1.0 SUMMARY OF THE PROJECT

This section provides an overall summary of the proposed Tremley Point Connector Road project (TPCR). Further details on the project description, proposed mitigation for unavoidable shading/filling impacts to wetlands, purpose and need, alternatives analysis, environmental impacts and mitigation for the TPCR are provided in this Environmental Assessment (EA) in the sections to follow.

1.1 Project Location and Description

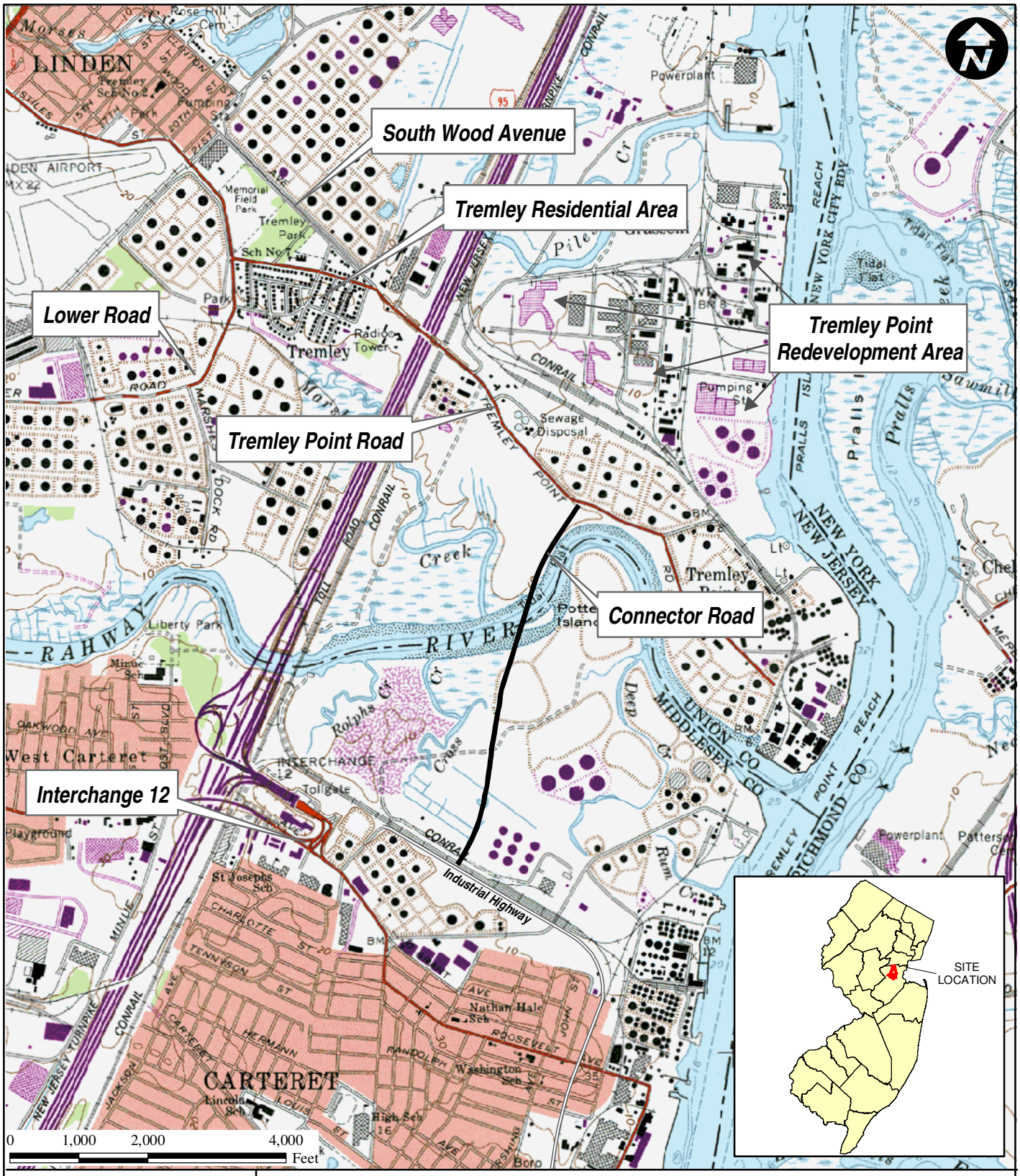
The proposed TPCR consists of the construction of a new, county owned and maintained, four-lane, predominantly pile-supported, approximately 1.1 mile long roadway/bridge. The proposed roadway/bridge will intersect with Industrial Highway in Carteret, Middlesex County, traverse the Rahway River and connect at Tremley Point Road in the City of Linden, Union County, New Jersey (Figure No. 1). The TPCR will provide direct access between the New Jersey Turnpike's Interchange 12 via Industrial Highway and the Tremley Point area of Linden (Figure No. 2). Interchange 12 is located at milepost (MP) 95.9 of the New Jersey Turnpike in Carteret. Also included in the project is mitigation for unavoidable shading and filling impacts to wetlands and associated black-crowned night heron *(Nycticorax nysticorax)* and yellow-crowned night heron *(Nyctanassa violacea)* foraging areas located within the footprint of the proposed TPCR. These impacts will be mitigated through the creation of wetlands from existing uplands located adjacent to Piles Creek wetlands mitigation site on Tremley Point that was previously constructed by the New Jersey Turnpike Authority (Authority) as part of their Interchange 11 to 14 widening program.

Tremley Point Road is a privately maintained roadway that originates at the bridge over the Turnpike at MP 97.2. To the west of this location, the road is known as South Wood Avenue. Tremley Point Road is bounded by various petroleum bulk storage and trucking facilities, a sewerage treatment plant, and the Rahway River with its associated wetlands.

Industrial Highway is bounded to the north by rail lines operated by Conrail and chemical storage facilities operated by Kinder Morgan Inc. (Kinder Morgan). To the south are petroleum storage tanks owned and operated by BP/Amoco (formerly the American Oil Company) and Roosevelt Avenue. To the east is the Arthur Kill and to the west is Interchange 12 (Figure No. 3).

1.2 Project Purpose and Need

To help meet the fast-growing commercial needs of the New York/New Jersey metropolitan region and ensure the continued efficiency and competitiveness of the numerous cargo loading/unloading facilities that operate within the Port of New York and New Jersey (Port), the cargo industry seeks to improve and increase their capacity with a modern warehousing/distribution network that can support their ever increasing economic activity.



Legend

Tremley Point Connector Road

SOURCE:
NJDEP GIS Database
TeleAtlas Roads, 2006
USGS Topographic Map,
7.5 Minute Series
Arthur Kill Quadrangle, 1981

STATE PLANE COORDINATES
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USGS SITE LOCATION MAP
NEW JERSEY TURNPIKE AUTHORITY TREMLEY POINT CONNECTOR ROAD
BOROUGH OF CARTERET, MIDDLESEX COUNTY
AND CITY OF LINDEN, UNION COUNTY
NEW JERSEY

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Chk'd By: ID	Date: 08/15/08	Figure No. 1

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Legend

Tremley Point Connector Road

SOURCE:
TeleAtlas, 2006

ROAD MAP
NEW JERSEY TURNPIKE AUTHORITY
TREMLEY POINT CONNECTOR ROAD
BOROUGH OF CARTERET, MIDDLESEX COUNTY
AND CITY OF LINDEN, UNION COUNTY, NEW JERSEY

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Chk'd By: IPD	Date: 8/15/08	Figure No. 2

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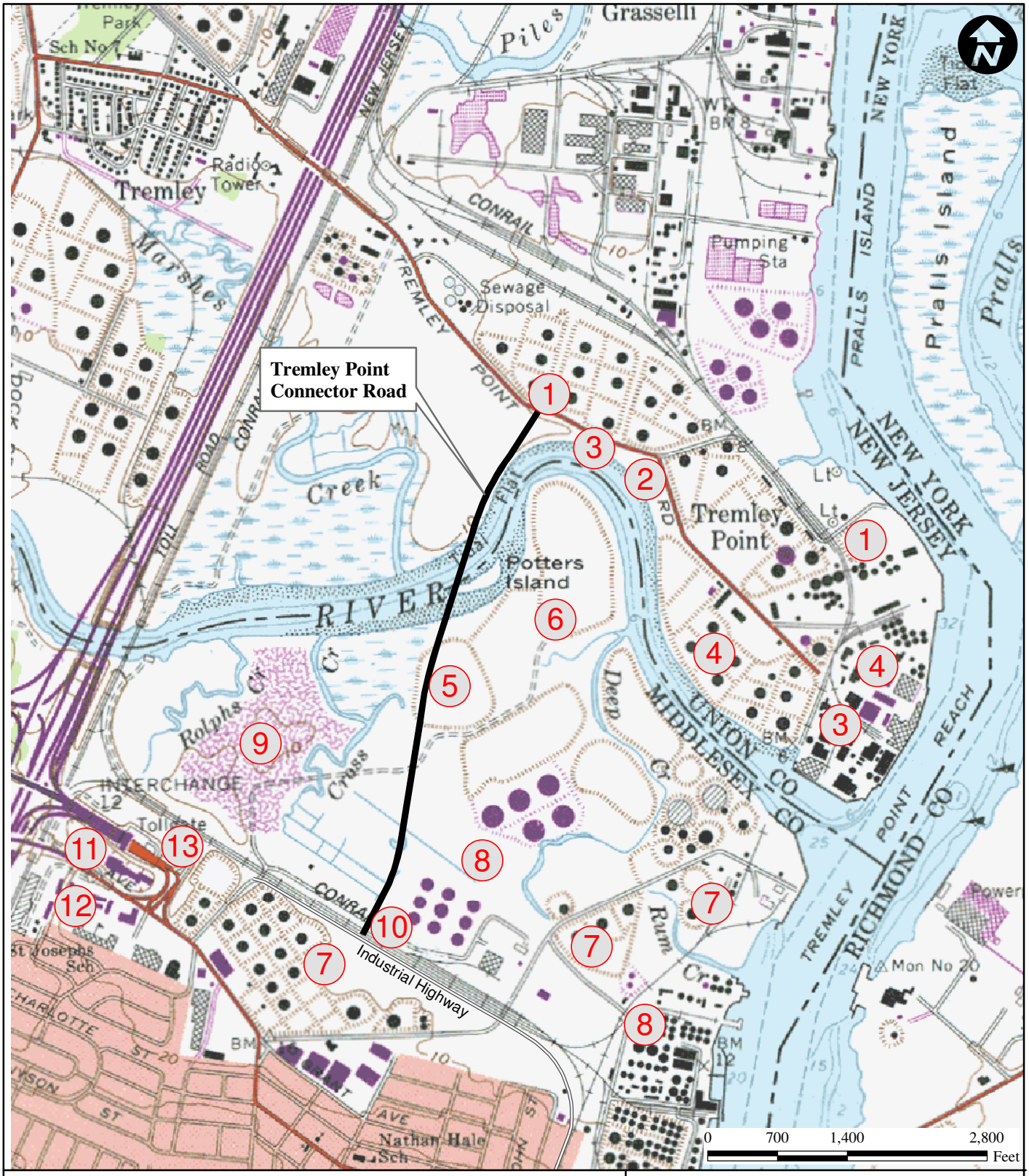

ADJACENT PROPERTY OWNERS
NEW JERSEY TURNPIKE AUTHORITY
TREMLEY POINTCONNECTOR ROAD
BOROUGH OF CARTERET, MIDDLESEX COUNTY
AND CITY OF LINDEN, UNION COUNTY, NEW JERSEY

Legend
Tremley Point Connector Road

SOURCE:
USGS Topographic Map, 7.5 Minute Series Arthur Kill Quadrangle NY,NJ, 1981
TeleAtlas, 2006

1 - Tosco Terminal
2 - Tremley Point Industries
3 - Sea Scout Base
4 - Citgo Petroleum
5 - Cytec (American Cyamamid)
6 - Cytec (American Cyamamid)
7 - BP / Amoco
8 - Kinder Morgan
9 - Titan PDC (formerly Carteret Sanitary Landfill / Slayton Tract)
10 - Carteret Industrial Road
11 - Holiday Inn
12 - Garden Apartments
13 - United Bulk Carriers

PS&S integrating design & engineering	Drawn By: ML	Scale: 1" = 1,400'	Project No. 02595.003.004
	Chk'd By: IPD	Date: 8/15/08	Figure No. 3

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As part of this industry effort, candidate brownfield sites (and/or other under-utilized sites) located within approximately 25 miles of the Port are being investigated to ascertain their potential to accommodate the growing market demand for warehousing/distribution centers to support the Port's continued on-going growth. The Tremley Point area in Linden is within easy reach of existing Port facilities and consists of an undeveloped area with 400 acres of brownfields that has the potential to be redeveloped into commercial warehousing facilities to respond to the Port's needs.

The proposed redevelopment of approximately 400 acres of brownfields at Tremley Point will generate a significant amount of traffic, most of which would be destined for the Turnpike and other major highways. The only current means of ingress and egress to and from the Tremley Point area for trucks and other vehicles is via the combination of Tremley Point Road and South Wood Avenue. The current traffic in the area mainly consists of commercial vehicles, including tanker trucks that distribute refined petroleum products from existing petroleum storage facilities in the Tremley Point area. Currently the closest accessible major highway is Route 1&9 in Linden, approximately 1.5 miles away.

Use of the existing local road network to accommodate the proposed Tremley Point redevelopment would require routing the newly-generated traffic onto South Wood Avenue through the predominately residential areas of Linden. To adequately accommodate proposed Tremley Point redevelopment, Union County, in conjunction with the City of Linden, requested the Authority to investigate the potential for providing a direct connection between the Turnpike and the proposed Tremley Point Redevelopment area that would not significantly increase traffic, primarily from trucks, in the residential areas of Linden. A new roadway/bridge (the TPCR) is proposed to be constructed from Tremley Point Road in Linden to Industrial Highway in Carteret to deliver the traffic from the Tremley Point area. The TPCR will allow the Tremley Point area traffic to access the Turnpike via the toll plaza at Interchange 12, which will result in a significant decrease in peak period traffic on South Wood Avenue over existing conditions.

In addition to addressing the existing limited roadway network for ingress/egress to Tremley Point, the various TPCR Alternatives, as discussed in Sections 2.0 and 3.0, will convey the Tremley Point Redevelopment traffic away from South Wood Avenue and encourage a significant volume of truck traffic to utilize Industrial Highway and ultimately Interchange 12. The TPCR would route most of the heavy truck traffic away from the commercial and residential areas along South Wood Avenue and direct it to the industrial areas along Industrial Highway. While some changes in traffic on South Wood Avenue are unavoidable with such a large scale redevelopment, the TPCR is expected to be the preferred route for the vast majority of the vehicles as it will be a faster and more efficient means for accessing other roadways as compared to South Wood Avenue. Use of the direct Industrial Highway connection to Interchange 12 for the TPCR would also attract some of the existing traffic from the commercial and residential areas along Roosevelt Avenue in Carteret.

Ten alternative alignments are being evaluated for the TPCR. Previously, five alternative alignments for a new Turnpike Interchange (12A) were evaluated and rejected as a means of addressing the Tremley Point redevelopment traffic (see Sections 2.0 and 3.0 and Appendix H). All of the 10 TPCR alternative alignments that are being evaluated share the common goals of the purpose and need for this project.

Without a means to address the increase in traffic that will occur with the redevelopment of approximately 400 acres of existing brownfields, the City of Linden is reluctant to commence with the full redevelopment of Tremley Point. The TPCR would allow the City of Linden to redevelop the Tremley Point brownfields and support a sizable amount of cargo storage traffic for the foreseeable future. This will increase the value of the municipal tax base for Linden, provide clear environmental benefits to the citizens of Linden and the region from the remediation of contaminated sites at Tremley Point, and meet State-wide planning goals for redevelopment within the urban core, served by existing infrastructure.

On-going improvements to Interchange 12 will be constructed prior to the completion of the TPCR, mainly to address impacts upon Carteret roadways from existing and anticipated traffic in Carteret. The Authority has obtained the necessary New Jersey Department of Environmental Protection (NJDEP) and U.S. Army Corps of Engineers (USACE) permits for Interchange 12 and construction is currently underway with an estimated completion date of the fourth quarter of 2009. While the TPCR could benefit from an improved Interchange 12, this project is independent of that project, and in fact, it was initially proposed, unsuccessfully, to route the TPCR project exclusively through Linden as Interchange 12A (see Sections 2.1 and 3.0, and Appendix H).

1.3 Wetlands Impacts

Construction of the TPCR will result in filling/shading impacts to tidal and freshwater wetlands associated with the 100-year tidal floodplain of the Rahway River. By constructing a retaining wall and an elevated, pile-supported viaduct structure for the TPCR, the impacts to wetlands will be minimized to the extent practicable. Impacts to wetlands that are the result of the filling are associated with the terminal sections of the roadway where embankments are needed (i.e., the areas adjacent to Industrial Highway and Tremley Point Road). In accordance with guidance provided by the City of Linden, there will be no impacts to the three wetland parcels that total 0.455 acres in size which are located within the brownfield redevelopment area. A summary of the construction costs and wetlands impacts for the various alignments are presented in Table 1-1 with detailed information provided in Table 3-1.

Depending upon the alternative alignment used for this project, construction of the TPCR will impact between 4.3 to 14.2 acres of wetlands (i.e., predominantly shading impacts). Wetlands impacts are considered to be the only significant impact from implementation of the TPCR, therefore the project is being submitted for review with two potential refinement alignments, (i.e., Alternate Alignments 9 and 10) which will reduce wetlands filling/shading impacts down to slightly more than four acres. As the predominant

impact will result chiefly from shading by the pile supported viaduct, additional and innovative means to further reduce the wetlands impacts will continue to be assessed and researched throughout the NEPA process. Additionally, incorporated as an integral part of the proposed TPCR project is the commitment by the Authority to create replacement wetlands from existing uplands located adjacent to Piles Creek at the wetlands mitigation site on Tremley Point that was previously constructed by the Authority as part of their Interchange 11 to 14 Widening Program. This creation of wetlands from existing uplands will occur adjacent to the proposed brownfield development site and will be completed to the satisfaction of the U.S. Coast Guard (USCG), in consultation with the USACE, NJDEP, U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS) and U.S. Environmental Protection Agency (USEPA) prior to opening the TPCR to vehicular traffic. Mitigation for wetlands impacts is discussed in Section 6.0 of this EA.

1.4 Construction Impacts

Traffic on Industrial Highway and Tremley Point Road, in addition to other local roads, may be temporarily impacted during the construction activities due to temporary shoulder and lane closures required for construction equipment to access the project site and to reconstruct the roadways where they intersect with the TPCR.

Depending upon the TPCR alternative alignment to be implemented, minimal amounts of landfill material and/or contaminated soils may be disturbed by pile driving for the structural supports of the elevated roadway. To ensure the structural stability of the roadway embankment for at-grade portions of the roadway, landfill and/or contaminated soils may be excavated and removed. These potential disturbances of landfill material will be performed in accordance with the provisions of Landfill Disruption Permits to be obtained from NJDEP. Disturbances of contaminated soils will be performed in accordance with the provisions of an NJDEP approved Remedial Action Workplan (RAW). Anticipated impacts and proposed mitigative measures are summarized in Table 5-11.

1.5 Traffic

Projected future area-wide growth in traffic volumes in northern New Jersey, and more specifically, traffic growth attributable to development on Tremley Point, has been factored into the level-of-service (LOS) traffic modeling conducted for the TPCR. The traffic modeling results indicate that the TPCR and Tremley Point redevelopment will not result in a deterioration of the existing LOS at intersections in the vicinity of Interchange 12 and Tremley Point Road. In addition, the results of the projected traffic impact analysis for South Wood Avenue (see Section 5.1.6.5) indicate that with construction of the TPCR, the projected traffic volumes will not exceed the design capacity of the roadway as a result of already approved and proposed redevelopment projects on Tremley Point and will result in a significant decrease in peak period (morning and evening) truck and vehicular traffic on South Wood Avenue over existing conditions.

Traffic on Interchange 12, Roosevelt Avenue, Industrial Highway, Tremley Point Road and local roadways may be temporarily impacted during construction of the TPCR due to temporary shoulder and lane closures. Traffic delays from such closures will be minimized in accordance with Authority, county and municipal policies and procedures.

1.6 Air Quality

The TPCR project was recently listed on the North Jersey Transportation Panning Authority's (NJTPA) Transportation Improvement Program (TIP) for Fiscal Year (FY) 2009-2012. The NJTPA has determined that the FY 2009-2012 TIP for northern New Jersey conforms with the State Implementation Plan (SIP) established by the NJDEP. Conformity is the process that has been established by joint guidance from the U.S. Department of Transportation (USDOT) and USEPA that ensures transportation investments will contribute to improving air quality in areas where concentrations of certain pollutants, including carbon monoxide, ozone and particulate matter, exceed national standards. Based upon the emission modeling results presented in the NJTPA's *"Air Quality Conformity Determination"* for FY 2009-2012, the NJTPA has satisfied all requirements of the federal final conformity rule for the TPCR.

1.7 Alternative Alignments

Alternative alignments that were evaluated for the TPCR are presented in Section 3.0. These alternative alignments include the No-Action Alternative, the creation of Interchange 12A (see Appendix H), an alignment through the former Carteret Landfill that has been developed into a warehouse distribution facility by Titan PDC, and nine other alternative alignments that extend from Industrial Highway in Carteret, traverse over the Rahway River and terminate at Tremley Point Road in Linden. Alternative alignment No. 10 is designated as the preferred TPCR project alternative in Section 2.0. Important elements of the evaluation included wetlands, existing landfill areas, approved redevelopment project sites, soil contamination, petroleum and chemical tank farms, navigation and land uses.

Although the No-Action Alternative, by definition, avoids all potential adverse environmental impacts from implementation of the TPCR, it will fail to achieve the basic purpose and need for the project (i.e., mitigate traffic impacts to urban residential neighborhood associated with redevelopment of the brownfields on Tremley Point; remediation and beneficial reuse of contaminated sites), and significant regional transportation benefits will not be realized. The following is a summary table of the alternative alignments that have been evaluated in detail in Section 3.0, including the Interchange 12A alternative designs that have been rejected. Further information is provided in Table 3-1.

Table 1-1 Summary of Alternatives for the Tremley Point Connector Road		
ALTERNATIVE	**WETLANDS, OPEN WATER and UPLAND IMPACTS**	**TOTAL COST ($Million)**
TPCR – Alternate 1	0.4 acres – Wetlands 0.9 acres – Open Water 11.7 acres – Uplands	$108.9
TPCR – Alternate 2	8.9 acres – Wetlands 0.8 acres – Open Water 1.2 acres – Uplands	$53.5
TPCR – Alternate 3	7.4 acres – Wetlands 0.8 acres – Open Water 1.2 acres – Uplands	$73.3
TPCR – Alternate 4	10.2 acres – Wetlands 0.7acres – Open Water 1.5 acres – Uplands	$57.1
TPCR – Alternate 5	6.1 acres – Wetlands 1.1 acres – Open Water 0.4 acres – Uplands	$49.7
TPCR – Alternate 6	6.4 acres – Wetlands 0.9 acres – Open Water 0.8 acres – Uplands	$49.3
TPCR – Alternate 7	7.5 acres – Wetlands 0.9 acres – Open Water 0.4 acres – Uplands	$57.8
TPCR – Alternate 8	7.4 acres – Wetlands 0.6 acres – Open Water 3.6 acres – Uplands	$88.3
TPCR – Alternate 9	4.9 acres – Wetlands 1.2 acres - Open Water 1.5 acres – Uplands	$56.0
TPCR – Alternate 10	4.3 acres – Wetlands 1.4 acres – Open Water 2.4 acres – Uplands	$62.6
Interchange 12A – Alternate A	13.2 acres – Wetlands 0.9 acres – Open Water 24 acres – Uplands	$334.4
Interchange 12A – Alternate B	7.9 acres – Wetlands 0.2 acres – Open Water 19.8 acres – Uplands	$301.0
Interchange 12A – Alternate C	7.2 acres – Wetlands 0.9 acres – Open Water 23.2 acres – Uplands	$287.4
Interchange 12A – Alternate D	9.1 acres – Wetlands 0.5 acres – Open Water 35.4 acres – Uplands	$439.0
Interchange 12A – Alternate E	14.2 acres – Wetlands 1.6 acres – Open Water 24.2 acres – Uplands	$361.4

1.8 Mitigation Measures

1.8.1 Temporary/Construction

Soil movement during construction of the TPCR and the creation of wetlands at an upland site on Tremley Point located adjacent to Piles Creek that was previously used for the creation of wetlands by the Authority will be minimized through the use of best management practices and implementation of a Soil Erosion and Sediment Control Plan certified by the Freehold Soil Conservation District (SCD) for the portions of work in Carteret and a Soil Erosion and Sediment Control Plan certified by the Somerset-Union SCD for the portions of work in Linden. As significant portions of the TPCR will be an elevated roadway/bridge, the construction will require little ground disturbance compared with the construction of an at-grade roadway, and the disturbance of landfill material (if any) along the right-of-way of the TPCR will be minimized. Any disturbance of landfill material will take place in accordance with the requirements of Landfill Disruption Permits to be obtained from the NJDEP for geotechnical test borings, subsurface construction activities and pile driving. It is proposed that disturbed landfill materials will either be returned to the landfill and appropriately covered, or disposed of at an appropriate off-site facility.

Areas of contaminated soils that may be encountered and identified during pre-construction assessments will be addressed in accordance with an NJDEP-approved RAW. Soils encountered during construction activities that are identified as contaminated based upon field monitoring and measurements or visible characteristics will be segregated, stockpiled and tested to identify appropriate re-use and/or disposal measures in accordance with NJDEP regulations.

As a major portion of the TPCR is to be constructed over wetlands along with minimal adjacent uplands, timber mats are proposed to be placed on the wetlands for temporary access by construction equipment and the areas of disturbance will be restored after construction. In addition, for construction activities over and in the Rahway River, barges will be used to the extent practicable to minimize disruption to the river bottom and adjacent shore areas.

1.8.2 Permanent/Operational

Although operation of the TPCR will result in an increase in the area of pavement that will be treated with seasonal de-icers, the additional chloride load to existing surface drainage features and the Rahway River will be minimized through the application of best management practices (BMPs) and implementation of an approved NJDEP stormwater management plan.

Opportunities for mitigation of the shading and filling impacts to wetland resources within the immediate vicinity of the project area are being proposed as

part of the overall TPCR project. The mitigation site is located immediately adjacent to the Authority's previously constructed nine-acre wetlands creation mitigation site on Tremley Point (see Figure No. 22 in Section 5.1.4.5). The proposed mitigation site is currently an upland area composed of field and under-story tree species that will be removed for the creation of additional tidally influenced wetlands at Piles Creek. There are limited available upland resources within the project area that are not existing brownfields or contaminated areas; therefore, the Authority will investigate as an additional remedy the purchase of wetlands credits if determined necessary by regulatory agencies. The USACE and NJDEP would be the principal agencies to make this determination.

The USACE has previously authorized the purchase of wetlands mitigation credits for the Authority sponsored Interim Improvements to Interchange 12. As part of the project design presented herein, the creation/enhancement of wetlands in the vicinity of Piles Creek has available capacity for approximately 9.9 acres of wetlands creation and 5.4 acres of wetlands enhancement opportunities, so the purchase of wetlands credits is not thought to be necessary. Wetlands mitigation will be addressed as part of the NJDEP and USACE permits and will be subject to further review and approval during the permitting for the TPCR.

1.9 Unavoidable Adverse Environmental Impacts

Construction of the TPCR Alternative Alignment No. 10 will impact approximately 4.3 acres of wetlands (i.e., predominantly shading impacts). These wetlands impacts are the total due to a combination of placement of roadway embankment fill and shading impacts associated with the elevated roadway structures to be constructed on piers. The avoidance and minimization of these adverse impacts to wetlands, and known contaminated soil areas, were examined during the alignment and design alternatives, as presented in Section 3.0. Given the project's purpose and need and the land use constraints (i.e., limited upland areas for construction), impacts to wetland resources and contaminated soils will be minimized to the maximum extent practicable. The purchase of credits from a wetland mitigation bank is an additional means of mitigating or reducing wetlands impacts that will be investigated, if deemed necessary during the EA process.

1.10 Other Environmental Impacts

The proposed TPCR project will impact other environmental parameters, the vast majority of which will be beneficial impacts once the project has been implemented. A detailed discussion of the project related impacts is provided in Section 5.0 under the heading, "Probable Environmental Impact of the Project if Implemented" with a Summary Table and Environmental Impact Checklist provided as Table 5-11. Section 6.0 discusses the methods to be implemented to mitigate for any unfavorable environmental impacts. The areas of impact that are evaluated and discussed include: geology; soils; land forms; hydrological features; vegetation; wildlife and habitat; threatened or endangered species; flood plains; wetlands; air quality; noise; hazardous

materials; project area land use; demographics; public and municipal services; utilities; cultural features; parks and recreational facilities; aesthetic features; historical and archaeological features; and architectural features.

1.11 Licenses, Permits and Other Approvals

The TPCR will require several environmental approvals. Specifically, the construction of the TPCR and the wetlands creation area will result in disturbance of more than 5,000 square feet of soil, thus requiring a Soil Erosion and Sediment Control Plan certification from the Freehold and Somerset-Union SCDs pursuant to the Soil Erosion and Sediment Control Act of 1975. The TPCR will also require authorization under NJDEP's Construction Activity Storm Water General Permit Program of the New Jersey Pollutant Discharge Elimination System (NJPDES), administered jointly by the NJDEP and the SCD. A Flood Hazard Area Control Act Permit, Freshwater Wetlands Individual Permit, Waterfront Development Permit and a Riparian Instrument will also be required from the NJDEP. The Flood Hazard Area Control Act Permit will be required due to activities within the 100-year flood plain. The wetlands permit is necessary for impacts to tidal wetlands along the proposed roadway alignment, and the Waterfront Development Permit and Riparian Instrument are required due to historically flowed tidelands within the primary impact area. The USACE also must issue a permit or approval for wetland impacts of the project.

Approval of the Site Remediation Program at the NJDEP will also be required. A Memorandum of Agreement application (MOA) will need to be prepared and approved by NJDEP. This MOA will provide the framework for the submission of additional remedial studies of the chosen alternative alignment for the TPCR, up to and including a RAW potentially for the Cytec Properties. As an additional consideration, a request for approval from the NJDEP will also be submitted for disturbances in the deed-restricted portions of the Cytec Property.

As the TPCR will traverse the Rahway River, a navigable river used for commerce, a USCG Bridge Permit pursuant to the General Bridge Act of 1946 will be required.

1.12 NEPA/Environmental Compliance

The USCG has confirmed that an EA pursuant to the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality (CEQ) regulations implementing NEPA is needed to assist the USCG and other regulatory and review agencies in their evaluation of a permit application for this project. The USCG also advised the Authority that the USCG is the lead federal agency in implementing the NEPA review. This EA was prepared to document that the proposed TPCR would have potentially significant effects on the environment, but that the impacts of the TPCR after wetlands mitigation will be less than significant, in which case a Finding of No Significant Impact (FONSI) can be prepared. The results of this EA are expected to indicate that with the combination of the TPCR impact avoidance measures, minimization measures and mitigation measures as described in this EA for the proposed

TPCR, not only will the TPCR project result in no significant adverse environmental impacts, but it will result in an overall positive environmental benefit by enabling the remediation, redevelopment, and productive re-use of contaminated brownfield sites at Tremley Point.