

Routes 7/15 Interchange Norwalk, Connecticut State Project No. 102-358

Environmental Assessment, Draft Section 4(F) Evaluation and Environmental Impact Evaluation

Appendix O Draft 4(f) Evaluation

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DRAFT

SECTION 4(F) EVALUATION

Pursuant to 40 U.S.C. 303

Route 7/Route 15 Interchange Project Norwalk, Connecticut

State Project 102-358 Federal Aid Project 0015(133)

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INTRODUCTION

The Connecticut Department of Transportation (CTDOT) and the Federal Highway Administration (FHWA) proposes to construct improvements at the Routes 7 and 15 (Merritt Parkway) interchange in Norwalk, Connecticut, with federal funds provided by FHWA (see Location Map, Appendix A). The proposed project requires the use of Section 4(f) resources.

This Section 4(f) Evaluation has been prepared pursuant to Section 4(f) of the *United States Department of Transportation Act of 1966*, codified at 49 U.S.C. §303 with implementing regulations at 23 CFR Part 774, and in accordance with FHWA policies and guidance. Section 4(f) protects publicly owned parks, recreation areas, and wildlife/waterfowl refuges. Historic resources, both publicly and privately owned, are protected under Section 4(f) if they are listed in or determined eligible for listing in the National Register of Historic Places (NRHP). FHWA may not approve the use, as defined in 23 CFR Part 774, of Section 4(f) property unless a determination is made that:

- 1. There is no feasible and prudent avoidance alternative to the use of the property; and
- 2. The proposed action includes all possible planning to minimize harm, as defined in 23 CFR §774.17, to the property resulting from that use; or
- 3. The use, including any measures to minimize harm (such as avoidance, minimization, or enhancement measures), will have a *de minimis* impact on the property. In the case of historic resources, a *de minimis* impact may be made when the Section 106 process results in a determination of "no adverse effect" with the written concurrence of the State Historic Preservation Officer.

This Section 4(f) Evaluation includes a description of the existing Routes 7 and 15 (Merritt Parkway) interchange, a summary of the project purpose and need, a description of the Proposed Action (based upon Design Parameters for the project), a list of Section 4(f) resources to be used by the Proposed Action, a discussion of the alternatives considered, identification of measures to minimize harm, description of mitigation measures, a least overall harm analysis including a determination of the alternative with the least overall harm, a summary of project coordination with the officials with jurisdiction over the Section 4(f) properties, and a summary of public outreach activities.

Part 1 of this Section 4(f) Evaluation focuses on the NRHP-listed Merritt Parkway Historic District, including a contributing structure, the Main Avenue Bridge (Bridge Nos. 00560A and 00560B). Part 2 focuses on an adjacent NRHP-eligible structure, the Glover Avenue Bridge (Bridge No. 04155), using the Nationwide Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges. Part 3 presents the Section 4(f) determinations.

No publicly owned parks, recreation areas, or wildlife or waterfowl refuges are found within or adjacent to the project area.

PART 1: MERRITT PARKWAY HISTORIC DISTRICT

A. Existing Conditions

The Merritt Parkway (Route 15), a scenic parkway built in the late 1930s, extends from Greenwich, Connecticut, on the New York state line eastward to the Housatonic River, which separates the towns of Stratford and Milford, Connecticut. The project includes that portion of the Parkway from a point about 1,200 feet west of Perry Avenue eastward a distance of 1.2 miles to West Rocks Road, all within the town of Norwalk, Connecticut. The Parkway generally has two travel lanes in each direction and is characterized by architecturally embellished bridges at intersecting roads and naturalistic plantings in the median and along the Parkway's edges.

At Interchange 39, the Parkway intersects Route 7, a limited-access four-lane ca. 1990 highway that runs for about three miles between Route 95 in South Norwalk and Grist Mill Road, a short distance north of the Parkway. About 1,500 feet east of Route 7, the Parkway intersects Main Avenue, which formerly was designated Route 7 (and still forms the continuation of Route 7 north of Grist Mill Road). Main Avenue is a four-lane undivided road, with limited provisions for pedestrians, running through a densely built area of retail plazas, suburban-type residential neighborhoods, and multistory office and apartment complexes.

Currently, there is only partial connectivity among Route 15, Route 7, and Main Avenue. Interchange 39 provides the following connections between Route 15 and Route 7:

- Route 7 northbound to the Merritt Parkway southbound¹
- Route 7 southbound to the Merritt Parkway southbound
- Merritt Parkway northbound to Route 7 northbound
- Merritt Parkway northbound to Route 7 southbound

Connections between Route 7 and the Merritt Parkway to and from the north are not provided. Due to the missing connections:

- Merritt Parkway southbound motorists must use the Merritt Parkway/Main Avenue interchange (Exit 40B) to access Route 7 northbound, north of Grist Mill Road.
- Merritt Parkway southbound motorists must use the Merritt Parkway/Main Avenue interchange (Exit 40A) and Route 123/New Canaan Avenue to access Route 7 southbound.
- Route 7 northbound motorists have no direct access to the Merritt Parkway northbound and must use the New Canaan Avenue/Route 123 interchange (Exit 2) and Main Avenue to access the Parkway.

¹ Although the Merritt Parkway in the project area runs generally east-west, the westward travel direction is designated southbound and the eastward travel direction is designated northbound.

• Route 7 southbound motorists have no direct access to the Merritt Parkway northbound and must use Main Avenue to access the Parkway.

Interchange No. 40 provides connections in all directions between the Merritt Parkway and Main Avenue, but the Main Avenue/Parkway ramps, part of the Parkway's original design, are narrow, lacking in adequate acceleration/deceleration lanes, and configured with an unacceptably tight radius. The existing loop ramps to and from the Parkway have radii ranging from 50 feet to 120 feet, substantially tighter than the CTDOT Highway Design Manual (HDM) standard of 145 feet. In addition, two of the entrance ramps are stop controlled before entering the Parkway, which does not comply with HDM and American Association of State Highway and Transportation Officials (AASHTO) recommendations based on the 65 mph design speed of the Parkway.

All three highways carry high volumes of traffic. Main Avenue has two signalized intersections immediately adjacent to the project: the Merritt View office complex and the Stop & Shop shopping plaza south of the Parkway, and Glover Avenue/Creeping Hemlock Drive to the north of the Parkway. The Metro-North Commuter Railroad's Merritt 7 station is located a short distance north on Glover Avenue.

A brief history of prior assessments of the Route 7/Route 15 interchange is provided within Chapter 1.1.1 of the project's Environmental Assessment/Environmental Impact Evaluation (EA/EIE) document.

B. Purpose and Need

The purpose of the project is to:

- improve roadway system linkage between Route 7 and Route 15 at Interchange 39;
- improve the mobility for vehicles at both the Route 15 interchanges at Route 7 and at Main Avenue (No. 39 & No. 40), and to improve the mobility for all users (motorists, pedestrians, and cyclists) along the immediate adjacent local roadway network (Main Avenue, Glover Avenue, and Creeping Hemlock Drive, and;
- improve safety in the vicinity of these interchanges.

The specific needs that would be addressed are as follows:

Roadway System Linkage

Currently, there are approximately 250 vehicles during the weekday morning peak hour and approximately 125 vehicles during the weekday evening peak hour that use the Main Avenue corridor to connect between Route 7 and the Merritt Parkway. This is approximately 5 to 15 percent of the traffic currently using the Main Avenue corridor between Route 123 and the Merritt Parkway during either peak hour. These additional vehicles contribute to current peak hour

congestion along the Main Avenue corridor (Level of Service² (LOS D/E)). Further information on current traffic operations is provided within Chapter 3.1 and Appendix B of the project's EA/EIE document.

Mobility - Vehicular

As previously described, Interchange 39 currently provides partial connections between Route 7 and the Merritt Parkway (connections between Route 7 and the Merritt Parkway to and from the north are not provided). Interchange 40, a second nearby interchange, provides connections in all directions between the Merritt Parkway and Main Avenue. However, connections between Route 7 and Main Avenue do not exist in the vicinity of Interchange 39 or Interchange 40.

Because of the missing connections at Interchange 39, motorists must use local roadways to connect between Route 7 and the Merritt Parkway. Southbound Merritt Parkway motorists must use the Main Avenue interchange (40) to access Route 7 northbound (north of Grist Mill Road) and Route 7 southbound (south of Route 123/New Canaan Avenue). Similarly, motorists on Route 7 have no direct access to the northbound Merritt Parkway. Southbound Route 7 motorists must continue on Main Avenue and use Interchange 40 to access the northbound Merritt Parkway. Northbound Route 7 motorists must exit at the Route 123/New Canaan Avenue interchange and travel via Main Avenue to access the northbound Merritt Parkway.

Mobility – Other Users (Bicycles/Pedestrians/Transit)

Bicycle and pedestrian facilities in the project vicinity are limited, despite substantial pedestrian activity during the weekday mid-day time period in the vicinity of the office buildings on the west side of Main Avenue. There are no bicycle facilities at the project location, and shoulder widths are less than one foot wide on Main Avenue. Several segments of the roadway, particularly in the area around the Main Avenue and Creeping Hemlock intersection, have no sidewalks on one or both sides. Only one small roadway segment, along with Glover Avenue, is fully in compliance with the U.S. Americans with Disabilities Act (ADA). Sidewalks, curb ramps, and crosswalks within this area are missing and/or lacking safety features for visually or hearing-impaired pedestrians, reducing access and mobility for users with disabilities.

Safety

The existing Main Avenue and Merritt Parkway interchange ramps have substandard acceleration and deceleration lanes, steep changes in grades, sharp curves, and limited sight distances. These are all conditions that contribute to a high number of crashes. With more than 300 crashes within a 0.5-mile segment, the Main Avenue interchange has the highest density of crashes along the 37-mile Merritt Parkway corridor (more than 50 percent higher than any other interchange; see Figure 1, page 7).³

 $^{^{2}}$ Level of Service (LOS) is a qualitative measure used to describe the quality of traffic operations of a roadway. Varying levels of congestion and delay are translated into a letter rating that ranges from A (free flow conditions; no delays) to F (breakdown in traffic flow; substantial delays).

³Based on a review of crash records for a four-year period (2015-2018) from the Connecticut Crash Data Repository. This interchange can only be compared to other Parkway interchanges because there is no other Connecticut facility that is comparable to the Merritt Parkway, that is, a high-volume four-lane highway serving a densely populated portion of the New York City metropolitan area.

The configuration of these ramps is original to the Parkway's late 1930s construction, a time when the Parkway was expected to accommodate vehicles traveling at 45 mph.

C. Proposed Action

As a result of an extensive, multi-level Alternatives Analysis (discussed further within Chapter 2 of this project's EA/EIE), two build alternatives, designated Alternative 21D and Alternative 26, were brought forward for inclusion in the project's Environmental Assessment/Environmental Impact Evaluation document. Conceptual designs for the two alternatives are shown as aerial plans in Appendix B. Both alternatives would result in full connectivity between the Merritt Parkway and Route 7; both would replace the existing Main Avenue/Merritt Parkway interchange with a new interchange that corrects the deficiencies of the present ramps; both would reconstruct the intersection of Main Avenue, Glover Avenue, and Creeping Hemlock Drive; and both would widen Main Avenue to improve traffic flow and allow for pedestrian/bicycle/bus amenities.

Alternative 26 requires two fewer new ramps, and the acceleration/deceleration lanes associated with the ramps under Alternative 26 are not as long as those that would be built under Alternative 21D. These differences arise from two new signalized intersections that would be installed on Route 7 under Alternative 26.

Taking into account the project's purpose and need, public input, agency consultation, engineering, constructability, estimated construction and maintenance costs, and potential environmental impacts, FHWA and CTDOT have identified Alternative 26 as the Preferred Alternative. This alternative best addresses the project's purpose and need while minimizing the environmental impacts.

The Preferred Alternative will proceed to the design phase. The design development will be guided by the following parameters:

- Minimize vehicular congestion associated with the interchange of the Merritt Parkway and Main Avenue and the intersection of Main Avenue and Glover Avenue/Creeping Hemlock Drive.
- Create opportunities for improved connections to existing and reasonably foreseeable alternate modes of transportation, such as surface transit, commuter rail, and pedestrian and bicycle facilities.
- Coordinate with City of Norwalk toward a workable solution that is compatible with City and regional initiatives.
- Utilize cost-effective solutions that maximize capital investment over the lifespan of the project.
- Reduce maintenance costs of affected bridges and roadways.

- Minimize the impact of construction on the traveling public and local communities to the extent practicable.
- Implement sustainable practices.
- Create a design that is consistent with the Merritt Parkway's historic and scenic character and design.
- Preserve, enhance and/or rehabilitate surviving historic landscape features where practical or, where the landscape has been significantly altered, creating new landscape designs that are consistent with the Parkway's original design intent.



Figure 1: Number of crashes at Merritt Parkway interchanges, 2015-2018.

D. SECTION 4(F) RESOURCES

Under Section 4(f), parks, recreation areas, wildlife and waterfowl refuges, and historic sites are afforded protection. Historic sites are properties either listed in or determined eligible for listing in the NRHP. Historic properties, which may be either publicly or private owned, include buildings, structures, objects, site (including archaeological sites), and historic districts. Historic Section 4(f) resources were identified by staff at CTDOT in consultation with the Connecticut State Historic Preservation Office (CTSHPO) under the Section 106 process of the National Historic Preservation Act. This Section 4(f) Evaluation only concerns historic properties; no publicly owned parks, recreation areas, or wildlife or waterfowl refuges are found within the project area.

1. Merritt Parkway Historic District

The Merritt Parkway Historic District (Photographs 1-4, Appendix C) was listed in the NRHP in 1991 at the national level of significance in the areas of transportation, landscape architecture, and architecture. It was named a State Scenic Road in 1993 and a National Scenic Byway in 1996. The significance of the Merritt Parkway in the area of transportation history is derived from its successful incorporation of the ideals of the parkway concept. Despite a series of changes, the Parkway retains many of its original qualities and remains an example of a largely intact early 20th-century planned landscape. Construction of the Parkway provided a major transportation link between New York City and Fairfield, which contributed to the rapid development and suburbanization of southwestern Connecticut in the mid-20th-century period. In terms of landscape architecture, the Parkway is significant as an early example of naturalistic landscape design. In the area of architecture, the Parkway's bridges are significant for their expression of the Art Deco, Art Moderne, and Classical Revival styles.

The character-defining features of the Merritt Parkway include the following:

- **Roadway width**. The fundamental historic character of the Merritt Parkway is that it provided the motorist with the experience of driving through a park-like setting. The two-lane width of the original Parkway allowed close-up views of the landscaping; widening it with additional lanes necessarily makes the landscaping look further off, resulting in the motorist driving <u>past</u> a park-like setting rather than <u>through</u> one. The abrupt exits and entrances of the original Parkway (with lower travel speeds) also contributed to the overall experience by minimizing interruptions to the park-like setting. Roadway width and roadside character influence the motorist's experience of the Parkway. Vegetation setbacks vary, creating visual interest as views open and/or are terminated at focal points. In some instances, the roadside is clear of vegetation, expanding views beyond the right-of-way and increasing the perception of increased roadway width.
- **Median and verges**. Implicit in the mission of creating a park-like setting for the motorist to drive through was provision for a generous, attractively planted median between travel directions; otherwise, the roadway would be too open and the view to the left no longer

park-like. Early views show grassy areas, shrubs, and widely spaced trees in the median, thereby contributing to the overall variety in landscaping. The width of the median varied, furthering the goal of creating a constantly changing experience. As originally built, the Parkway's verges were narrow, usually consisting of grassy areas separated from the roadway by a low mountable curb. Narrowing the median, widening and paving the verges, and eliminating appropriate vegetation would result in a diminishment of the character of the Parkway.

- Alignment. The vertical and horizontal alignment of the Parkway originally followed the general topography, with rock cuts and fill as needed to avoid excessive grades and to elevate the Parkway above surrounding roads. The result was a continuous progression of moderate grades and curves, a circumstance that promoted the Parkway's aesthetic of everchanging views. Except for the relatively small changes needed to accomplish the crossing of Route 7, the vertical and horizontal alignment of the Parkway has not changed within the project area.
- Vegetation. In order to create a park-like setting and "heal the scars of construction," the plantings along the Parkway were intended to be naturalistic, varied in size, texture and flower, and well-maintained. A mixture of evergreen and deciduous species ensured that the Parkway would undergo seasonal change but never be without some greenery. Flowering plants, shrubs, grassy areas, and full-sized trees created variety so that there was no monotony as the motorist proceeded along. The Parkway landscaping never was intended to become densely overgrown nor dominated by any one species.
- **Bridges**. The bridges on the Parkway were intended to complement the landscape by providing a succession of attractive, interestingly detailed structures in a variety of styles, just as one might see when walking along the pathways of a public park. Although the effect is most pronounced in the case of the Parkway's many overhead bridges, most of the undergrade bridges also include parapets with obvious aesthetic intent. Today some of the parapets that project above the roadway have been faced with concrete and some are wholly or partially obscured by added guiderails, but many have stone, metal, or concrete ornamentation still visible to passing Parkway motorists.
- **Signage**. The original Parkway signage consisted of relatively small roadside wooden signs in a rustic style with graphic perforated edges, and the overall density of signage was low. Today, signage is more extensive and includes standard metal roadside signs, roadside signs of a different shade of green that are metal but echo the original rustic style, and large-scale overhead signs on large-diameter cantilevered arms. The rustic signs are intended to be less visually intrusive than standard roadside signs. The overhead signs, however, interrupt the visual experience of the Parkway by introducing large-scale, blatantly modern elements into the field of view; the effect is especially egregious from the opposite travel lane, where the view is blocked without the benefit of providing information.
- **Guiderails**. The roadway-protection system that appears in the earliest photographs of the Parkway consisted of fencing of stout timber posts and rails. Later this was supplemented by post-and-cable and post-and-chain systems, but large portions of the Parkway were

without any form of guiderail. Today, the Parkway has a mixture of post-and-cable restraints, modern metal guiderail, scored concrete barriers, and timber-faced metal guiderail. The latter two types are intended to be more visually compatible with the Parkway than ordinary concrete barriers and metal guiderails. It is CTDOT's policy to install these two types of guiderail throughout the length of the Merritt Parkway.

• Views. As originally conceived, the Parkway was not just a self-contained landscape experience but also a way to appreciate longer views of the Connecticut countryside. The rolling farmland that may have originally been visible is now much less characteristic of lower Fairfield County bordering the Parkway. As a result, views from the Parkway that are not screened by vegetation mostly show something much different: modern commercial and office development and neighborhoods of post-World War II suburban housing. At the same time, it must be recognized that not all was bucolic even at the time of the Parkway's construction: for example, the factories along the Norwalk River in the Winnipauk section would have been clearly visible to Parkway motorists.

In terms of integrity of materials and design, the portion of the Parkway within the project area is not the most intact part of the 37-mile-long Merritt Parkway Historic District. Added lanes, inconsistent signage and guiderail treatments, reduction of the median, development proximity to the right-of-way, and inappropriate, lost, or overgrown vegetation have affected its historic character. The western portion of the Parkway within the project area today mostly resembles a modern expressway rather than a scenic parkway (Photograph 2). It features typical modern entrances, exits, and signage and lacks historic elements found throughout the rest of the Parkway, such as a wide landscaped median. The easternmost portion of the project area, east of the Main Avenue interchange, retains more of the Parkway's historic character, derived from the planted median strip, narrow verges, and close-to-the-road landscaping (Photograph 1). At a closer level of detail, however, exceptions can be found within these generalizations. For example, in the more highly altered western portion of the project area, there is a typical Parkway rock outcropping close to the roadway, at the southbound on-ramp from Route 7 North (Photograph 3), and there is a small group of trees in the median as the roadway ascends toward the Perry Avenue undergrade bridge that is not unlike the original Parkway treatment. The overall geometry of the eastern portion of the project is more intact, but details such as modern signage, condition of the vegetation, and modern guiderails reduce the experience of the original Parkway concept. Views in the eastern portion reveal the dense modern commercial, office, and residential development that surrounds this portion of the Parkway (Photograph 4).

Both Alternative 21D and Alternative 26 would use the Merritt Parkway Historic District; see Section E, Alternatives Analysis, for more detail and a comparison of the two alternatives' effects.

2. Merritt Parkway Main Avenue Bridge (Bridge Nos. 530A and 530B)

The Main Avenue Bridge (Photograph 5-7), a contributing resource within the Merritt Parkway Historic District, is a Classical Revival/Rustic-style concrete structure consisting of twin spans, each carrying two lanes of traffic over Main Avenue. Except for the Parkway itself, the bridge's historic setting has largely disappeared due to the surrounding modern commercial development.

However, the bridge serves the important function of preserving a typical view <u>of</u> the Parkway from the surrounding streets, an important part of the Parkway's historic intent.

Structurally, the bridge's parallel arches are rigid-concrete frames with shallow segmental arched openings for the roadway. The spans are faced with random rubble with rock-faced granite voussoirs, quoins, and coping. The northern parapet and northeast wing wall of Bridge 530B were replaced in kind during a repair project in 2015 and 2016. Because the repairs had little effect on the structure's historic appearance, the bridge continues to be regarded as a contributing resource.

Both Alternative 21D and Alternative 26 require the replacement of the Main Avenue Bridge; see Section E, Alternatives Analysis, for more detail.

Other NRHP-Eligible Properties

In addition to these Section 4(f) resources, the technical studies undertaken for the project identified several other historic properties within the project's Section 106 Area of Potential Effects. These are not included in the Section 4(f) evaluation because there will be no Section 4(f) use of the properties. The technical studies found that in the case of the <u>Perry Avenue Bridge</u> and the <u>West Rocks Road Bridge</u>, both of which are contributing components of the Merritt Parkway Historic District, there would be no adverse effect from the project. The <u>Metro-North Bridge</u> (<u>Photograph 8</u>) and the <u>Norwalk River Bridge</u> (Photograph 9) would not be directly affected but would have their public visibility somewhat reduced, a diminution of those two bridges' integrity of setting and therefore an indirect adverse effect under Section 106. However, under Section 4(f), there is no use of the Metro-North and Norwalk River bridges. The following considerations lead to this conclusion:

- Neither of the bridges will be physically impacted by any project construction activity.
- The visual impacts of ramp construction would not rise to the level of a Section 4(f) constructive use (according to Section 4(f) regulations, a constructive use occurs "when the proximity impacts of a proposed project adjacent to, or nearby, a Section 4(f) property result in **substantial impairment** [emphasis added] to the property's activities, features, or attributes that qualify the property for protection under Section 4(f)").
- Currently and historically, public visibility of the bridges has been minimal, limited to a view in the distance from Glover Avenue.
- Although considered contributing structures within the Merritt Parkway Historic District, the two bridges are not visible from the Parkway itself.
- Stylistically, the bridges are utilitarian in appearance compared with the Merritt Parkway's elaborately detailed overhead and undergrade bridges that carry public highways.
- The project will in no way preempt future actions that could enhance the public visibility of the two bridges, such as the creation of multi-purpose trails along the river.

As a result of the archaeological studies conducted for the project, three archaeological sites that lie within the footprint of construction activities were recommended as NRHP-eligible (Connecticut Archeological Sites 103-57, 103-58/103-60, and 103-61/103-62). However, because the sites are important chiefly because of what can be learned by data recovery, they have minimal value for preservation in place and therefore are not Section 4(f) resources.

E. ALTERNATIVES ANALYSIS

CTDOT and FHWA undertook a lengthy, multi-level Alternatives Analysis that is more fully described in Chapter 2 of the project's EA/EIE document. A total of 26 build alternatives were identified and then evaluated according to the extent to which they fulfilled the project's goals of interconnectivity, safety, and mobility; the design parameters listed in the previous section were also taken into account. As a result of the Level 1 screening, the number of alternatives was reduced to four; none of the rejected alternatives sufficiently addressed the project's Purpose and Need. In the Level 2 screening, of the remaining four, one was rejected because of its use of ramps higher in elevation than the existing Parkway travel lanes, a major adverse effect on the Parkway's historic character. Another alternative was dropped because it did not sufficiently meet the criteria of compatibility with regional initiatives and proximity of new ramps to existing residential neighborhoods. The two remaining build alternatives, Alternative 21D and Alternative 26, were brought forward for inclusion in the project's EA/EIE document. These two alternatives are illustrated in the aerial plans included as Appendix B.

Identification of Avoidance Alternatives

An Alternatives Analysis for a Section 4(f) Evaluation must consider whether there is a feasible and prudent avoidance alternative that would avoid the use of Section 4(f) resources. A feasible and prudent avoidance alternative avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property. In assessing the importance of protecting the Section 4(f) property, it is appropriate to consider the relative value of the resource to the preservation purpose of the statute. As defined in 23 CFR §774.17:

- An alternative is not feasible if it cannot be built as a matter of sound engineering judgment.
- An alternative is not prudent if:
 - It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
 - It results in unacceptable safety or operational problems;
 - After reasonable mitigation, it still causes:
 - Severe social, economic, or environmental impacts;
 - Severe disruption to established communities;
 - Severe disproportionate impacts to minority or low income populations; or
 - Severe impacts to environmental resources protected under other Federal statutes;

- It results in additional construction, maintenance, or operational cost of an extraordinary magnitude;
- It causes other unique problems or unusual factors; or
- It involves multiple factors listed above, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

Given the narrow existing cross sections of local roadway networks, the tight radii of loop ramps and substandard acceleration and deceleration lanes that currently exist within the ROW, extensive development adjacent to existing ROW, topography, and an inability to reduce required proposed cross sections, there are no feasible and prudent avoidance alternatives that would avoid the use of Section 4(f) resources while still addressing the project's purpose and need. All of the build alternatives that were considered would have some impact on the Merritt Parkway Historic District's historic character because of the need for additional ramps and acceleration/deceleration lanes and because of the effects on three of the historic district's contributing bridges.

The only alternative that would completely avoid the use of Section 4(f) resources is the No-Build Alternative. Not undertaking the project would avoid the use of Section 4(f) properties. However, the No-Build Alternative would not be feasible and prudent because it would leave the project's purpose and need unfulfilled. There would be no reduction in congestion on Main Avenue, the substandard interchange between Main Avenue and the Parkway would remain in place, and motorists would continue to have to use indirect methods of making many of the connections between the Parkway and Route 7. Opportunities for enhancing alternate modes of transportation would be substantially reduced. Finally, the opportunities to enhance the Parkway's historic character by addressing the current state of inconsistent signage and guiderail treatment, inappropriate, overgrown, and missing vegetation, and inconsistent treatment of the median would be lost.

Alternatives Carried Forward for Least Overall Harm Analysis

Once it has been concluded that there is no feasible and prudent avoidance alternative, then the FHWA may approve, from the remaining alternatives that use Section 4(f) property, only the Alternative that causes the least overall harm. Several factors must be balanced in determining the least overall harm:

(i) Ability to mitigate adverse impacts to each Section 4(f) property. The mitigation measures for Alternative 21D and Alternative 26 are the same: implementation of the "Merritt Parkway Landscape Assessment Guidelines" (March 2020; Appendix I3 of the project's EA/EIE document) and design considerations for the replacement Main Avenue bridge.

(*ii*) Relative severity of the remaining harm to the protected activities, attributes, or features that qualify each Section 4(f) property for protection. Because the ramps and associated added lanes are shorter, the magnitude of the effect of Alternative 26 on the Parkway's historic design would be somewhat less than Alternative 21D.

(iii) Relative significance of each Section 4(f) property. The Section 4(f) properties are the same for both alternatives.

(*iv*) *Views of official*(*s*) *with jurisdiction over each Section 4*(*f*) *property.* CTSHPO concurred with CTDOT's recommendations of <u>Adverse Effect</u> in a letter dated November 20, 2020. Refer to Part 1, Section G of this 4(f) Evaluation for additional information.

(v) Degree to which the purpose and need for the project are met. Alternative 21D and Alternative 26 both fulfill the project's Purpose and Need.

(vi) Magnitude of adverse impacts to resources not protected by Section 4(f). Alternative 26 meets the goals with substantial advantages compared to Alternative 21D (Refer to Table 2.4.2 of the project's EA/EIE document)

(*vii*) Substantial differences in cost. At this time, the preliminary capital construction cost estimate of constructing Alternative 21D (207 million) is approximately 90% higher than the preliminary capital construction cost estimate of Alternative 26 (109 million).

Alternative 21D

Alternative 21D would complete the partial interchanges (Interchange 39, 40) with traffic movements between Route 7, the Merritt Parkway, and Main Avenue (see Project Plans, Appendix B). The existing Route 7/Merritt Parkway loop ramps would be retained in the easterly quadrants as would the direct connections in the westerly quadrants. The four remaining Route 7/Merritt Parkway interchange movements would be achieved with semi-direct connections. Several towers of a power line may require relocation.

The dual historic Merritt Parkway bridges over Main Avenue would be replaced and the bridge spans extended to allow for a widened roadway section. The increased span would provide space below for a wider Main Avenue and allow for the construction of additional left turn lanes to provide for left-turn movements and provide wider sidewalks and incorporation of bike facilities. This would facilitate the project's purpose related to improved mobility of both vehicles and other users (pedestrian/bikers/transit users). In addition to the existing signal at Glover Avenue and Main Avenue, two new signalized intersections would be provided along Main Avenue for a total of three-closely spaced signalized intersections. Glover Avenue would be widened and a replacement bridge would be constructed over the Norwalk River. Creeping Hemlock Drive would be realigned to the north and widened. A new signalized intersection would be provided along Creeping Hemlock Drive at the existing westbound Merritt Parkway off-ramp.

The four existing tight-loop ramps at Interchange 40 would be eliminated. Elimination of the existing ramps in the southwest quadrant of the Main Avenue interchange would allow for a long eastbound weave lane between an eastbound Route 7 entry ramp and an improved exit loop ramp in the southeast quadrant of the Route 7 interchange.

In the westbound direction, the tight Merritt Parkway exit loop ramp in the northwest quadrant (to southbound Main Avenue) would be eliminated. Longer Merritt Parkway ramp acceleration and deceleration lanes would also be provided. The westbound entrance ramp would be built between

a recently constructed residential apartment building and the Merritt Parkway. As currently conceived, the new ramps would be at or below the elevation of the Merritt Parkway.

In addition to the new ramps and roadways noted above, this alternative would require the construction of eleven (11) new bridges and modifications or replacements to three (3) existing bridges for expanded roadways and/or ramps. This includes replacement of two (2) historic bridges (Merritt Parkway over Main Avenue and Glover Avenue over Norwalk River).

Alternative 26

Alternative 26 would complete the partial interchange (Interchanges 39, 40) with traffic movements between Route 7, the Merritt Parkway, and Main Avenue (see Project Plans, Appendix B). This alternative would introduce two signalized intersections along Route 7 to complete the partial interchange. A modified diamond interchange with the Merritt Parkway would retain the existing loop ramp in the northeast quadrant and the existing direct connector ramp in the southwest quadrant to optimize traffic operations at the two signalized intersections.

The loop ramp in the northeast quadrant would be reduced in size from the larger existing one, a change made possible by slower speeds on the reclassified Route 7 from a freeway to a signalized arterial. Three northbound and three southbound lanes would be necessary at the signalized Route 7/ramp intersections, with turn lanes at each Route 7 intersection approach. No powerline tower relocations are required for Alternative 26.

The dual historic Merritt Parkway bridges over Main Avenue would be replaced and the bridge spans extended to allow for a widened roadway section. The increased span would provide space below for a wider Main Avenue and allow for the construction of additional left turn lanes to provide for left-turn movements and provide wider sidewalks and incorporation of bike facilities. This would facilitate the project's purpose related to improved mobility of both vehicles and other users (pedestrian/bikers/transit users). In addition to the existing signal at Glover Avenue and Main Avenue, two new signalized intersections would be provided along Main Avenue for a total of three-closely spaced signalized intersections. Glover Avenue would be widened and a replacement bridge would be constructed over the Norwalk River. Creeping Hemlock Drive would be realigned to the north and widened. A new signalized intersection would be provided along Creeping Hemlock Drive at the existing westbound Merritt Parkway off-ramp.

The four tight-loop ramps at Interchange 40 would be eliminated. Elimination of the existing ramps in the southwest quadrant would allow for a long eastbound weave lane between an eastbound Route 7 entry ramp and an improved exit loop in the southeast quadrant.

In the westbound direction, the tight Merritt Parkway exit loop ramp in the northwest quadrant would be eliminated. To avoid further weaving on the westbound Merritt Parkway for the southbound Main Avenue movement, an independent ramp would be located between the westbound weaving lane and the new residential building to the north.

In addition to the new ramps and roadways noted above, Alternative 26 would require the construction of four (4) new bridges and the replacement of two (2) existing historic bridges (Merritt Parkway over Main Avenue and Glover Avenue over Norwalk River) to incorporate new or widened roadways or ramps.

Least Overall Harm Analysis

Alternative 21D and Alternative 26 both entail the replacement of the Main Avenue Bridge to improve traffic flow on Main Avenue and to allow for multimodal amenities. Alternative 21D also requires replacement of the bridge in order to accommodate an additional lane associated with the connection between Route 7 northbound and the Merritt Parkway northbound.

A widened Main Avenue, including left-turn lanes and wider sidewalks, is essential to fulfill the project's roadway system linkage, safety, and mobility purposes. All but one of the 26 alternatives under consideration in the Level 1 screening require replacement of the bridge; that alternative was eliminated because it failed to meet the safety and mobility elements in the project's Purpose and Need⁴. Because of the density of commercial, office, and residential development in the area, other strategies for preserving the bridge (realigning Main Avenue to avoid the use of the historic bridge, retaining the historic bridge with a second bridge immediately adjacent to it on one side or the other) would result in numerous right-of-way takings, impacts to environmental resources (e.g., wetlands), and displacement of residents in two (2) multi-story apartment buildings.

Both Alternative 21D and Alternative 26 would replace the inadequate Main Avenue/Merritt Parkway interchange (an original feature from the late 1930s) with safer ramps; this change would represent an unavoidable adverse effect on the Merritt Parkway Historic District's integrity of design and materials. Lanes would also be added at the Merritt Parkway/Route 7 interchange to accomplish complete connectivity between the two highways. Because the ramps and associated added lanes are shorter, the magnitude of the effect of Alternative 26 on the Parkway's historic design would be somewhat less than Alternative 21D. In the case of both alternatives, the effects on the Parkway's historic character can be substantially minimized by implementation of the "Merritt Parkway Landscape Assessment Guidelines" (March 2020; Appendix I3 of the project's EA/EIE document).

⁴ Alternative 9 would provide all connections at the Merritt Parkway/Route 7 interchange and eliminate all ramps at the Merritt Parkway/Main Avenue interchange (Appendix A2 of the project's EA/EIE document).

Summary of Least Overall Harm Analysis

The following table summarizes the results of the Least Overall Harm analysis:

| Factor | Alternative 21D | Alternative 26 |
|--|------------------|----------------|
| Ability to mitigate adverse impacts | Same | Same |
| Relative severity of remaining harm | Slightly greater | Slightly less |
| Relative significance of Section 4(f) properties | Same | Same |
| Views of official(s) with jurisdiction | TBD | TBD |
| Degree to which Purpose and Need are met | Same | Same |
| Impacts to resources not protected by Section 4(f) | Higher | Lower |
| Substantial difference in cost | Higher | Lower |

F. MINIMIZATION MEASURES

The project's Purpose and Need cannot be fulfilled without adding ramps and lanes to the Merritt Parkway, including the reconfiguration of the existing interchange between the Parkway and Main Avenue. In order to minimize harm to the Merritt Parkway Historic District, CTDOT, with substantial input from the public, developed a set of landscape guidelines that would be implemented in the final design ("Merritt Parkway Landscape Assessment Guidelines," March 2020, included in the EA/EIE document as Appendix I3). The guidelines include the following design principles:

- View corridors created through horizontal and vertical roadway geometry;
- Visibility of bridge structures with varied width and length of view corridors;
- Plant material that effectively frames views, complements bridge structures, screens unsightly views, provides focal points, and creates landscape groupings of varied scale;
- Built landscape transitioning seamlessly into naturalized landscape;
- Median treatments and highway design vocabulary (guiderails, signs, lighting standards and off-site over-spill, barrier fences, etc.) are consistent and recognizable, conform to overall Parkway appearance, and are selected from a compact and well-defined palette of materials;
- Landscape reveals natural/naturalized resources such as watercourses, slopes, ledge outcrops, and sky; and
- Overhead canopy within the Merritt Parkway right-of-way that modulates along the corridor and complies with CTDOT roadway safety guidelines.

Implementation of these guidelines would in effect restore the historic character of the Parkway within the project limits. Currently, that character is impaired by inconsistent signage and guiderail treatments and inappropriate, lost, or overgrown plantings. Overall, the historic character of the Merritt Parkway will be more apparent after the project than currently is the case.

Creation of a Memorandum of Agreement (MOA) between FHWA, CTSHPO, and CTDOT is currently the subject of consultation among CTDOT and CTSHPO. Consultation with Tribal entities is also ongoing and may result in participation in the creation of the MOA. As of this date, possible MOA stipulations for mitigating the adverse effects on the Merritt Parkway Historic District, and the Main Avenue Bridge include:

- 1. In preparing the final design for the Preferred Alternative, CTDOT shall, as far as possible, follow the guidelines in "Merritt Parkway Landscape Assessment Guidelines" (March 2020). CTDOT shall submit the final design to CTSHPO and FHWA for review and shall revise the design accordingly.
- 2. CTDOT shall design the replacement for the Main Avenue Bridge so as to complement the established aesthetic of the Merritt Parkway Historic District. CTDOT shall submit the design for the replacement bridge to CTSHPO and FHWA for review and shall revise the design accordingly.

During the MOA consultation process, comments provided by interested parties will be evaluated for inclusion through modifications to the draft as agreed between the Consulting Parties/Tribes. Acceptance of modifications by the Consulting Parties will be confirmed prior to finalization and signature.

G. AGENCY COORDINATION AND PUBLIC OUTREACH

CTDOT, on behalf of FHWA, has coordinated planning for the project with CTSHPO, providing that agency with descriptions of the project, design plans, and archaeological and historical technical reports. The CTDOT Office of Environmental Planning recommended findings of <u>Adverse Effect</u> on the Merritt Parkway Historic District and one of the district's contributing components, the Main Avenue Bridge (Bridges Nos. 00560A and 00560B). After independently reviewing the project, CTSHPO concurred with CTDOT's recommendations of <u>Adverse Effect</u> in a letter dated November 20, 2020. Agency consultation is documented by the correspondence included in Appendix N3 of the EA/EIE. Section 106 consultation is documented by the correspondence included in Appendix N6 of the EA/EIE and preparation of an MOA between Consulting Parties is in progress as noted in Section F.

The Route 7/Route 15 Interchange Project has been presented for public comment at a series of meetings. The meetings, all held in Norwalk, received the required public notice; in addition, several interested local organizations were invited by mail or email. Oral comments at the meetings and subsequent written comments were received. Representatives of the following organizations attended one or more of these public meetings: the City of Norwalk Historical Commission, the Merritt Parkway Conservancy, the Norwalk Historical Society, and the Norwalk

Preservation Trust. The project's public information and outreach included the following (partial list):

September 15, 2017, 328 Flax Hill Road, Norwalk, public focus groups
September 19, 2017, Norwalk City Hall, Norwalk, Project Advisory Committee (PAC)
October 17, 2017, Norwalk City Hall, Norwalk, general public
May 7, 2019, Norwalk City Hall, Norwalk, PAC Section 106 Subcommittee
July 11, 2019, 301 Merritt 7, Norwalk, PAC
October 23, 2019, Norwalk City Hall, Norwalk, general public
November 21, 2019, 328 Flax Hill Road, Norwalk, PAC Landscape Subcommittee
December 16, 2020, Virtual Meeting (Microsoft Teams), general public (minutes pending)
December 1, 2021, Virtual Meeting (Microsoft Teams), general public (minutes pending)

CTDOT also formed a Project Advisory Committee (PAC) in March, 2017, which was composed of approximately 25 individuals representing a variety of local stakeholders including local neighborhood groups, interest groups, economic development groups, municipalities, transit providers, and major landowners / developers. The PAC has met throughout the course of the project, providing key local knowledge as the study team progressed with the development of this document along with input on screening the alternatives.

In addition to the public meetings, the project maintains a frequently updated website with copies of technical reports, announcement of public meetings, agendas, and minutes of past meetings.

PART 2: GLOVER AVENUE BRIDGE (PROGRAMMATIC EVALUATION)

Glover Avenue lies immediately north of the Merritt Parkway, with its intersection with Main Avenue directly adjacent to existing Parkway on and off-ramps. In order to create safe and efficient traffic flow at this intersection, the Project proposes widening Glover Avenue, including providing a wider bridge over the Norwalk River (see Location Map, Appendix A). The existing bridge, a 1912 two-span stone arch structure that is considered to be an NRHP-eligible property, will be replaced with a new bridge.

The 4(f) evaluation for this project action is made under the 1983 *Programmatic Section* 4(f) *Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges.* The Programmatic Section 4(f) evaluation for projects involving historic bridges provides a streamlined format consisting of a cover sheet and check list, followed by concise text sections that describe the project action, relevant analysis of alternatives, measures to minimize harm, and coordination with the public and other governmental agencies.

The Programmatic 4(f) Evaluation for the Glover Avenue Bridge appears on the next five pages, followed by Part 3, the determination statements for both the Merritt Parkway Historic District (including its contributing components) and the Glover Avenue Bridge.

CONNECTICUT DIVISION FEDERAL HIGHWAY ADMINISTRATION PROGRAMMATIC SECTION 4(f) EVALUATION AND APPROVAL UNDER THE NATIONWIDE SECTION 4(f) EVALUATION AND APPROVAL FOR FHWA PROJECTS THAT NECESSITATE THE USE OF HISTORIC BRIDGES

Description of the Historic Bridge(s) <u>Bridge No. 04155 (the Glover Avenue Bridge) is a two-span</u> stone-arch structure originally built in 1912C; the bridge is eligible for listing in the National Register of Historic Places (NRHP). The bridge has an overall length of 84' and a width of 34' 6'', including two vehicle lanes and sidewalks on both sides. The bridge carries Glover Avenue over the Norwalk River in the town of Norwalk, Connecticut (see Location Map, Appendix A).

Federal Project No. 0015(133), State Project No. 102-358.

Consult the Nationwide Section 4(f) Evaluation as it relates to the following items. Complete all items. **Any response on a box ([]) requires additional information prior to approval.**

| Applicability | | Yes | No |
|---------------|---|------------------|-----|
| 1. | Will the bridge be replaced or rehabilitated with Federal funds? | X | [] |
| 2. | Will the project require the "use" of a historic structure, which is on or is eligible for listing on the National Register of Historic Places? | <u> X </u> | [] |
| 3. | Will the project impair the historic integrity of the bridge either by demolition or rehabilitation? | X | [] |
| 4. | Has the bridge been determined to be a National Historic Landmark? | | [X] |

Alternatives Considered:

Consult the Nationwide Programmatic Section 4(f) Evaluation for the generic reasons that might be addressed. The evaluation of alternatives for the subject project, however, must quantify those reasons as applicable and be supported by the circumstances of the project.

| 1. | All of the following alternatives to avoid any use of the | | |
|----|---|---|-----|
| | historic bridge have been evaluated? | X | [] |

DRAFT SECTION 4(f) EVALUATION

| has been determined for reasons of maintenance and safety not to be feasible and prudent? | X | [] |
|---|----------|-----|
| 3. The build on new location without using the old bridge alternate has been studied and it has been determined for reasons of terrain, and/or adverse social, economic or environmental effects, and/or engineering and economy, and/or preservation of the old bridge, not to be feasible or prudent? | <u>X</u> | [] |
| 4. Rehabilitation of the existing bridge without affecting the historic integrity of the bridge has been studied and it has been determined, for reasons of structural deficiency, and/or geometrics that rehabilitation is not feasible and prudent? | <u>X</u> | [] |
| Measures to Minimize Harm: (When an item does not apply, indicate NA in the Yes column) | | |
| 1. The project includes all possible planning to minimize Harm as the following apply? | _X | [] |
| 2. For bridges that are to be rehabilitated, the historic integrity of the bridge is preserved, to the greatest extent possible, consistent with unavoidable transportation needs, safety, and load requirements?* | NA | [] |
| 3. For bridges that are to be rehabilitated to the point that the historic integrity is affected or that are to be moved or demolished, the FHWA has ensured that full adequate records are made of the bridge in accordance with the Historic American Engineering Record (HAER)? | х | ſĵ |
| 4. For bridges that are to be replaced, the existing bridge is made available for an alternative use, provided a responsible party agrees to maintain and preserve the bridge? | | [X] |
| 5. For bridges that are adversely affected, the FHWA, CTSHPO and ACHP have reached agreement through the Section 106 process on the Measures to Minimize Harm and those measures are incorporated in the project? | Х | [] |

*Note: These criteria and the provisions of Section 4(f) apply when it has been determined by FHWA in consultation with the Connecticut State Historic Preservation Office (CTSHPO) and the

Advisory Council on Historic Preservation (ACHP) through the Section 106 process that the rehabilitation work will result in an "adverse effect" on the historic integrity of the structure. When through the above consultation it is determined the rehabilitation work will result in "no adverse effect" on the historic integrity of the structure, the provisions of Section 4(f) and the above Nationwide Programmatic Section 4(f) Evaluation do not apply.

Project Description

State Project No. 102-358 proposes to construct improvements to the Route 7 and Route 15 interchange and improve interconnections with local roads in the City of Norwalk, Connecticut. The purpose of the project is to:

- improve roadway system linkage between Route 7 and Route 15 at Interchange 39;
- improve the mobility for vehicles at both the Route 15 interchanges at Route 7 and at Main Avenue (No. 39 & No. 40), and to improve the mobility for all users (motorists, pedestrians, and cyclists) along the immediate adjacent local roadway network (Main Avenue, Glover Avenue, and Creeping Hemlock Drive, and;
- improve safety in the vicinity of these interchanges.

The replacement of the Glover Avenue Bridge (Bridge 04155) is part of this project. Bridge 04155, built in 1912, is a two-span masonry arch bridge. The structure measures 84 feet in length and 34.5 feet in width. The intersection of Glover Avenue and Main Avenue is directly adjacent to two of the current on/off ramps between Main Avenue and the Merritt Parkway; as a consequence, Glover Avenue is directly involved in circulation at the interchange. Deployment of a police officer is routinely required during the evening peak period to manage traffic at this intersection and to assure that the Glover Avenue railroad crossing to the west is cleared. This intersection does not have railroad pre-emption. Recent bridge inspections have rated the structure as structurally adequate but functionally obsolete due to the volume of traffic carried.

The replacement bridge would have four travel lanes instead of the two lanes provided by the current bridge, as well as sidewalks on both sides, approximately doubling the width. Widening Glover Avenue would result in a reduction in backed-up traffic on both Glover Avenue and Main Avenue, thereby improving mobility at the Parkway interchange (this is documented in Appendix B of the project's EA/EIE). The widening of Glover Avenue would also address safety concerns at the Glover Avenue railroad crossing west of the Main Avenue intersection.

Built in 1912, the Glover Avenue bridge (originally called the Belden Avenue Bridge) features two shallow elliptical arches of 40' span (Photograph 10). The spandrels are a random ashlar of locally quarried granitic gneiss, while the parapet coping and ring stones are formed from Portland brownstone blocks. The current pipe railings, while modern, are similar to the bridge's original railings. A dedicatory inscription on the south parapet's coping lists the date of construction, the names of the town selectmen, and the name of the bridge's engineer (Photograph 11).

The bridge has local historical significance as an example of the movement in the early 20th century to provide bridges that were not only functional but also aesthetic improvements for the community. In that period, Norwalk, like other Fairfield County towns, was beginning to develop a middle-class, suburban identity; bridges like this, with their rustic stone masonry, were seen as helping to create a park-like ambience appropriate to that identity. Charles N. Wood (1847-1913), Norwalk's municipal engineer, designed the bridge and supervised its construction.

CTDOT's 1990 survey of historic bridges, which was reviewed and accepted by CTSHPO, recommended that the bridge be considered eligible for listing in the NRHP. In connection with an earlier interchange-improvement project at this location, the eligibility of the bridge was affirmed in consultation between CTDOT and CTSHPO. Written and photographic documentation of the bridge was prepared to state-level standards in April 2000 and archived as part of the Connecticut Historic Preservation Collection (Dodd Research Center, University of Connecticut Library, Storrs, CT).

Measures to Minimize Harm

In consultation with CTSHPO, the Glover Avenue Bridge was identified as a NRHP-eligible property. Stipulations currently under consideration for the project's Memorandum of Agreement (MOA) would provide for

- incorporating the historic bridge's dedicatory inscription into the design of the new bridge
- assessing the adequacy of the existing state-level documentation undertaken in 2000 and supplementing the documentation as necessary.

It should be noted that the MOA likely would not include any clauses for the marketing of the existing structure for alternative uses because of the extreme difficulty of dismantling, moving, and re-erecting stone-arch bridges. Relocation/reuse of the structure is not a feasible and prudent action since dismantling the bridge would not lend itself to maintaining any type of historic integrity.

Alternative Evaluation

Alternative 1 – Do Nothing

Although this alternative would not affect the historic bridge, it is not considered feasible and prudent; the project's Purpose and Need clearly identifies adequate circulation in the immediate vicinity of the interchange of the Merritt Parkway and Main Avenue as an essential part of the project. In addition to serving numerous multistory office and apartment complexes, Glover Avenue provides access to the Merritt 7 Metro-North Railroad station. Currently, backups at the intersection of Glover Avenue and Main Avenue regularly require the presence of police officers to direct traffic. As documented in Appendix B of the project's EA/EIE, adding lanes to Glover Avenue at this point would result in a reduction in backed-up traffic on both Glover Avenue and Main Avenue, thereby improving mobility at the Parkway interchange.

Alternative 2 – Construct New Bridge on New Alignment without Affecting the Historic Integrity of the Old Bridge

The area is densely built with multistory office and apartment complexes having little setback from Glover Avenue and the roadway alignment is fixed. Constructing a new bridge on a new alignment would result in numerous right-of-way takings and displacement of residents in two (2) multi-story apartment buildings. Furthermore, the current Glover Avenue Bridge would need to be maintained given its historic significance. For these reasons, this alternative is not considered feasible and prudent.

Alternative 3 – Rehabilitate the Historic Bridge without Affecting the Historic Integrity of the Bridge

Rehabilitation of the bridge without affecting its historic integrity would not address the project's purpose and need. Although some historic stone-arch bridges have been widened on one side, while maintaining the other side intact, this option is not possible in the case of the Glover Avenue Bridge; the bridge must be widened on both sides, maintaining the current centerline in order to improve overall levels of service nearby Main Avenue intersection. Furthermore, widening the Glover Avenue Bridge from two lanes to four lanes would necessarily diminish the structure's integrity of design and materials. Accordingly, this alternative is not considered feasible and prudent.

Public Information and Outreach

The Route 7/Route 15 Interchange Project has been presented for public comment at a series of meetings, each of which explicitly identified the replacement of the Glover Avenue Bridge as a component of the project. The meetings, all held in Norwalk, received the required public notice; in addition, several interested local organizations were invited by mail or email. Oral comments at the meetings and subsequent written comments were received. Representatives of the following organizations attended one or more of these public meetings: the City of Norwalk Historical Commission, the Merritt Parkway Conservancy, the Norwalk Historical Society, and the Norwalk Preservation Trust. The project's public information and outreach included the following (partial list):

September 15, 2017, 328 Flax Hill Road, Norwalk, public focus groups
September 19, 2017, Norwalk City Hall, Norwalk, Project Advisory Committee (PAC)
October 17, 2017, Norwalk City Hall, Norwalk, general public
May 7, 2019, Norwalk City Hall, Norwalk, PAC Section 106 Subcommittee
July 11, 2019, 301 Merritt 7, Norwalk, PAC
October 23, 2019, Norwalk City Hall, Norwalk, general public
November 21/2019, 328 Flax Hill Road, Norwalk, PAC Landscape Subcommittee
December 16, 2020, Virtual Meeting (Microsoft Teams), PAC Landscape Subcommittee
November 30, 2021, Virtual Meeting (Microsoft Teams), general public (minutes pending)
December 1, 2021, Virtual Meeting (Microsoft Teams), general public (minutes pending)

In addition to the public meetings, the project maintains a frequently updated website with copies of technical reports, announcement of public meetings, agendas, and minutes of past meetings.

PART 3: DETERMINATIONS

The following Determinations apply to the Route 7/Route 15 Interchange Project, State Project 102-358, Federal Aid Project 0015(133):

- 1. Based upon the Section 4(f) Evaluation for the NRHP-listed Merritt Parkway Historic District, and in accordance with 23 CFR §774.3(a), FHWA has concluded that there is no feasible and prudent avoidance alternative to the proposed use of the Merritt Parkway Historic District, including a contributing component (the Main Avenue Bridge), and that the proposed action includes all possible planning to minimize harm to the Section 4(f) resource (the Merritt Parkway Historic District and its contributing components) resulting from such use.
- 2. Based on the Programmatic Section 4(f) Evaluation for the NRHP-eligible Glover Avenue Bridge, and the results of public and agency consultation, as evidenced by the attachments hereto, the FHWA has determined that:
 - This component of the project meets the applicability criteria set forth in the Nationwide Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges dated July 5, 1983.
 - All of the alternatives set forth in the Findings section of the above Nationwide Section 4(f) Evaluation have been fully evaluated. Based on those Findings, it is determined that there is no feasible and prudent avoidance alternative to the use of Bridge No. 04155 (Glover Avenue over the Norwalk River) in the town of Norwalk.
 - This component of the project complies with the Measures to Minimize Harm Section of the above Nationwide Section 4(f) Evaluation; the Section 106 process has been completed and agreement among the FHWA, CTSHPO, and CTDOT has been reached.

APPENDIX A:

Map of Project Area and Alternatives

Route 7/Route 15 Interchange Project State Project 102-358 / Federal Aid Project 0015(133)

Appendix Page I

DRAFT SECTION 4(f) EVALUATION



Location of project shown on the USGS Norwalk North Quadrangle. The outlines for the two build alternatives include the limits of construction activities.

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APPENDIX B:

Project Plans

Route 7/Route 15 Interchange Project State Project 102-358 / Federal Aid Project 0015(133)

Appendix Page III



Aerial Depiction of Alternative 21D.

Appendix Page IV



Aerial Depiction of Alternative 26.

Appendix Page V

APPENDIX C:

Photographs of Section 4(f) Resources

Route 7/Route 15 Interchange Project State Project 102-358 / Federal Aid Project 0015(133)

Appendix Page VI



Photograph 1: Merritt Parkway north of the Main Avenue interchange, camera facing northeast.



Photograph 2: Merritt Parkway between Perry Avenue and the Route 7 interchange, camera facing northeast.

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Photograph 3: Rock outcropping west of the Route 7 interchange, camera facing north.



Photograph 4: Merritt Parkway on ramp and off ramp at the interchange with Main Avenue, looking northwest toward the intersection of Main Avenue and Glover Avenue.



Photograph 5: Merritt Parkway Main Avenue Bridge (Bridge Nos. 530A and 530B), north elevation, camera facing southwest.



Photograph 6: Merritt Parkway Main Avenue Bridge (Bridge Nos. 530A and 530B), south elevation, camera facing north.

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Photograph 7: Merritt Parkway Main Avenue Bridge (Bridge Nos. 530A and 530B), Parkway level, camera facing west.



Photograph 8: Merritt Parkway Metro-North Bridge (Bridge No. 720), north elevation, camera facing south.



Photograph 9: Merritt Parkway Norwalk River Bridge (Bridge No. 721), north elevation, camera facing south.



Photograph 10: Glover Avenue Bridge (Bridge No. 004155), south elevation, camera facing northeast. This bridge, which would be replaced under both build alternatives, is evaluated in a separate 4(f) document using the Nationwide Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges.

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Photograph 11: Dedicatory inscription, Glover Avenue Bridge, south parapet. The project's MOA calls for the re-use of this stone in the new bridge.