

4. SECTION 4(F) EVALUATION

4.1 INTRODUCTION

This Section 4(f) Evaluation has been prepared pursuant to federal regulations contained in 23 CFR Part 771.135 which implements Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended, 49 U.S.C. 303 and 23 U.S.C. 138. This act requires that a Section 4(f) Evaluation be prepared for any federally funded highway project that uses property from a significant publicly owned park, recreation area, wildlife and waterfowl refuge, or land from an historic site of National, State, or local significance as determined by the officials having jurisdiction over the park recreation area, refuge, or historic site. The Section 4(f) evaluation must demonstrate that the following conditions have been met:

1. There is no feasible and prudent alternative to the use of that land; and
2. The action includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from such use.

Historic sites under Section 4(f) include any archaeological sites that are considered eligible for inclusion on, or are already on, the National Register of Historic Places and which warrant preservation in place, including those discovered during construction. The term “use” occurs when the land from a Section 4(f) site is acquired for a transportation project and there is an occupancy of land that is adverse, in terms of the statute’s preservationist purposes, or the proximity impacts of the transportation project on the Section 4(f) site, without acquisition of land, are so great that the purpose for which the Section 4(f) site exists are substantially impaired. The latter is termed “constructive use” and can include, amongst other things, an increase in noise level that affects enjoyment of the resource, impairment of the aesthetics of the resource’s setting, a restriction of access to the resource, the effects of construction vibration, and interference with access to a wildlife or waterfowl refuge that would affect its ecological functions.

This Section 4(f) evaluation is based on portions of the Historic Architecture Technical Environmental Study, Volumes I through IV.

4.2 DESCRIPTION OF SECTION 4(F) RESOURCES

4.2.1 Parkland and Open Space

The Green Acres Program serves as an agent for the NJDEP, to manage the acquisition of land when it becomes part of the system of state parks, forests, natural areas, and wildlife areas. Green Acres works with the NJDEP's divisions of Parks and Forestry, Fish and Wildlife, and the New Jersey Natural Lands Trust to determine which lands should be preserved. Green Acres does not own the land it acquires; instead land is assigned to the divisions for management.

4.2.1.1 Kennedy Park

In Somers Point, Kennedy Park is the only parkland/open space in the Green Acres program potentially affected by the proposed project. It is located along the shore of the bay in Somers Point approximately 600 meters (2,000 feet) west of the Route 52 causeway. The causeway and the World War Memorial Bridge can be clearly viewed from the southeast corner of the park. The park, approximately 4.2 hectares (10.5 acres) in area, is a quiet place with lawns and trees and mostly passive activities.

4.2.1.2 Tidal Marsh Islands

In Ocean City, the Route 52 causeway passes over three tidal marsh islands (the Rainbow Islands) in Great Egg Harbor Bay. The portions of these islands that are outside of the highway right-of-way, along with other islands in Great Egg Harbor Bay (including the fill area supporting the Ocean City Information Center) are part of Ocean City's open space inventory and are Green Acres encumbered. Open space areas on the three islands measure approximately 101 hectares (250 acres). These islands, which are inundated at high tide, are covered with cordgrass (*Spartina alterniflora*) and include some meandering water channels. Recreational fishermen

can be found along the shores of the islands fishing in Rainbow Channel or Elbow Thorofare. The islands also provide nesting habitats for birds and small animals and therefore are being considered a 4(f) areas. Refer to Section 3.4 Natural Ecosystems.

4.2.2 Cultural Resources Sites

4.2.2.1 Archaeological

No significant prehistoric or historic archaeological sites were discovered during the field surveys performed for this project.

4.2.2.2 Historic Bridges

Of the four structures constructed, circa 1933, over the four channels crossed by the causeway, only the World War Memorial Bridge over Ship Channel has been found eligible for inclusion in the National Register of Historic Places. The others were evaluated and found to be not eligible because they were judged either not to be distinctive in design or they had been significantly altered by past rehabilitation work. Refer to Section 3.5 Cultural Resources.

The bascule bridge over Ship Channel and the viaduct approaches to it constitute the eligible structures. The structures are badly deteriorated, especially the approaches, and they are beyond the point where they can be rehabilitated. Also, there are only 12 meters (40 feet) between existing parapets. In order to meet current safety standards, the reconstructed causeway structures would have to be widened to 24 meters (80 feet) plus a 1.8 meter (6.0 foot) sidewalk on one side.

4.2.2.3 Historic Architecture

In a prior study in 1995, two additional sites in Somers Point were found to be listed on, or eligible for listing, on the National Register of Historic Places. These included the Somers

Mansion (listed on the National Register on December 18, 1970), and the Bay Front Historic District (eligible for the National Register).

In a study conducted for this project it was revealed that three sites in Ocean City within the Area of Potential Effects are eligible for inclusion in the National Register of Historic Places. (See Figure 3.5-4). They are the Dockside Café/Marina, Bayside Center, and Tabernacle Baptist Church.

4.3 ALTERNATIVES ANALYSIS

Ten Build Alternatives plus four variations were developed and evaluated, in addition to the No Build Alternative. Several of these alternatives neither minimized nor avoided Section 4(f) resources. Others avoided or minimized Section 4(f) impacts; however, they had to be rejected for other overriding considerations. The remaining Build Alternatives that were ultimately selected for detailed environmental consideration all have some impacts to parkland and cultural resources. Refer to Table 4.3-1 and Figure 4.3-1.

4.3.1 Alternatives That Neither Minimize Nor Avoid Section 4(f) Impacts

Initially, alternatives involving a causeway with a centrally located high fixed span bridge were considered. Alternative 1 proposed a causeway on embankment, on an alignment offset to the east of the existing Route 52 alignment, with a high level fixed bridge over centrally located waterways. Alternative 2 was very similar, except the alignment was to be offset to the west of the existing alignment. These alternatives were rejected in the early stages because they involved dredging in high value clam habitats and they would have required relocating the ICWW into the Rainbow Channel.

To avoid these significant dredging problems, alternatives utilizing the existing channels were considered. These alternatives were on alignments reasonably close to the existing Route 52 alignment. Alternatives 3 and 4 both involved the construction of moderately raised bascule bridges over the existing channels. In Alternative 3, the causeway traversing the Rainbow

Islands was to be on embankment, with an alignment to the east of existing. In Alternative 4, the causeway was to be entirely on structure, offset to the west of existing. Both were rejected in the early stages because they did not sufficiently reduce the number of bridge openings and they had very high long-term bridge operation and maintenance costs.

An alternative with smooth horizontal and vertical alignment and significant ease of construction feasibility was also considered. Alternative 8 proposed high level fixed bridges over both of the existing channels, with the causeway entirely on structure and an alignment offset significantly to the west of existing. Alternative 8 was also rejected early because it required the acquisition of 10 commercial properties and would create profound visual impacts to downtown Ocean City.

The alternatives discussed here had overriding “fatal flaws” and did not meet the project purpose and need.

4.3.2 Alternatives That Avoid or Minimize Section 4(f) Impacts

Several alternatives that either avoided or minimized Section 4(f) impacts were proposed. Please refer to Table 4.3-1 and Figure 4.3-1.

The No Build Alternative (Alternative 11) involves retaining the existing causeway and bridges, and providing continual repair work necessary to keep the facility functional. Rehabilitation of specific portions of the roadway, bridges, and pilings would be conducted, as necessary. Clearly, retaining the existing causeway and bridges would avoid any impacts to the Rainbow Islands parkland and open space, the World War Memorial Bridge (eligible for the National Register of Historic Places), and the settings of the Bayside Historic District in Somers Point and the Dockside Café/Marina in Ocean City. However, the causeway bridges are badly deteriorated, and continued repair and rehabilitation will not preserve the structural integrity of the causeway and bridges, and will continue to present a safety hazard. The No Build Alternative is not viable since this proposal functions under the assumption that the World War Memorial Bridge could be maintained in safe condition while preserving all or most of its historic characteristics.

**Table 4.3-1
SUMMARY OF SECTION 4(f) IMPACTS**

	Alternative	Description	Area of Parkland Taken	Parkland Access Effects (Islands)	Effects to World War Memorial Bridge	Effects to Bayside Center	Effects to Dockside Café / Marina
Alternatives with minimum 4(f) impacts (considered, but rejected)	11	No Build	None	None	Short-term: None Long-term: eventual replacement needed	None	None
	6	Rehabilitation	None	None	No effect	None	None
	6 Modified	Rehabilitation with widened causeway portion	Minor	None	Adverse effect to approach spans	None	None
	7	Aligned distantly to the West	Minor	Vehicular access eliminated	Adverse effect	Visual effect	Visual effect
	10	Tunnel	None	Vehicular access eliminated	Adverse effect	Visual effect	Visual effect
Alternatives considered for further evaluation	5A	2 bascule bridges with causeway on continuous structure; alignment offset to the west	4.12 Hectares (10.18 Acres)	Modified, but maintained	Adverse effect	Visual effect	Visual effect
	5B	1 bascule bridge and 1 fixed bridge with causeway on continuous structure; alignment offset to the west	3.65 Hectares (9.02 Acres)	Modified, but maintained	Adverse effect	Visual effect	Visual effect
	5C	2 fixed bridges with causeway on continuous structure; alignment offset to the west	3.65 Hectares (9.02 Acres)	Modified, but maintained	Adverse effect	Visual effect	Visual effect
	9/9A-1	2 fixed bridges (9) or 1 bascule bridge and 1 fixed bridge (9A) with causeway on continuous structure; alignment near existing	4.33 Hectares (10.70 Acres)	Modified, but maintained	Adverse effect	Visual effect	Visual effect
	9/9A-2	2 fixed bridges (9) or 1 bascule bridge and 1 fixed bridge (9A) with Rainbow Island portion on embankment with edge walls; alignment near existing	4.33 Hectares (10.70 Acres)	Modified, but maintained	Adverse effect	Visual effect	Visual effect
	9/9A-3	2 fixed bridges (9) or 1 bascule bridge and 1 fixed bridge (9A) with Rainbow Island portion on embankment with side slopes; alignment near existing	6.22 Hectares (15.37 Acres)	Modified, but maintained	Adverse effect	Visual effect	Visual effect

Note: The first three rejected alternatives (11, 6, and 6 Modified) do not meet the project purpose and needs. All the other alternatives do, but the rejected alternatives 7 and 10 have unacceptably high socioeconomic impacts. Additionally, alternative 10 has exorbitant life-cycle costs.

Further, the No Build Alternative conflicts with the purpose and need for this project because of the following shortcomings:

- it does not widen lanes, add shoulders nor provide a median barrier – all of which would improve traffic safety;
- it does not raise the level of the causeway to prevent it from becoming impassable during severe storms, which could also impede evacuation during an emergency; and
- it does not eliminate, nor significantly reduce, the delays to motorists and emergency vehicles as a result of frequent bascule bridge openings during the tourist season.

Build Alternative 7, which would have almost no physical impacts to cultural resources and parklands, was considered. This alternative proposed a new causeway, entirely on structure, offset distantly to the west of the existing alignment with high level fixed bridges over the existing channels. However, the World War Memorial Bridge would ultimately be removed, and vehicular access to the parklands would be eliminated. This alternative was rejected for further consideration due to the severe socioeconomic impacts it will impose on both residences and businesses, and its significant alteration of prevailing traffic patterns.

Alternative 6 involves rehabilitation of the existing causeway exactly as it is. The World War Memorial Bridge would be rehabilitated following the guidelines of the Department of the Interior, and the other three bridges would be reconstructed. Although this alternative would have no impact on Section 4(f) properties, it retains the low level bascule bridges, and the facility remains subject to flooding. Therefore, this alternative does not meet the purpose and need of the project, and consequently, was rejected. A variation of Alternative 6 (6 Modified) would involve widening the entire causeway from the existing 3.0 meter (10 foot) wide lanes to standard 3.6 meter (12 foot) wide lanes with shoulders and sidewalk over most of the causeway, except for the World War Memorial Bridge over the Ship Channel. The profile would remain the same. This rehabilitation alternative avoids most of the visual impacts to the settings of the Bayside Historic District in Somers Point and the Dockside Café/Marina in Ocean City. Although this alternative may slightly alter the setting near the Somers Mansion, there would be no anticipated adverse impacts to the Somers Mansion because its setting does not contribute to its eligibility. However, to the extent that additional right of way would be required to widen

the lanes, minor impacts would occur to the open spaces of the Rainbow Islands. These impacts would be limited to the area acquired for the right of way.

Alternative 6 Modified would also not meet the purpose and need of this project, except that it would widen lanes over a part of the length. Also, the abrupt transition from a width of 24 meters (80 feet) to 12 meters (40 feet) over Ship Channel would introduce an unacceptable safety hazard. Maintaining traffic during construction would be extremely difficult due to the restricted width of the existing causeway. Furthermore, the approaches to the World War Memorial Bridge are so badly deteriorated that they would have to be replaced. Accordingly, the World War Memorial Bridge could not be rehabilitated without a 4(f) use. On the basis of these facts, this alternative was rejected.

Alternative 10 proposed that a tunnel be built from MacArthur Boulevard in Somers Point to 9th Street in Ocean City along an alignment substantially west of the existing Route 52 alignment. This alternative would have essentially no physical effects on parklands or cultural resources, with the exception of the World War Memorial Bridge, which would be removed. However, vehicular access to the recreational areas would be eliminated and, in addition, this alternative would have extremely serious construction phase impacts on tidal wetlands and shellfish habitat. Moreover, it would have significantly higher construction costs and would also affect many of the businesses in Ocean City and Somers Point. It was therefore rejected.

4.3.3 Alternatives Selected for Detailed Environmental Evaluation

The Build Alternatives addressed in this Section 4(f) analysis include the following: Alternatives 5A, 5B, and 5C, and Alternatives 9 and 9A. The proposed structures for these alternatives would be higher than the existing crossing, with different bridge designs. For all of the Build Alternatives, the proposed high fixed bridges would be approximately 40 feet higher than the existing World War Memorial Bridge.

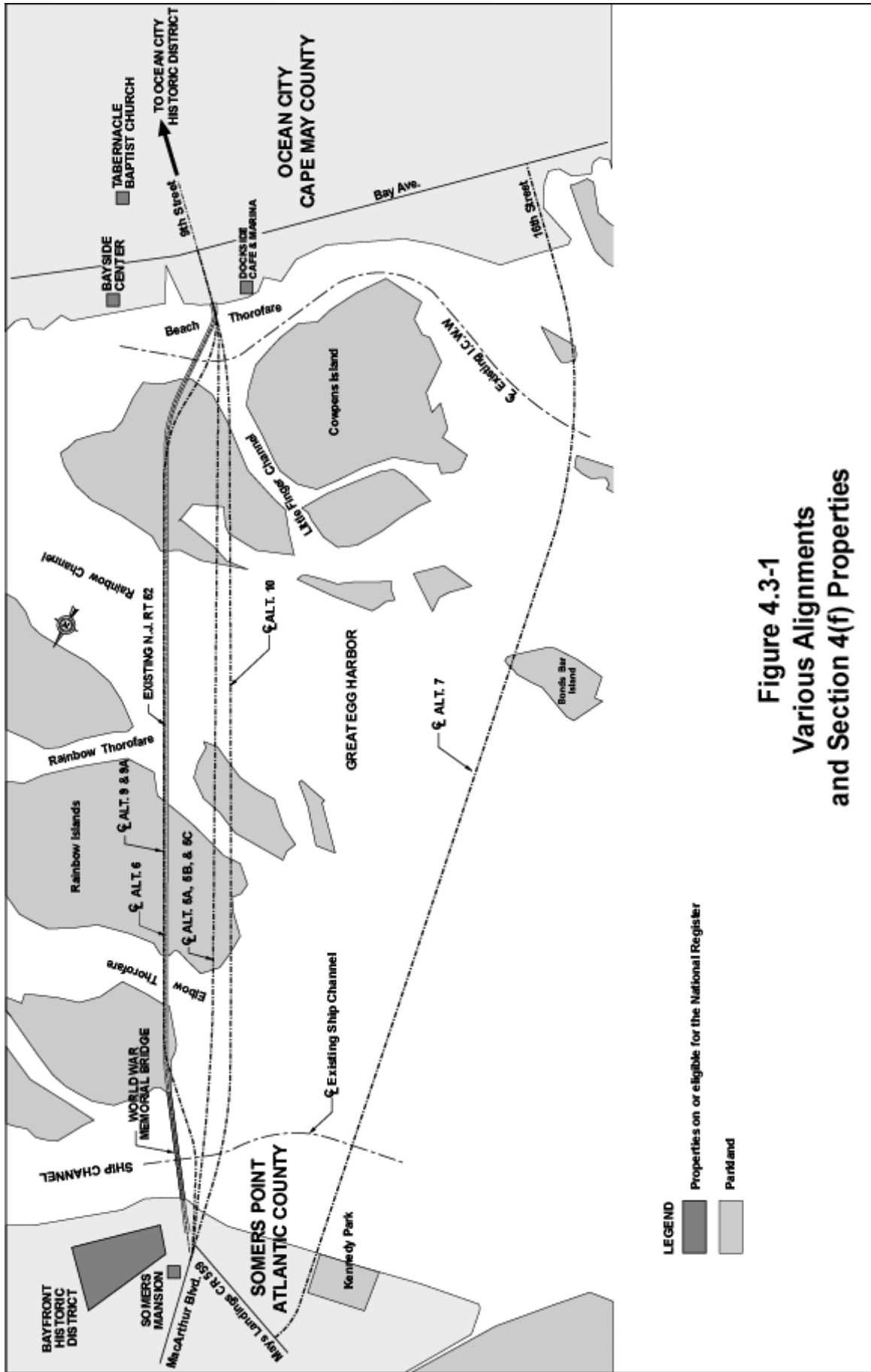
4.3.3.1 Parkland and Open Space

There are no anticipated physical impacts to Kennedy Park under any of the Build Alternatives. Indirect impacts include the modification of the visual environment for visitors and the appearance of the causeway and bridges as seen from Kennedy Park. The long viewing distances from Kennedy Park will tend to minimize the impact of the higher profile. Moreover, the more gradual vertical alignment employed in the proposed viaducts, compared with the sharp existing vertical curve, may tend to result in a more aesthetically pleasing experience for the viewer.

Each of the five Build Alternatives impacts the open space of Ocean City's Green Acre areas. In each alternative, the elevated viaducts proposed have to be constructed above the tidal wetland islands. Also, one of the three options under Alternative 9 and 9A involves construction on standard embankments with side slopes that fill existing wetlands/open space areas. The impacts are of three kinds:

- 1) Acquisition of 12.2 meter (40 foot) right-of-way in addition to the existing 24 meter (80 foot) right-of-way;
- 2) filling of open space areas on the island between Elbow Thorofare and Rainbow Channel by the side slopes of embankment sections (Alternatives 9 and 9A, option 3); and,
- 3) under Alternative 5A, dredging a new ICWW channel through the wetland/open space areas adjacent to Beach Thorofare.

Table 4.3-1 summarizes the direct impacts on Section 4(f) open space and cultural resources in Ocean City by the various Build Alternatives (Refer also to Figure 4.3-1). In addition, Table 4.3-2 provides details to indicate how individual properties will be affected by each of the Build Alternatives selected for detailed environmental analysis. All of the Build Alternatives involve alteration of the existing access to the Ocean City Information Center. Possible mitigation measures are identified in Section 4.4.1. Under the various Build Alternatives, it would be possible to mitigate/offset these impacts by enhancing recreational use of the parklands of the Rainbow Islands. This would be accomplished by constructing a new access to the recreational



**Figure 4.3-1
Various Alignments
and Section 4(f) Properties**

areas on that island, by providing a designated parking area for fishermen on the island between Elbow Thorofare and Rainbow Channel. This effort would be relatively easier under Alternatives 9 and 9A than under Alternatives 5A, 5B, or 5C. It is noteworthy that some of the quantities in Table 4.3-1 include impacts that result directly from the encroachment on 4(f) lands in order to provide access to recreational areas on the Rainbow Islands. While the acquisition of Section 4(f) open space for right-of-way represents a diversion of use, the maintenance of access for recreation is a significant mitigation factor.

Alternatives 5A, 5B and 5C will alter views to the west of the upland open space areas. The proposed viaducts in some areas will be as low as four meters from the wetland surface. Of Alternatives 5A, 5B, and 5C, Alternative 5A will adversely impact the most area due to the additional impact associated with the ICWW channel realignment. Under Alternatives 5A, 5B, and 5C the existing right-of-way would also be needed to mitigate wetland impacts, and the area may not be adequate for both.

Under Alternatives 9 and 9A, the visual impact will be confined to small areas near Ship Channel and Beach Thorofare where the proposed viaducts will be very high above the wetland surface. Alternatives 9 and 9A will impact more Section 4(f) area than Alternative 5A, 5B and 5C, since they would require more extensive property acquisition. It should be possible to partially mitigate/offset these impacts associated with Alternatives 9 and 9A by transferring ownership of the existing right-of-way along the islands to Ocean City as open space.

Under Alternatives 9 or 9A, direct filling of wetland/open space areas can be minimized, by adopting either Option 1 (continuous structure) or Option 2 (embankment with edge walls), rather than Option 3 (embankment with side slopes). Impacts would be greater under Option 3, where the edge of the embankment will extend into the island beyond the existing right-of-way.

Table 4.3-2

IMPACTS TO SECTION 4(f)
LANDS IN OCEAN CITY

Route 52(1) Causeway Between
Somers Point, Atlantic County and Ocean City, Cape May County

BLOCK	LOT	SQ. METERS (ACRES)	DESCRIPTION	IMPACTS FROM VARIOUS ALTERNATIVES, AREA IN SQUARE METERS (ACRES)									11 No Build
				5		9			9A				
				A	B & C	1	2	3	1	2	3		
1750	1	4,046.8 (1.00)	Majority of parcel is a tidal wetland. Access from Route 52.	0	0	844 (0.21)	844 (0.21)	844 (0.21)	844 (0.21)	844 (0.21)	844 (0.21)	0	
1750	2	141,640.5 (35.00)	Majority of parcel is a tidal wetland. Access from Route 52.	14,592 (3.61)	14,592 (3.61)	1,891 (0.47)	1,891/ 2,921* (0.47 / 0.72)	8,634 (2.13)	1,891 (0.47)	1,891/ 2,921* (0.47 / 0.72)	8,634 (2.13)	0	
1750	4	53,823.4 (13.30)	Entire parcel is a tidal wetland. No access from Route 52.	7,332 (1.81)	7,332 (1.81)	0	0	0	0	0	0	0	
1750	16	158,151.8 (39.08)	Majority of parcel is a tidal wetland. Access from Route 52. The Ocean City Information Center is located on this parcel.	19,276 (4.76)	14,588 (3.60)	14,051 (3.47)	14,051 (3.47)	14,051 (3.47)	14,051 (3.47)	14,051 (3.47)	14,051 (3.47)	0	
850	1	186,560.8 (46.10)	Majority of parcel is a tidal wetland. Access from Route 52.	0	0	3,757 (0.93)	3,757 (0.93)	3,757 (0.93)	3,757 (0.93)	3,757 (0.93)	3,757 (0.93)	0	
850	3	360,859.6 (89.17)	Majority of parcel is a tidal wetland. Access from Route 52.	0	0	14,497 (3.58)	14,497 / 18,025* (3.58 / 4.45)	26,662 (6.59)	14,497 (3.58)	14,497 / 18,025 * (3.58 / 4.45)	26,662 (6.59)	0	
850	6	106,109.0 (26.22)	Majority of parcel is a tidal wetland. Access from Route 52.	0	0	8,258 (2.04)	8,258 (2.04)	8,258 (2.04)	8,258 (2.04)	8,258 (2.04)	8,258 (2.04)	0	
Total Area (listed Islands)		1,011,192.1 (249.87)		41,200 (10.18)	36,512 (9.02)	43,298 (10.70)	43,298/ 47,856* (10.70 / 11.83)	62,206 (15.37)	43,298 (10.70)	43,298/ 47,856* (10.70 / 11.83)	62,206 (15.37)	0	
Percent of Listed Islands (4(f) Parklands) Affected by Alternative				4.1%	3.6%	4.3%	4.3% / 4.7%†	6.2%	4.3%	4.3% / 4.7%†	6.2%	0%	

* Area in square meters / Area in square meters if toe berms are required at the outside bases of the edge walls (Area in acres / Area in acres with toe berms).

† Percentage / Percentage if toe berms are required at the outside bases of the edge walls.

NOTE: Area impacts are estimates based on the preliminary design, and may be refined during final design.

4.3.3.2 Historic Bridge

Under all of the Build Alternatives, the World War Memorial Bridge on Route 52 over Ship Channel and the other causeway bridges are planned for removal for public safety reasons. Possible mitigation measures are identified in Section 4.4.2.

4.3.3.3 Other Historic Sites

There are no anticipated adverse impacts to the Somers Mansion, listed on the National Register, because its setting did not contribute to its eligibility for listing on the National Register. There are no anticipated physical impacts to the Bay Front Historic District, also listed on the National Register, under any of the Build Alternatives. Indirect impacts include the modification of the setting and visual environment due to changes in the appearance of the causeway and bridges as seen from the Bay Front Historic District. The impacts to the setting of Bay Front Historic District cannot be avoided. However, the long viewing distances from the Bay Front Historic District will tend to minimize the impact of the higher profile. Moreover, the more gradual vertical alignments employed in the proposed viaducts, compared with the sharp existing vertical curve, may tend to result in a more aesthetically pleasing experience for the viewer.

As indicated previously, three sites in Ocean City within the Area of Potential Effect are eligible for inclusion on the National Register of Historic Places: the Dockside Café/Marina, Bayside Center, and the Tabernacle Baptist Church. There are no anticipated impacts from any of the alternatives to the Tabernacle Baptist Church or Bayside Center due to their distance from the project area. There are no anticipated physical impacts to the Dockside Café/Marina under any of the Build Alternatives. Indirect impacts include the modification of the setting and the visual environment due to changes in the appearance of the causeway and bridges as seen from the Dockside Café/Marina. These visual impacts would be relatively more significant under Alternative 5A, 5B, and 5C, since the alignment under these alternatives brings the roadway and structures closer to the Dockside Café/Marina. None of the alternatives under consideration would result in a 4(f) use of these historic sites.

4.3.4 Summary/Conclusion of Alternatives Analysis

As discussed in Section 4.3.2 above, several alternatives were considered to avoid or minimize the use of Section 4(f) properties or resources.

The avoidance alternatives include the No Build, the Rehabilitation and the Tunnel alternatives. The No Build Alternative is not feasible as the existing facility is functionally obsolete and the causeway bridges are deteriorated to the point that they cannot be safely maintained. The Rehabilitation Alternative is not feasible as the facility would remain functionally obsolete. Also, the structural condition of the causeway is too deteriorated for effective rehabilitation of the entire causeway. The Tunnel Alternative is not prudent as it eliminates recreational access to the parklands, has significant socioeconomic impacts and its cost of construction is unusually high.

The minimization alternatives include the Modified Rehabilitation and Alignment distantly to the west. The Modified Rehabilitation alternative is not prudent as it introduces unacceptable safety hazards and only partially restores the functionality of the facility. The Alignment distantly to the west is not prudent as it eliminates recreational access to the parklands and has significant socioeconomic impacts.

Thus the alternatives that avoid or minimize the use of Section 4(f) properties are not feasible and prudent. There are unique problems or unusual factors involved in the use of alternatives that avoid these properties, or the cost, social, economic, and environmental impacts, or community disruption resulting from such alternatives reach extraordinary magnitudes.

4.4 MEASURES TO MINIMIZE HARM

Impacts of feasible Build Alternatives that were studied in detail in the DEIS, including the Preferred Alternative, have been detailed in Section 4.3.3, and summarized in Table 4.3-1. All the Build Alternatives studied in detail have comparable impacts to Section 4(f) properties (except Alternatives 9/9A-3 that take a larger area of parkland due to side slopes). The Preferred Alternative (Alternative 9-1) is a feasible and prudent alternative as it meets the project purpose and need of providing a safe and efficient transportation facility while avoiding or minimizing impacts to sensitive environmental and community resources, including Section 4(f) properties. The mitigation measures to further reduce impacts and harm to Section 4(f) resources are identified in the following sections.

4.4.1 Parkland/Open Space Mitigation

The Preferred Alternative will have some adverse effect on the tidal marsh islands that are part of Ocean City's open space inventory through acquisition of land for the highway right-of-way, as summarized on Table 4.3-1. Several measures are proposed to minimize impacts, as listed below.

- Maximize the use of the existing right-of-way to offset the acquisition of 4(f) land for right-of-way purposes.
- Provide improved access and parking for recreational fishermen and other users to enhance the use of the Rainbow Islands parkland/open space.
- Transfer ownership of the existing right-of-way along the islands in Great Egg Harbor Bay to the City of Ocean City to offset the area acquired for the new alignment.
- Build causeway on structure to minimize impacts to wetlands/Green Acres areas.
- A parking lot and low-level timber public recreation/fishing pier are proposed to be built in Somers Point, near the site of the World War Memorial Bridge on the north bank of Ship Channel. A relatively level-grade pavement or boardwalk would connect the parking lot and the recreation/fishing pier. This would enhance recreational fishing in Great Egg Harbor Bay,

and would be easily accessible to children, the elderly and the handicapped. A monument with a plaque commemorating the World War Memorial Bridge would also be placed at this location.

4.4.2 Mitigation for Historic Bridge and Other Historic Sites

- For the historic bridge over the Ship Channel, the following mitigation measures have been agreed upon in a Memorandum of Agreement (MOA) between FHWA, NJDOT, and NJSHPO (for details, please refer to Appendix B):
 1. Prior to the demolition of the Route 52 Bridge over the Ship Channel (the World War Memorial Bridge), document the bridge to the Historic American Engineering Record (HAER) Standards.
 2. As a supplement to the HAER recordation, prepare an interpretive display showing the contribution of the bridge to the development of Ocean City and the Jersey Shore. Place the display on the acquired Gulf station property adjacent to the historic site, where parking would be possible.
 3. Attempt to market the bridge structure up to the time when specifications for the demolition contract must be finalized.
 4. Develop a list of bridge design guiding principles that would help in selecting design parameters and elements that reflect the project area's historic setting.

- Impacts on the viewshed of historic properties in the project area can be minimized by the following measures:
 1. Include architectural elements of design in the new bridges.
 2. Use the longest spans that are economically feasible, which will minimize the visual clutter that piles usually introduce.

4.5 COORDINATION WITH STATE HISTORIC PRESERVATION OFFICE AND THE PUBLIC

Section 106 coordination for the Route 52 Project consisted of consultation with cultural resources staff at the NJDOT and the NJSHPO through three means: 1) partnering workshops, 2) project-specific site meetings and 3) on-going coordination, both verbal and written.

An initial Partnering Workshop for the project was held on May 29, 1996. Review agencies having interests and/or regulatory authority with cultural resources that were represented were the NJSHPO, NJDEP-Office of Program Coordination, NJDOT and the FHWA.

A second partnering workshop was held on December 11, 1997. The purpose of this second workshop was to build upon the action plan and alternatives discussed at the first partnering workshop. Again, representatives from the NJDOT, FHWA, the project consultants and various local, county, state and federal agencies were in attendance. Review agencies having interests and/or regulatory authority with cultural resources that were represented were the NJSHPO, NJDEP-Office of Program Coordination, NJDOT and the FHWA.

On January 9, 1998, a meeting was held at the project study area with representatives of the NJDOT, NJSHPO and the cultural resources consultant, McCormick, Taylor & Associates, Inc. The purpose of the meeting was to discuss/agree upon the project APE, and specifics of the historic architecture study methodology.

Follow-up coordination was done with representatives of NJDOT and NJSHPO in Spring, 1998 regarding the project APE. In addition, discussions with the NJDOT took place regarding the reporting format for the TESSs.

On July 29, 1999 at 10:30 AM, a workshop meeting was held for the purpose of briefing local officials from the City of Somers Point, Ocean City and Atlantic and Cape May Counties prior to the Public Information Center held on August 12, 1999. The officials were presented with large-scale drawings of the various alternatives and recreational access plans. An explanation of the proposed alternatives that were proposed for further study in the Draft Environmental Impact Statement (DEIS) was also given.

A Public Information Center was held on August 12, 1999 from 3:00 PM to 7:00 PM at the Ocean City Intermediate School for the purpose of informing the public on the planned reconstruction of Route 52. The public was encouraged to ask questions and provide input and comments. A newsletter advertising the Public Information Center was mailed to everyone on the Route 52 mailing list, approximately 250 people. Approximately 140 people signed in attendance. The majority was residents and business owners from Ocean City and Somers Point. In addition, the mayors and various officials of both cities, representatives from Atlantic and Cape May Counties and interested parties from nearby communities also attended. Representatives of the Atlantic County Gazette, Ocean City Gazette, Ocean City Sentinel and the TSM TV network provided press coverage.

The State Historic Preservation Office, in a letter dated April 14, 2000, expressed their satisfaction at the adequacy of the efforts to identify archaeological and historical architecture properties, and concurred with the conclusions on the adverse effects to three eligible historical architecture properties. A copy of this correspondence may be found in Appendix C.

On November 15, 2000, a Public Information Center and Public Hearing took place at the Jordan Elementary School. A summary of comments given by the public at the Public Hearing is provided in Section 5.1.2.

A MOA between FHWA, NJDOT, and NJSHPO dated January 16, 2002 specifies that the replacement of the Route 52 Causeway shall be implemented in accordance with stipulations outlined in the MOA in order to take into account the effect of the proposed undertaking on historic property. The MOA is provided in Appendix B.

4.6 CONCLUSION

Based upon the above considerations, there is no feasible and prudent alternative to Alternative 9. The use of land from the tidal marshlands in the Great Egg Harbor (Green Acres encumbered parklands) and the taking of the Historic Bridge over Ship Channel, and the proposed action, includes all possible planning to minimize harm to these Section 4(f) properties.