



Vision Plan for the

MOTOR PARKWAY *Trail*

Nassau County, New York



SUBMITTED TO

**Nassau County Department
of Public Works**

SUBMITTED BY

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Village of Williston Park
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Town of North Hempstead
(Albertson, Mineola, Carle Place)
Town of Hempstead
(East Garden City, Garden City, Salisbury, East Meadow,
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CHAPTER 1

The Motor Parkway Trail aims to develop a continuous multi-use trailway through Nassau County that will, to the extent possible, utilize the route of the historic Long Island Motor Parkway.

Executive Summary

Objectives

The Long Island Motor Parkway was originally built to provide a vehicular connection from Queens through Nassau County to Suffolk County. Its ancillary role, for a few days a year, was to serve as the course for the historic Vanderbilt Cup Races which were initiated and organized for William K. Vanderbilt, Jr. . Today, the Nassau County Department of Public Works is heading this visioning process to provide the framework to redevelop portions of the Long Island Motor Parkway as the Motor Parkway Trail for new recreational uses. This process has resulted in this Vision Plan.

When implemented, the new Motor Parkway Trail will once again provide important recreational connection through Nassau County, but this time for hikers and bicyclists. Furthermore, the Trail will provide an important alternative transportation link between communities, open space resources and employment centers for those wishing to walk or bike through Nassau County to these destinations. Therefore, a resurrected Motor Parkway Trail can once again become an important recreational and transportation resource for the County.

The goal of this Vision Plan was to develop a continuous multi-use trail through Nassau County that will, to the extent possible, utilize the route of the historic Long Island Motor Parkway.

During the Vision Planning, a Working Group was formed to guide the Motor Parkway Trail design. This Working Group includes representatives from various public interest groups

and state and local government agencies:

- Long Island Preservation Panel
- Concerned Long Island Mountain Bikers (CLIMB)
- Long Island Greenways and Healthy Trails
- Long Island Greenbelt Trail Conference
- Friends of Massapequa Preserve/OSPAC
- Friends of Cunningham Park
- Parks and Trails New York
- Long island Power Authority
- Nassau County Planning Department
- New York State Department Of Transportation Bicycle Group
- New York State Parks Recreation and Historic Preservation

The Vision Planning process for the Motor Parkway Trail included many days of field investigation along the 27 miles of the original LIMP alignment through Nassau County.

Aside from being overgrown and in rough shape, the corridor is mostly contiguous as it runs across the County from the Queens border to the Suffolk border. There are many areas where the original Long Island Motor Parkway alignment is no longer available for development, either due to private parcel ownership/development, physical barriers that have been built over the years, unauthorized encroachments, etc. In order to aid in the evaluation of the corridor, the Working Group identified preliminary trail alignments and alternative alignments were evaluated in certain areas where there were several options (See illustrated maps in the Appendix to this Vision Plan).

The final Motor Parkway Trail that is illustrated in this Vision Plan includes off-road segments and segments that follow along or on existing roadways. The plan also includes locations for trail heads, signage and interpretive features. The final alignment for the Motor Parkway Trail connects to other planned or existing trails within Nassau County including: the Nassau HUB Bike Trail, the Wantagh Parkway Trail and the Bethpage Bikeway – thereby becoming a part of Nassau County’s vision for a Grand Loop.

The Motor Parkway Trail would be implemented over many years and the Vision Plan includes priorities and estimated construction costs. The historic nature, recreation aspect and

use as an alternative mode of transportation, make this Trail uniquely qualified for various funding and grants sources which are outlined in this Vision Plan.

Maintenance activities and general costs are included in the Vision Plan. Where the Trail runs through County land, Nassau County Department of Public Works would maintain the trail. Where the Trail is proposed on lands owned by other towns or villages, a Memorandum of Understanding (MOU) would be developed between the County and that town/ village. The MOU would outline the responsibilities for Trail maintenance.

Finally, this Vision Plan is just the first step – a Vision for the development of the Motor Parkway Trail. Nassau County is also engaged in developing a First Phase that is planned to include a short length of trail as a demonstration project, along with a signage program. Check back on the project website <http://www.nassaucountyny.gov/agencies/planning/motorparkwayplan.html>

CHAPTER 2

A resurrected Motor Parkway Trail can once again become an important recreational and transportation resource for the County.

Introduction

History does have a way of repeating itself. The Long Island Motor Parkway was originally built to provide a vehicular connection from Queens through Nassau County to Suffolk County. Its ancillary role, for a few days a year, was to serve as the course for the historic Vanderbilt Cup Races which were initiated and organized for William K. Vanderbilt, Jr. That recreational use ceased and exclusive use as a motor parkway held sway. Similar issues are driving the current initiative to create the Motor Parkway Trail, but on a different scale. This Vision Plan is being prepared to provide the framework to redevelop portions of the Long Island Motor Parkway as the Motor Parkway Trail for new recreational uses. As this Vision Plan is being implemented, the new Motor Parkway Trail will provide a form of recreation, but this time for hikers and bicyclists. Furthermore, the Motor Parkway Trail will provide an important transportation connection between communities, open space resources and employment centers for those wishing to walk or bike through Nassau County to these destinations. Therefore, a resurrected Motor Parkway Trail can once again become an important recreational and transportation resource for the County

Long Island Motor Parkway History

The Long Island Motor Parkway (LIMP) was the first automobile parkway in the nation though multi-use parkways had been developed as early as the 1870s (Dolkart 2001:6). Constructed in three stages between 1908 and 1926, the LIMP was encapsulated in a 100-foot wide right-of-way for much of its length, winding across parts of Queens, Nassau, and Suffolk counties. The original segment

of the Parkway was constructed in Nassau County in 1908. This 9-mile segment was built between Westbury and Bethpage (ibid). Nine of those 12 miles constructed that year were used for the Vanderbilt Cup Race in 1908. Between 1909 and 1912, the Parkway was extended both east into Suffolk County to Lake Ronkonkoma and west to Springfield Boulevard (then Rocky Hill Road) in Queens. The final segment, extending the Parkway further into Queens was completed between 1924 and 1926. In addition, a connector road was constructed in Suffolk County that took traffic from the LIMP to Commack. According to Robert Miller (2011), another secondary rock was built between LIMP and Mitchell Field.

The historical background to the LIMP is thoroughly reviewed in several sources including Dolkart's (2001).

National Register of Historic Places Nomination Form for the two LIMP sections at Alley Pond and Cunningham parks Queens; The Long Island Motor Parkway by Kroplick and Velocci (2008); and articles by Smith (1961), Wines (1961), and Miller (1989). Kroplick also maintains a website (http://www.vanderbiltcupraces.com/index.php/Motor_Pkwy/) dedicated to the LIMP and the Vanderbilt Car Races which provides insights into the extant features of the Parkway. The short discussion that follows is focused on the physical characteristics of the Parkway as they were developed in Nassau County.

The first, 1908 segment of the Parkway is the only one that conforms to Vanderbilt's original vision of the Parkway. Planned as a 'modern' automobile trackway for pleasure driving, the Westbury-Bethpage segment was 22-feet wide with 2-foot wide, unpaved shoulders. It was fenced and there were no at-grade crossings. Rather, 18 bridges crossed over the Parkway so that its users had an uninterrupted path.

The segment was covered with so-called Hassam paving. According to Dolkart (2001:12), this paving technique consisted of a six-inch thick layer of trap rock overlain by reinforced concrete pavement. The presence of wire reinforcing mesh riding above the trap rock within the concrete grout was designed to prevent cracking during construction and undue settling afterward. Smith (1961:19), Wines (1961:21), and Dolkart (2001:12) all note that no expansion joints were added but that felt joints were inserted after it was determined jointing was indeed needed. The concrete also was embedded with pea gravel and swept with brooms in order to corrugate the surface. To prevent glare, lamp black was mixed with the grout.

The 1908 segment had four major turns and was banked in numerous locations to allow for high-speed travel (up to 60 miles per hour). In locations where the bed was excavated into the landscape, drainage ditches were excavated adjacent to the shoulders. While the combined width of the prepared pavement and shoulders was 26-feet, the overall ROW purchased or otherwise obtained by the LIMP agents was 50 to 100 feet.

The 18 bridges in Nassau County on the original 1908 segment included 17 with steel I-beams "carrying a reinforced concrete floor" (Dolkart 2001:12) and a single bridge constructed with a steel girder. By the time the LIMP was final in Nassau County, there were 44 bridges spanning the Parkway's 20-mile length in that county. Overall, some 224 acres were encumbered as part of the LIMP in Nassau County (Smith 1961:27).

For various reasons, the subsequent 1909-1911 segments were paved 16-feet wide though it seems the LIMP agents continued to try to acquire 100-foot wide ROWs when possible. There also were two changes to the physical composition of the pavement: the reinforcing mesh was not added and apparently joints were not included (Dolkart 2001:13). Bridges remained effectively the same as did features such as the pavement edge, fence posts, and railings; in subsequent years these were replaced with concrete posts and bollards. Concrete guideposts also were constructed at the Parkway entrances and exits. These guides hosted 2x6-inch timber inserts.

In the 1920s, the 16-foot wide segments of the Parkway were widened to 22-feet to accommodate both increasing use and speed. Although the Parkway was never landscaped like the Pasadena Freeway in California or the Bronx River Parkway in New York, there were some landscaped areas adjacent to the toll houses. The LIMP was maintained as a toll road and eventually supported 20 toll lodges and 8 other toll-collecting structures. The toll lodges were located "in Hollis Hills, Lake Success, Roslyn, Mineola, Garden City, Westbury, Levittown, Old Bethpage, Melville, Dix Hills, Brentwood and Ronkonkoma" (<http://www.nycroads.com/history/motor>). Peak use of the Parkway occurred in 1929 when some 175,000 motorists bought access to the road (ibid).

During the late 1920s and into the 1930s, negotiations between the LIMP operators and New York State Park Commissioner, Robert Moses, began and then ceased. The operators wanted the State to subsume LIMP as part of the proposed, non-toll Northern State Parkway. When Moses

refused to consider the idea, few saw the LIMP as a viable enterprise once the Northern State Parkway was completed. In 1938, the Parkway's use as an automobile roadway ended and the Parkway deeds were 'sold' to county officials to cancel tax debt.

The segments of rights-of-way are now in use as roadway (in Suffolk County), as bike paths (in Queens County), as parkland and trails, as utility ROW, and as development land. As noted by Kroplick and others, and as observed during the compilation of this vision plan, elements of the LIMP remain in various segments along the original ROW in Nassau County. These include pavement segments, abutments, banks, an overpass approach, and fence posts and bollards (Site Analysis and Draft Trail Alignment Sheets 1, 2, 3, 7, and 8).

In sum, the historic importance of the LIMP is attributable to its role in the "history of transportation and recreation" and to the fact that "it embodies the design characteristics of the...limited access, paved automobile parkway" (Dolkart 2001:6). In Queens, it was judged significant under National Register of Historic Places criterion A and C and these criteria seem applicable to the extant segments in Nassau County as well. While much of the historical interest in the LIMP results from its initial use as a raceway and its romantic origins in the early years of American automobile racing, its real importance lies in the roles the LIMP played in the development of Long Island and New York transportation arteries.

Implication for Funding

The LIMP section in Queens County is listed on the National Register of Historic Places (NR #02000301). One element of it, the Old Courthouse Road Bridge in Herricks (Nassau County), NY, is listed on the New York State Register (USN #05902.000565). According to Virginia Bartos (compliance reviewer-structures, New York State Office of Parks, Recreation, and Historic Preservation (OPRHP)), the state considers any remaining portion of the LIMP as potentially eligible to the NRHP and this would cover those extant sections in Nassau County.

In New York, any project that is funded, licensed or approved by local, state or federal agencies has to consider the effects of that project on historic properties that are listed on or eligible to the National or State Registers of Historic Places. If Federal agencies, including such agencies as the US Army Corps of Engineers (USACOE), the Environmental Protection Agency (EPA), or the Federal Highways Administration

(FHWA), are involved, then the historic properties are reviewed under Section 106 of the National Historic Preservation Act (NHPA). If State permits are needed, then Section 14.09 of the New York State Historic Preservation Act comes into play. Section 14.09 is not the same as the State Environmental Quality Review Act (SEQRA; New York Environmental Conservation Law Article 8 and its implementing regulations [6 NYCRR Part 617]) which provides a process for local communities to evaluate projects for environmental impacts at the local level. SEQRA also may be applicable depending on the need for local level permits.

If the Motor Parkway Trail project is involving more than one level of permitting, usually the Federal level permit process is considered 'lead' and the lead permitting agency coordinates with their counterparts at the State and local levels. This ensures that all of the requirements are met for agencies at all levels. For cultural resources projects, the mechanism for this coordination is a Programmatic Agreement (PA) which stipulates which agency is lead, how the other agencies participate in the historic properties review process and what roles those agencies have in the evaluation of the historic properties in play. In this process, historic properties (aka, cultural resources) are defined as any site, structure, building, object, district, or cultural landscape which meets the age criteria of 50 years for inclusion onto the National Register of Historic Places (NRHP).

For the Motor Parkway Trail project, the Vision Plan calls for modification of the LIMP and the addition of new facilities outside of the LIMP right-of-way (ROW). From OPRHP's perspective, the existing LIMP ROW in Nassau County is an historic property which meets the 50-year old age criterion for inclusion on to the NRHP. If the project proposes use of public monies or needs a permit from a public agency for spaces outside of the existing LIMP ROW, then these areas also must be evaluated to determine if they contain historic properties that are eligible to the NRHP or the State Register. Thus, at this juncture, it seems likely that both Section 106 of the NHPA and Section 14.09 will come into play. The steps that would need to be taken to address these regulations are presented in the Implementation section of this plan. For reference, both of the regulations are briefly summarized below as is the SEQRA process. These summaries are based on discussions presented on the OPRHP web site.

The National Historic Preservation Act of 1966, Section 106

The National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), was created in response to the widespread destruction of historic properties by public works projects such as the Interstate Highway system. The NHPA mandated the creation of the NRHP and the State Historic Preservation Offices (SHPOs) and Tribal Historic Preservation Offices (THPOs) to administer the NHPA at the state level and on Tribal lands. Section 106 of the implementing regulations specifies the process that all Federal agencies must follow as regards the determination of effect on historic properties within Project areas under their review. The process involves both the Federal agency and the SHPO/THPO and in rare instances, it may also involve the Advisory Council on Historic Preservation (ACHP). Most importantly, however, the Section 106 review and evaluation process also involves participation by the public. The public must be informed of the historic properties evaluation and they must be afforded the opportunity to participate in the evaluation process though the lead federal agency controls the degree of that participation. For the Motor Parkway Trail project, public meetings that were held prior to the determination of Federal involvement may not be accepted as applicable to the Section 106 process; the applicability of prior public meetings will be made by the representative of the lead Federal agency.

The New York State Historic Preservation Act of 1980, Section 14.09

The New York State Historic Preservation Act of 1980 is New York's counterpart to the NHPA. Like the NHPA, Act 14.09 established the State Register. It also mandated that all state agencies consult with the OPRHP if it appeared that any projects being planned might or would definitely result in impact to any historic, architectural, archeological or cultural property that is listed on or eligible to the National or State registers. As with the Section 106 process, each of the historic properties is evaluated against register criteria and the state agencies must avoid or mitigate adverse impacts to such properties if they are determined eligible to the State and/or Federal registers.

State Environmental Quality Review Act (SEQRA)

SEQRA (6NYCRR Part 617 of the New York State Environmental Conservation Law, as amended, 1996) is New York's overriding set of uniform environmental regulations. All local, county, and state governmental agencies must incorporate consideration of environmental impacts into their

planning, review and decision-making processes and their guidance for doing that is provided under the SEQRA regulations. As part of the SEQRA process, consideration must be given to all historic properties listed on the State or National Registers of Historic Places and all archeological sites. The SEQRA process is two-step as it first requires the applicable agency to determine if the project will have a significant impact on the environment including historic properties. If it is determined that there will be a significant impact, then a SEQRA-level Environmental Impact Statement must be completed. Under SEQRA's revised regulations (1996), municipalities may request that SHPO review their projects for impacts to historic properties. In these cases, the SHPO is acting as the municipality's advisor and the SHPO is not necessarily reviewing the individual historic properties for inclusion onto the State or Federal registers.

Vision Plan Goals

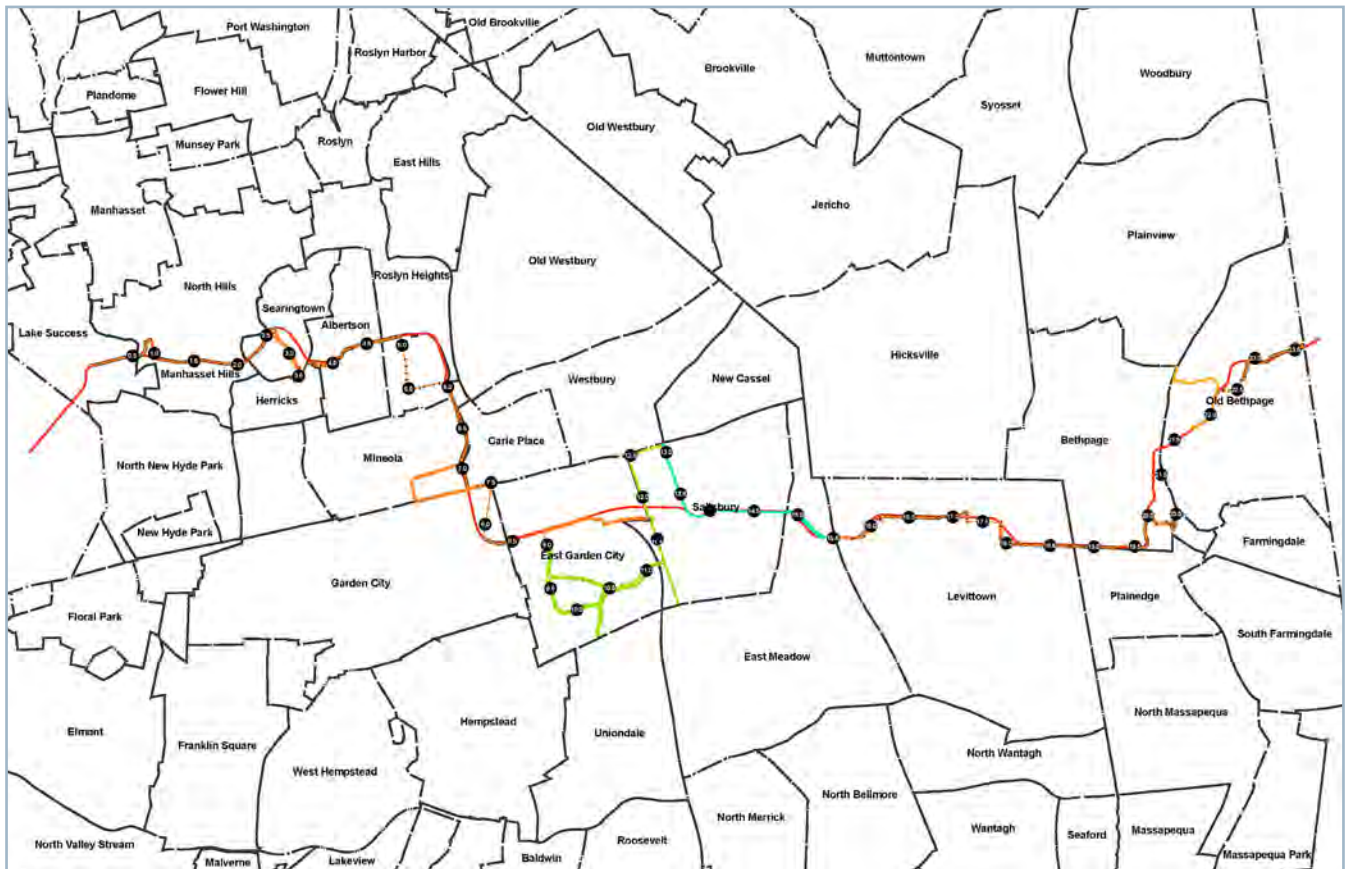
Goal

To develop a continuous multi-use trail through Nassau County that will, to the extent possible, utilize the route of the historic Long Island Motor Parkway.

Objectives

- Motor Parkway Trail will offer an alternative mode of transportation by accommodating non-motorized multiple users such as pedestrians, in-line skaters and cyclists.
- Motor Parkway Trail will be handicapped accessible.
- Motor Parkway Trail will connect, where possible, to other existing and planned trail systems and support the parallel goal of a Nassau Country "Grand Loop" trail system.
- Motor Parkway Trail will provide alternative non-motorized access to many towns and villages, open space resources, employment centers, retail centers and important civic destinations, schools, courthouse, post office, etc.
- Motor Parkway Trail amenities will interpret historic remnants of the original Motor Parkway and, where feasible, protect, rehabilitate and utilize, or fully restore those remnants.
- Motor Parkway Trail will be designed to New York State and/or Nassau County DPW highway standards and all other applicable codes and requirements.

FIGURE 1



- Motor Parkway Trail will support, where possible, additional recreational opportunities such as birding, cultural interpretation, nature education and/or other leisure activities.
- Motor Parkway Trail will utilize durable materials to minimize long-term maintenance.

Connectivity

The Motor Parkway Trail has the potential to become an invaluable transportation link to numerous community resources. As can be seen on the following map, the original Motor Parkway alignment in Nassau County runs through towns and villages, as well as destination shopping and employment centers. The alignment of the proposed Motor Parkway Trail has been designed to link to or be in proximity of many schools, parks, the coliseum, shopping areas, neighborhoods.

This Vision Plan has identified important user generation points and destinations and has identified connections that are easily monitored, that have minimal environmental impacts and that can be implemented as universally

accessible to all citizens. Through a series of interconnected trails that link the variety of open space parcels in this area, the Vision Plan has established a dynamic greenway system that greatly exceeds the sum of its individual parts. The proposed Motor Parkway Trail connects to several other planned or implemented trails within Nassau County including the Blue Ribbon Trail, the Wantagh Parkway Trail, the Bethpage Bikeway Extension and will establish a significant portion of the envisioned Nassau County “Grand Loop” trail system.

Users

The users of the Motor Parkway Trail are expected to be diverse and include such modes of transportation such as walkers, runners, cyclists, strollers, roller-bladers, and skate boarders. Bike trails have always been promoted as alternative transportation options, but have been used predominantly for recreational purposes. However, with the rising cost of fuel, and with more awareness of green and sustainable issues, bike trails are getting more and more used for transportation including local travel and commuting. The Vision Plan considered traffic generators

such as schools, shopping areas and the many businesses and employment clusters located along the Motor Parkway Trail.

Accessibility

The Motor Parkway Trail will be accessible to all, not because it is the law and a public funding requirement, but because all citizens should have the opportunity to enjoy and experience this Trailway and explore the resources along it. The Motor Parkway Trail will not only meet slope requirements for accessibility will also been design with appropriate walking surfaces, sight distances and signage. Such features also improve access for the elderly, as well as parents with small children.

CHAPTER 3

The Motor Parkway Trail will be a multi-use and universally accessible trail with linkages to a variety of community resources. It will be an invaluable recreation resource for the community. Biking, hiking, in-line skating and cross-country skiing are a few of the active benefits to be realized through the development of this trail. In addition, birding, cultural interpretation, nature education and similar leisure activities will be provided by this new trail. All of these elements have been integrated to create a new recreational resource that will enhance the quality of life for local residents and workers, and may become an outdoor classroom for many of the schools located along the Motor Parkway Trail.

Analysis and Alternatives

In order to realize the Motor Parkway Trail's goals and objectives, the Vision Planning process included a detailed site analysis to guide the design process. Information gained during this process assisted the study team in analyzing alternative trail alignments. The following is a summary of the process and findings of the Site Analysis and Trail Alternatives Analysis.

Site Analysis Summary

The Vision Planning process for the Motor Parkway Trail included many days of field investigation along the 27 miles of the original LIMP alignment through Nassau County. This investigation included walking the length of the original LIMP right-of-way and additional potential connecting routes, photography the site and analyzing the conditions for potential development as a trail. The context through which the trail will run was noted as it passes through many different settings: towns, neighborhoods and business areas.

Several aspects of the site were noted and can be found documented on the Site Analysis Maps in the Appendix. For reference, the original Motor Parkway alignment is represented on those maps. In order to aid in the evaluation of the corridor, preliminary trail alignments were identified by the Working Group and are illustrated on the maps. The Site Analysis includes:

Community Destinations

The areas were identified through GIS data from Nassau County GIS database and indicate public parcels, parks, open

space, schools, churches and synagogues, courthouses, libraries and other civic sites.

Ownership Considerations

Ownership of the right-of-way along LIMP changes through Nassau County. In order to evaluate the feasibility of the trail the owners of these parcels have been identified using Nassau County GIS database and Nassau County Department of Assessment's Land Record Viewer (website).

Long Island Motor Parkway Remnants

The pavement, bollards, fencing, and buildings of the original Motor Parkway were not universally dismantled when the road was closed in 1938. As such, remnants of the parkway exist in different areas along the corridor and have been noted on the Site Analysis Maps.

Existing Grades

Utilizing USGS based on their DEM data the existing grades in the areas of the original Motor Parkway were evaluated. Grades greater than a pitch of 5% have been noted as this signifies areas that would need to be addressed or re-graded to be universally accessible when construction documents are developed for implementation.

Existing Traffic Signals

In order to understand the challenges faced where at grade crossings will be necessary the locations of existing traffic signals have been mapped from data from the Nassau County GIS database. In addition, speed and accident data have been obtained as part of this process to inform more detailed design during the development of construction documents. See Appendix.

Potential Trail Parking

During the field investigation flat, open, public space that was close to existing roadways were identified as potential areas for parking designated for trail use.

Potential Wetlands

Data obtained from Nassau County GIS databases along with field investigations done by wetland biologists identified areas of potential wetlands. Wetland delineation was not included in this effort. However, those areas have been noted identify where further investigation may be needed when more detailed construction documents are developed.

Existing Photos

As part of the field investigation the full 27 miles of the original Motor Parkway alignment and adjacencies were photographed. While not all photographs are included here, the Appendix includes several key photos keyed to the Site Analysis Plans.

Trail Alignment Alternatives Analysis

There are many areas where the original Motor Parkway alignment is no longer available for development, either due to private parcel ownership/development, physical barriers that have been built over the years, unauthorized encroachments, etc. As such, alternative alignments for the Trail were evaluated in certain areas where there were several options. These areas can be generally described as:

- Carriage Road and Sugar Maple Drive
- Wheatley Hills Golf Course
- Garden City—north of the LIRR tracks and south of the LIRR tracks
- Stewart Avenue - East Garden City
- North East of Bethpage State Park - Bethpage

As described below, several evaluation criteria were identified. A higher value was given to those characteristics that were preferable. While all of the items below are important to consider, the Working Group identified some items as having a higher relative importance and therefore weighted those aspects with the multiplier indicated. See the Appendix for the maps illustrating this process and the evaluation criteria. This process was used to identify the best trail alignment for each area above and that alignment is represented on the final Motor Parkway Trail plans.

Follows the Original Motor Parkway Alignment (x3)

- 4 - Follows Exactly
- 3 – Close distance/same general alignment/direction
- 2 – Far distance/same general alignment/direction
- 1 – Different alignment/direction

Aesthetics/Experience (x1)

- 4 – Views, quiet and vegetated
- 3 – Vegetated and quiet
- 2 – Vegetated but noisy

1 – No vegetation and noisy

ROW Actions Required (x2)

4 – Now ROW action required

3 – Temporary easement required

2 – Permanent easement required

1 – Acquisition required

Connectivity/Community Linkages (x1)

4 – Major community linkages

3 – Medium easement required

2 – Minor community linkages

1 – No community linkages

Relative Construction Cost (x2)

4 – Lowest i.e.

off-road: utilize existing pavement with minimal repairs

on-road: construct within existing curbs

3 – Medium i.e.

off-road: reconstruct existing pavement, some new work

on-road: construct within exiting curbs with re-striping

2 – Higher i.e.

off –road: all new trail with typical construction

on-road: need to expand road cross-section

1 – Highest i.e.

off-road: all new trail with new bridge/underpass

on-road: expand cross-section with major structural changes to existing bridge/underpass

At-grade crossing conditions (x2)

4 – None

3 – Minimal i.e. crossing that needs only signs/stripping/clearing

2 – Significant i.e. needs grading/road alignment changes or new signal

1 – Major i.e. need new signal and/or separated crossing

Education/Interpretive Opportunities (x1)

4 – Historic remnants and environmentally unique

3 – Historic remnants / not environmentally unique

2 – No historic remnants but environmentally unique

1 – No historic remnants and not environmentally unique

Environmental Impacts Requiring a Permitting Effort (x1)

4 – None

3 – Triggers temporary permits

2 – Triggers permits; achievable

1 – Triggers permits; difficult to achieve

On-Road vs. Off-Road (x1)

4 – All off-road

3 – Mostly off-road

2 – Mostly on-road

1 – On-road

Relative Operating and Maintenance Costs (x1)

4 – Lowest i.e. utilizes roadway already maintained

3 – Medium i.e. expands roadway and relative maintenance costs

2 – Higher i.e. mix of new maintenance efforts

1 – Highest i.e. all new off-road trail with all new maintenance requirements

Summary of Potential Users

There is much discussion regarding developing estimates of the number of users on a proposed trail. There is no surefire method that can predict user volumes for all situations.

What is known is that numerous trail user surveys have shown that a major portion of users on most any trails in urban and suburban environments live within 2 miles of the trail corridor and use the trail on a regular and consistent basis.

Given this information, one method that has been used to estimate the volume of users on a trail includes several factors such as:

- the population density within 2 miles of the trail
- actual counts of the number of uses on existing trails in similar environments.

Basically the population density living within 2 miles of the

trail is divided by the number of users to obtain a factor that is essentially trip/resident-in-the-project-corridor. A trail user passing a counting station is counted each time a person (runner, walker, bicyclist) passes a counting station. Thus a person traveling along the trail then turning around and making a return trip on the trail is counted twice. Thus a bicyclist commuting to and from work the trail would be counted twice. A runner jogging from one end of the Trail to the other and then returning along the trail would be counted twice.

This factor is then multiplied by the population density and area of the trail (trail length x 4 mile width) for the specific project corridor to develop an estimate of users for the proposed trail.

This method was verified by calculating user volumes on existing trails and then comparing calculated results to actual user count volumes and found they generally agree.

CHAPTER 4

The Motor Parkway Trail through Nassau County has been envisioned as a shared-use trail vision that is as an accessible, non-motorized, historical, recreational and alternative transportation resource for residents and visitors. Accommodating a variety of users including pedestrians, bicyclists, cross-country skiers and wheelchair users this trail provides a very unique respite and recreational corridor stretching 27 miles through the heavily developed setting of Long Island, NY. The following is a summary of the proposed improvements to develop the Motor Parkway Trail.

Proposed Improvements

Trail Elements

Several things make up a trail corridor such as the pavement, signage, and special features. The Motor Parkway Trail will include the following elements which are illustrated in the following plans.

Historic LIMP Remnants

Many remnants have been found along the proposed Trail that will be incorporated into the project. These remnants will be treated in one of the following ways. In no case are there remnants of the original Motor Parkway that will be removed from the corridor. Additionally, it is not the vision of this plan to re-build any portion of the LIMP to its original state.

Protected - remnants will remain in their current state, interpreted, and protected with split trail fencing to discourage active use.

Rehabilitated - overgrowth will be removed from the area, and will undergo minor repairs for use as part of the Motor Parkway Trail.

Ownership - in large park the proposed Motor Parkway Trail has been located on public property or within road right-of-ways. On the plans those parcel requiring acquisition or partnerships have been identified.

Materials - the Motor Parkway Trail pavement will be bituminous concrete that can withstand occasional use by

emergency vehicles. In areas where the concrete edge of the original Motor Parkway is in-tact that pavement may be incorporated into the trail cross section (see Chapter 5 Trail Details).

Connectivity - The Motor Parkway Trail plans indicate the proximity to public destinations and public transportation.

Signage and Interpretive - Basic approach to signage has been identified in this Vision Plan. Three types of signs are proposed, including:

Trailhead Signs—These would be located at major access points to the trail as a kiosk.

Trail Blazers—These signs would be located a secondary access points from adjacent neighborhoods and business areas as well at major decision making points where the trail alignment turns or combines with another trail system.

Interpretive Signs—These are proposed at location of those historical remnants and will serve as a way to educate the public on the history of the corridor as the original Long Island Motor Parkway and its relationship to the development of the Motor Parkway Trail.

Trailheads and Parking—locations for trailhead and parking designated for the trail have been identified on the plans. Additional information regarding the various elements of a trailhead are presented in the following chapter.

Fencing and Buffers along abutting properties have not been identified in this Vision Plan.

Segment A

Mile 0.0 to Mile 2.5

Town(s): Village of Lake Success, Village of North Hills, Town of North Hempstead (Manhasset Hills)

The Motor Parkway Trail will begin at the west near the Queens border at Lakeville Road north of the Northern State Parkway. Traveling east the Trail will following the existing path along the southern border of the Great Neck Schools. A new trail is proposed further east to follow the original LIMP alignment until it reaches Northern State Parkway and then it will turn north to follow the edge of the Parkway and then proceed along Hollow Lane. The trail heads south on New Hyde Park Road until it reaches the original LIMP alignment and follow this alignment east until Shelter Rock Road. After

crossing Shelter Rock Road, the trail continues east behind existing residences along the original LIMP alignment until it reaches Herricks' school property.

Interpretive Signs

#1 @ Mile 0.1

- Identify LIMP Lodge at nearby residence and Full cross-section of the original LIMP along the southern edge of the Great Neck School.

#2 @ Mile 1.3

- Identify original LIMP underpass at Court House Road.

#3 @ Mile 2.5

- Identify pavement remnants of original LIMP.

Segment B

Mile 2.5 to 6.5

Town(s): Town of North Hempstead (Searingtown, Albertson, Mineola), Village of Williston Park, Village of East Williston

At Herricks High School a spur trail is proposed to connect to the High School building. The Motor Parkway Trail will head east for only one block along IU Willets Road before turning south on Reed Drive, heading south again on Old Searingtown Road and then west along Searingtown Road to cross at the traffic signal at the corner of Herricks Road. Here, the Trail will connect to a path proposed around an existing pond next to the Shelter Rock Library. The Motor Parkway Trail will run east again along Searingtown Road and through the Library parking lot to connect on to William Street. The trail will head east on William Street and then north on Wentworth Avenue to connect east through Caemmerer Park and along Highway Drive. After crossing Willis Avenue the Trail will continue east along the Original LIMP alignment and connect to Williston Park just east of the LIRR tracks. A new crossing is proposed over the LIRR tracks to connect to the remnants of the original LIMP abutment that remain at the relative elevation to cross the tracks. Continuing east the Trail will move along a segment of pavements remnants of the original LIMP to then cross Roslyn Road. The Motor Parkway Trail will continue south along Roslyn Road and then east along East Williston Avenue connecting to the North Side School. Across from Wheatley Hills Golf Course, the Trail will head south along the original LIMP alignment and cross E. Jericho Turnpike. The Trail will then head south along the original LIMP alignment and then south on Donna Lane to cross Raff Avenue. The Trail will continue south along the original LIMP alignment.

Interpretive Signs

#4 @ Mile 4.3

- Identify pavement remnants of the original LIMP.

#5 @ Mile 4.7

- Identify remnants of the original LIMP abutment and pavement remnants.

#6 @ Mile 6.3

- Identify pavement remnants of the original LIMP.

Segment C

Mile 6.5 to Mile 9.0

Town(s): Town of North Hempstead (Mineola, Carle Place), Town of Hempstead (Garden City, East Garden City)

The Motor Parkway Trail will run south along the original LIMP alignment and cross Westbury Avenue. Continuing south along the original LIMP alignment the Trail connects to Wilson Park and Hampton Street School. South of the park the vision is for the Trail to continue south along the LIMP alignment and cross the LIRR tracks with a new bridge and head south to meet Old Country Road. However, in order to make this bold move to follow this alignment the trail must cross several privately owned parcels. While this seems to be a hurdle that cannot be overcome now, Nassau County hopes the future may present itself with options to meet this vision. An alternative route through this area has been identified from Wilson Park west on Liberty Avenue, south on Roslyn Road and turning east to meet Old Country Road. The Motor Parkway Trail will run east along Old Country Road and turn south to run along Clinton Road to meet the LIMP alignment at the original Motor Parkway Lodge. From here the Trail will follow this original alignment east to Roosevelt Field Mall area.

Interpretive Signs

#7 @ Mile 6.9

- Identify pavement remnants of the original LIMP and the original LIMP alignment over the LIRR tracks.

#8 @ Mile 8.2

- Identify pavement remnants, remnant bollards, a portion of an original abutment remnant bollards, a portion of an original abutment and one of the original LIMP lodges.

Segment D

Mile 9.0 to Mile 12.0

Town(s): Town of Hempstead (E. Garden City, Salisbury)

The Motor Parkway Trail will follow the original LIMP alignment east to run along South Street at the southern edge of the Roosevelt Field Mall. Diverging from the original LIMP alignment, the Motor Parkway Trail will turn south with South Street to Stewart Avenue. Here, the Trail will follow the proposed Nassau HUB Bike Trail that runs south along Quentin Roosevelt Boulevard and along Charles Lindbergh Boulevard leading east to Merrick Avenue. The trails will head north along Merrick Avenue and Eisenhower Park.

Segment E

Mile 12.0 to Mile 15.0

Town(s): Town of Hempstead (Salisbury, East Meadow)

The Motor Parkway Trail will head north along Merrick Avenue with the proposed Nassau HUB Bike Trail and turn east along Old Country Road. At Salisbury Park Drive the Motor Parkway Trail will follow the proposed Wantagh Parkway Trail. The trails will head south along Salisbury Park Drive as it curves to meet the original LIMP alignment east along the edge of Eisenhower Park to Carman Avenue. At Carman Avenue the trails will run on Salisbury Park Drive to meet the Wantagh Parkway.

Interpretive Signs

#9 @ Mile 13.7

- Identify the original LIMP alignment through Eisenhower Park.

Segment F

Mile 15.0 to Mile 17.5

Town(s): Town of Hempstead (East Meadow, Levittown)

West of Wantagh Parkway, the Motor Parkway Trail will follow the original LIMP alignment east along Salisbury Park Drive and head northeast on Carnation Road. Following the general alignment of the LIMP the Trail will head west on Orchid for one block and then north on Pintail Lane. The Motor Parkway Trail will move through a series of mostly open spaces heading east along the

original LIMP alignment and past the site of the LIMP Grandstands. There are several parcels to cross that are owned, but undeveloped, by a single private developer. At Crocus Lane, the Trail will continue east behind the Laurel Lane school and north on Laurel Lane, east on Blacksmith Road and east on Cool Lane to cross Jerusalem Avenue. The Trail will go south on Jerusalem Avenue to go east at the town baseball field and along Polaris Drive which generally follows the original alignment of the LIMP.

Interpretive Signs

#10 @ Mile 16.7

- Identify the original LIMP Grandstands.

Segment G

Mile 17.5 to Mile 21.5

Town(s): Town of Hempstead (Levittown), Town of Oyster Bay (Bethpage)

From Polaris Drive the Motor Parkway Trail will head south on Solar Lane and east on Meridian Road. The Trail will head south on Neptune Lane to meet the original LIMP alignment that runs east along side the LIPA easement. Utilizing this easement the Trail will continue east, cross N. Wantagh Avenue, Hicksville Road and then Stewart Avenue. The Trail will head north on Stewart Avenue just half-block to run east along Arthur Avenue and south again at Broadway. After crossing Broadway, the Motor Parkway Trail runs east following the original LIMP alignment and LIPA easement and turns to the north at the historic LIMP Deadman's Curve. The Trail will pass along side Deadman's Curve and then meet the original LIMP alignment again heading north to Central Avenue. The Trail will diverge from the LIMP alignment and run east on Central Avenue to meet the existing Bethpage Bikeway. The Motor Parkway Trail will follow the Bethpage Bikeway north and east through Bethpage State Park.

Interpretive Signs

#11 @ Mile 19.6

- Identify the original LIMP Deadman's Curve.

Segment H

Mile 21.5 to 23.6

Town(s): Town of Oyster Bay (Bethpage, Old Bethpage)

Having followed the existing Bethpage Bikeway, the Motor Parkway Trail will follow the proposed Bethpage Bikeway Expansion along the original LIMP alignment as it moves east through Bethpage State Park. The Motor Parkway Trail will diverge from the Bethpage Bikeway Expansion to move east on Schoolhouse Road. Then heading north on Round Swamp Road, the Trail will enter the Battle Row County Park and Campground to join the original LIMP alignment along the northern edge of the campground and running east and crossing Bethpage-Sweet Hollow Road just west of Claremont Road. The Trail will run east along the southern border of the Old Bethpage Restoration Village following the original LIMP alignment and end in Nassau County as a loop trail that incorporates the historic LIMP Bridge at Coyler Farm.

Interpretive Signs

#12 @ Mile 22.0

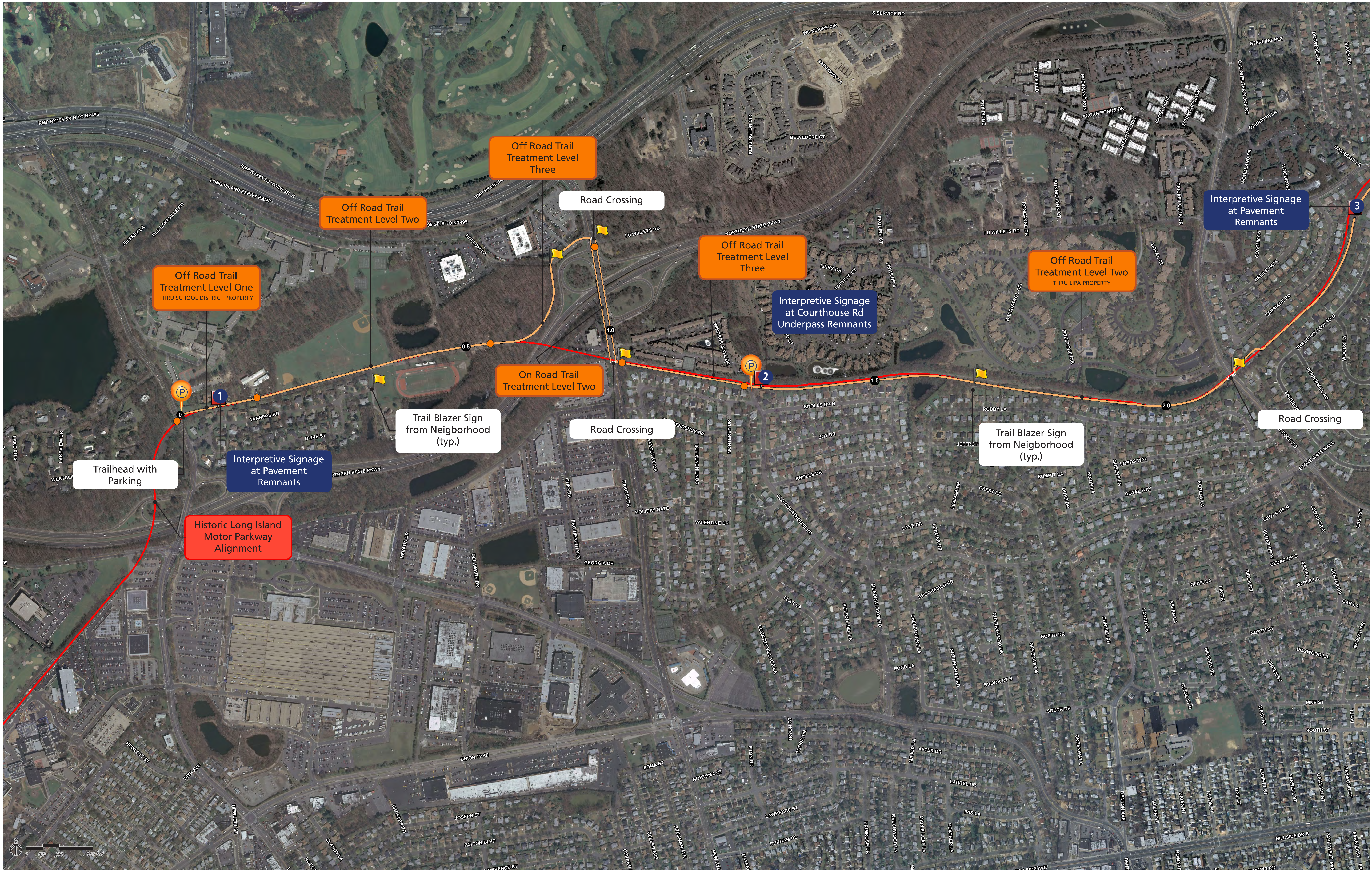
- Identify the pavement remnants of the original LIMP.

#13 @ Mile 23.0

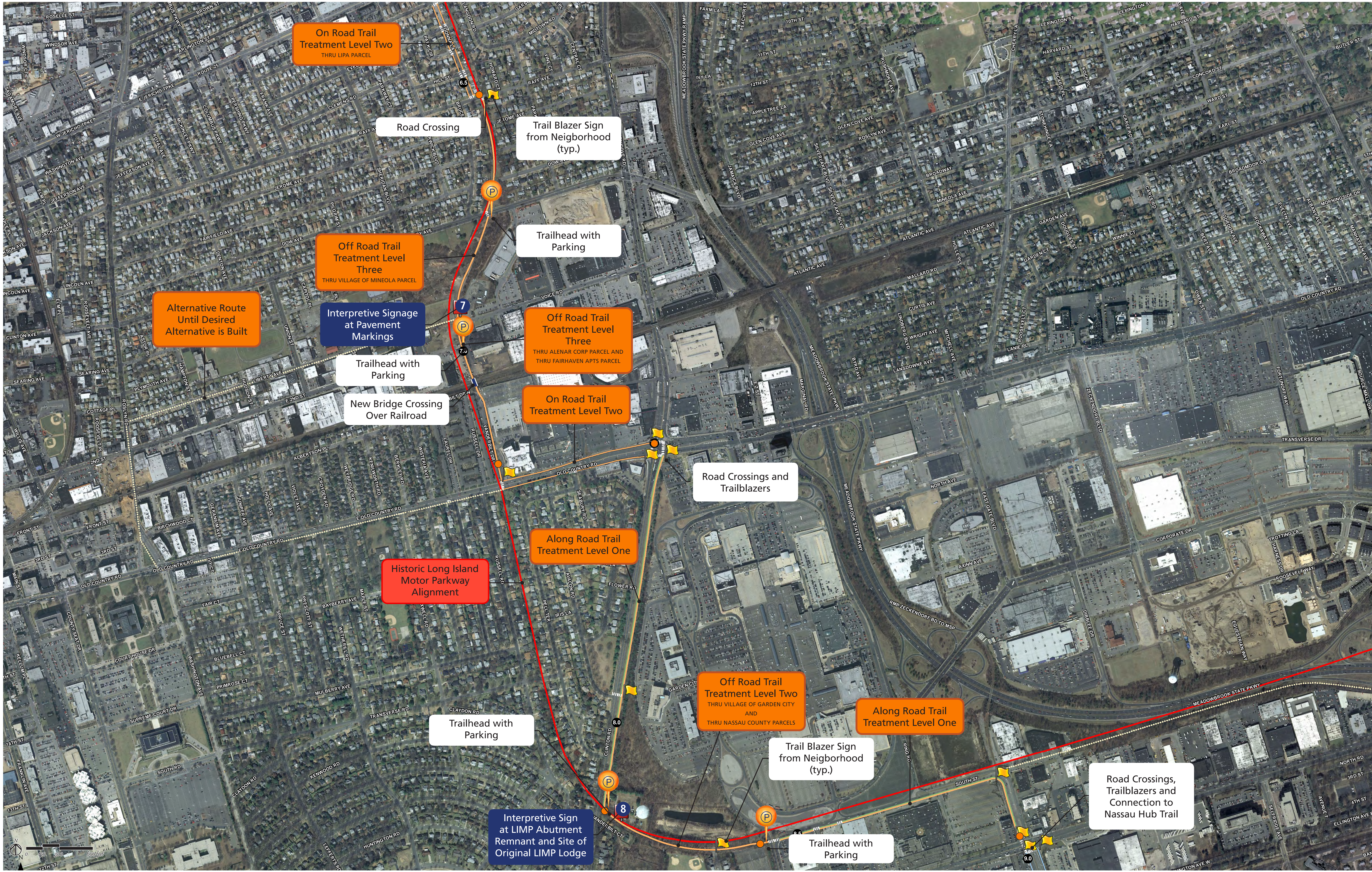
- Identify pavement remnants and the original LIMP abutment.

#14 @ Mile 23.6

- Identify the original LIMP Bridge at Coyler Farm.



















CHAPTER 5

The County's vision for this rail trail is as an accessible, non-motorized, historical, recreational and alternative transportation resource for residents and visitors. The trail shall accommodate a variety of users including pedestrians, bicyclists, cross-country skiers and wheelchair users. A shared-use trail is the type of facility that can best meet the broad expectations that users have for a non-motorized trail in a setting like Long Island.

Trail Details

Design Criteria

The speed that a bicyclist travels is dependent on several factors, including the type and condition of the bicycle, the purpose of the trip, the condition and location of the bicycle path, surface type, the speed and direction of the wind, and the physical condition of the bicyclist (AASHTO Guidelines, page 36). Shared-use paths should be designed for speeds at least as high as the preferred speed of the faster bicyclists but not such that the path design encourages speed. Given that the trail intersects several roadways, it is anticipated that the trail will be used by a wide range of bicyclists including experienced cyclists who utilize on-road facilities and travel at higher speeds. NYSDOT and AASHTO recommend a design speed of 20 mph for general paved path surfaces on the relatively flat terrain and anticipated use by experienced cyclists. For unpaved surfaces, the AASHTO Guidelines recommend 15 mph. Trail design at intersecting roadways is configured to encourage a lower operating speed for bicyclists. Traffic calming measures such as signs and pavement markings on the approaching roadways are proposed to heighten motorists' awareness of a trail crossing.

Typical Trail Cross-Sections

Three typical trail cross-sections have been identified in this Vision Plan: Off-Road, Along Road and On-Road. The Off-Road trail is a portion of the trail whose location has no reference to a roadway. The Off-Road trail cross section accommodates travelers in both directions within the given segment of pavement. Portions of the trail that are Along Road are located adjacent to a road but separated by a buffer.

The buffer may be planted with trees, a lawn strip, or a narrow piece of pavement with a guard. The Along-Road trail cross section accommodates travelers in both directions within the given segment of pavement along only one-side of the road. Portions of On-Road trail include bicycle accommodation in the roadway and pedestrian accommodations on a sidewalk without any buffer. The On-Road trail is divided: half on each side, with bicycle traveling in the same direction as vehicles.

This Vision Plan identifies typical Treatment Levels of each type of trail relative to the existing conditions. Each Treatment Level identified the typical level of work needed to be done in order to implement that type of trail in a certain type of existing condition. However, the final implementation will depend on specific existing conditions to be determined by a field survey at the time that Segment is to be implemented. Below are typical trail cross-sections and their treatment level. Additional Along-Road and Off-Road cross-sections can be found in the Appendix.

FIGURE 10: **On Road Treatment Level One**

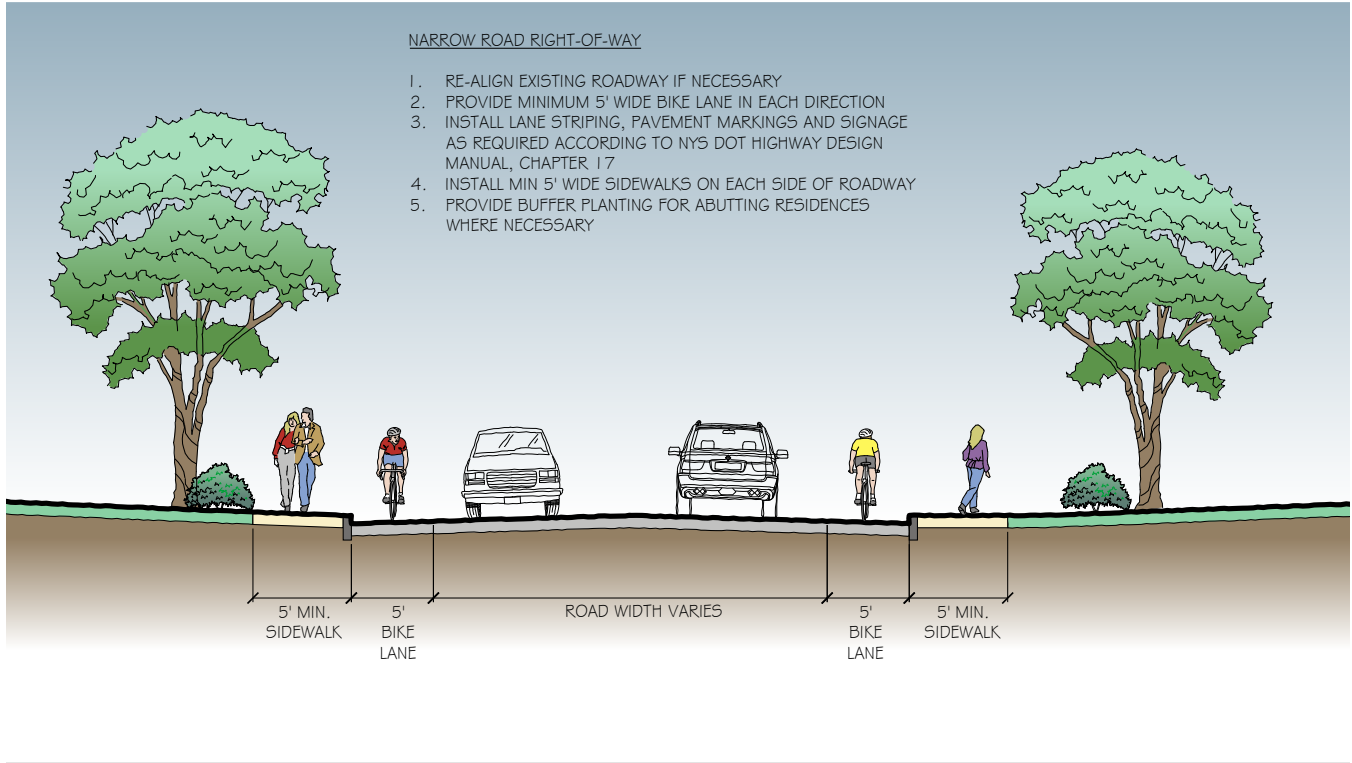


FIGURE 11: **On Road Treatment Level Two**

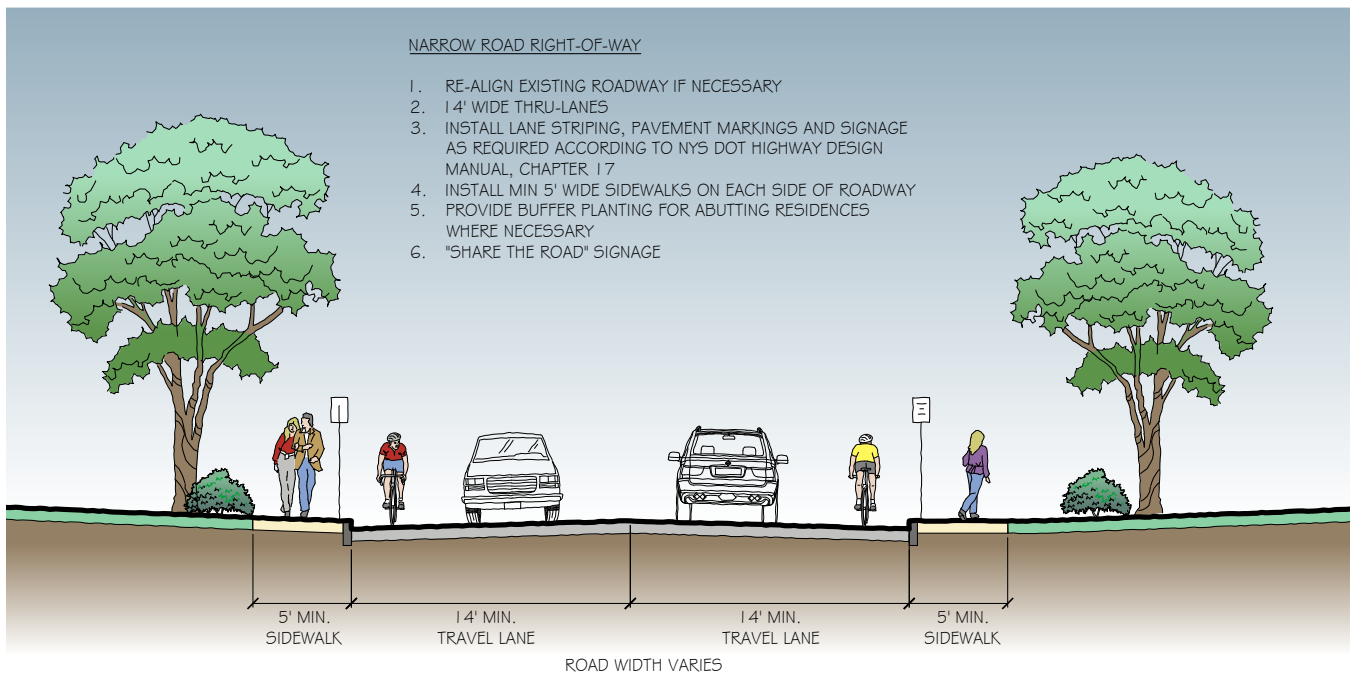


FIGURE 12: **Along Road Treatment Level One**

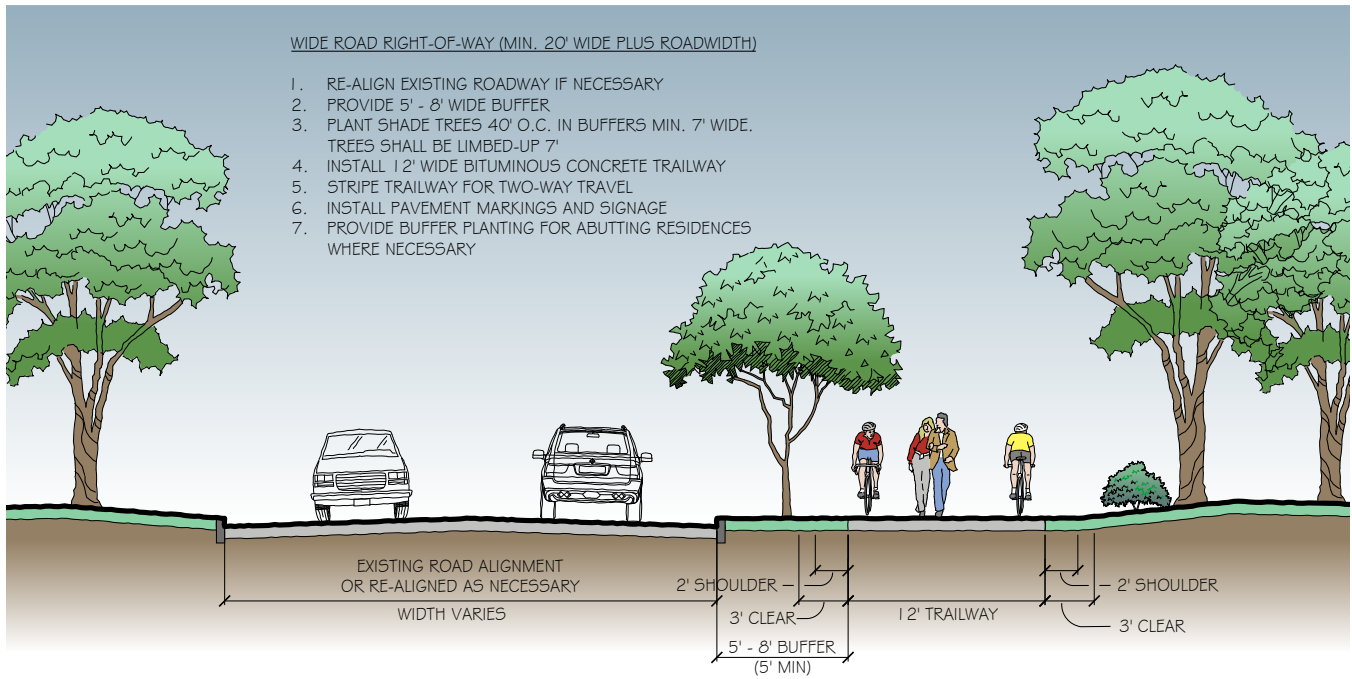


FIGURE 13: **Along Road Treatment Level Two**

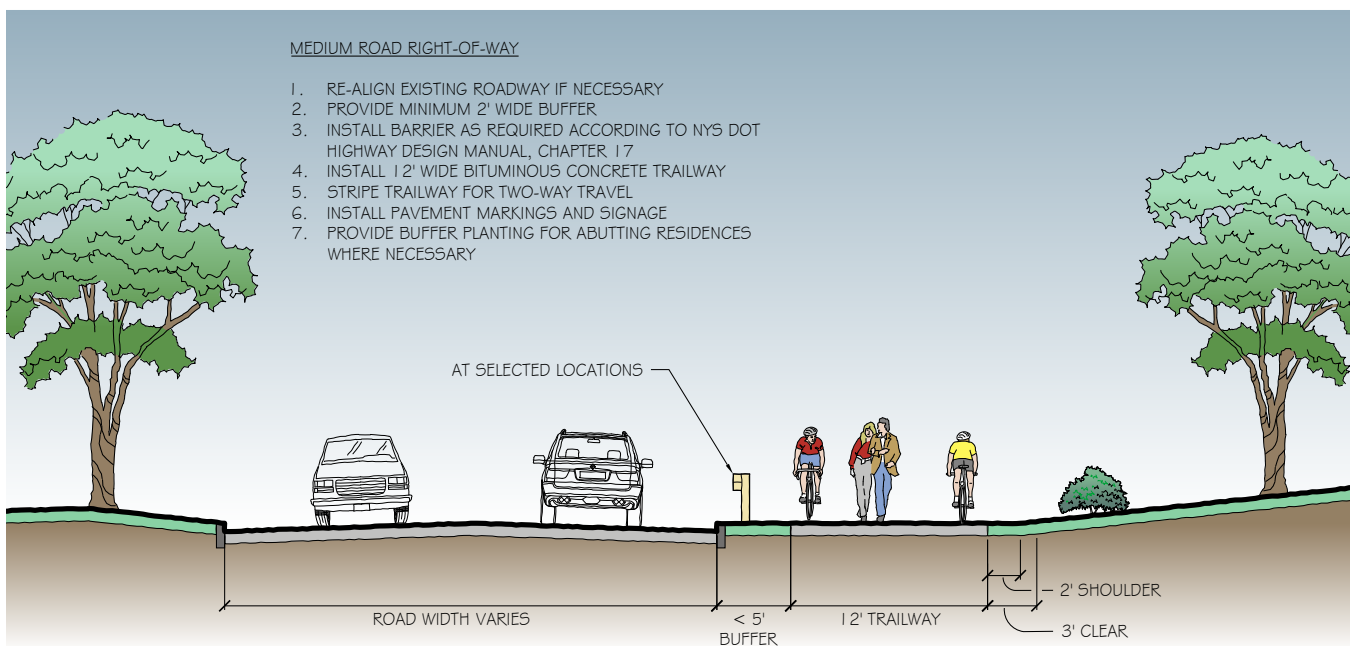


FIGURE 14: **Off Road Treatment Level One**

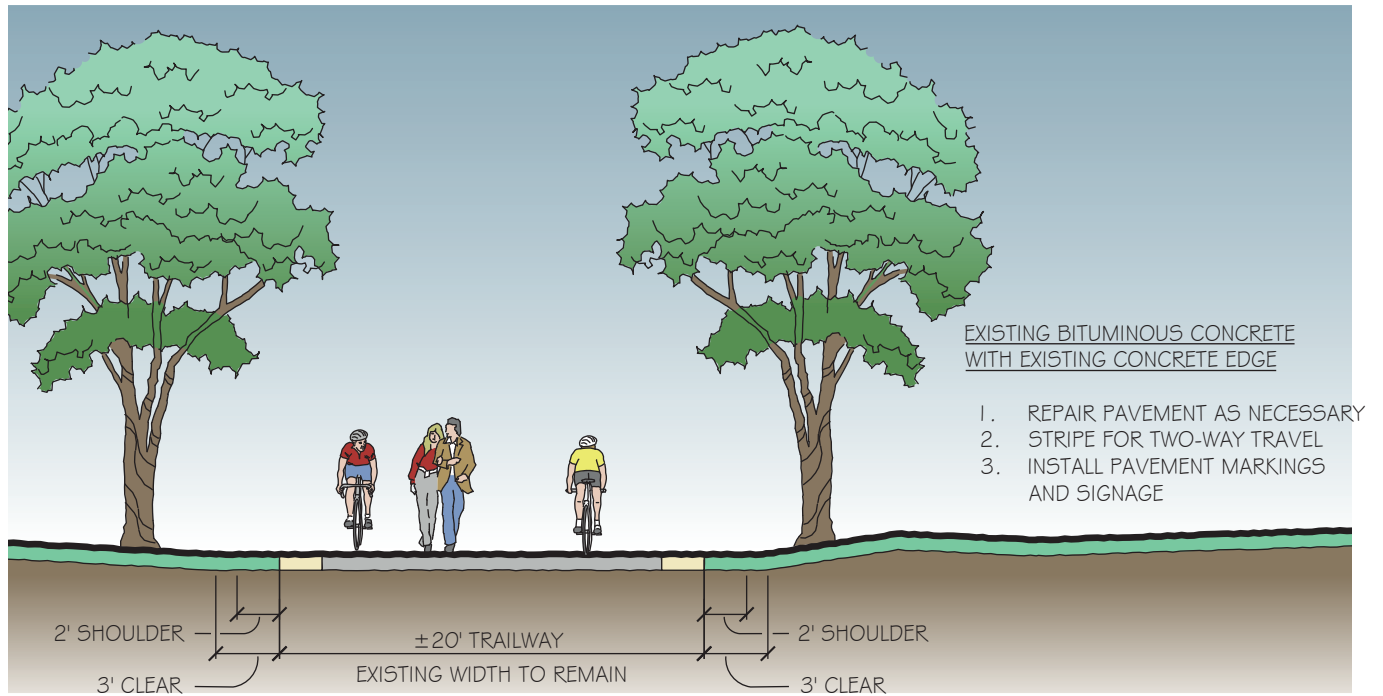
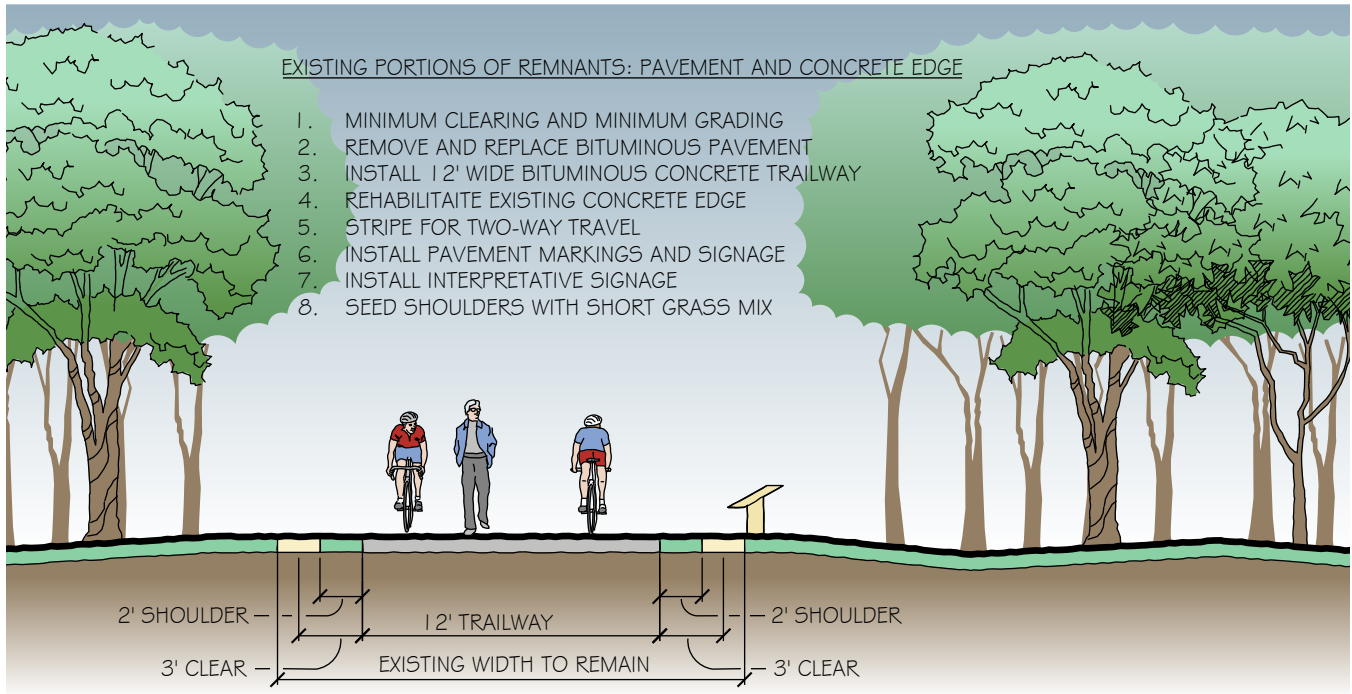


FIGURE 15: **Off Road Treatment Level Two**



OFF ROAD - Treatment Level 2

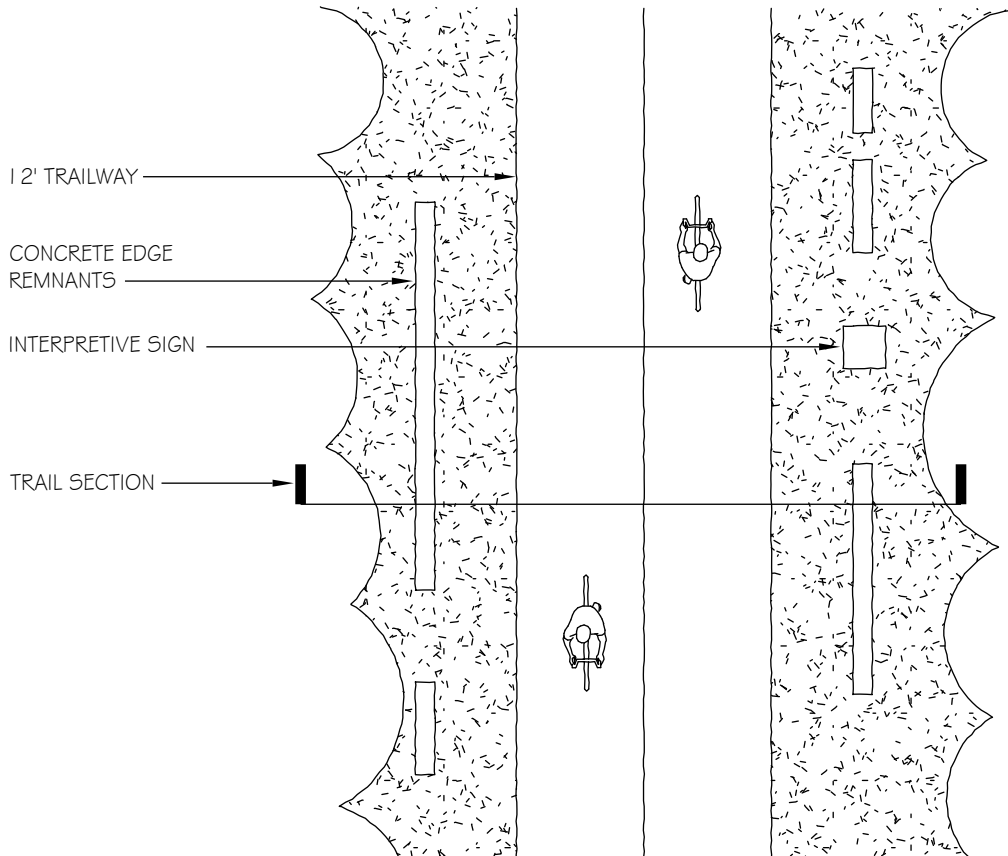
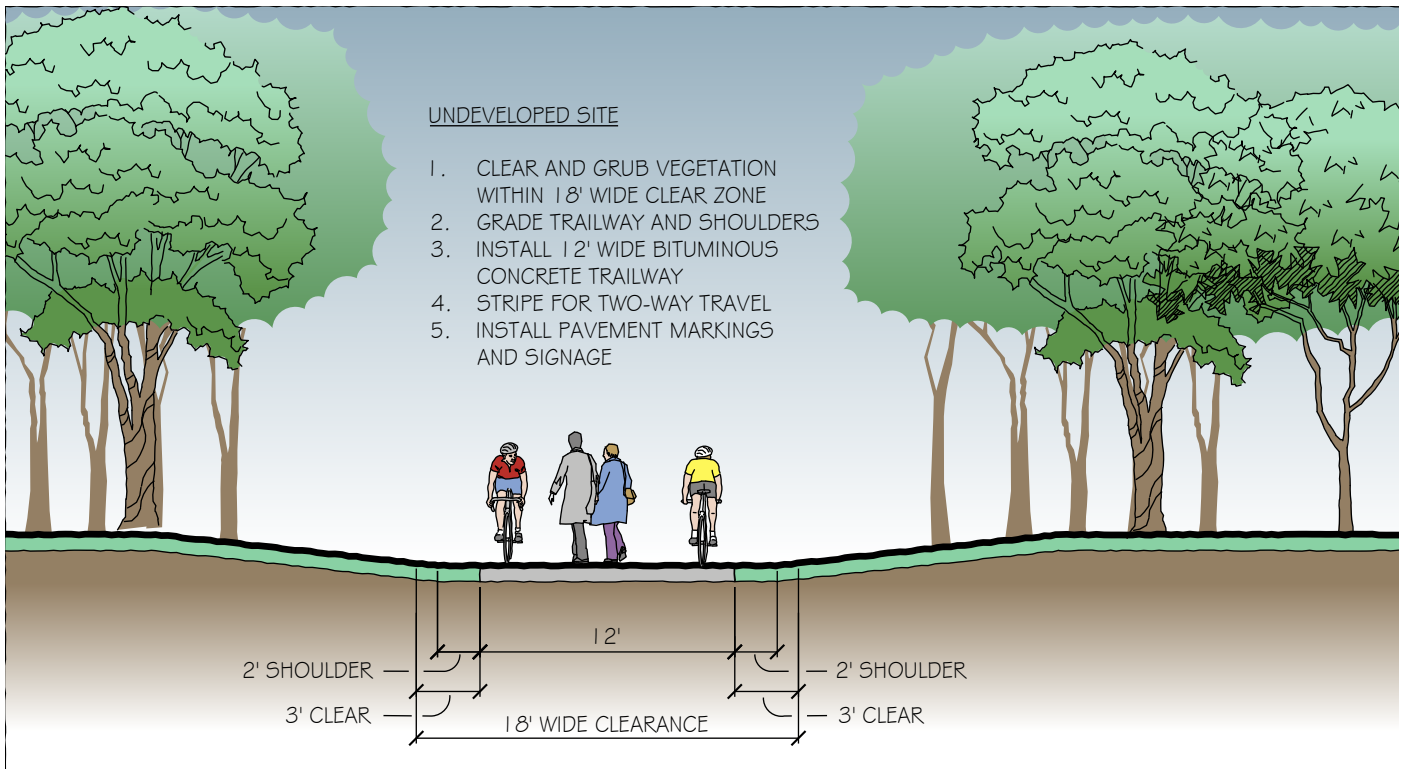
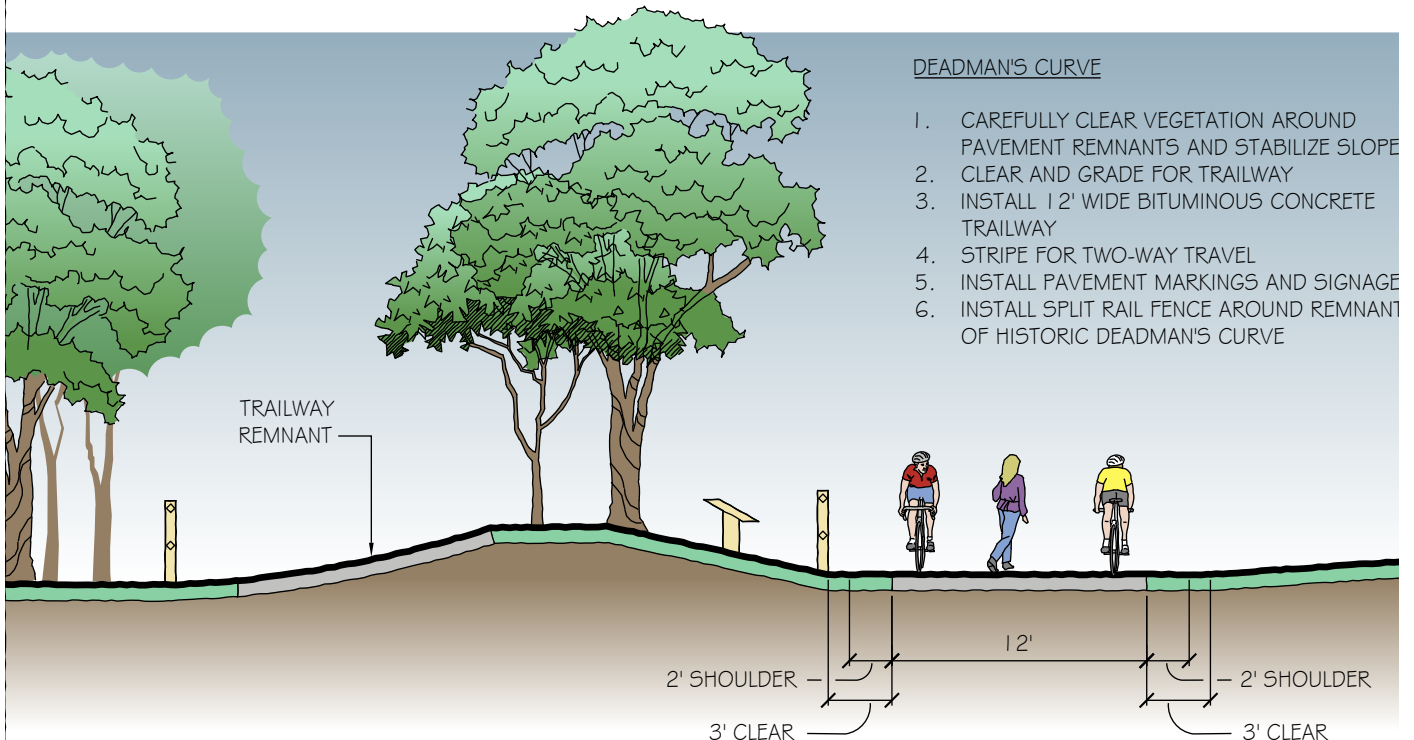


FIGURE 16: **Off Road Treatment Level Three**



OFF ROAD - Treatment Level 3



Road Crossings and Trail Heads

Road Crossings

The Motor Parkway Trail crosses roadways at many locations. Those crossings which occur at intersections should be developed to local, state and federal standards. Mid-block road crossings should be avoided as much as possible. Where mid-block crossings are necessary or desirable the diagram below is provided for guidance in their development. Elements to be considered include roadway and trail signage, roadway and trail striping, limiting access onto the trail by vehicle, and clear warning for pedestrians, bicyclists and vehicles. Final mid-block crossings should be designed based on a field survey at the time that crossing is to be implemented.

Trail Heads

The Vision Plan identifies locations within each Segment for Trail Heads. Trail Heads are locations for users to start or finish their use of the trail or as a stopping point along the trail. Generally, each Trail Head should include the following depending on specific existing conditions to be determined by a field survey at the time that the Trail Head is to be implemented:

- Parking including handicapped spaces (number of spaces to be determined)
- Trail Head Signage (to include a kiosk with a map of the trail, Rules for Users, and other helpful information)
- Trail Directional Signage

FIGURE 17: Trail Head

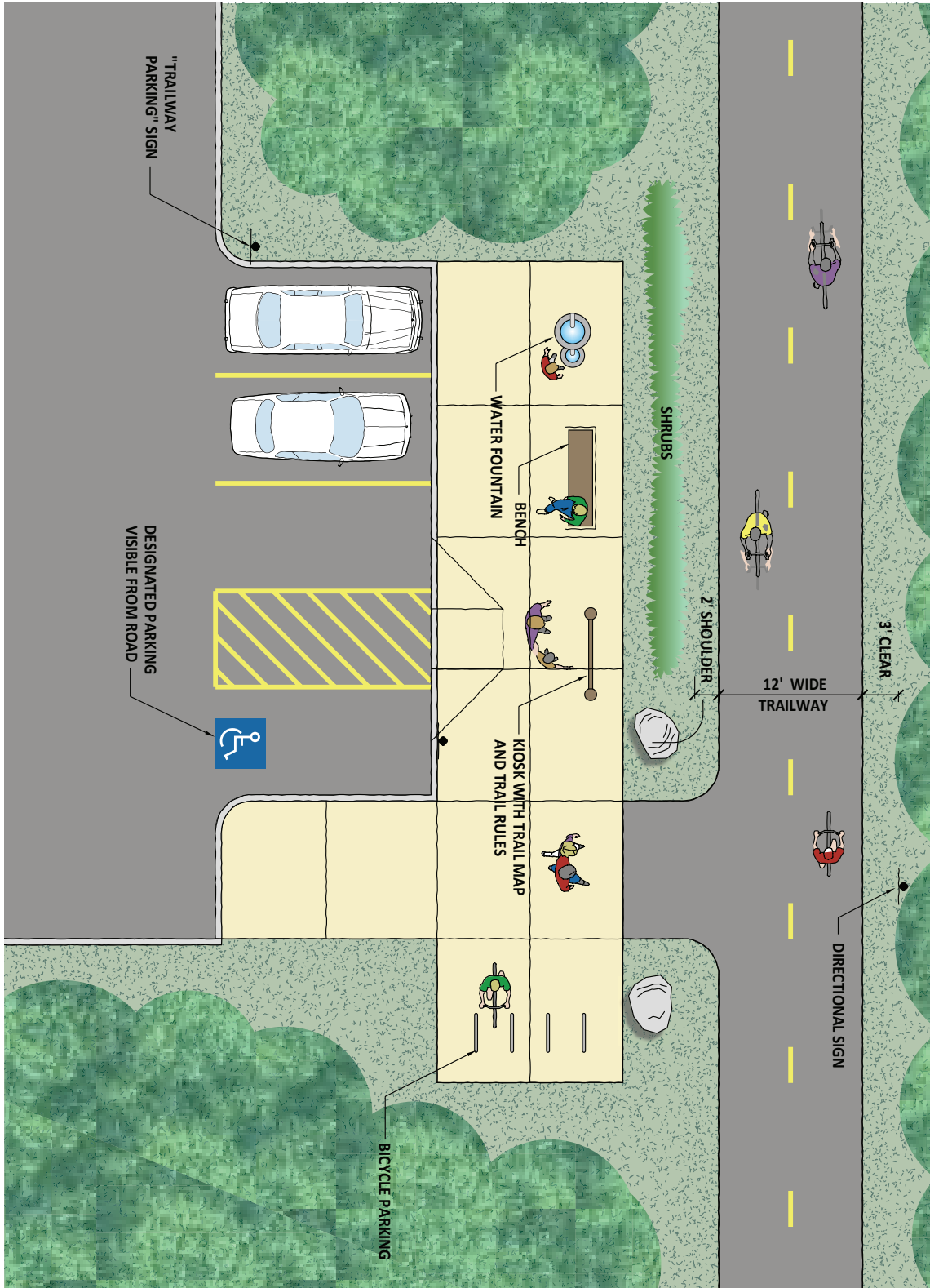
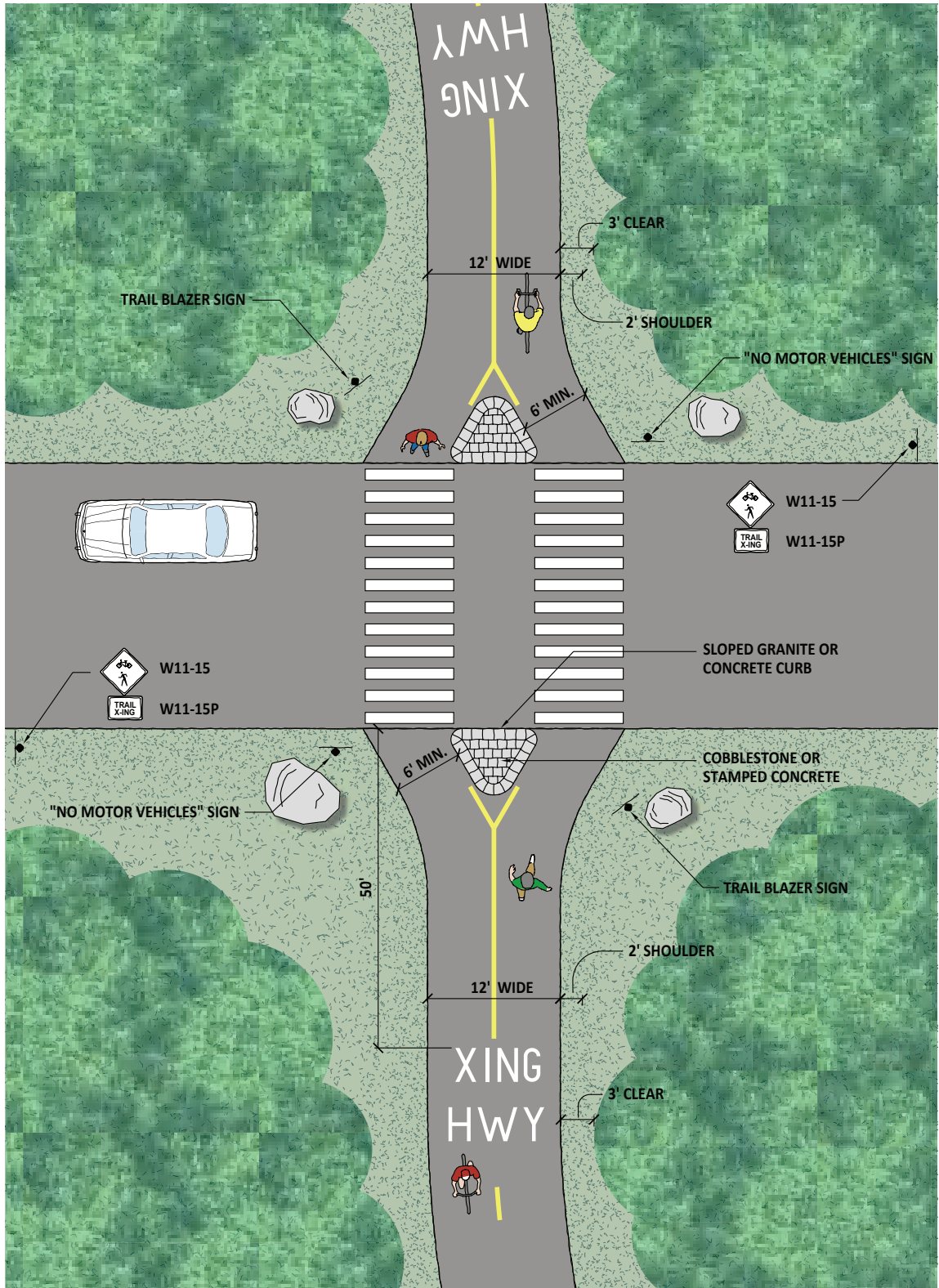


FIGURE 18: Roadway Crossing



LIPA Coordination

Nassau County is in close coordination with the Long Island Power Authority for the safe development of the Motor Parkway Trail that is proposed to be located along the same corridors as LIPA power lines. The design of the trail in these locations should consider distance from towers, trail definition through the use of fencing or planting and maintenance access. Final design guidance will be provided as each Segment of the trail is implemented.

CHAPTER 6

The County's vision for this trail is as an accessible, non-motorized, historical, recreational and alternative transportation resource for residents and visitors. The trail shall accommodate a variety of users including pedestrians, bicyclists, cross-country skiers and wheelchair users. A shared-use trail is the type of facility that can best meet the broad expectations that users have for a non-motorized trail in a setting like Long Island.

Implementation

The following is a proposed implementation plan by segment and in order of priority. The list includes the estimated segment construction cost, summary of benefits and rationale for priority placement and description of segment.

Priorities

Priority 1

Segment G

- Mostly LIPA / MTA Property
- All off-road construction
- Provides connectivity to existing Bethpage Bikeway

Description

From Polaris Drive in Levittown the Motor Parkway Trail will head south on Solar Lane and east on Meridian Road. The Trail will head south on Neptune Lane to meet the original LIMP alignment that runs east along side the LIPA easement. Utilizing this easement the Trail will continue east, cross N. Wantagh Avenue, Hicksville Road and then Stewart Avenue. The Trail will head north on Stewart Avenue just half-block to run east along Arthur Avenue and south again at Broadway. After crossing Broadway, the Motor Parkway Trail runs east following the original LIMP alignment and LIPA easement and turns to the north at the historic LIMP Deadman's Curve. Deadman's Curve will be preserved with a spur trail around the original roadway section for viewing. The Trail will pass along side Deadman's Curve and then meet the original LIMP alignment again heading north to Central Avenue. The Trail will diverge from

the LIMP alignment and run east on Central Avenue to meet the existing Bethpage Bikeway. The Motor Parkway Trail will follow the Bethpage Bikeway north and east through Bethpage State Park.

Priority 2

Segment F

- Provides continuous trail from Wantagh Trail to the west and Bethpage Bikeway to the east.
- Mix of off-road and on-road trail.
- Requires acquisition/use of several properties:
 1. Levittown School
 2. Josato property
 3. On street alternatives are available if acquisition is not completed.

Description

East of Wantagh Parkway the Motor Parkway Trail will follow the original LIMP alignment east along Salisbury Park Drive and head northeast on Carnation Road. Following the general alignment of the LIMP the Trail will head west on Orchid Road for one block and then north on Pintail Lane. The Motor Parkway Trail will move through a series of mostly open spaces heading east along the original LIMP alignment and past the site of the LIMP Grandstands. There are several parcels to cross that are owned, but undeveloped, by a single private developer. At Crocus Lane the Trail will continue east through the Laurel Lane School and north on Laurel Lane, east on Blacksmith Road and east on Cool Lane to cross Jerusalem Avenue. The Trail will go south on Jerusalem Avenue then go east at the town baseball field and along Polaris Drive which generally follows the original alignment of the LIMP.

Priority 3

Segment H

- Connects Bethpage Trail to Restoration Village and the easterly terminus of LIMP Trail.
- Mostly off-road design

Description

The Motor Parkway Trail will follow the proposed Bethpage Bikeway Expansion along the original LIMP alignment as it moves east through Bethpage State Park. The Motor Parkway Trail will diverge from the Bethpage Bikeway Expansion to move east on Schoolhouse Road. Then heading north on Round Swamp Road, the Trail will enter the Battle Row

County Park and Campground to join up with the original LIMP alignment along northern edge of the campground and run east and crossing Bethpage-Sweet Hollow Road just west of Claremont Road. The Trail will run east along the southern border of the Old Bethpage Restoration Village following the original LIMP alignment and end in Nassau County as a loop trail that incorporates the historic LIMP Bridge at Coyer Farm.

Priority 4

Segments D & E

- Combines two segments
- Trail connections to two Bike trails (Wantagh and Emerald Ribbon)
- Smallest implementation cost

Description Segment D

The Motor Parkway Trail will follow the original LIMP alignment east to run along South Street at the southern edge of the Roosevelt Field Mall. Diverging from the original LIMP alignment, the Motor Parkway Trail will turn south with South Street to Stewart Avenue. Here, the Trail will follow the proposed Emerald Ribbon Pathway that runs south along Quentin Roosevelt Boulevard and along the Charles Lindbergh Boulevard leading east to Merrick Avenue. After crossing Merrick Avenue the trails will head north along Merrick Avenue and Eisenhower Park.

Description Segment E

Heading north along Merrick Avenue with the proposed Emerald Ribbon Pathway, the Trail turns east along Old Country Road. At Salisbury Park Drive the Motor Parkway Trail will follow the proposed Wantagh Parkway Trail. The trails will head south along Salisbury Park Drive as it curves to meet the original LIMP alignment east along the edge of Eisenhower Park to Carmen Avenue. At Carmen Avenue the trails will run on Salisbury Park Drive to meet the Wantagh Parkway.

Priority 5

Segment A

- The western starting point for the Trail
- Of the three remaining segments (A, B & C), Segment A will be the easiest to implement
- Contains a lot of off-road sections
- Not much acquisition required

- Terminates at Herricks High School which connects this school to Great Neck South HS
- Includes restoration of historical bridge at Courthouse Road
- Potential wetland impacts on eastern edge of Great Neck South HS property

Description

The Motor Parkway Trail will commence to the west near the Queens border at Lakeville Road north of the Northern State Parkway. Traveling east the Trail will follow the existing path along the southern border of the Great Neck Schools property. New trail extension is proposed beyond the school to the east to follow the original LIMP alignment until it reaches Northern State Parkway and then it will turn north to follow the edge of the Parkway and then proceed east along Hollow Lane. The trail then heads south on New Hyde Park Road until reaching the original LIMP alignment and follows this alignment east, behind existing residences and past the Courthouse Road bridge, to Shelter Rock Road. After crossing Shelter Rock Road, the trail continues eastward behind existing residences along the original LIMP alignment until it reaches Herrick's School Property and IU Willets Road.

Priority 6

Segment B

- Mostly on main roads
- Has Challenges:
 1. Requires a new LIRR bridge
 2. Anticipated lack of community support

Description

At Herricks High School a spur trail is proposed to connect to the High School building. The Motor Parkway Trail will head east for only one block along IU Willets Road before turning south on Reed Drive, heading south again on Old Searingtown Road and then west along Searingtown Road to cross at the traffic signal at the corner of Herricks Road. Here, the Trail will connect to a path proposed around an existing pond next to the Shelter Rock Library. The Motor Parkway Trail will run east again along Searingtown Road and through the Shelter Rock Library parking lot to connect on to William Street. The trail will head east on William Street and then north on Wentworth Avenue to connect east through Caemmerer Park and along Highway Drive to Willis Avenue. After crossing Willis Avenue the Trail will continue east along

the Original LIMP alignment and connect to Williston Park just east of the LIRR tracks. A new crossing is proposed over the LIRR tracks to connect to the remnants of the original LIMP abutment that remain at the relative elevation to cross the tracks. Continuing east the Trail will move along a segment containing pavements remnants of the original LIMP to then cross Roslyn Road. The Motor Parkway Trail will travel south along Roslyn Road and then east along East Williston Avenue connecting to the North Side School. Across from Wheatley Hills Golf Course, the Trail will head south along the original LIMP alignment and cross E. Jericho Turnpike. The Trail will then head south along the original LIMP alignment and then south on Donna Lane to cross Raff Avenue. The Trail will continue south along the original LIMP alignment.

Priority 7

Segment C

- Considered most difficult segment
- Requires trail bridge over LIRR
- Limited ROW along Old Country Road makes bike accommodations difficult to achieve
- ROW issues along east side of Clinton Road

Description

The Motor Parkway Trail will run south along the original LIMP alignment and cross Westbury Avenue. Continuing south along the original LIMP alignment the Trail connects to Wilson Park and Hampton Street School. South of the park the vision is for the Trail to continue south along the LIMP alignment and cross the LIRR tracks with a new bridge and head south to meet Old Country Road. However, in order to follow this alignment the trail must cross several privately owned parcels. While this seems to be a hurdle that cannot be overcome now, Nassau County hopes the future may present itself with options to meet this vision. An alternative route through this area has been identified from Wilson Park west on Liberty Avenue, south on Roslyn Road and turning east to meet Old Country Road. The Motor Parkway Trail will run east along Old Country Road and turn south to run along Clinton Road to meet the LIMP alignment at the original Motor Parkway Lodge. From here the Trail will follow the original alignment, north of Vanderbilt Court, east to Roosevelt Field Mall's Ring Road South and South Street area.

Summary of Estimated Costs

The following table provides a breakdown of cost construction by segment type and cross-section.

FIGURE 19

	SEGMENT A	SEGMENT B	SEGMENT C	SEGMENT D	SEGMENT E	SEGMENT F	SEGMENT G	SEGMENT H
ALONG ROAD COST	\$0.00	\$2,953,848.80	\$761,596.22	\$600,059.88	\$0.00	\$913,541.82	\$229,875.80	\$202,486.20
OFF ROAD COST	\$2,780,713.66	\$1,479,737.84	\$1,176,819.91	\$0.00	\$0.00	\$977,284.00	\$2,124,665.20	\$1,332,660.00
ON ROAD COST	\$180,129.04	\$871,833.65	\$353,909.92	\$0.00	\$0.00	\$380,889.60	\$534,832.48	\$190,444.80
ROADWAY CROSSINGS COST	\$29,995.98	\$69,990.62	\$29,995.98	\$19,997.32	\$9,998.66	\$29,995.98	\$39,994.64	\$19,997.32
TRAILHEAD COST	\$158,555.94	\$317,111.87	\$237,833.90	\$79,277.97	\$0.00	\$317,111.87	\$317,111.87	\$237,833.90
SIGNAGE (INTERPRETIVE + TRAILBLAZER)	\$15,900.00	\$17,250.00	\$11,050.00	\$7,400.00	\$5,600.00	\$6,800.00	\$6,500.00	\$16,200.00
BRIDGE COST	\$150,000.00	\$404,000.00	\$404,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$150,000.00
COST BY SEGMENT	\$3,315,294.61	\$6,113,772.78	\$2,975,205.93	\$706,735.17	\$15,598.66	\$2,625,623.27	\$3,252,979.99	\$2,149,622.22
TRAIL TOTAL COST								\$21,154,833.00

Permits

As discussed in the earlier section of the Vision Plan, the project may require both Federal and State permits. Depending on the types of permits needed, the requirements of Section 106 of the NHPA and Section 14.09 might need to be addressed. In the following section, the implications of such permitting as regards cultural resources are summarized. The discussion is divided into four parts: Areas of Potential Effect, Agency Coordination and Work Plan, Survey and Reporting, and Subsequent Steps.

Areas of Potential Effect

The first step in the cultural resources requirements is definition of the Areas of Potential Effect (APEs). In the Vision Plan, the designers and planners have proposed to use the existing LIMP ROW, other public rights-of-way now used as roads or trails, and new areas not currently used as rights-of-way. The plan calls for re-use of the existing LIMP structure and ROW as a trail. In doing so, the plan also proposes the installation of new drainage and modification or replacement of bridges, approaches, or infrastructure. Trailheads will be created at locations which do not currently host public facilities and which may require installation of utility lines including potable water. In

locations with existing buildings or structures, these may need to be removed or otherwise modified. These proposed actions will include affects to existing buildings and structures, possible removal of features, and possible excavation to depths which may not have been previously disturbed. Cumulatively, these affects are combined to create the Project APE. Before approaching the permitting agencies, and most specifically, the cultural resources review agency Office of Parks, Recreation, and Historic Preservation (OPRHP), the Project needs to have the APE developed so that the agencies know where: 1) there will be ground disturbance; 2) where existing historic features will be replaced, modified, or taken out of use; and 3) where new infrastructure will be added to existing historic features.

Agency Coordination and Work Plan

Once the APE is defined, then coordination with the review and permitting agencies can occur. Such coordination is initiated by the Project Proponent who notifies the applicable agencies of the Project and then, subsequently, by the agency determined to be the lead agency for cultural resources coordination. Assuming these steps have been implemented, the Proponent, their consultants (as

needed), the lead permitting agency, and the OPRHP meet to discuss how the applicable cultural resources regulations will be addressed. In New York, these meetings often result in the development of a Work Plan.

Work Plan defines how the Proponent will satisfy the regulatory requirements as regards cultural resources. It will define the steps that will be taken to identify, record, and report the historic resources which may/may not be present in the APE. These historic resources include both archaeological and architectural/engineered features and districts. The Work Plan is reviewed by the lead agency and the OPRHP and, if accepted, then implemented in the manner outlined in the Work Plan.

The development of the APE, Agency Coordination, and Work Plan preparation and review can typically be completed in 60-120 days assuming that all parties are conversant with the Project. Most agencies have 30 to 45 days by law to review product.

Survey and Reporting

The LIMP is an historic resource and there are other historic resources known to be present along the route of the Project. It is very likely that the OPRHP will require an identification survey of the entire APE. Depending on the type of action being proposed in an area, one or more of the following tasks may have to be completed: background and literature review, reconnaissance or intensive archaeological survey (Phase I), or architectural survey (Phase I). Each of these tasks has to be reported though more than one task can be summarized in a single report. While architectural survey can be conducted from a car or on foot, archaeological survey is usually done on foot. No archaeological survey is permissible if there is snow cover thus there are seasonal restrictions as to when archaeological survey, at least, can be conducted.

The amount of time needed to complete survey and its reporting is directly related to the size of the APE and the specificity of the Work Plan. In general, equal amounts of time are needed to do the survey and report it. The review agencies have 30 to 45 days to deal with the reports once they are in-hand. Thus, and again in general, it is likely that any survey effort, from inception to agency write-off, would take a minimum of three months.

Subsequent Steps

What steps might be required after the survey results have been reviewed range from none to complex. If no cultural resources determined to be eligible to the National or State

registers are identified, then no further work is required for cultural resources. However, if resources are identified that may be eligible or are clearly eligible, other steps have to be completed. These include Phase II assessments which are implemented when a clear evaluation of the eligibility is not possible from Phase I data; plans to determine if impacts to eligible properties can be avoided; mitigation if impacts cannot be avoided to eligible properties; and development of a Memoranda of Agreement which codify treatment of eligible properties. None of these steps are going to occur swiftly. The length of time for their implementation and resolution, however, will be considerably shortened if the Proponent has established a solid working relationship with both the lead agency and the OPRHP.

Potential Funding Sources

Presently, funding is available through Nassau County's Environmental Bond Act for the development of a Vision Plan, Technical Design Report and the construction of a Phase I. In order to continue with the design and construction of future sections of the Motor Parkway Trail, it will be necessary to identify viable funding sources to supplement future funding, if available, by Nassau County. These funding sources can be through the federal and state government or private funding sources or a combination.

In the past, funding and planning for bicycle and pedestrian accommodations were largely afterthoughts; however it has been realized that in order to advance transportation options it is imperative to integrate these modes into the general transportation and land-use planning and funding processes.

The US DOT continues to develop stronger support of non-motorized transportation, demonstrated most recently with the Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations signed on March 11, 2010. The USDOT/FHWA supports the development of fully integrated active transportation networks and is moving to integrate supporting initiatives within federal policies and via collaboration among federal agencies.

Livability and sustainability have become significant initiatives and not just buzzwords. The revised official Policy Statement reads; The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes.

Federal surface transportation law provides flexibility to States and MPOs to fund bicycle and pedestrian improvements from a wide variety of programs. Virtually all the major transportation funding programs can be used for bicycle and pedestrian-related projects. When considering ways to improve conditions for bicycling and walking, States and MPOs are specifically encouraged to:

- Include bicycle and pedestrian improvements as an incidental part of larger projects, as described above;

and

- To review and use the most appropriate funding source for a particular project and not rely primarily on the Transportation Enhancements activities. Many bicycle and pedestrian projects are more suitable for funding under the Congestion Mitigation and Air Quality Improvement Program, Surface Transportation Program, or another program.

The US DOT encourages states, local governments, professional associations, community organizations, public transportation agencies and other government agencies to adopt similar policy statements on bicycle and pedestrian accommodation as an indication of their commitment to accommodating bicyclists and pedestrians as an integral element of the transportation system. The US DOT has partnered with the US Environmental Protection Agency and US Housing and Urban Development to help foster livable communities, in part through grant funding aimed at reducing automobile dependence.

The following table represents a sampling of Federal funding sources that presently exist.

Maintenance

It is imperative to have a workable Operations & Maintenance Plan be provided for the Motor Parkway Trail, to assure the continued functionality and accessibility of the multi-use path. It is important to know the costs of this plan, funding sources available to fund the plan and identifying the entity responsible to administer and manage the plan. It may also be beneficial to designate the future Stewardship or Benefactors to work with the responsible entity to share the responsibility and oversight of the plan. The Stewardship could be made up of local municipalities, businesses, civic groups and private individuals working in concert to not only oversee the plan, but also assure the sustainability of the Motor Parkway Trail.

As a "public way", open to the public travel, it will be the responsibility of the County to maintain the trails, as it would any other public way. Identification of maintenance needs and implementing good maintenance practices are key elements in providing safe facilities for bicyclists and pedestrians. Basic maintenance activities include keeping the trails surface free of debris, identifying and correcting surface hazards, keeping signs and pavement markings in good condition and cutting back encroaching vegetation to maintain adequate sight distances on the trail and at road crossings. Having a written operations and maintenance plan and an emergency response

Federal Bicycle/Pedestrian Funding Opportunities (many administered through state DOTs)	NHS	STP	HSIP	SRTS	TEA	CMAQ	RTP	FTA	TE	BRI	402	PLA	TCSP	JOBS	FLH	BYW
Bicycle and pedestrian plan		✓				✓						✓	✓			
Bicycle lanes on roadway	✓	✓	✓	✓	✓	✓		✓	✓	✓					✓	✓
Paved Shoulders	✓	✓	✓	✓	✓	✓				✓					✓	✓
Signed bike route	✓	✓		✓	✓	✓									✓	✓
Shared use path/trail	✓	✓		✓	✓	✓	✓			✓					✓	✓
Single track hike/bike trail							✓									
Spot improvement program		✓	✓	✓	✓	✓										
Maps		✓		✓		✓					✓					
Bike racks on buses		✓			✓	✓										
Bicycle parking facilities		✓		✓	✓	✓		✓	✓							✓
Trail/highway intersection	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓	✓
Bicycle storage/service center		✓		✓	✓	✓		✓	✓				✓	✓		
Sidewalks, new or retrofit	✓	✓	✓	✓	✓	✓		✓	✓	✓					✓	✓
Crosswalks, new or retrofit	✓	✓	✓	✓	✓	✓		✓	✓						✓	✓
Signal improvements	✓	✓	✓	✓	✓	✓										
Curb cuts and ramps	✓	✓	✓	✓	✓	✓										
Traffic calming		✓	✓	✓									✓			
Coordinator position		✓		✓		✓							✓			
Safety/education position		✓		✓		✓					✓					
Police patrol		✓		✓							✓					
Helmet promotion		✓		✓	✓						✓					
Safety brochure/book		✓		✓	✓	✓	✓				✓					
Training		✓		✓	✓	✓	✓									

KEY

- NHS NATIONAL HIGHWAY SYSTEM
- STP SURFACE TRANSPORTATION PROGRAM
- HSLIP HIGHWAY SAFETY IMPROVEMENT PROGRAM
- SRTS SAFE ROUTES TO SCHOOL PROGRAM
- TEA TRANSPORTATION ENHANCEMENT ACTIVITIES
- CMAQ CONGESTION MITIGATION/AIR QUALITY PROGRAM
- RTP RECREATIONAL TRAILS PROGRAM
- FTA FEDERAL TRANSIT CAPITAL, URBAN & RURAL FUNDS
- TE TRANSIT ENHANCEMENTS
- BRI BRIDGE
- 402 STATE AND COMMUNITY TRAFFIC SAFETY PROGRAM
- PLA STATE/METROPOLITAN PLANNING FUNDS
- TCSP TRANSPORTATION, COMMUNITY, SYSTEM PRESERVATION
- JOBS ACCESS TO JOBS/REVERSE COMMUTE PROGRAM
- FLH FEDERAL LANDS HIGHWAY PROGRAM
- BYW SCENIC BYWAYS

plan will also enable County officials to determine manpower and budgets needed to implement these plans.

The Maintenance and Operations section in the Appendix provides guidance to the general maintenance requirements for these types of initiatives. It includes a copy of Chapter 22 from the publication FHWA BIKESAFE: Bicycle Countermeasure Selection System regarding maintenance of bicycle facilities. Also included are copies of Resources for Trail Managers and checklists for maintenance tasks and budgets from the Rails to Trails Conservancy report Rail-Trail Maintenance and Operation.

It is recommended that the County officials review these materials and finalize formal written operation and maintenance plans and emergency response plan for the trail. In order to provide guidance towards this end, the following information is provided.

The Operations & Maintenance Plan refers to both the day-to-day activities necessary to preserve the functionality of the Motor Parkway Trail and those activities necessary to repair damaged portions of the trail. Day-to-day or Routine Maintenance of litter/trash pick-up, debris removal, weed and dust control; trail sweeping, sign replacement, tree and shrub trimming and other regularly scheduled activities. Routine maintenance would also include minor trail repairs such as crack sealing and pothole repair. Corrective Maintenance refers to mitigating significant defects or restoring major components that have been damaged, or have significantly deteriorated.

A successful Operations & Maintenance Plan begins with a sound engineering design and engineering principles, low maintenance materials and a comprehensive plan, including guiding principles to not only maintain the Motor Parkway Trail, but also the quality of life for the communities that the trail passes through.

Guiding Principles

The following principles will help assure the sustainability of the Motor Parkway Trail:

- Sound facility planning and design.
- Protect life, property, and the environment.
- Promote and maintain a quality outdoor recreation experience.
- Develop a management plan that addresses operational policies, standards, and routine and corrective

maintenance goals.

- Conduct regular inspections.
- Addresses police, fire/rescue and other emergency services concerns.
- Maintain an effective, responsive public feedback system and promote public participation.
- Peacefully coexist with adjacent properties.

Typical Routine Maintenance Activities

- Inspection and Citizen Response
- Trail Surface Maintenance
- Sweeping/Street Sweeping (For On-Street Facilities)
- Street Surface Upkeep and Repair (On-Street Facilities)
- Maintain Connecting On-Street and Sidewalk Routes
- Vegetation and Pest Management (e.g. Trimming Overhanging Branches)
- Litter and Trash Removal
- Graffiti and Vandalism Control
- Dust Reduction
- Signage (Especially Safety Signage), Striping and Lighting
- Snow and ice removal

Typical Corrective Maintenance:

- Repaving and Pavement Overlays
- Parking Lot Repair at Trailheads
- Address Detours/Disruptions (With Workable Alternative Routes)
- Remedy off trail short cuts
- Repair damage to trail and mitigate erosion issues

Costs

Costs can vary substantially depending on the facility, climate, and complexity of the system. Publication documentation has indicated that for an urban trail systems, like the Motor Parkway Trail, costs for operating and maintenance may vary from \$2500 to \$10,000 annually per-mile. Since the Motor Parkway Trail is approximately 26 miles long, this prorates to a operation and maintenance cost ranging anywhere from \$65,000 to \$260,000 per year. The anticipated O&M costs have to be weighed against the return that the Motor Parkway Trail will return to the community in terms of recreational

benefits, health, fitness and community pride.

Revenue Sources

- General fund allocations, which are usually generated by the maintaining municipalities General Sales/Real Property Tax;
- Participation and partnering with the Stewards of the trail;
- Creation of an endowment from benefactors or philanthropic or other sources to generate on-going revenue;
- Recruiting volunteers, youth and adopt-a-trail participants and sponsors.

Operations

The County's vision of the LIMP Trail is as a non-motorized shared-use facility for use by bicyclists and pedestrians. The design criteria complies with accepted industry standards and criteria for bicycles and pedestrians and encourages users to comply with uniform traffic operations and laws. Thus the signs, pavement markings and other amenities are designed to convey that message through the use of common standards of color, shape and graphics as used on typical roadway signs without "oversigning" the natural landscape.

It is recommended that trail use rules be posted at trail access points, as appropriate.

It is recommended that the County review their existing by-laws as they relate to trails and shared-use facilities to verify if changes or additions are needed. The Maintenance and Operations section of the Appendix contains a copy of by-laws adapted by the town of Milford, MA for regulating use on the their section of the Upper Charles River Trail.

Economic Benefits

Non-motorized transportation best practices have seen considerable advances in recent years including growing support from the US Department of Transportation (US DOT) which has been progressively advancing support for bicycling and pedestrian transportation options over the past decade. The confluence of several issues and events recently has accelerated that support; the spike in oil and gasoline prices prompted many Americans to reconsider their reliance on automobiles for commutes and short trips with anecdotal evidence and actual data from a number of studies around the

US indicating that bicycle commuting and transit use increased. The economic and housing market collapses have prompted both individuals and governmental entities to seriously consider the implications of reliance on land-use and transportation systems that are proving unsustainable, even in good economic climates. The US DOT is now placing more emphasis on supporting bicycling and walking as legitimate modes of transportation while seeking to integrate them with transit and land-use planning in such a way that maximizes the potential to support mode shifts toward non-motorized transportation through initiatives aimed at livability and sustainability. Additionally, the implications that daily transportation needs and choices have on public health have received much greater recognition in recent years.

Land use and transportation are inextricably linked, often resulting in a built environment that requires use of a private automobile for basic mobility, even for short trips. Schools are often located on the periphery of communities in "greenfields", as are many employment centers and large commercial developments, resulting in a separation of land uses that requires frequent and multiple trips throughout a typical day, and typically only feasible by automobile. This has resulted in significant increases in vehicle miles travelled (VMT), energy and natural resource consumption, emissions, congestion, and time spent driving while at the same time resulting in health impacts such as asthma, resulting from diminished air quality and inactive lifestyles that contribute to obesity. Economic impacts are also significantly associated with the availability of transportation options available within a community. Communities that have more transportation options are often more vibrant and enjoy a higher quality of life, while also attracting business development and tourism, contributing to their economic base. Further, for a majority of American transportation and housing costs combined exceed 50 percent of household expenses, reducing discretionary income and further stifling economic activity.

According to a 2008 poll by Coldwell Banker, 78% of real estate agents said their clients want to live in an area that helps reduce gasoline costs. The 2009 Commuter Pain Survey by IBM Corporation revealed that 21% of Americans have changed the way they commute because of the recession. Surveys of independent bicycle retailers have demonstrated a large majority citing increases in sales of transportation related bicycles, accessories, and services since 2007, with customers citing high gas prices as their primary reason for switching to bicycling for transportation options. Capitalizing on these behavioral changes that have resulted from a variety of societal impacts by further developing transportation options will increase the likelihood that people continue their changed

behaviors when economic constraints don't necessitate it.

With approximately one half of all trips being three miles or less and 41% of all trips less than two miles (according to the 2001 National Household Travel Survey), bicycling and walking have the potential to serve a significant share of daily trips. However, suburban land use patterns have resulted in a separation of land use types while also relying largely on a transportation network comprised of collectors and arterials that provide indirect routes along roadways that have not typically sought to accommodate bicyclists and pedestrians. Even when travel distances are short enough to be accomplished by walking or bicycling often the built environment discourages such modal choices due to a lack of safe and direct routes for bicyclists or pedestrians. An aging population with a significant cohort of "Baby Boomers" will result in a growing percentage of the population facing mobility challenges.

According to Federal Highway Administration (FHWA), whether a person decides to walk or bicycle is related to a three-tiered hierarchy of factors: initial considerations, trip barriers, and destination barriers. For walking, the most significant barriers are related to safety (both perceived and actual), access, and aesthetics. Yet, while safety is also a barrier for bicyclists, they are more influenced by the third tier of factors – existence of facilities, system continuity, and access to transit – than are pedestrians.

Construction of the Motor Parkway Trail would provide a walking/biking alternative to driving that overcomes these barriers.

Next Steps

While this Vision Plan has laid out the vision for the Motor Parkway Trail, significant to this process is Nassau County's commitment to implementation. To this end, a Technical Design Report has been developed that sets the standards for implementation for this plan. Additionally, a Phase One project has been identified and Nassau County has secured funding for its construction.

Technical Design Report

A key element of this planning process is giving the County and community supporters the tools and information necessary to help bring their vision of the LIMP Trailway to reality. A Technical Design Report (TDR) is being prepared, that will identify and recommend a stand alone "First Phase Construction Project." The TDR will include the description

of existing conditions, solutions and alternatives, design criteria, schedule of drawings, construction schedule and preliminary construction costs. Upon approval by the Commissioner of Public Works, the final TDR will be prepared and used to guide all future phases on the Trail development

