

2.0 PURPOSE AND NEED AND DESCRIPTION OF THE PROPOSED PROJECT

2.1 Project History

Tremley Point is an abandoned former industrial area located in the City of Linden east of the Turnpike mainline and north of the Rahway River (Figure No. 1). It is projected that the proposed redevelopment of the Tremley Point area will generate a significant amount of truck traffic, most of which will be destined for the Turnpike. The existing local road network would require routing this new traffic through the already congested and predominately residential areas of Linden to eventually reach the Turnpike via Routes 1&9. Union County requested the Authority to investigate means to provide a new direct connection between the Turnpike and the proposed redevelopment area so as not to increase truck traffic through the residential neighborhoods along the route to and from Tremley Point. To deliver the traffic from the Tremley Point area to the Turnpike at Interchange 12, the construction of a new TPCR is being proposed between Tremley Point Road in Linden and Industrial Highway in Carteret. This will allow traffic to enter the Turnpike via the new access from Industrial Highway to the toll plaza at Interchange 12 and not have to rely upon the existing local roads within Linden to support the redevelopment of Tremley Point.

The Authority is currently improving operations at Interchange 12 in Carteret to address the existing severe traffic congestion that results in an unacceptable LOS at the interchange during most times of the day. The proposed improvements at Interchange 12 currently under construction include adding toll lanes to the toll plaza, reconfiguration of the toll plaza entrance and exit ramps, and improvements to the local approach roadway intersections. The toll plaza improvements, based upon completed traffic studies, will address the anticipated traffic volumes in Carteret that will result from the following approved development projects in Carteret: OENJ Car Port; Lower Roosevelt RDA; Ferry Terminal; Port Carteret; and Titan PDC, in addition to traffic that would be generated at the proposed redevelopment of the Tremley Point brownfield areas of Linden.

As an alternative to constructing the TPCR, the possibility of constructing a new Turnpike interchange on the north side of the Rahway River to service the redevelopment in Linden was previously investigated. A study was performed and documented by the Authority's General Consultant, HNTB, in a report entitled, *Alternatives Study, Proposed Interchange 12A Truck Only Interchange* dated April 18, 2001. This study found that a new Interchange, 12A, was not feasible due to operational and geometric traffic conflict issues related to the proximity of the proposed Interchange 12A deceleration/acceleration lanes relative to the existing deceleration/acceleration lanes for Interchanges 12 and 13. (Descriptions of the 12A concepts are provided in Appendix H.)

Subsequent to the investigation of the Interchange 12A concept, HNTB investigated several alternative alignments for the TPCR. The results of their investigation are contained in a report titled *Interchange 12 Improvements and Tremley Point Road Connector, Alternatives Study*, dated March 4, 2002. Four alignment alternatives

contained in the HNTB report were carried forward into the Alternatives Analysis (Section 3.0) of this EA. The current phase of the TPCR involves performing evaluation of alignment alternatives that meet the project's purpose and need. Investigation of available NJDEP documentation related to potentially contaminated areas and comments from federal and state review agencies led to the development of six additional alignment alternatives that are also included in the Alternatives Analysis of this EA document. One of these six alignment alternatives (Alternate 10) is designated as the TPCR Project and its description is presented below in Sections 2.3 and 2.4.

An initial NEPA scoping session was held at the offices of the USCG on March 2, 2005 with representatives from the U.S. Environmental Protection Agency (USEPA), USACE, National Marine Fisheries Service (NMFS), U.S. Fish & Wildlife Service (USF&WS) and NJDEP, in addition to the Authority and their environmental and engineering consultants. A subsequent site visit on April 4, 2005 resulted in a request from the USEPA and USF&WS to consider additional alternative alignments. (The USF&WS also provided additional comments via correspondence dated May 13, 2005.) The alternative alignment requested by USF&WS would require disrupting the Titan PDC development, an area that is approaching the completion of construction for a warehousing distribution center. The USEPA requested the consideration of an alignment that travels immediately adjacent to the northbound lanes of the Turnpike. All of the alternative alignments are presented in Section 3.0 of this EA.

In 2004, prior to beginning the development of the initial geotechnical boring program for the TPCR, a neighborhood organization, the Tremley Point Alliance, petitioned the NJDEP Environmental Justice Task Force (EJTF) on the following three issues relative to any redevelopment of the Tremley Point Area:

- Performance of a health survey and air quality monitoring due to the high incidence of asthma and other respiratory illnesses in the area;
- Protection of wildlife that exists in the Seventh Ward (Tremley Point); and
- Prior to any approvals for projects in the Seventh Ward that have a potential to impact human health/environment, an EIS and public participation must be required.

The EJTF has evaluated the Environmental Justice Petition (EJP) and has conditionally approved the EJP, provided that the EJTF and the Tremley Point Alliance mutually agree to identify specific actions prior to developing an Action Plan. No mutual agreement has been reached as of yet.

However, as documented in this EA, with the combination of the TPCR impact avoidance measures, minimization measures and mitigation measures for the proposed TPCR, the TPCR will result in no significant adverse environmental impacts. Also, the TPCR and the proposed redevelopment of Tremley Point will help to mitigate impacts associated with Tremley Point redevelopment. Further, the TPCR will result in an overall positive environmental benefit to the citizens of Linden by enabling the remediation of contaminated sites in the vicinity of the resident's homes that make up the Tremley Point Alliance and thereby reducing their exposures to these contaminated sites. In addition,

the TPCR will be a statewide benefit based upon the numerous State and regional planning studies (i.e. State Development and Redevelopment Plan, NJDEP Brownfields Redevelopment Act, Smart Growth Initiatives, Port Authority of New York/New Jersey Portfields Initiatives, and Union County and Middlesex County planning goals) that will allow for needed redevelopment of brownfields sites. Ultimately, the TPCR will aid in alleviating Linden's burden of contaminated sites and will reduce their unfavorable impact of living adjacent to contaminated sites.

2.2 Purpose and Need for the Project

Several alternative alignments have been evaluated for the TPCR (see Section 3.0 and Appendix H). All of the alternatives share the common goals of the purpose and need for this project, which are to:

- Facilitate and enable the rehabilitation and redevelopment of approximately 400 acres of brownfields at Tremley Point while:
 - avoiding or minimizing potential adverse environmental impacts to the affected environment;
 - mitigating unavoidable environmental impacts due to the TPCR; and
 - maximizing environmental improvements resulting from the implementation of the TPCR, including the remediation and clean-up of known contaminated sites for beneficial reuse that will be a benefit to the citizens of Linden and also the residents of New Jersey overall; and
- Address the existing traffic, primarily trucks, and potential for future additional traffic from already approved developments by the City of Linden and future planned developments to and from Tremley Point that currently have to travel through a residential section of Linden on South Wood Avenue as the sole means of reaching major roadways such as Route 1&9 and the Turnpike.

The above TPCR goals are shared by and in conformance with: the State Master Plan; the Brownfield Redevelopment and Smart Growth Initiatives; the Union County Port Master Plan; and area Municipal plans and goals.

2.2.1 Port of New York and New Jersey

The New York/New Jersey metropolitan region is one of the world's largest consumer markets. With an extensive existing infrastructure composed of a combination of maritime, rail, aviation and highway transportation networks, more than 100 million customers within a one day's journey are efficiently provided with goods and materials imported to the region. The region's maritime and transportation facilities are among the largest and most productive in the nation, supporting more than 300,000 jobs and \$17.8 billion in economic activity. The Port of New York & New Jersey (Port) is the third largest port in the United States and the largest on the East and Gulf coasts. The Port is currently increasing

in size at a rate of approximately 4% per year. With the advent of deeper channels up to 50 feet in depth, it is anticipated by the Port Authority of NY/NJ that the growth of the Port will continue.

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, the cargo industry must have a modern warehousing/distribution network that can support their business. However, in such a densely populated area, it has become increasingly difficult for businesses to find appropriate warehousing/distribution facilities inside the metropolitan region in the areas closest to the vast majority of the region's port and airfreight infrastructure.

In order to meet the needed capacity of warehousing to support the Port's continued growth, existing brownfield sites (and other under utilized sites) located within 25 miles of the Port are being investigated to ascertain their potential to accommodate the growing market demand for warehousing/ distribution centers. The sites under evaluation by the Port Authority of NY/NJ need to meet the following desirable criteria to be most appropriate for this use:

- Located within 25 miles of the Port;
- Easy access to major highways;
- Site development issues that are resolvable and not cost prohibitive;
- Adjacent to essential utilities and zoned appropriately for industrial use or designated for redevelopment;
- A minimum of 25 acres;
- Close to key port, airfreight and/or other transportation hubs and infrastructure;
- Developable for ocean or airfreight related warehousing and distribution, especially those activities that would bring significant jobs, investment and economic activity to the Port and region;
- Limited ownership interests (i.e., minimal property assemblage issues); and
- Local government support.

The Tremley Point brownfield areas in Linden meet all these criteria, with the exception of having easy access to a major highway.

2.2.2 Tremley Point

Tremley Point is currently composed of approximately 400 acres of underutilized and vacant brownfield areas and several petroleum storage facilities that distribute refined petroleum products to the region. In conformance with the State Master Plan, Brownfield Redevelopment and Smart Growth initiatives, the redevelopment of approximately 400 acres of brownfields on Tremley Point, which will be facilitated by the TPCR, will remediate known contaminated sites

for beneficial reuse that will be a benefit to the citizens of Linden in particular and the residents of New Jersey overall. The current means for distribution of the refined petroleum products located on Tremley Point is through the use of tanker trucks and the only means of egress to the region is via Tremley Point Road to South Wood Avenue and the first major highway, Route 1&9 in Linden. This route goes through residential areas of Linden. Tremley Point has various brownfield areas that can be redeveloped into commercial warehousing facilities; however, Linden has been reluctant to approve such large-scale redevelopment due to the limited road access to the area.

The proposed redevelopment of the Tremley Point area will generate a significant amount of traffic, most of which will be destined for the Turnpike and other highways (see Sections 4.1.6 and 5.1.6). Use of the existing local road network will require routing this new traffic through the already congested and predominately residential areas of Linden. To deliver the traffic from the Tremley Point area, a new roadway is proposed between Tremley Point Road in Linden and Industrial Highway in Carteret. This will allow traffic to enter the Turnpike via the toll plaza at Interchange 12.

The Authority is improving the operations at Interchange 12 to address the current severe congestion from the existing traffic volumes in Carteret and the anticipated traffic generated from approved developments in Carteret. The traffic from the proposed redevelopment of the Tremley Point brownfield areas of Linden can also be accommodated through the improvements to Interchange 12. The Tremley Point redevelopment is located on the opposite side of the Rahway River to the north of the Interchange 12 toll plaza area. Currently, the only means to travel from Carteret to Tremley Point is via Roosevelt Avenue to Randolph Avenue in Rahway; access Routes 1 & 9 by Lawrence Street, travel along Routes 1 & 9 to Linden and then travel through residential areas of Linden on South Wood Avenue to reach Tremley Point, a distance of seven miles.

In addition to addressing the above existing road connections, the various TPCR alternatives, as discussed in Section 3.0, will convey potential brownfield redevelopment traffic away from South Wood Avenue and encourage a significant volume of truck traffic to utilize Industrial Highway. This will route most of the heavy truck traffic away from the commercial and residential areas along South Wood Avenue and direct it to the less developed areas along Industrial Highway. Use of the existing direct Industrial Highway connection to the Interchange 12 toll plaza for the proposed TPCR also minimizes the addition of traffic to the commercial and residential areas along Roosevelt Avenue in Carteret.

2.2.3 Constituency to be Served

The proposed TPCR would provide a direct link between Carteret and Linden where none currently exists. Tremley Point Road crosses over the Turnpike at

MP 97.2 and is then called South Wood Avenue west of the Turnpike. South Wood Avenue is a 25 mph local road through predominantly residential areas of Linden. Currently, all traffic, including industrial truck traffic, to and from Tremley Point has to travel through the residential section of Linden to gain access to major highways such as Routes 1 & 9 and the Turnpike. All of the TPCR alternatives considered are designed to intercept most of the vehicular traffic from Tremley Point and provide a direct access to the Turnpike at Interchange 12 via Industrial Highway.

The Turnpike, traveled by approximately 710,000 vehicles per weekday, is one of two major north-south transportation arteries in New Jersey; the Garden State Parkway being the other. The Turnpike serves all classes of vehicles (the Parkway excludes trucks for a major portion of its network) and is a key link in the ground transportation interstate network connecting the Eastern Seaboard that serves heavy volumes of automobiles, trucks and buses.

2.2.4 Benefits of the Project

The immediate benefit of the TPCR will be the realization of the redevelopment of approximately 400 acres of brownfield areas at Tremley Point into modern commercial/warehouse facilities. In addition to the significant economic benefits to the region and the State that the brownfields redevelopment will have, it will also provide an important positive environmental benefit to the surrounding area through the remediation and cleanup of known contaminated sites at Tremley Point.

The TPCR will also provide the benefit of addressing the existing traffic, and potential for future traffic, primarily trucks, from the local roads in Linden by intercepting traffic from Tremley Point that is currently destined for Routes 1&9, and directing the traffic to Industrial Highway in Carteret and ultimately to Interchange 12.

The City of Linden has already approved the redevelopment of existing sites (i.e., Tremley Expansions) now or formerly owned by a combination of Tremley Point Marine, PSE&G, Citgo, Grasselli, Pacific Gas and DuPont. While some of the approved redevelopment of existing facilities has not yet been undertaken, once implemented, these projects are anticipated to significantly increase traffic on South Wood Avenue. The current AM peak traffic on South Wood Avenue is 87 trucks and 248 vehicles. If all of the approved Tremley Expansions are implemented, the AM peak traffic on South Wood Avenue will increase to 401 trucks and 714 vehicles. (See Section 5.1.6)

With the construction of the TPCR, it is anticipated that the majority of these vehicles will abandon the use of South Wood Avenue and instead use the TPCR. It has been modeled that with the TPCR in place to intercept traffic, the Tremley Expansion traffic on South Wood Avenue during the AM peak period will

actually decrease to 50 trucks and 200 vehicles, a substantial decrease over existing traffic conditions even without the Tremley Expansions.

Anticipated future traffic in the area is composed of two components: background growth; and traffic that will be generated by new and planned redevelopment projects (i.e., Tremley Expansion) in the region (see Section 5.0 – Probable Environmental Impact of the Project if Implemented).

2.3 Project Description

The TCPR will be county owned and maintained and will consist of the construction of a new, predominantly pier/pile-supported, 1.1 mile long, four-lane elevated roadway/bridge that will extend from Industrial Highway in Carteret, traverse the Rahway River and terminate at Tremley Point Road in Linden. Alternate 10 is provided as the full description of the proposed TPCR as it has the least wetlands impacts (i.e., 4.3 acres) as compared to the other alternative alignments and meets the purpose and need of the project. Further details on the various other alternative alignments/designs that have been developed to provide a direct link between Linden and Carteret are provided in Section 3.0 – Alternatives to the Proposed Project.


2.4 Tremley Point Connector Road – Alternate 10

2.4.1 Description

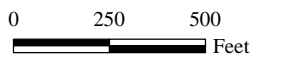
Alternate 10 provides one of the most direct connections between Industrial Highway and Tremley Point Road (Figure No. 4). The TPCR will be constructed on a combination of retaining walls and elevated pile supported viaduct that will traverse predominantly tidally influenced wetlands and open water of the Rahway River. This approximately 5,700-foot long alignment intersects Industrial Highway at a point that utilizes the existing embankments of the Kinder Morgan Tract. This alignment bends slightly to the north with a 2,530 foot radius to travel through the western most lagoon of the former American Cyanamid site and crosses the Rahway River on a skewed alignment with a 2,530 foot radius to the northeast and a bridge length of approximately 1,200 feet. This alignment continues on a tangent for approximately 530 feet where it ties into Tremley Point Road.



Legend

 Alternate Route 10

Source:
 Access Alternatives From New Jersey Turnpike
 To Tremley Point, Dated November 2006,
 Drawn by Edwards & Kelsey.
 ESRI StreetMap USA, 2007.
 Pictometry Online Imagery, 4/22/07.
 ArcGIS Online – Aerials Express, 2006.



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

**TREMLEY POINT
 CONNECTOR ROAD
 ALTERNATE 10**

Dwn By: JFA	Scale: 1" = 500'	Project: 02595.003.004
Chkd By: IPD	Date: 8/15/08	Figure No. : 4

Construction of Alternate 10 will impact approximately 4.3 acres of wetlands through a combination of filling and shading impacts. In order to mitigate/compensate for unavoidable wetlands impacts and impacts to night heron foraging areas, incorporated as an integral part of the proposed TPCR project is the commitment by the Authority to create replacement wetlands by enlarging the wetlands mitigation site located adjacent to Piles Creek on Tremley Point that was previously constructed by the Authority. This creation of wetlands from existing uplands will occur adjacent to the proposed brownfield development site and will be completed to the reasonable satisfaction of the USCG, in consultation with the USACE, NJDEP, USFWS, NMFS and USEPA prior to opening the TPCR to vehicular traffic. 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.

2.4.2 Geometry

In accordance with the 2001 AASHTO Manual entitled “*A Policy on Geometric Design of Highways and Streets*” this alignment satisfies a design speed of 50 mph with curve radii varying from a minimum of 2,530 feet. A maximum superelevation rate of 4% is utilized for the horizontal curvature with superelevation transition rates based on 2% per second for the design speed. Vertical grades vary from a minimum of 0.5% to a maximum of 3% with minimum vertical curve lengths based on three times the design speed. Both the horizontal and vertical geometry permit a posted speed of 45 mph along the TPCR.

2.4.3 Environmental Impacts

This alignment traverses large tidally influenced wetland areas on both sides of the Rahway River with impacts to approximately 4.3 acres of wetlands, the least wetlands impacts, with the exception of Alternate 1, which is not considered a viable alternative (see Section 3.3). This alignment follows the western edge of the Rahway River on the Linden side of the project, more than the other alignments. This orientation maintains a large continuous wetland area to the west of the roadway. It is environmentally preferable to maintain the continuity of wetland areas as much as possible.

This alignment is located within the western-most portion of the American Cyanamid sludge lagoons and is intended to avoid, or at least minimize, impacts to current wetlands. The results of the soil borings data collected as part of the initial geotechnical boring program indicate that the lagoon area soils and groundwater have elevated concentrations of lead and zinc in excess of NJDEP guidance levels. This alignment can be slightly altered and the type of structure used through the area will be selected to minimize contamination impacts.

Based upon a review of available files, there is a potential for soil and groundwater contamination along this alignment. Contaminated soils and a layer of free product on the groundwater were encountered during construction of the Industrial Highway in the vicinity of the BP/Amoco wetlands. Records of the soil sampling taken during construction indicate that petroleum hydrocarbons, cyanide, organic compounds and heavy metals were present in the soils. Contamination found at the BP/Amoco wetlands is related to the presence of coal ash, contaminated surface water and contaminated groundwater.

2.4.4 Construction Cost

The estimated construction cost for Alternate 10 is \$59,600,000. The property acquisitions (uplands, wetlands and riparian) necessary for the alternate are estimated to be approximately 8.1 acres. An order of magnitude combined cost for both the property acquisitions and mitigation needed for this alternate, based on local tax records and recent sales information, is estimated to be \$3,055,500. The resulting total cost estimate for Alternate 10 (i.e., including construction, property acquisition and mitigation costs) is \$62,655,500.

2.4.5 Advantages

The Alternate 10 alignment is the second shortest route between Industrial Highway and Tremley Point Road. Also, on the south side of the river this alignment utilizes Kinder Morgan's upland diked berms and upland containment lagoons, including one of the Cytec lagoons, to minimize wetland impacts. By utilizing Kinder Morgan's uplands, there is the possibility of providing additional stormwater management basins in this area. The TPCR will cause relatively minor impacts to wetlands (i.e., 4.3 acres), with the predominant impact being the shading of wetlands, and with minimal impact to the Kinder Morgan site, while maintaining large continuous wetland areas on the north and south side of the Rahway River

2.4.6 Disadvantages

This alternate has the longest river crossing, combined with a longer length of viaduct on a structure. Using one of the Cytec lagoons as a means to minimize wetlands impacts reduces the potential for redevelopment of the Cytec lagoon for other purposes. This alternate adds several hundred feet to trip length for each vehicle on Industrial Highway and requires a ROW acquisition at the Kinder Morgan Facility. However, these disadvantages are not significant.

2.5 Project Sponsor

The Authority is the project sponsor for the proposed TPCR. The Authority was established pursuant to the Turnpike Authority Act (N.J.S.A. 27:23-1 *et seq.*) that was enacted by the New Jersey State Legislature in October 1948 to construct, maintain and

operate a modern express highway in New Jersey. Its Board of Commissioners is appointed by the Governor of New Jersey, subject to the approval of the State Senate. The headquarters of the Authority is located at 581 Main Street, Woodbridge, New Jersey.

2.6 Project Setting

2.6.1 Regional

The project site is located in the northeast-central portion of New Jersey (Figure No. 1).

2.6.2 Municipal

The proposed TPCR will be located within the Borough of Carteret, Middlesex County and traverse over the Rahway River to the City of Linden, Union County, New Jersey.

2.6.3 Neighborhood

The area of the proposed TPCR intersection with Industrial Highway in Carteret contains a combination of Interchange 12 and industrial properties. To the north of the intersection is a railroad line, the Kinder Morgan petroleum bulk storage facility and the Titan PDC warehousing distribution facility located on the former Carteret Landfill. To the west is the Turnpike interchange and to the south is an extensive bulk storage petroleum facility managed by BP/Amoco (Figure No. 3).

The immediate area of the proposed TPCR intersection with Tremley Point Road in Linden contains a series of petroleum bulk storage facilities owned and operated by Citgo, Tosco, Cytec, and Tremley Point Industries. There is also a wastewater treatment facility operated by the Linden-Roselle Sewerage Authority.

2.7 Design and Operational Features

2.7.1 Proposed Improvements

Besides the proposed TPCR itself, two new signalized intersections will be developed where none currently exist at each terminus for the TPCR intersections (i.e., Tremley Point Road and Industrial Highway). The new signalized intersections will allow for an acceptable level of service (LOS) for all traffic using the TPCR and intersecting roadways. Further information on the various alternative designs that have been evaluated for achieving suitable service rates for various vehicles is presented in Section 3.0 - Alternatives to the Proposed Project.

2.7.1.1 Construction Schedule

The engineering phase of the project can be completed during 2010. The duration of construction for the TPCR will be approximately two years, with an estimated completion date of late 2012. The Authority will coordinate the construction of the federal/state agency approved alternative alignment with the Carteret and Linden police departments for traffic coordination and with the owners of adjacent properties that may be temporarily impacted by construction activities.

2.7.1.2 Work Force Required

It is estimated that there will be a construction work force that will generate approximately 225,000 man-hours of labor over the two-year construction period. The construction work force in persons per day will vary over the construction period.

2.7.1.3 Construction Traffic

It is anticipated that during construction of the TPCR the new intersections with Tremley Point Road, and the railroad crossing and Kinder Morgan Salt Meadow Road located adjacent and parallel to Industrial Highway will require construction staging and maintenance and protection of traffic to minimize disruptions on the existing roadways. When necessary, traffic will be redirected onto temporary lanes. The greater need for traffic control coordination will be at Industrial Highway, which has higher traffic volumes than Tremley Point Road.

2.7.1.4 Site Preparation

Typical clearing and grubbing activities will precede the limited excavation and filling to support the pile driving necessary to achieve the proposed grades. Burning or blasting will not be permitted. Soils and groundwater with levels of contamination above the NJDEP Cleanup Criteria that may be encountered during preconstruction investigations will be appropriately handled, segregated and/or appropriately recycled/disposed as per procedures to be implemented with an NJDEP-approved RAW.

2.7.1.5 Precautionary Measures

Approved soil erosion and sediment control plans from the Freehold and Somerset-Union SCDs will be implemented to protect soil and surface water/wetlands resources at the project site. Dust control measures, which may include wetting and temporary vegetation of soil stockpiles, as applicable, will also be implemented.

2.7.2 Operational Phase

2.7.2.1 Capacity of Tremley Point Connector Road

The proposed TPCR has been designed to accommodate projected peak traffic volumes based on a 20-year traffic projection (i.e., 20 years from construction of the TPCR), including approximately 6,000 vehicles in each of the AM and PM periods (entry and exit) (See Section 5.1.6). As a proposed four-lane highway, the TPCR will accommodate peak hour volumes at an acceptable level of service of C or better.

2.7.2.2 Discharges

The principal discharge from the project site during operation of the TPCR will be stormwater runoff from paved areas. The majority of the runoff will be managed in water quality basins, as described in Section 5.1.4.3.

2.7.2.3 Use of Resources

When in operation, the TPCR will require the use of the following resources:

- Energy to power lights for the roadway and intersections;
- Fuel for maintenance vehicles; and
- Avoidance of extra motor vehicle miles travelled and associated fuel usage and productivity loss associated with utilization of existing roadways for Tremley Point area access.

Each of these resources is available in sufficient supply to serve the TPCR.