed study mainly because of Section 4(f) impacts and environmental resource impacts.

The Split Plaza East and Modified Plaza West Alternatives were selected for more detailed study because both meet the project needs, and minimize socioeconomic and environmental impacts compared to the Standard Toll Plaza Alternative. The *Split Plaza East Alternative* staggers the location of the eastbound and westbound toll plazas, with a combined total of 18 lanes. The eastbound toll plaza exiting traffic would consist of ten lanes, including one emergency lane. The westbound toll plaza exiting traffic would consist

of eight lanes, including one emergency lane. Both plazas would be located between Galloway Road and PA 513 (Hulmeville Road) and include electronic toll collection (E-*ZPass*).

The *Modified Plaza West Alternative* is a conventional, full-width configuration plaza that incorporates E-ZPass. This alternative was selected for detailed study because it meets the project needs, avoids Section 4(f) properties, and minimizes environmental and socioeconomic impacts compared to Split Plaza West. It consists of 18 lanes, including two emergency lanes and is located between the Richlieu Road and Galloway Road overpass bridges, near the Philadelphia Park Racetrack. Table ES-1 of the Final EIS identifies the differences in impacts between the Split Plaza East and Modified Plaza West Alternatives.

As part of the project, local improvements in the Toll Plaza Element would include reconstruction of the US 1 bridge over I-276, and widening/reconstruction of I-276 bridges and overpasses that traverse Old Lincoln Highway, and PA 132 (Street Road). The structures over Richlieu Road, Galloway Road, and PA 513 (Hulmeville Road) will be replaced. Socioeconomic, cultural, and natural resource impacts associated with these improvements have been included in the impact summary tables for each Project Element and Alternative.

### B. Interchange Element

The Flyover A and Single Loop A Interchange Alternatives, both located at the point-of-crossing of the interstates in the Interchange Element, were selected for detailed study. The main characteristic of *Flyover A* is that the ramps would make direct connections between I-95 and I-276, including those that "fly over" both interstates to make that connection. *Single Loop A* is similar to Flyover A except that a loop ramp would be substituted for the proposed I-276 eastbound flyover ramp to existing I-95 northbound.

Overall, the Flyover A and Single Loop A Alternatives would have a similar range of environmental and Section 4(f) impacts, with the majority of the surrounding environmental and cultural resource features being avoided. However, Single Loop A would have less commercial and residential property displacements than Flyover A. Table ES-1 of the Final EIS identifies the differences in impacts between these two interchange alternatives.

In addition to the proposed interchange, other improvements that would occur in the Interchange Element include the widening/reconstruction of I-276 bridges that traverse Neshaminy Creek, Mill Creek, Durham Road, and PA 413 (New Rodgers Road); and the replacement of bridges over I-276 at Bensalem Boulevard, New Falls Road, Bristol-Oxford Valley Road, and over I-95 at Ford Road.

### C. Bridge Element

An additional Delaware River Turnpike Bridge is required to accommodate capacity requirements of the forecasted traffic volumes. The *Bridge North* and *Bridge South* Alternatives were both evaluated in detail. These Build Alternatives incorporate a new,

three-lane, one-way directional bridge that would supplement the traffic capacity of the existing Delaware River Turnpike Bridge. The existing bridge would be rehabilitated and used as a three-lane, one-way bridge in the opposite travel direction of the new bridge. Based on design year (2025) traffic forecasts, the last segment of the project to require capacity increases is the Delaware River Crossing. Therefore, the proposed bridge and rehabilitated existing bridge are currently last in the design and construction schedule.

The proposed new parallel structure would be similar in design to the existing bridge for aesthetic reasons. Bridge placement to the north or south of the existing bridge would be the only major design difference between the two alternatives. The separation between the bridges (approximately 22.9 m/75 ft) was based on seismic considerations and to allow construction of the new bridge in proximity to the existing bridge. The channel width and underclearance of the existing bridge would be maintained as per the requirements of the United States Coast Guard (USCG). Because the end of the Pennsylvania Turnpike toll collection system would be relocated to the west of the proposed interchange, the existing two-way toll facility at the Pennsylvania Turnpike Interchange 30/359 would be modified to become a one-way, re-designated I-95 southbound bridge toll plaza. This direction of toll collection would be consistent with one-way tolls of other major Delaware River Bridges between Pennsylvania and New Jersey. Local access would remain via Interchanges 28/351 and 29/358 along I-276 (to be re-designated I-95 east of the proposed interchange), as well as the existing interchanges at PA 413 (New Rodgers Road) and US 1 Business (Old Lincoln Highway), along I-95 (to be re-designated I-295 north of the proposed interchange). The Bridge South Alternative impacts fewer wetlands, streams, and historic resources and requires fewer displacements than the Bridge North Alternative. Table ES-1 of the Final EIS identifies the differences in impacts between the two Bridge Element alternatives.

Further improvements proposed in the Bridge Element include the reconstruction or modification of bridges carrying I-276 over Green Lane and the 3M Railroad Spur.

**Controversial Issues:**

Throughout project development, the Draft EIS Comment Period and Public Hearing, and the Final EIS Comment Period several substantive issues were raised which were considered in the final evaluation of the transportation Alternatives. These concerns include; the potential of the project to adversely impact the Pennsylvania Division of the Delaware Canal, a National Historic Landmark (NHL); a request to include a bicycle/pedestrian facility on or with the proposed new Delaware River crossing, and; the request to expand the project study area to include potential travel routes from local quarries to Interstate 95.

A. Pennsylvania Division of the Delaware Canal

Based upon issues raised by the Pennsylvania State Historic Preservation Office (PASHPO) during the Section 106 process, additional consultation regarding the potential for the project to adversely impact the Pennsylvania Division of the Delaware Canal, an

NHL, have been conducted. Consistent with 36 CFR 800, the National Park Service, Keeper of the National Register of Historic Places indicated their determination, that due to disturbance during the initial construction of the existing Delaware River Turnpike Bridge, the section (approximately 61 m [200 ft]) beneath the bridge does not contribute to the Delaware Canal NHL. This determination followed an onsite field view. The PASHPO did not agree with the FHWA interpretation of this determination.

In consultation with the PASHPO, the FHWA determined that the selected alternative would not adversely effect the Delaware Canal. The PASHPO did not concur with that determination. The Delaware and Lehigh National Heritage Corridor (DLNHC) and the Pennsylvania Department of Conservation and Natural Resources (PADCNR) also disagreed with the determination. Consistent with the same regulations, the Presidents Advisory Council on Historic Preservation (ACHP) was invited to comment on the effects of the project. Following an onsite field view, the ACHP agreed that the selected alternative would not adversely effect the Delaware Canal NHL. Lastly, at the appeal of the PASHPO, the Department of the Interior, NHL Office, requested clarification regarding the proposed undertaking. As with the office of the Keeper of the National Register of Historic Places, and the ACHP, the office of the National Historic Landmarks was provided the opportunity to field view the site. Concluding that field view, the representative from the office of the NHL, indicated that further participation by that office is not anticipated.

Ongoing Section 106 consultation has led to the inclusion of several stipulations in the Programmatic Agreement (PA) *(see Attachment A)* and this ROD further ensuring the protection of the extant Delaware Canal, during construction of the project.

B. Bicycle/ Pedestrian Facility

After the close of the Draft EIS comment period, and during the preparation of the Final EIS, several individuals and organizations requested that a bicycle/pedestrian facility be included in the development of the additional bridge over the Delaware River.

At this time a bicycle/pedestrian facility for the proposed crossing of the Delaware River is not included in the state's transportation planning process, nor has it been identified as a transportation project need associated with the I-276/I-95 Interchange Project. However, because the addition of a multi-modal component to the proposed Delaware River crossing has general merit and is consistent with TEA-21 and FHWA objectives, preliminary investigations were conducted to determine the feasibility of a bicycle/pedestrian facility.

The preliminary investigations revealed some outstanding substantive issues that limit or restrict the incorporation of a multi-modal component in the proposed action, if pursued at this time. Some of the issues or concerns that would need to be considered and addressed by those special interests prior to the ability of the FHWA to reasonably assess the incorporation of a bicycle/pedestrian facility along the proposed Delaware River Bridge include:

- The limitations of the PTC and NJ Turnpike Authority (NJTA) regulations which presently restrict bicycles and pedestrians on their facilities;
- safety issues that require that a bicycle or pedestrian facility be separated from high speed motor vehicles by a barrier and include a screening fence that prevents jumping or falling of path users into the waterway;
- the need to develop and install a fare collection system for access to a commission operated facility as required under the current terms of the PTC indenture and the need to assess the applicability of such fare collection for the NJTA operated portion of the bridge;
- the additional special maintenance and labor costs associated with maintaining the facility;
- the potential for additional socio-economic and environmental impacts pursuant to NEPA and other federal and state laws and regulations;
- an adequate level of coordinated planning efforts by the appropriate interests and
- the efforts of the Delaware Valley Regional Planning Commission to determine location and funding of potential facilities; and
- programming of the bicycle/pedestrian facility into the approved Statewide Transportation Improvement Program (STIP) for both Pennsylvania and New Jersey.

The construction of the proposed Delaware River Turnpike Bridge would not occur until after 2012. Should circumstances change prior to construction, such that the above listed concerns are resolved or nullified, the FHWA and the sponsoring agencies could then re-evaluate the incorporation of a bicycle/pedestrian facility pathway along the proposed Delaware River Bridge Element. A copy of the FHWA letter dated August 1, 2002 pursuant to this issue is enclosed as *Attachment B*.

C. Potential Travel Routes of Sources of Borrowed Fill to Interstate 95

Several commentors inquired as to the location of the source of the necessary fill and roadway sub-base materials to be used for construction of the Project. Individuals were specifically concerned about the possibility that, during the construction of the interchange project, supply trucks might travel from quarries in Wrightstown Township, Bucks County, through neighborhoods in Newtown and Lower Makefield Townships, to the I-276/I-95 Interchange Project construction site. As further noted by commentors, due to a weight-posted culvert, quarry trucks are currently prohibited from using Swamp Road, which is the most direct route (when used in conjunction with the Newtown Bypass [PA332]) to travel between the quarries and I-95. More circuitous state highways through certain neighborhoods are currently being used as an alternative to Swamp Road.

As explained in both the Draft and Final EIS, the construction contract policies of the FHWA, PENNDOT, and the PTC do not regulate the sources or transportation routes of the materials used by the contractor(s) for project construction. Standard and project-specific materials and construction method specifications are used to attain uniform project quality standards. While it is acknowledged that the Wrightstown-area quarries produce PENNDOT-approved materials, it cannot be ascertained whether these quarries, will, or

will not, supply materials for the construction of the I-276/I-95 Interchange Project. Numerous approved quarries (20+) are within the PENNDOT District 6-0 five-county area. Also, some of these quarries are contractor-owned and would likely be used by their owner-contractors should these contractors be awarded construction contracts. In addition, the interchange project is over 8 miles long and could involve a variety of different haul routes for construction material. In summary, the factors affecting the selection and use of construction materials sources and transportation methods are quite variable and unpredictable at this time.

Because of the unknowns surrounding material site selection/transport issues, a quantitative evaluation of the impacts associated with the sources or transportation routes of materials was not conducted as part of the Final EIS. However, PENNDOT is currently evaluating the improvement of the Swamp Road corridor to alleviate the perceived truck traffic issues associated with the movement of stone from the Wrightstown quarries to any location. Swamp Road between the quarries and PA 332 (Newtown Bypass) may be opened to truck traffic by 2007.

**Finding:**

For the reasons described previously, Project Alterative 1, consisting of Modified Plaza West, Single Loop A, and Bridge South, has been identified as the Selected Alternative. Project Alternative 1 is also identified as the Environmentally Preferable Alternative consistent with 40 CFR 1505.2(b). The project is located in a densely populated urban region and, as documented in detail in the Final EIS, Project Alternative I has moderate impacts (2.2 acres) to wetlands, the least impacts to forested wetlands, floodplains, rangelands, surface water crossings, intermittent streams and Section 4(f) protected properties. The attached impact table documents in greater detail the difference in impacts amongst the evaluated alternatives *(see Table 1).*

## III. SECTION 4(f) RESOURCES

As discussed above, and as described in detail in Section III and Section V of the Final EIS, a broad range of Alternatives were evaluated and the impacts on the use of Section 4(f) protected properties are summarized in the Section 4(f) Evaluation. Of the Alternatives evaluated, that are prudent and feasible, all would require the use of property from one (1) public park, Black Ditch Park. All would require the use of one (1) resource listed on the National Register of Historic Places, the Pennsylvania Railroad. Four (4) Alternatives would require the use of one (1) resource listed on the National Register of Historic Places, the Delaware Canal NHL. However, the Selected Alternative would not require the Section 4(f) use of this NHL. These resources are described in detail in the Section 4(f) Evaluation section (Section V) of the Final EIS.

In the Section 4(f) Evaluation, alternatives were studied to determine whether there was any feasible and prudent Alternative to avoid the use of all Section 4(f) resources. It was determined that none of the total avoidance alternatives would meet the project needs, and therefore, they would not be prudent alternatives.

The alternatives analysis contained in the Section 4(f) Evaluation considered:

1. Total avoidance alternatives, which are those alternatives which would avoid uses of all Section 4(f) resources
2. Other alternatives, some of which were considered as part of the Preliminary Alternatives Analysis (PAA), as well as those included in the Detailed Alternatives Analysis and;
3. Shifts and design modifications to avoid or minimize Section 4(f) impacts to individual resource locations.

Finally, all possible planning measures were considered to avoid, minimize and mitigate harm from Section 4(f) use of Black Ditch Park, the Pennsylvania Railroad, and the Delaware Canal NHL. It was determined after incorporation of minimization and mitigation measures, Project Alternative 1 would have the least number of impacts to Section 4(f) resources, minimizing the use of Black Ditch Park and the Pennsylvania Railroad and avoiding the use of the Delaware Canal NHL.

The construction of the selected Interchange Element would require use of a small portion of the streambank of Mill Creek in the Section 4(f) property, Black Ditch Park. Presently the portion of the Park that will be used is a steeply sloped, wooded area that is subject to heavy streambank erosion and utilized for passive recreation. However, use of a grade-separated structure for the interchange ramps, instead of fill embankment, would enhance the function of the floodplain by improving the stability of the streambank and limiting floodplain encroachment. This would help preserve the resource. The new pier necessary to support the bridge structure would be located in the floodplain of Mill Creek, and within the limits of the Park; however, the pier would be designed to maintain current flood elevations of the creek. Proposed retaining walls adjacent to the resource would be designed to aesthetically blend with the setting.

The construction of the selected Bridge Element would require use of a small portion of the National Register eligible Pennsylvania Railroad. This is a linear resource, which runs between New York City and Philadelphia that must be crossed by any Alternative in order to approach and span the Delaware River. This Section 4(f) use would be limited to the location of the proposed piers and an aerial easement and would not use existing track areas or specific architectural contributing elements.

The US Department of Interior, in correspondence dated July 11, 2001 concurred in the finding that there is no feasible and prudent alternative to the use of Section 4(f) resources, and also concurred with the proposed measures to minimize harm.

## IV. MEASURES TO MINIMIZE HARM

During the Transportation Project Development Process, adjustments were made to the various alternatives to avoid or minimize and mitigate where appropriate, impacts to natural, cultural and social/economic resources. These adjustments were reviewed by the

regulatory and review agencies and have been incorporated into the project. The PTC will retain a Design Management Consultant (including an Environmental Monitor) to ensure that design commitments made in the Final EIS and this ROD are incorporated into the final design plans and implemented during construction. Further design refinements will also be reviewed for environmental sensitivity. The natural regulatory and resource agencies will be given the opportunity to review and provide input to such refinements, as appropriate. Additional public involvement activities will be undertaken to provide the public with the same opportunity. The Final Design Management consultant will also ensure that all required environmental permits are obtained and permit conditions are incorporated into the construction contract plans, documents and specifications.

Specific mitigation commitments are made in the Final EIS, Section IV Environmental Consequences. The substantive commitments are summarized below and all commitments will be included in the Mitigation Report:

- An Environmental Monitor (EM) will be retained to ensure execution of each of the minimization and mitigation measures as described in this ROD and in the Mitigation Report. The EM will ensure that the appropriate minimization and mitigation measures are included in the plans and specifications, and will document the implementation of each commitment. The EM will ensure that qualified personnel will be assigned as appropriate.
- Upgrades to existing state roads, as outlined in the Final EIS, will be completed as part of this project.
- Implementation of the CMS Strategies, as described in Section IV of the Final EIS, to complement the proposed I-276/I-95 Interchange and maximize the effectiveness and efficiency of the existing transportation network in both Pennsylvania and New Jersey. This will involve the efforts of Pennsylvania and New Jersey state police, incident/traffic management team, teams from the PTC, New Jersey Turnpike Authority (NJTA), New Jersey Department of Transportation (NJDOT), and PENNDOT, as well as the installation of equipment and infrastructure. Coordination between the aforementioned agencies and the Delaware Valley Regional Planning Commission (DVRPC) is important to the success of these strategies.
- A Maintenance and Protection of Traffic (MPT) Plan will be prepared during final design to minimize temporary traffic impacts during construction.
- Geo-technical investigations will be conducted during final design to determine soil and bedrock characteristics. These will then be evaluated for construction suitability. Final Design will be modified as necessary to ensure stability of the highway and cut slopes.
- ~~o~~ In the event acid producing soils are encountered in New Jersey, methods for testing and mitigation (where appropriate) would be consistent with the current version of the manual. *Technical Manual for Land Use Regulation Program* (NJDEP, 1993).
- The location of utilities (power lines, water and sewer lines, etc.) within the proposed right-of-way will be identified by field survey during pre-final design. Relocations will be performed where necessary.

- Detailed Erosion and Sediment Control Plans would be prepared during Final Design in accordance with the guidelines provided by Pennsylvania Department of Environmental Protection (PADEP); New Jersey Department of Environmental Protection (NJDEP); Bucks County Conservation District; PENNDOT, and the New Jersey Department of Agriculture.
- If private water wells are encountered and impacted, the wells will be replaced, re-drilled to another water producing zone, or public water will be provided, if available.
- Detailed hydrologic and hydraulic analyses will be conducted during final design. This information will be used to finalize the design of bridges, culverts, and channel relocations in accordance with 23 CFR 650 to ensure that these facilities will be of sufficient capacity.
- An application for a United States Coast Guard (USCG) Bridge Permit will be made and coordination with the USCG will occur during final design of the Bridge Element.
- The structures carrying the Selected Alternative over Neshaminy Creek, Mill Creek, the Delaware River, and other unnamed tributaries, will be designed to avoid increases in the 100-year flood elevation. Abutments and piers will be placed so as to avoid or minimize encroachment on the 100-year floodplain.
- During final design and prior to construction, permitting procedures will be instituted in accordance with PADEP Chapter 105 and Chapter 106, NJDEP regulations, and the Floodplain Management Act, P.L. 851, No. 166.
- All construction within floodplains will be in compliance with Executive Order 11988, Floodplain Management, dated May 24, 1977; Federal Emergency Management Agency (FEMA) regulations; and all Federal, State, and local regulations. If the hydraulic studies indicate the project will modify the contour of the floodplain, or increase the floodplain elevation above the Base Flood Elevation (BSE), a Conditional Letter of Map Revision (CLOMR) will be applied for through FEMA.
- Measures to avoid or minimize impacts, as well as mitigation for unavoidable impacts, to surface water resources will incorporate consideration of strategies listed in Section IV of the Final EIS and implementation, as appropriate, during construction.
- Efforts to further minimize or avoid wetland impacts will continue through final design. Wetland mitigation measures and restoration or replacement sites will be identified through coordination with PADEP, NJDEP, the US Army Corps of Engineers (USACOE), and the US Environmental Protection Agency (USEPA). Wetland replacement areas will be constructed which satisfy the following replacement rations: 1:1 replacement acres to lost acres for impacted emergent wetlands; 2:1 replacement acres to lost acres for impacted scrub/shrub and forested wetlands; and 2:1 replacement acres to lost acres for exceptional value wetlands.
- Measures to avoid or minimize impacts, as well as mitigation for unavoidable impacts to wildlife and terrestrial habitat, will incorporate consideration of strategies listed in Section IV of the Final EIS and implementation, as appropriate, during construction. Such measures would be coordinated with the appropriate Federal and State resource agencies.

- In accordance with Executive Order 13112 Invasive Species, measures will be taken to prevent the introduction and spread of invasive species. Specific commitments to control invasive species will be developed during Final Design. Measures that may be utilized are identified in Section IV of the Final EIS.
- Further coordination will be conducted with the National Marine Fisheries Service (NMFS), for the Federally Endangered shortnose sturgeon (*Acipenser brevirostrum*), in accordance with Section 7 of the Endangered Species Act (ESA) [16 U.S.C. Section 1536(a)(2). Construction activities in the Delaware River, and impact minimization measures, would be coordinated with the NMFS, as stipulated in Section IV of the Final EIS.
- Measures will be investigated to further avoid, or minimize impacts to state listed animal and plant species and their habitats. Such measures may include those identified in Section IV of the Final EIS. Implementation of such measures would be coordinated with the state regulatory agencies.
- Mitigation commitments for impacts to potentially significant archaeological sites and commitments to avoid potential impacts historic properties are documented in an executed Programmatic Agreement (PA) and are hereby incorporated in this document. A copy of the executed PA has been attached to this ROD *(Attachment A)*. *(Additional signatures by concurring parties may be added to the agreement after the adoption of the ROD).*
- The PTC will not oppose the pursuit, by an authorized organization, of the reestablishment of a watered channel and/or the use of property under its jurisdiction as a path or trail pursuant to applicable laws and regulations.
- All property acquisitions will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 USC 4601), the Pennsylvania Eminent Domain Code Act of June 22, 1964, as amended, and Title VI of the Civil Rights Act of 1964.
- A re-evaluation of the noise sensitive land uses will occur during Final Design for the Selected Alternative using applicable abatement analysis and design guidelines. Commitments regarding the exact abatement measure locations, heights, and types (or approved alternatives) will also be made at that time.
- Minimization and mitigation measures for visual impacts may include landscaping to screen the views of at-grade and elevated ramps. Citizens and local public officials will have the opportunity to review more detailed engineering plans during the development of project design. Comments would then be taken into consideration and, where feasible, included in the final design.
- Further investigation would be required at potentially sensitive waste sites impacted by the Selected Alternative. Any structures that would be acquired must be surveyed for asbestos and PCB-containing materials before they are demolished. In addition, any known and/or encountered sensitive waste sites would be properly remediated according to appropriate state and federal requirements.

Further detail on the above and other mitigation commitments are contained within the Final EIS or other referenced documents. All mitigation commitments from the Final

EIS and this ROD will be consolidated into one Final Mitigation Report in accordance with the PENNDOT Transportation Project Development Process. This report will be provided to the design manager and the final design consultants as well as made available to agency officials.

## V. MONITORING OR ENFORCEMENT PROGRAM

The FHWA, PENNDOT, and the PTC have committed to monitor final design development and construction of this project to ensure that all mitigation commitments made in the Final EIS, this ROD and the Mitigation Report are implemented. As appropriate, periodic briefings will be offered for the natural and cultural resource agencies to solicit input in the final design and construction and to refine the ongoing efforts to minimize project impacts. Similarly, public involvement activities will be undertaken to solicit input. These efforts will include, but not be limited to: considerations of displacements; wetland impact minimization and mitigation; stream relocations; stormwater management design; avoidance of the intact canal south of the project area; monitoring for the presence of intact canal components in the existing ROW; design considerations for visual impacts; and noise abatement design.

A Design Management Consultant will be retained to assist in the environmental monitoring effort. A Construction Management firm(s) with an Environmental Monitor will be selected to continue the environmental monitoring during the project construction phase(s).

## VI. COMMENTS ON THE FINAL EIS

The Notice of Availability of the Final EIS was published in the *Federal Register* and local papers on July 11, 2003. The comment period officially closed on August 15, 2003. A total of 66 letters of comment were received; 57 letters were received during the comment period, nine (9) letters were received after the close of the comment period.

Six (6) Federal agencies submitted comments, and four (4) letters were received from Federally recognized Native American Tribes.

- Federal Emergency Management Agency (FEMA) indicated that updated Flood Insurance Studies and Flood Insurance Rate Maps for Pennsylvania are available. Also, coordination should be conducted to ensure local flood plain management ordinances are observed.
- The USEPA voiced their concern of potential construction related impacts to natural resources.
- The USACOE reported the Final EIS has been incorporated into the project's permit application file, and will be considered when the USACOE renders a final decision on the Preferred Alternative.
- The DLNHC expressed the opinion that the PTC does not own the property beneath the existing Delaware River Turnpike Bridge. Also, the project would

adversely impact the historic Delaware Canal, the Delaware River Heritage Trail, and the Delaware and Lehigh National Heritage Corridor.

- The US Department of Agriculture (USDA) has no comments or concerns since there are no agricultural impacts.
- Two (2) letters were received from the Delaware Nation, Oklahoma, one (1) letter was received from the Delaware Tribe of Indians, Oklahoma, and (1) letter was received from the Oneida Tribe of Indians of Wisconsin. These letters expressed the desire for the tribes to continued to be consulted regarding the project, specifically regarding archaeological investigations
- The National Park Service (NPS) indicated the DLNHC should be considered a branch or agent of the NPS pursuant to current federal law and regulation, and as such, federal agencies should coordinate directly with the DLNHC.

Eight (8) state agencies submitted comments on the Final EIS.

- The PGC stated their appreciation of mitigation commitments to remove excess sediment deposits between Mill Creek and the I-276 bridge over the creek. This will allow for a wildlife corridor. Also, the PGC suggests a meeting to determine specific items to incorporate into the project, regarding construction timing and distance, pertaining to nesting sites of the Pennsylvania endangered peregrine falcon on the existing Delaware River Turnpike Bridge.
- The PFBC indicate no objection to the construction of the Preferred Alternative. However, there are several items that require additional discussion: stormwater management facility locations, wetland and stream mitigation, species of special concern, stream relocations, and culvert designs.
- The PADCNR Office of the Secretary urged the inclusion of a multi-purpose path for pedestrian and bicycle traffic in the design of the new bridge across the Delaware River. The PADCNR will aid this effort in any way possible.
- The PADCNR Bureau of State Parks supports the PASHPO opinion that the introduction of a new bridge over the Delaware Canal would adversely affect the historic and engineering quality of this NHL, as well as diminish the setting.
- The PADEP Southeast Regional Office requested any sensitive waste sites known or discovered within the required ROW be managed according to PADEP regulations, and the waste be disposed of properly. Also, construction and demolition materials are considered Municipal Waste and will have to be properly managed and disposed.
- The PADEP Soils and Waterways Section requests that practical methods be utilized to avoid and minimize impacts to the wetlands, watercourses and floodplains; impacts to Coastal Zone wetland or waterways must be mitigated in the Coastal Zone; stormwater discharge must be treated during and after construction; PFBC's culvert design manual should be utilized when reconstructing culverts; the PADEP Natural Stream Channel Design for PA should be followed for stream relocations; acknowledgement of the submittal of the 401 Water Quality Certification to be completed after the wetland Jurisdictional Determination; if considering using dredge materials

coordination must be conducted with the PADEP Waste Management Program; Appendix H of the Final EIS should identify permits obtained by utility companies or mining operations; also, concerned about grubbing, construction and demolition material management and disposal; fugitive dust problems.

- The NJDOT stated their support of the accommodation of non-motorized travel in the Bridge Element.
- State Representative Charles McIlhinney, Jr. requests the exploration of the possibility of adding a pedestrian/bicycle facility on the newly proposed Delaware River Bridge for the Project.

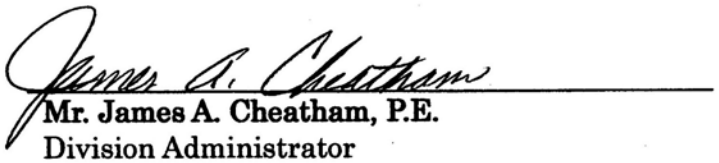
The remaining 48 letters were received from organizations, municipalities, and private citizens. The substantive issues raised included the following:

- A majority of these commenters requested the evaluation of a bicycle/pedestrian facility for the proposed new additional Delaware River Turnpike Bridge.
- Several commenters were concerned about flooding due to the increased stormwater runoff.
- Several commenters were concerned about impacts during construction, such as increased noise.
- Several commenters were concerned about right-of-way acquisitions.

All substantive comments received on the Final EIS and those received during the defined comment period, including responses to each issue are contained in the ROD Basis Report prepared in support of this Record of Decision.

## VII. CONCLUSION

Based on the analysis and evaluation presented in the Final Environmental Impact Statement; consideration of the engineering, social, economic, and environmental factors; and input from the public involvement process, **Project Alternative 1, formed by the combination of the Modified Plaza West, Single Loop A, and Bridge South, is adopted as the Selected Alternative.**



DEC 31 2003

**Mr. James A. Cheatham, P.E.**
**Division Administrator**
**Pennsylvania Division**
**Federal Highway Administration**

Date