Route 206 Joint Vision Plan and Traffic Calming Study

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Executive Summary

Route 206 is a state road that traverses Princeton Township and Princeton Borough in Mercer County, New Jersey. Princeton Township, Princeton Borough, and advocacy group, Citizens for a Safer Route 206, requested assistance from the New Jersey Department of Transportation (NJDOT) Statewide Local Transportation Planning Assistance Program to develop a comprehensive vision for Route 206 from the Nassau Street intersection area in Princeton Borough to Cherry Valley Road in Princeton Township. NJDOT's Local Transportation Planning Assistance Program provides technical transportation planning assistance to local governments in their efforts to advance, support and promote the state's Smart Growth policies and to manage their own transportation resources more effectively.

This effort - the Route 206 Joint Vision Plan and Traffic Calming Study - takes a corridor level approach to finding solutions to local concerns. The resulting Vision Plan has three objectives. It sets the community context for recommendations, assesses the performance of various concepts, and provides the basis for the local entities to work with NJDOT, Mercer County and the region's Metropolitan Planning Organization, the Delaware Valley Regional Planning Commission, to plan, prioritize and advance Vision Plan elements. While the study was undertaken with the understanding that NJDOT does not currently have available funding to implement any or all of the recommendations in the Vision Plan, the study has been completed with the idea that development of a comprehensive vision for the road can provide a blueprint for change as funding sources do appear. This final report documents how the Vision Plan was developed, it provides a written description of the Vision Plan, and it presents results from the corridor analysis.

Project consultants Urban Engineers, Inc. (Urban) and Glatting Jackson Anglin Lopez Rinehart, Inc. (Glatting Jackson) worked closely with Princeton Township, Princeton Borough, Citizens for a Safer Route 206, NJDOT, project area stakeholders and the general public to develop a Vision Plan for the community to tailor to its evolving needs. The public involvement process (Chapter 2) was centered on two charrettes designed to maximize a collaborative working relationship with the public. This process generated a vast amount of public

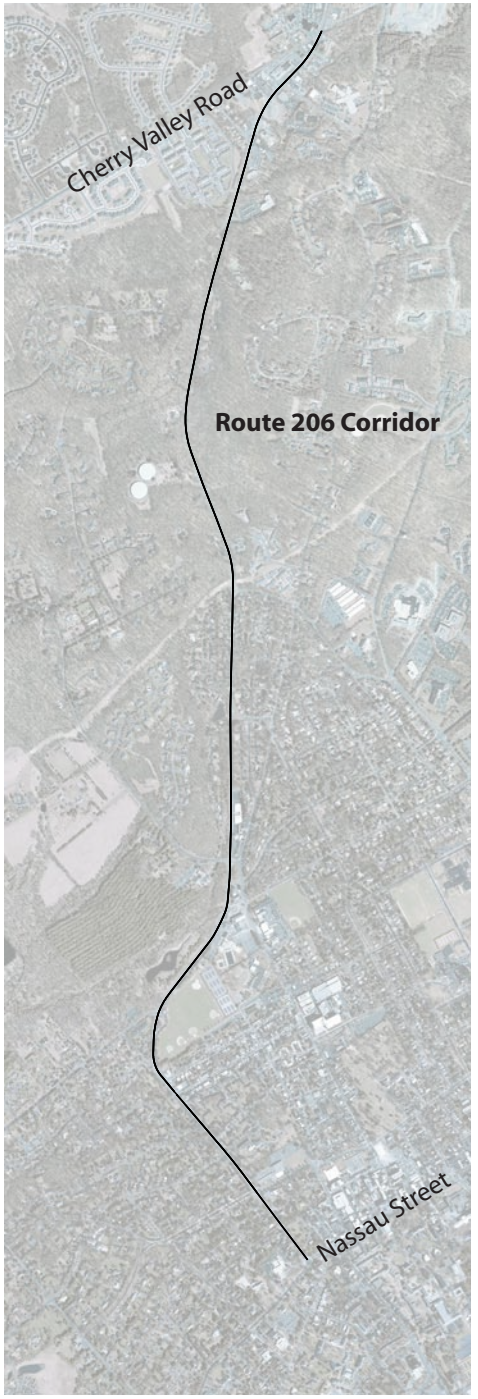


Figure 1: Study Area

input and feedback that was then translated into a set of "starter ideas" to form the basis of the Vision Plan.

The Vision Plan

An urban-rural transect is an analytical tool used to describe a geographical cross-section through a sequence of environments, with the most rural at one end of the spectrum to the most urban at the other. As one travels through a transect, there are underlying parameters of density, building type and setback, roadway type, environmental features and other elements that characterize each area. The Project Consultants used the concept of an "urban-rural transect" to set the framework for planning and design options, and to develop recommendations for the Vision Plan.

Route 206 was defined as a series of five sub-areas from the southern end of the corridor to the north: "In-Town Residential," "Civic Park," "Neighborhood Commercial/Rural Residential," "Woodland," and "Northern Commercial." These sub-areas are described in more detail in Chapter 3. The qualities and needs of each sub-area were then used to shape proposals for roadway improvements in each transect sub-area.

The Vision Plan contains a series of traffic calming elements - street trees, roundabouts, back-in angled parking, and pedestrian median refuges - designed to slow vehicular traffic and increase safe opportunities for pedestrians.

The major intersection elements consist of a pair of roundabouts on Nassau Street, a system of three roundabouts in the Route 206/Valley Road/Cherry Hill Road area, five individual roundabouts (Mountain Road, Jefferson Road, Ewing Street, Arreton Road and Princeton Gateway/Griggs Drive), and a revised signalized concept at the Route 206 and Cherry Valley/Princeton Avenue intersection. All roundabouts were envisioned to be single lane roundabouts. These elements are described in Chapter 4.

Corridor Analysis

Once the main elements of the Vision Plan were sketched out, a corridor analysis (Chapter 5) was conducted. First, the existing conditions in the study area were

Figure 2: Intersection Elements of the Vision Plan

analyzed to understand the context and problem conditions within which the Vision Plan elements would operate. The elements of the Vision Plan were analyzed for performance using existing conditions as a base. A corridor context assessment and regional initiatives were then prepared to identify regional issues which will have a bearing on the developed Vision Plan. As the Vision Plan and its objectives can only be strengthened by taking into account regional action items outside of the Vision Plan corridor, a number of recommendations to support the Vision Plan conclude this chapter.

Congestion problems were noted at several intersections. As they operate today, intersections at Route 206 (Stockton/Bayard) and Route 27 (Nassau) and Route 206 (State Road) and Cherry Valley Road exhibit particularly poor performance overall. Vehicular and pedestrian safety is a serious concern. In 2003, the intersection of Route 206 (Stockton/Bayard) and Nassau Street had a crash rate almost 400 percent higher than the state-wide average that year. Two other intersections – at Route 206 (State Road) and Ewing Street, and at Route 206 (State Road) and Cherry Valley Road – also show a significant history of crashes.

A capacity analysis was performed on Vision Plan elements. SIDRA, a program specifically designed to assess roundabout performance, was used to evaluate proposed changes to selected intersections. Signalized intersections, such as the Route 206 (State Road) and Cherry Valley Road intersection, were analyzed using the Highway Capacity Manual (HCM2000). Most of the proposed roundabouts were found to operate as well or better than the intersection solutions they would replace. Where level of service and queuing problems appear (at the intersection at Nassau, Stockton, and Bayard and the intersection at State and Cherry Hill), additional approach lanes to the proposed roundabouts may improve level of service and reduce queue length. While final configuration, performance and effects can only be determined as engineering studies on these projects advance, preliminary capacity analysis demonstrated that roundabouts can be an effective measure to control traffic at the locations determined in the Vision Plan. The results of the capacity analysis are provided in Chapter 5.

Implementation Plan and Next Steps

Through the public involvement process, public input and feedback was translated into a set of "starter ideas," which in turn formed the basis for the Vision Plan. These starter ideas, or concepts, create a "form-based comprehensive plan" of images which illustrate how the corridor might appear. The Vision Plan allows residents to focus on the big picture and avoid fixating on specific details. The final form of the plan will inevitably change over time as land use, environment and cultural resources, and other factors also change. The role of the Vision Plan is to provide Princeton residents with a framework to think about changes to the road as they are proposed and to evaluate specific proposals in the context of objectives for the entire roadway.

The Vision Plan will ultimately be implemented incrementally based on additional community discussion and planning. An Action Plan for the Vision is provided in table form in Chapter 6, illustrating breakout projects, order-of-magnitude costs, roles and responsibilities. The first step towards implementation is for the Vision Plan to be evaluated locally, with those elements adopted by the community to be incorporated into local circulation plans. As funding is secured, each particular starter idea presented in the Vision Plan needs to be refined though the project development process.

Chapter 1: Project Overview and Context

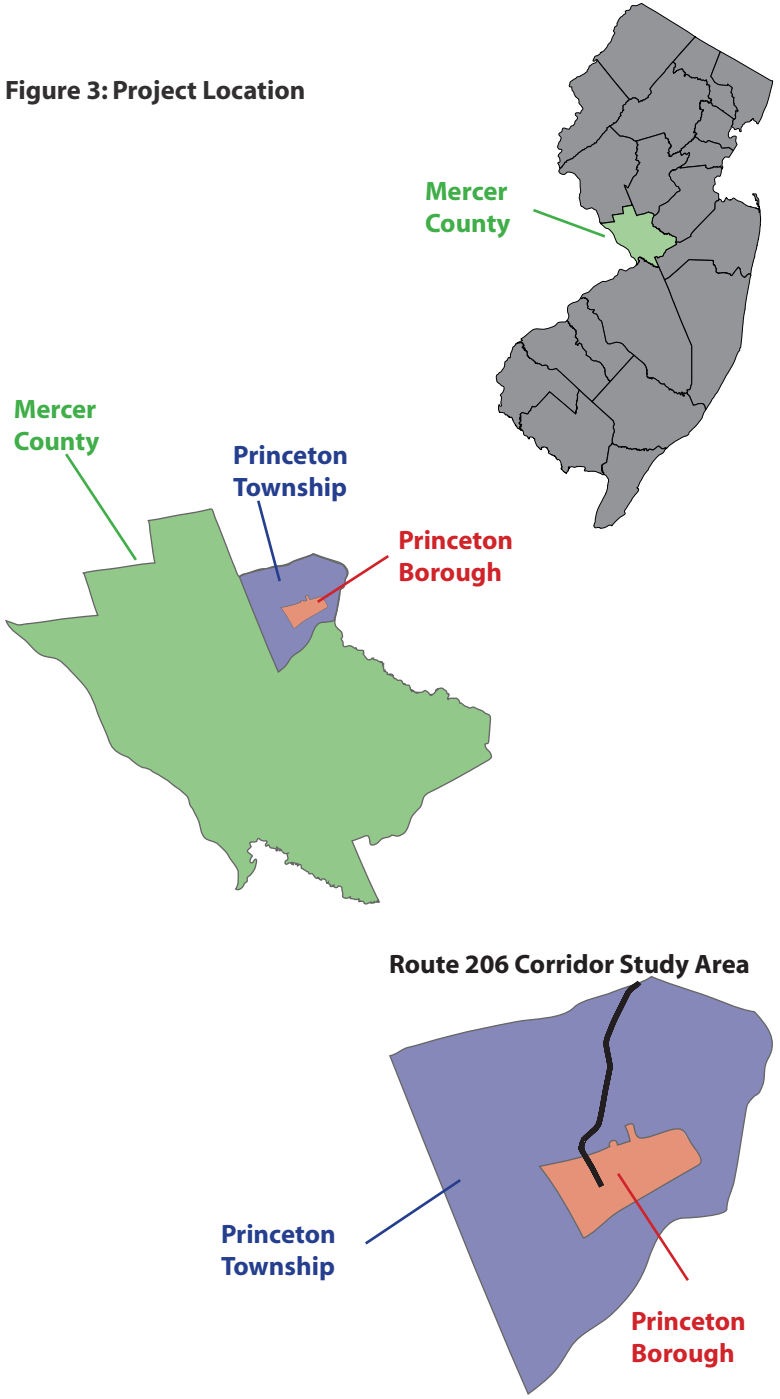
The Route 206 Joint Vision Plan and Traffic Calming Study is a Context Sensitive Design planning study for the Route 206 corridor in Princeton Borough and Princeton Township, New Jersey.

Both Princeton Borough and Princeton Township are jointly designated a Regional Center in New Jersey's State Development and Redevelopment Plan. The area has ready access to US Highway Route 1, the New Jersey Turnpike, the Garden State Parkway, and rail service (Amtrak and New Jersey Transit) which provide direct connections to New York and Philadelphia. While the two municipalities have completely separate political entities, a close governmental relationship exists between the two governments, and the Princeton community is identified as one entity culturally. Furthermore, many public functions, such as the school system and the Planning Board, are consolidated. Both Princeton Borough and Princeton Township have been designated as certified local governments by the State Office of Historic Preservation.

The project study area extends from the Nassau Street intersection area in Princeton Borough to Cherry Valley Road in Princeton Township, a distance of approximately three miles. The northern leg of Route 206 is known as Bayard Lane in the Borough of Princeton. In 2000, Princeton Borough's population was just over 14,000 people. Princeton Borough is known for its tree-lined streets, its vibrant commercial district with restaurants and specialty shops along Nassau Street (NJ Route 27), its historic homes and buildings, its parks and its friendly and safe atmosphere.

The Borough is also home to Princeton University, the fourth-oldest college in the United States. Princeton University has approximately 7,000 faculty, undergraduate and graduate students. The campus contains many historic landmarks, most notably Nassau Hall, which in 1783 was the temporary capitol of the United States. A shuttle train known as the "Dinky" connects the campus to Princeton Junction Station and to regular service to New York City and Philadelphia.

Figure 3: Project Location



Route 206 is known as State Road on its northern leg in Princeton Township. The Township covers an area of over 16 square miles, surrounding and completely encompassing the 1.85 square mile area of the Borough of Princeton. The 2000 Census found the population of Princeton Township to be just over 16,000 people. Princeton Township has more of a suburban and rural character than the Borough, but retains a small town feel. Recreational jogging and bicycling are important activities for both Borough and Township residents and Princeton's environmental assets are highly valued by the community.

Both Bayard Lane and State Road weave through a fully built-out community of historic homes, three historic districts, environmentally sensitive features such as stone outcroppings, brooks and streams, recreational areas and a canopy of older trees. Most area residents come into regular contact with these roads. Many live on or within a few blocks of Route 206, and most drive it regularly. NJDOT functionally classifies Route 206 through Princeton Township and Princeton Borough as an urban principal arterial that operates as a two-lane highway. The road also acts as a regional facility, carrying traffic from the northwestern part of New Jersey to the City of Trenton. It also carries truck traffic that uses Route 206 as a shortcut from Interstate 287 in Somerset County to I-95 and I-295 in Mercer County.

This project was initiated by Princeton Township, Princeton Borough and advocacy group, Citizens for a Safer Route 206, through the New Jersey Department of Transportation (NJDOT) Statewide Local Transportation Planning Assistance Program. The Princeton community requested assistance from the Department to develop a unified, comprehensive, context sensitive vision for Route 206 in Princeton. NJDOT's Local Transportation Planning Assistance Program provides technical transportation planning assistance to local governments in their efforts to advance, support and promote the state's Smart Growth policies and to manage their own transportation resources more effectively.

Historic Princeton

Source: Historical Society of Princeton

Source: Mercer Hill Historic District Association

Princeton Borough, Princeton Township and Citizens for a Safer Route 206 identified a number of concerns to be addressed in the study. These included:

- The noise and volume of truck traffic, and the potential for even more truck traffic if a proposed intermodal transload facility is built off Route 206 in Hillsborough;
- Safety concerns generated by the volume and speed of traffic, dangerous driving practices and the current engineering solutions on the road, which cause drivers to speed;
- A high accident rate, which has prompted Princeton Township to seek Safe Corridor designation;
- The "barrier" effect of the road: the large volume of fast-moving vehicles poses a challenge for other modes of travel and divides formerly unified residential areas; and
- Piecemeal changes to the roadway to address problems at specific locations; over time these changes have challenged the relationship of the road to the community around it, compromising the quality of life in Princeton.

The local governments and the citizens' group asked that the plan identify ways to improve safety for everyone on or near the road. They asked that the plan define the northern gateway in Princeton more effectively, informing drivers that they are entering a residential community and that their driving behavior must change to respect the residential environment. Finally, they requested that intersections along the corridor work together, and that proposed design modifications improve the movement and safety of traffic along the entire stretch of the corridor and in the residential neighborhoods surrounding the road.

Project Team

The Vision Plan was developed in accordance with the principles of partnership inherent in both a Context Sensitive Design approach and the citizen-based genesis of the project itself. The Project Team consisted of the following entities:

- Local representatives from Princeton Borough, Princeton Township, and the Princeton advocacy group, Citizens for a Safer Route 206
- Representatives from the New Jersey Department of Transportation (NJDOT)
- Project Consultants (Urban Engineers [Urban] and Glatting Jackson Anglin Lopez Rinehart, Inc. [Glatting Jackson])

Vision Plan Development Process

The study began with an analysis of available data. Data included topographic mapping, tax parcel data, and an inventory of historic resources. A review of vehicular and pedestrian accident data, traffic volumes, NJDOT management systems data and previous studies of the corridor was also conducted.

The Vision Plan was developed within a collaborative public involvement process designed to maximize stakeholder involvement. Central to this process was the use of two design workshops to provide a concentrated, open work atmosphere. During the first workshop in November 2005, the Project Consultants opened the workshop by introducing the public to ideas about traffic calming and linking them with real world examples. They familiarized themselves with the Route 206 corridor though field visits and stakeholder interviews. They conducted some 80 interviews over the subsequent three day period. In the course of these discussions, participants identified local issues and opportunities that the consultants could use to help shape the plan.

A second four day workshop in January 2006 began with the Project Consultants presenting their initial findings to the public and again reviewing traffic calming concepts used in other communities. The consultants then developed a draft corridor Vision Plan based on their understanding of local input, which they presented to the public at the end of the second workshop. They encouraged public questions, comments, and expressions of concern both during and after the presentation.

During a public comment period, which extended for two weeks following completion of the second workshop, the Project Consultants conducted a more detailed corridor analysis in order to gauge the corridor's performance under both existing conditions and conditions proposed in the Vision Plan. Tasks during this step included an impact assessment of elements at a conceptual level, identification of priorities and timeframes, and preparation of order-of-magnitude cost estimates. The impact analysis was limited primarily to traffic carrying capacity, based on available current and projected traffic counts. Environmental and other impacts were beyond the scope of the study. The public comment period also allowed Princeton residents to register their reactions to various aspects of the Vision Plan.

Chapter 2: Summary of Public Involvement Process

The development of the Route 206 Vision Plan followed a collaborative public involvement process designed to maximize stakeholder involvement. Central to this process was the use of two design workshops (in late November 2005 and early January 2006), which provided a concentrated, open work atmosphere.

First Workshop (November 28 – December 1, 2005)
The first workshop began on Monday, November 28, and concluded on Thursday, December 1. On the first day, the Project Consultants walked the Route 206 corridor to document existing conditions by taking photographs and making field notes. Based on information from the tour, the Project Consultants prepared an introductory PowerPoint presentation for a first public meeting on Monday night.

The Township and the Borough publicized the meeting in a variety of ways: through advertisements in local newspapers and through a flyer mailed or hand delivered to more than 300 people (Appendix A). The evening meeting was televised live and subsequently re-aired four times on local access television, and posted on websites belonging to the Township, Borough and the citizens' group, Citizens for a Safer Route 206. Approximately 150 people attended the first open house meeting. A summary of the attendees at this and subsequent public meetings is provided in Appendix A.

Ian Lockwood of Glatting Jackson used a PowerPoint presentation to illustrate context sensitive approaches to roadway corridor planning and design. A 'context sensitive design' emphasizes the road's context and attempts to devise solutions that not only meet the needs of people using the road, but also respects the needs of neighboring communities and the environment. Context sensitive design projects are sensitively integrated into their human and natural contexts, or settings, and their designs are tailored to those particular circumstances. To illustrate this concept, Lockwood offered examples of roadway design, both successful and unsuccessful, throughout North America and Europe.

Lockwood also explained the concept of a 'transect' – a geographical cross-section through a sequence of environments – and he described how transects

Eager Public Ready to Participate

Successful Traffic Calming in England

could be used in analysis of the Route 206 corridor. Underlying parameters of density, building type and setback, roadway type, environmental features and other elements characterize each transect, varying from the most rural at one end of the spectrum to the most urban at the other. Lockwood noted that this concept tool would set the framework for the planning and design analysis and for the development of recommendations for the Vision Plan.

The evening concluded with a comment, question and answer period. Comments about truck traffic and related noise and vibration issues dominated the discussion; most speakers wanted truck traffic to be diverted from Route 206 through Princeton. Attendees were encouraged to submit written comments on the project. Approximately 30 comments were received and are included in Appendix A.

Over the remaining three days of the first workshop, the Project Consultants conducted approximately 80 interviews with stakeholders from the project area, including local government staff and elected officials, business owners, residents, emergency services representatives, maintenance staff, school system representatives, and representatives from the local and regional planning agencies. These informal, interactive interviews provided a forum for stakeholders to identify problems and opportunities in a one-on-one setting with the Project Consultants who noted their concerns on maps of the road. At the conclusion of the workshop, the marked up tracing paper notes from the stakeholder meetings were synthesized into one drawing for use in the second workshop.

Several common themes became apparent in the stakeholder interviews:

Truck Traffic

Most, if not all, stakeholders perceived regional truck traffic to be a major problem. They often mentioned noise and vibrations generated by braking trucks, and many expressed concern about the potential increases in truck traffic resulting from a proposed inter-modal transload facility in Somerset County. Residents in many of the homes along Bayard Lane and State Road have adopted a variety of strategies to screen their houses from the trucks—from installing fencing to reorienting their doors away from the road.

Project Team Collecting Input

Truck Traffic is a Top Concern

Pedestrian Barriers to Crossing Route 206
Many stakeholders mentioned their inability to cross Route 206 safely as a result of the speed and volume of traffic. For many, this crossing issue has also changed the dynamic of the surrounding neighborhoods. Over time, changed conditions on Route 206 have had a severing effect – isolating portions of neighborhoods from each other.

High Traffic Speeds
The stakeholders expressed great concern about the speed of automobiles along Route 206. Many noted that the road has been changed over time to accommodate increasing automobile speeds, but at the expense of other modes such as walking or bicycling.

Problematic Intersections
Several intersections were noted to be especially problematic:

- Residents noted conflicting vehicle movements at the intersection of Nassau Street with Route 206 (Bayard and Stockton). They also observed that the current signal phasing does not permit opportunity for pedestrians to cross safely.
- Along Bayard Lane, pedestrians find it difficult to cross at intersecting streets.
- The jug-handle at Mountain Avenue is highway-like in appearance and encourages drivers to adopt a "highway driving mentality." Negotiating the area around Cherry Hill Road is difficult.
- The Mansgrove Road intersection is high-speed and anti-pedestrian.
- Ewing Street is the location of the majority of collisions within the Route 206 corridor.
- The Cherry Valley Road intersection has poor geometry and both Montgomery and Princeton Townships are taking steps to mitigate the skewed angle.

Design in a Two-Lane Context
Stakeholders felt strongly that Route 206 should remain a two-lane road and should not be widened and that its environmental assets should be preserved. Much of this sentiment is an acknowledgement that previous widenings have exacerbated traffic speed and aggravated pedestrian crossing problems while at the same time disrupting the natural context.

Route 206 and Nassau Street Intersection

Public Participation in the Design Process

"Incomplete Street"
Many stakeholders mentioned that Route 206 is an "incomplete street," in that it does not accommodate all modes of transportation. It lacks bicycle facilities and is, therefore, a poor place for inexperienced cyclists to ride. There are many dangerous crossing locations for pedestrians, and there are several areas in the in-town Borough section where sidewalks are not continuous.

Second Workshop (January 9 – January 12, 2006)
The second workshop began on Monday, January 9, and concluded on Thursday, January 12. At a Monday evening open house, the Project Consultants presented to the public their findings from the first workshop's stakeholder meetings. They also again described general concepts of traffic calming, they provided examples from other communities, and they offered some preliminary ideas for public feedback.

Princeton Township, Borough and Citizens for A Safer Route 206 publicized the open house in various ways: through advertisements in the local newspapers and through a second flyer (Appendix A) that was mailed and/or delivered to more than 300 residents, business owners, and other stakeholders. The open house presentation was televised live and was subsequently re-aired four times on local access television; it was also posted on the Township and Borough websites. Citizens for a Safer Route 206 also posted information about the meeting on their website, (http://www.stateroad206.org/)

Over the next two days, the Project Consultants prepared a conceptual corridor vision plan using the information from the first workshop, from the corridor tour and stakeholder interviews, from both public meetings, and from other data provided by state and local governments. The work sessions were open to the public so that they could monitor progress and provide feedback.

On Thursday, the Project Consultants reviewed the draft Vision Plan with the Project Team, and then with public officials on an individual, informal basis.

Ian Lockwood of Glatting Jackson then presented the Vision Plan to the public at an open house that evening, after which he fielded questions and responded to comments and concerns. Approximately 70 people attended this final


Public Meeting during the Second Workshop

meeting; an overview of attendees is included in Appendix A. Attendees were also encouraged to write their questions or comments on note cards during the meeting and to reply by mail or email after the meeting. Comments received by the January 23, 2005 deadline are included in Appendix A.

Chapter 3: Route 206 Transect

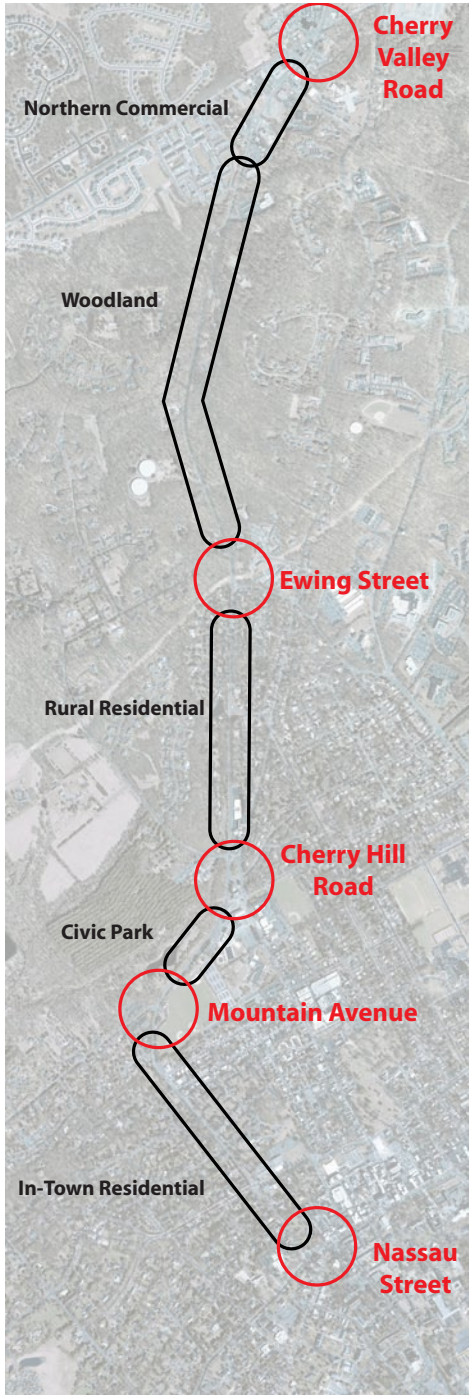
An urban-rural transect is a geographical cross-section through a sequence of environments, with the most rural at one end of the spectrum to the most urban at the other. As one travels through a transect, there are underlying parameters of density, building type and setback, roadway type, environmental features and other elements that define the distinctive character of each area.

Each element reflects its environment. For example, streets in urban areas have lower speeds, narrower curbed sections, wider sidewalks, street trees, and pedestrian-scale lighting, while roads in rural areas have higher speeds, wider sections with grass outside of the shoulder, and roadway-scaled lighting. These characteristics are self-enforcing and will shape the way in which motorists respond to the street. The Vision Plan uses the concept of an "urban-rural transect" as an analytical tool to set the framework for planning and design decisions and to develop recommendations for the Vision Plan.

The Route 206 corridor has a series of five transitions, or sub-areas, that define its character. As illustrated in Figure 4, they are:

In-Town Residential
Civic Park
Rural Residential
Woodland
Northern Commercial

Figure 4: Route 206 Sub-Areas



Key Intersections in Red

In-Town Residential

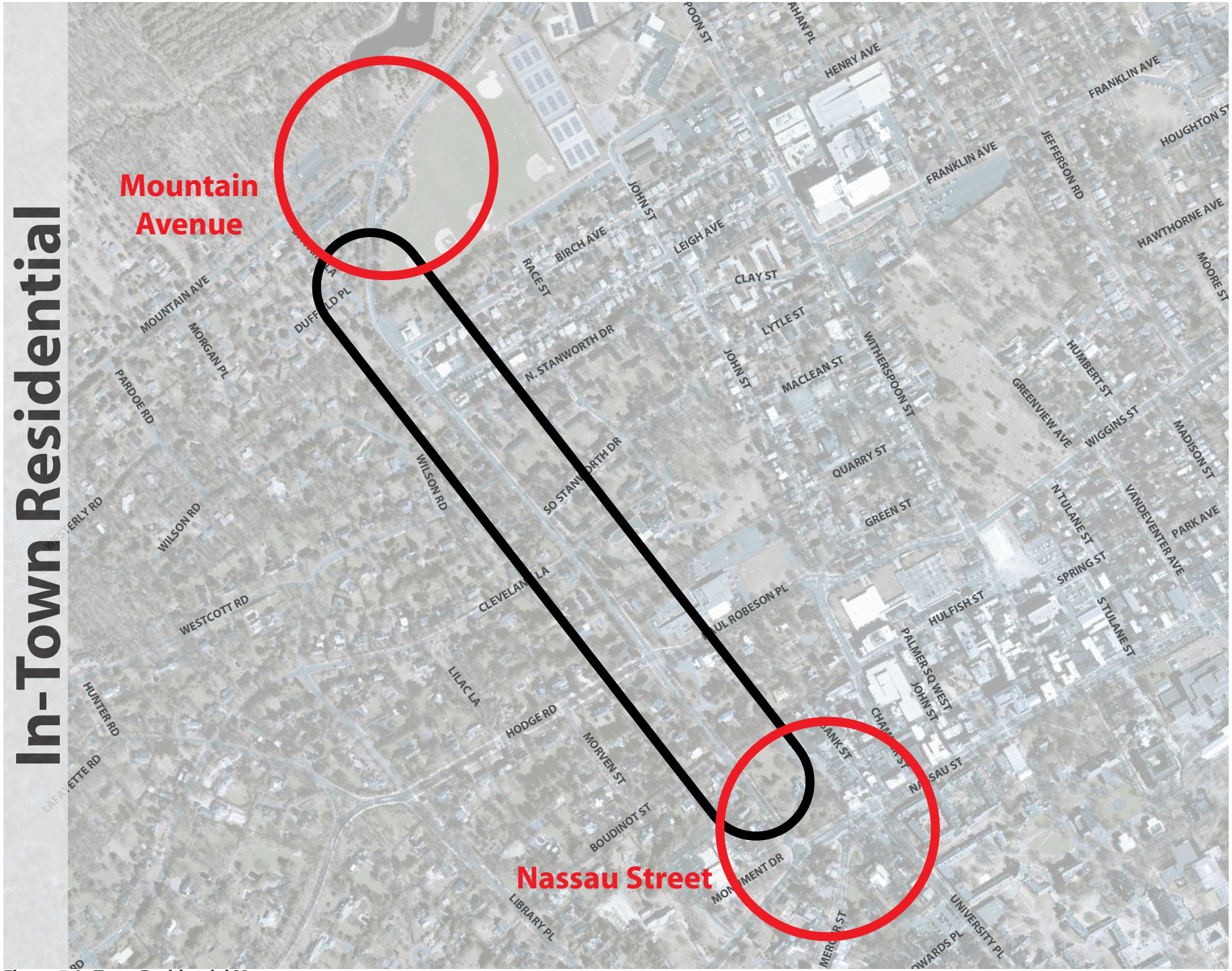


Figure 5: In Town Residential Map

In-Town Residential Area

The first area is the Bayard Lane section of Route 206 between Nassau Street and Mountain Avenue. This portion of the corridor, located predominantly in Princeton Borough, has an "In-Town Residential" character.

A complex of three intersections—from the main intersection of Nassau Street (NJ Route 27) with Route 206 (Stockton and Bayard) to nearby intersections at Nassau/Mercer and Nassau/University—has a distinctive urban feel. Two of these intersections are signalized while the intersection of Nassau/Mercer is unsignalized. The current configuration of roads is confusing to drivers and pedestrians alike; failure to yield to pedestrians is common throughout the entire stretch of road but is particularly common at Nassau/Stockton/Bayard. The current geometry makes for difficult turns in this area; congestion makes left turns from Stockton onto Bayard especially difficult.

Although this area has a charming in-town feel and a comfortable pedestrian scale, it is clear that there is substantial room to improve the environment for both drivers and pedestrians.

The road descends sharply from Hodge Road to Leigh Street. The grade change on this section of Route 206 contributes substantially to speeding. The road is three lanes wide through most of this section with a continous left turn lane from just past Hodge Road to Birch Street, which permits turns in both directions—a source of confusion to some drivers. Left turns are difficult and sometimes dangerous throughout this area.

"In-Town Residential" Character

Pedestrian Crossing at Mercer Street

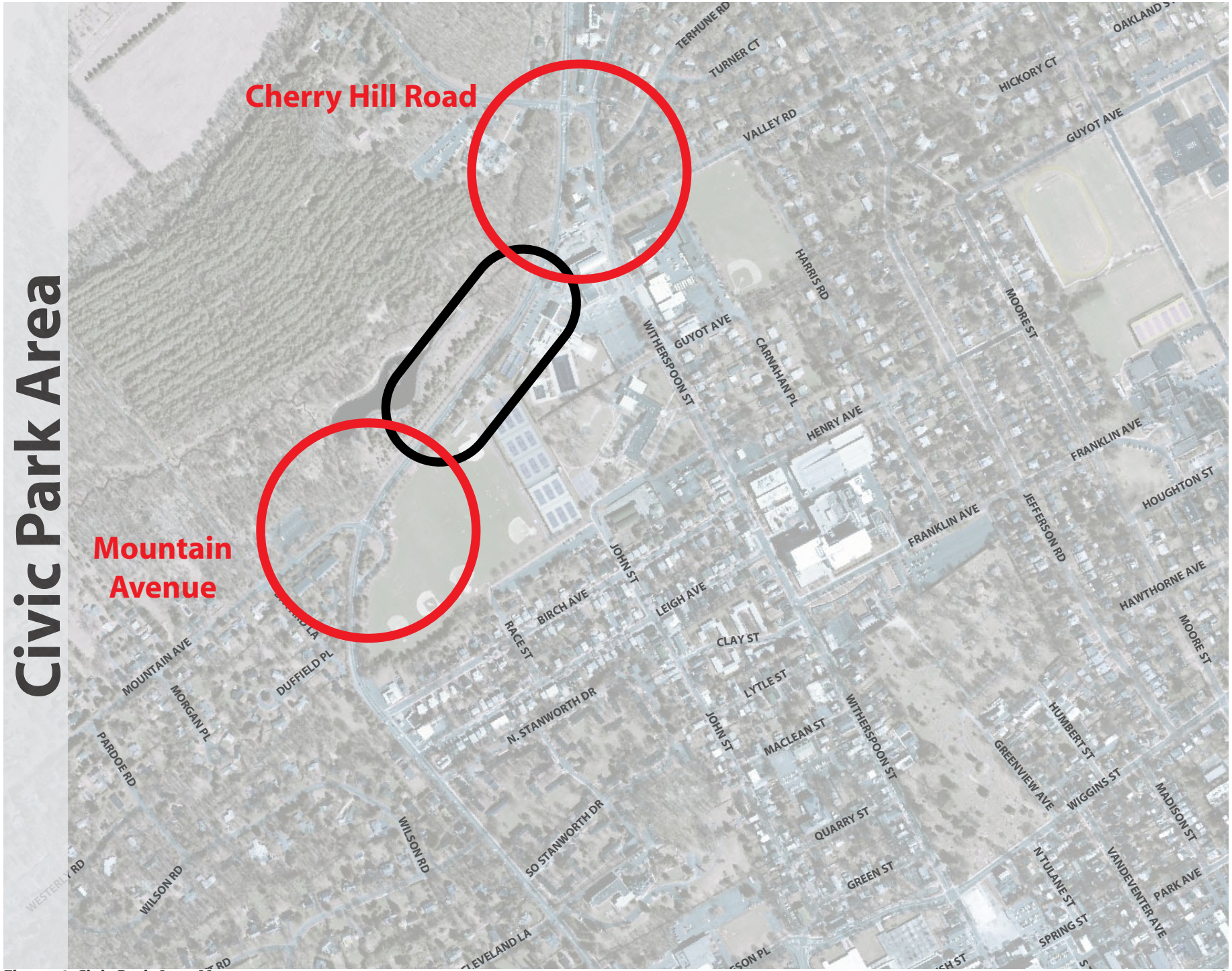


Figure 6: Civic Park Area Map

Civic Park Area

As Route 206 enters Princeton Township, the road enters an area with a "Civic Park" character, a decidedly more 'open' feel. At the bottom of the hill, the road curves where the old Bayard Lane has been closed to Mountain Avenue. Here Bayard Lane becomes State Road. At the intersection of State Road with Mountain Avenue, a forward jug handle allows turns on to Mountain Avenue. Due to the open feel of the area and the jughandle treatment at the Mountain Avenue intersection, the road invites a highway-driving mentality on the part of drivers. Speeding is common.

The intersection of Mountain Avenue and Route 206 is an important civic space because it abuts the entrance to Pettoranello Gardens and Community Park, both of which are significant community assets. Events at the amphitheater in Pettoranello Gardens are popular in the summer, and many people walk to this and other civic spaces from the surrounding neighborhoods. A multi-use trail weaves along the west side of Route 206 from Mountain Avenue to Cherry Hill Road. Although many people use these civic spaces, there is no easy pedestrian connection between the parks.

As the road passes Community Park School and Princeton Township Hall, this section of the transect retains its civic character. Just north of this stretch of road, the area becomes distinctly residential, but first the road passes through a series of intersections at Valley, Terhune, and Cherry Valley/Mount Lucas. This sequence of intersections, which connects to residential neighborhoods, is confusing to drivers. Left turns are prohibited from Valley Road onto Route 206. Pedestrians have a difficult time crossing traffic at most of these intersections.

Multi-Use Trail along Southbound Route 206

Intersection of Route 206 and Valley Road

Community Park adjacent to Route 206

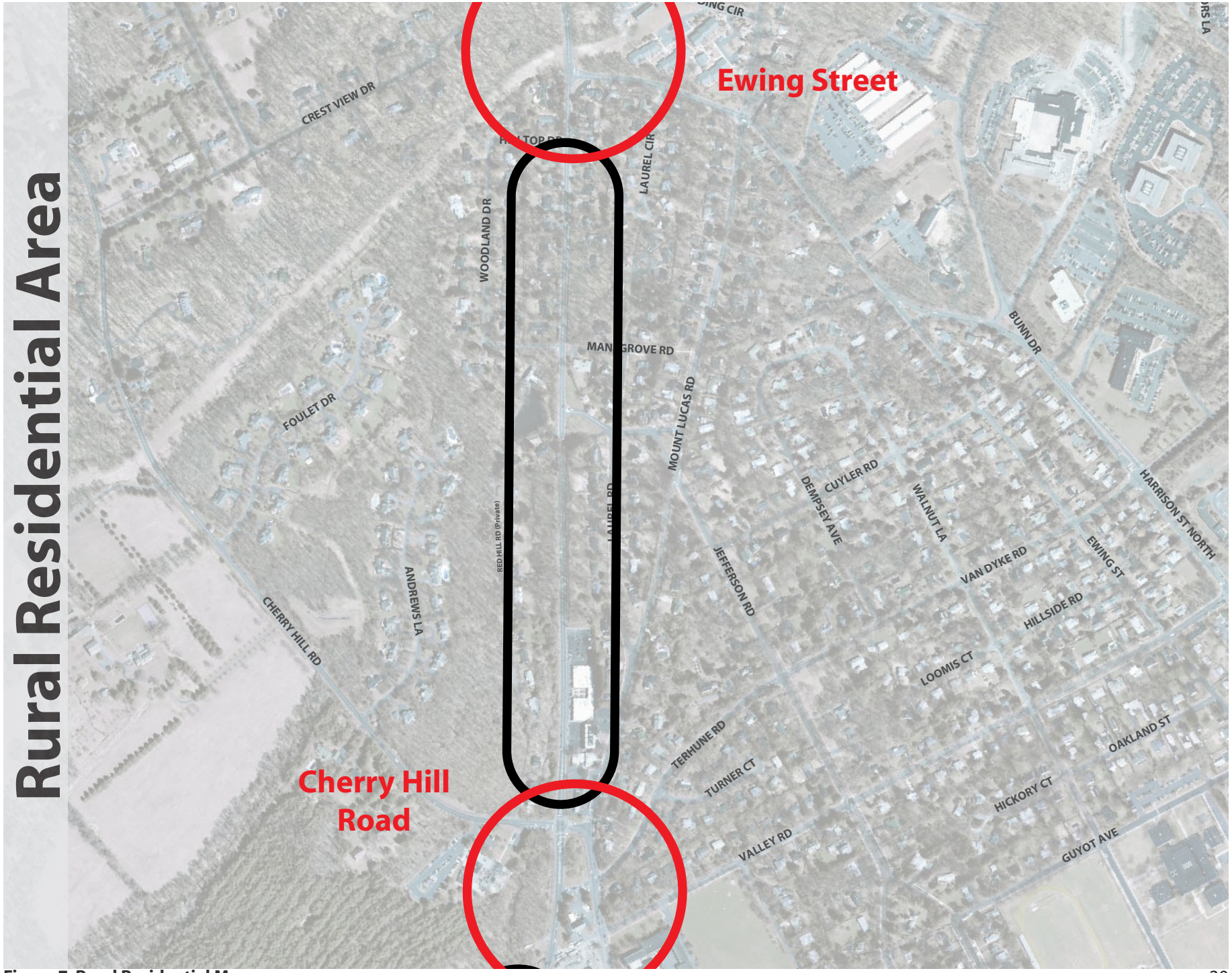


Figure 7: Rural Residential Map

Rural Residential Area

The next segment of Route 206 extends from Cherry Hill Road to Ewing Street and has a "Rural Residential" character, with low-density housing on both sides and no sidewalks in either direction. The roadway is characterized by relatively narrow travel lanes (11 feet), very narrow shoulders, and hidden driveways. Natural assets include the rock outcroppings on the hillside banks directly adjacent to the roadway, brooks which in places are very close to the road, and a tree canopy that covers most of this area.

At the southern end of this "Rural Residential" area is a small commercial complex. Called Clifftown Center and located just north of Cherry Hill Road, the commercial complex contains small businesses, including a drive-through bank branch, video store, convenience store, and offices. Sidewalks are limited and pedestrian access to the shopping center, provided mainly from Mount Lucas Road, is difficult. There are three parking lots adjacent to the buildings, set back from the roadway. In addition, there is a parking strip, also set back from the roadway, in front of some of the older businesses, to accommodate "quick-stop" customers. The commercial area, which has a relatively small footprint, appears largely unlandscaped when compared to the woodlands environment and single family home neighborhood surrounding it.

North of the commercial center, the road rises steadily past Ewing Street. Cars traveling southbound through this section of the road tend to speed because of the grade change. The speeding vehicles make it especially difficult for pedestrians to cross safely here.

One of the most dangerous intersections in the Route 206 corridor is located in this area. The Ewing Street intersection has the highest accident rate in Princeton Township. Vehicles traveling southbound on Route 206 just north of Ewing Street encounter a curve which hides the intersection until they are right upon it. As the road curves, it also descends, tempting too many drivers to speed at this location. They often do not see until the last minute vehicles waiting to make a left onto Ewing Street and they are unable to stop in time. Improving the safety of this intersection is a local priority.

Clifftown Shopping Center

High Accident Rate at Ewing Street Intersection

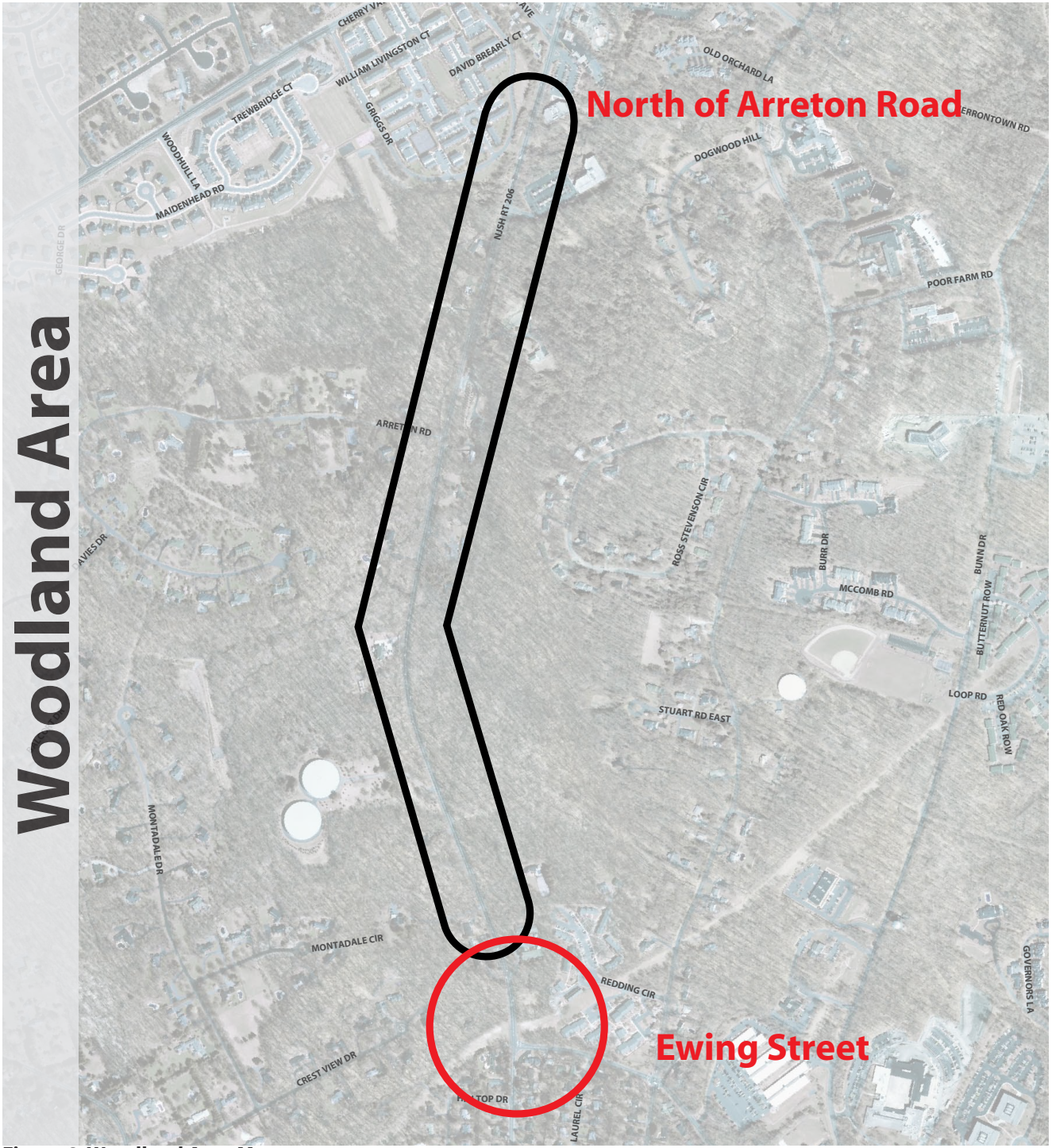
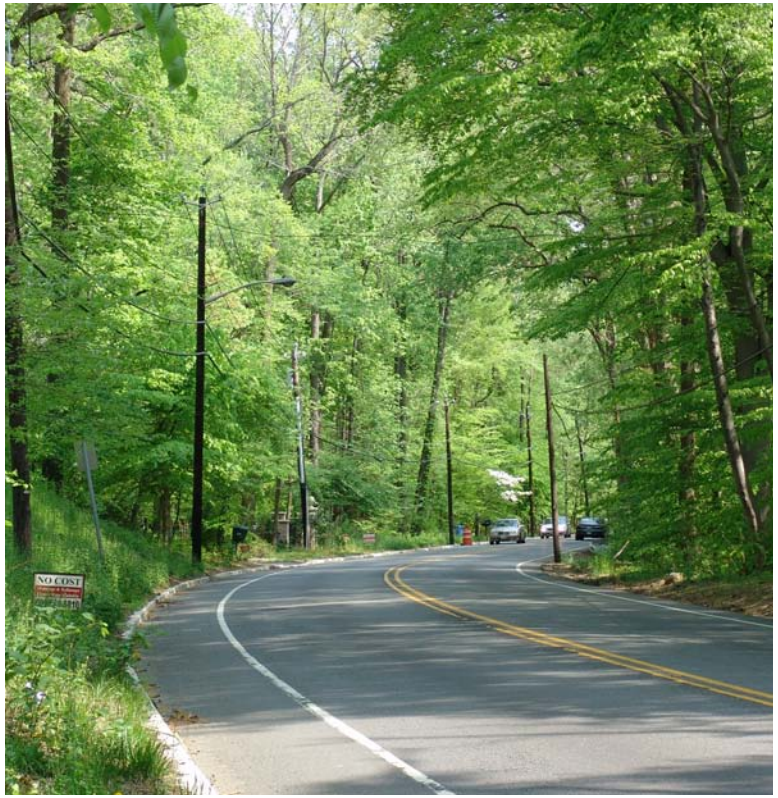


Figure 8: Woodland Area Map

Woodland Area

North from Ewing Avenue, the road takes on a "Woodlands" character which extends to the commercial area just north of Arreton Road. Throughout this area houses are patterned in less density and set back from the road. The roadway is characterized by narrow shoulders and few residential driveways. This stretch of Route 206 has dense woods on both sides and is valued by the community for its natural aesthetics, especially for the mature, continuous tree canopy. Drivers, seeing the open road before them, tend to exceed the speed limit here as well.



Wooded Section of Route 206

Actual Speeds Often Greater Than Posted Speeds

Figure 9: Northern Commercial Area Map

Northern Commercial Area

As State Road approaches the Princeton Gateway Office Building entrance just north of Arreton Road, the character of Route 206 changes again--from rural to commercial. This northernmost segment of Route 206, which begins at the office building and extends to the Township border at Cherry Valley Road, has a character suitable for future commercial development.

Before the road reaches the commercial section, however, it passes the Griggs Farm development, which includes relatively dense low- and moderate-income housing and which is separated from the west side of the road by a screen of trees. There is also a small residential community on Hillside Road that is subjected to a steady stream of traffic turning to and from State Road. In this location, State Road does not invite people who live in these communities to walk alongside it. Sidewalks are generally discontinuous except for new sidewalks near the Cherry Valley Road intersection.

North of Hillside, many businesses, substantially set back from the road with intervening parking lots, are located along either side of Route 206 in this stretch. At the northernmost boundary of this area, the angle of the intersecting streets at Cherry Valley and State Roads is skewed, and this configuration places additional stress on the movements of both cars and pedestrians, especially during rush hours. Because all four corners of this intersection contain established commercial enterprises, the latitude for change at this intersection is constrained.

Southbound Route 206 at Cherry Valley Road

Northbound Route 206 at Cherry Valley Road

Chapter 4: Vision Plan

In the course of this project, the Project Consultants integrated public input and feedback into a set of "starter ideas" which form the basis for the Vision Plan. The ideas embodied in the Vision Plan are intended as a starting point from which community residents and their elected officials and their planners can create a "form-based comprehensive plan" of images which illustrate how the corridor might appear. Each particular idea needs to be refined through community analysis, further impact analysis, and the project development process.

A Vision Plan is a "big picture." Outside factors (such as land use, environment and cultural resources, among others) may cause the plan to change over time. A Vision Plan provides Princeton with a framework that allows residents and officials to think about proposed changes in a comprehensive manner even as they are considering much smaller increments of change. For this reason, it will be useful to Princeton to agree on a common vision, a blueprint for future development. The hope is that this Vision Plan will help the Princeton community come to an agreement on elements to be integrated into its Master Plan and that it will guide NJDOT in implementing needed projects along the corridor.

This chapter will first define the design elements that shape the Vision, and then it will lay out possible applications of these elements to each of the transect areas described in the previous section.

Traffic Calming

The impulse to calm traffic arises from a broadened understanding of the road itself. Traffic calming protects the road's more vulnerable users, such as pedestrians and cyclists, and it also respects the relationship of the road to the environment in which it is located. The goal of traffic calming is to slow vehicles, and the most effective way to do this is by changing the design of the road because doing so self-enforces desirable motorist behaviors.

There are two broad categories of traffic calming. The first type of traffic calming is meant for local residential streets, and is characterized by relatively

inexpensive retrofit measures such as bumps, humps, chicanes, mini-circles, and pinch points. The second category is meant for framework streets, which typically serve the purpose of connecting neighborhoods, moving people longer distances, and accommodating emergency vehicles. The primary traffic calming measure on framework streets involves a change to the roadway cross-section. Such changes can include such strategies as altering the number of lanes, the lane widths, road textures and edge treatments, and adding parking and street trees. Since Route 206 is a framework street, the second type of traffic calming formed the basis of the Vision Plan.

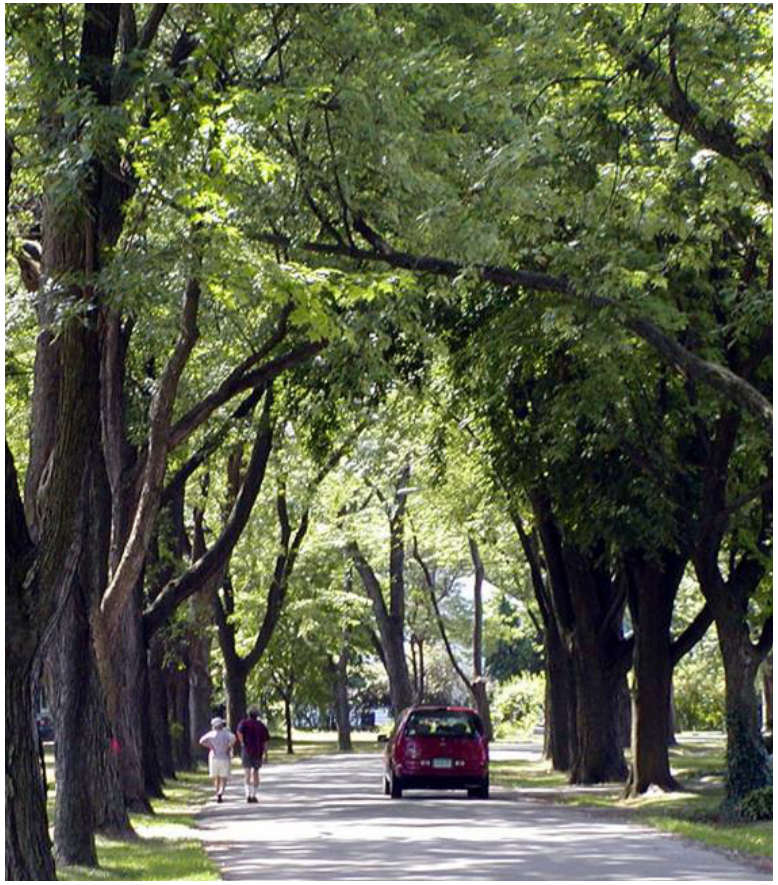
Although each segment of the Route 206 corridor has its own set of unique characteristics and challenges, several traffic calming measures were identified as common solutions and were emphasized throughout the corridor. These elements include street trees, roundabouts, back-in angled parking, and pedestrian median refuges. The following section describes the operational aspects and benefits of each individual element in detail:

Street Trees

Princeton is widely regarded as an aesthetically-pleasing area, and part of this feeling derives from the distinctive, mature trees which line the residential streets and even some commercial streets. Street trees are normally located in a landscaped buffer between the curb and sidewalk, although they can also be placed adjacent to the roadway in non-curbed areas. Besides improving aesthetics, street trees also have the effect of calming traffic because they visually narrow the roadway for motorists while helping to define a "sense of place."

Both because of its traffic-calming effects and because tree-lined streets are characteristic of Princeton, a recurring theme in this Vision Plan is to add street trees in areas where they are currently sparse or lacking. This Vision Plan calls for increasing the number of street trees alongside the road in all of the areas studied.

Street Trees Calm Traffic And Nerves



Roundabouts

Roundabouts have been significant traffic control features in Europe for some time, and are increasingly being used across the United States, from Florida to Colorado to New Jersey. Some of the newer applications include several roundabouts used along the same corridor. In places such as Avon, Colorado, roundabouts have been effectively used in sequence.

Much of the opposition to roundabouts in the United States stems from the confusion between roundabouts and traffic circles. Roundabouts are different from traffic circles in several ways. Compared to roundabouts, traffic circles are relatively large and allow significantly higher speeds. Each of the streets approaching a traffic circle has an individual traffic control (stop sign, yield sign, or signal), which makes it an ad hoc system. With roundabouts, approaching traffic must always yield to traffic within the circle, and slower speeds are enforced through design.

Roundabouts are a key component of the Vision Plan. Roundabouts can reduce some negative impacts of cars and trucks, such as speeding, noise and vibration, while at the same time enhancing aesthetics and safely accommodating bicycles and pedestrians. A single lane roundabout also may require significantly less right-of-way than a signalized intersection because turning lanes are eliminated. Physically, roundabouts are characterized by a prominent center island surrounded by a mountable ring used to accommodate large vehicles. Each approach to the roundabout is characterized by a splitter island used as a pedestrian refuge.

Operationally, vehicles approaching a roundabout yield to vehicles within the roundabout and wait for a gap to enter. Once they have entered, vehicles within the roundabout have the right of way and can then complete their turning movement. Pedestrians crossing a roundabout look left into oncoming traffic, cross one lane to the refuge island, look right, and then cross the opposite lane. Bicyclists can navigate the roundabout in the same manner as either a pedestrian or a vehicle. Because they have a larger swept path than other vehicles, large trucks may have their back left wheels go up on the mountable ring, but they will still be able to navigate the roundabout safely.

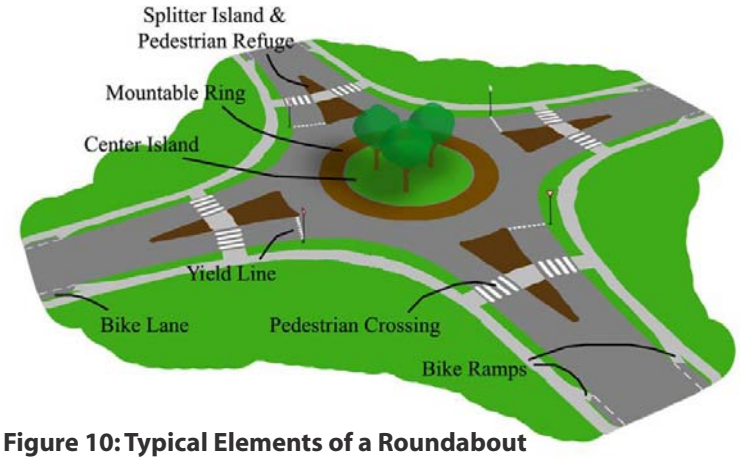


Figure 10: Typical Elements of a Roundabout

Local Example at Princeton University

Back-in Angled Parking

Another measure increasingly being used across the United States is back-in angled parking. While major cities such as Seattle and Washington, DC have incorporated back-in angled parking on their major streets, this type of parking is also being used effectively in suburban towns and rural highways.

Back-in angled parking provides a safe and convenient alternative to both parallel and head-in angled parking. The operation is similar to parallel parking where a car pulls past the parking space, signals, and then reverses into the space, but it has one fewer movement. There are distinct benefits associated with back-in angled parking, including:

- Better visibility while maneuvering because cars exiting spaces are not blindly backing into the travel lane
- Easier maneuver compared to parallel parking, which means that vehicles spend a shorter amount of time in the travel lane
- Safer and more convenient loading and unloading of the trunk because it is oriented to the sidewalk rather than the parking aisle or street
- Occupants are channeled to sidewalk by car doors (which makes this kind of parking safer for children in particular)
- Bicycle-friendly because the driver has better visibility and because car doors are oriented away from travel lanes
- Fewer collisions compared to head-on angled parking, which results in lower exposure to legal liability
- Angled parking allows almost twice the number of parking spaces than parallel parking in the same stretch of road

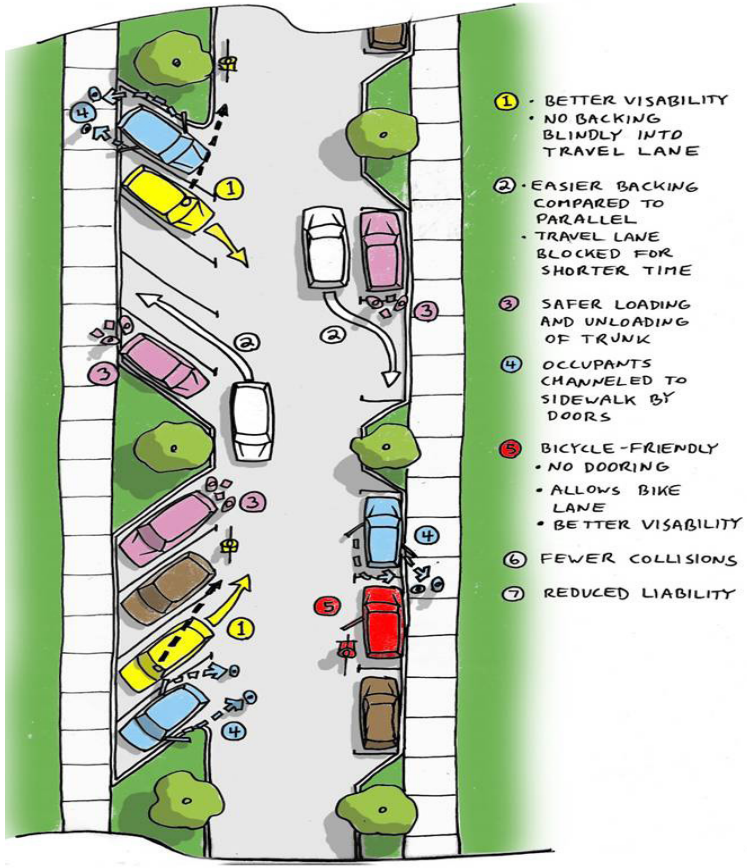


Figure 11: Advantages of Back-in Angled Parking

Pedestrian Median Refuges

Pedestrian crossing refuges serve the dual purpose of calming traffic and allowing pedestrians and bicyclists to cross the road safely, away from signalized intersections. These refuges are located mid-block and are physically similar to the splitter islands used in roundabouts. However, in contrast to roundabouts, the central refuge area is angled to face oncoming traffic. This encourages a pedestrian or bicyclist to stop after crossing the first lane and evaluate oncoming traffic before completing the crossing. Vehicular speeds are reduced because the island visually narrows the roadway to motorists, which encourages them to slow down.

Typical Pedestrian Refuge Island

Vision Plan Elements by Sub-Area

In-Town Residential

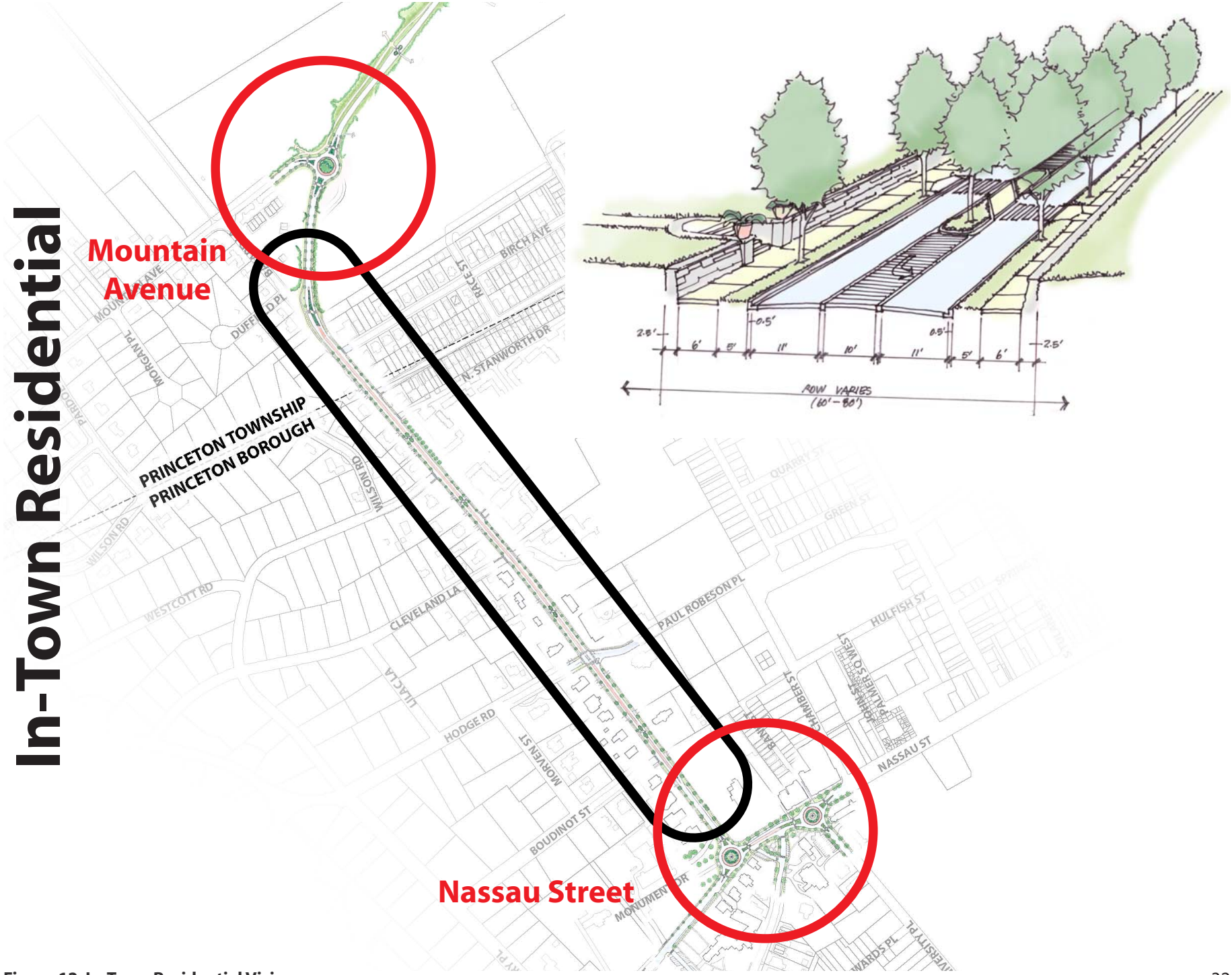


Figure 12: In-Town Residential Vision

In-Town Residential Area

A cross-section was developed for this area to reflect its in-town residential nature. The roadway in this section maintains its current curb-to-curb street width of 33 feet. The sidewalk system would be made continuous; the plan calls for building stone retaining walls to shore up the hill on the west side of Bayard Lane and permit construction of the new sidewalks.

The plan proposes five mid-block pedestrian refuges with crosswalks between Nassau Street and Mountain Avenue. These refuges would help restore pedestrian connectivity to the dense local street grid, and at the same time would encourage drivers to slow down by creating a sense of enclosure. Median refuges along Bayard Lane would also prevent vehicles from using the center left-turn lane to overtake other vehicles illegally. Finally, these refuges would prevent a "highway mentality" by encouraging drivers to look at near and middle distances as opposed to the full length of the street.

The plan proposes a landscaped median island just south of Boudinot Street as a way of making a transition from the two-lane section leaving the roundabout at Nassau Street, to the three-lane roadway needed to accommodate turns. By incorporating a lateral shift, this island would also serve to calm traffic.

The plan proposes a curbed pedestrian refuge island through the curve just north of Birch Street. In addition to accommodating pedestrian crossings, this island would remove the speed line around the curve by preventing motorists from weaving within the lane. An island in this location would also provide space for an entry feature into Princeton Borough for vehicles traveling south on Route 206.

Figure 13: Landscaped Median with Pedestrian Refuge Areas

At the center of Princeton Borough the plan recommends a new configuration that will highlight civic space while returning Princeton to its pedestrian-friendly past. The plan calls for replacing the two signalized intersections at Nassau/Stockton/Bayard and at Nassau/University with roundabouts and re-configuring the intersection of Mercer Street and Nassau Street.

A single-lane roundabout at the intersection of Route 206 and Nassau Street would reduce the amount of asphalt needed for the intersection. This excess asphalt can then be put to better uses such as landscaping, civic space, or parking. A roundabout eliminates the need for the center turning lane along the northern approach, which opens up a segment along the east side of Bayard Lane for parallel parking. A roundabout would also make it easier for pedestrians to navigate the intersection.

Although a single-lane roundabout at the intersection of Nassau Street and University Place would clip the parking lot at the southwest corner, it would free up enough land in other areas to create a small park. Placing monuments in the center of both roundabouts would create a "book-end" effect in line with Monument Park outside Borough Hall and would allow for a vista of landscaped civic space.

It is common for traffic on westbound Nassau Street turning left onto Mercer Street to back up through the University Place intersection due to inadequate separation of the side streets. Altering the intersection so that a segment of Mercer Street becomes one-way northbound, while simultaneously creating a new street behind the War Memorial to be used for the southbound movement onto Mercer Street would reduce this congestion. This new connecting street would also provide opportunities to increase on-street parking.

The final proposal for this area would be a new street connecting Route 206 and Mercer Street through the Trinity Church parking lot. By increasing the road network, this street would help remove local trips from the busier intersections. With back-in-angled parking, the new street would also increase the on-street parking supply for the Church by approximately eight spaces. Bulb-outs would protect the existing trees. A new, better configured and more attractive reflective space could be created closer to the building as a result.

Figure 14: Intersection Improvements at Nassau Street

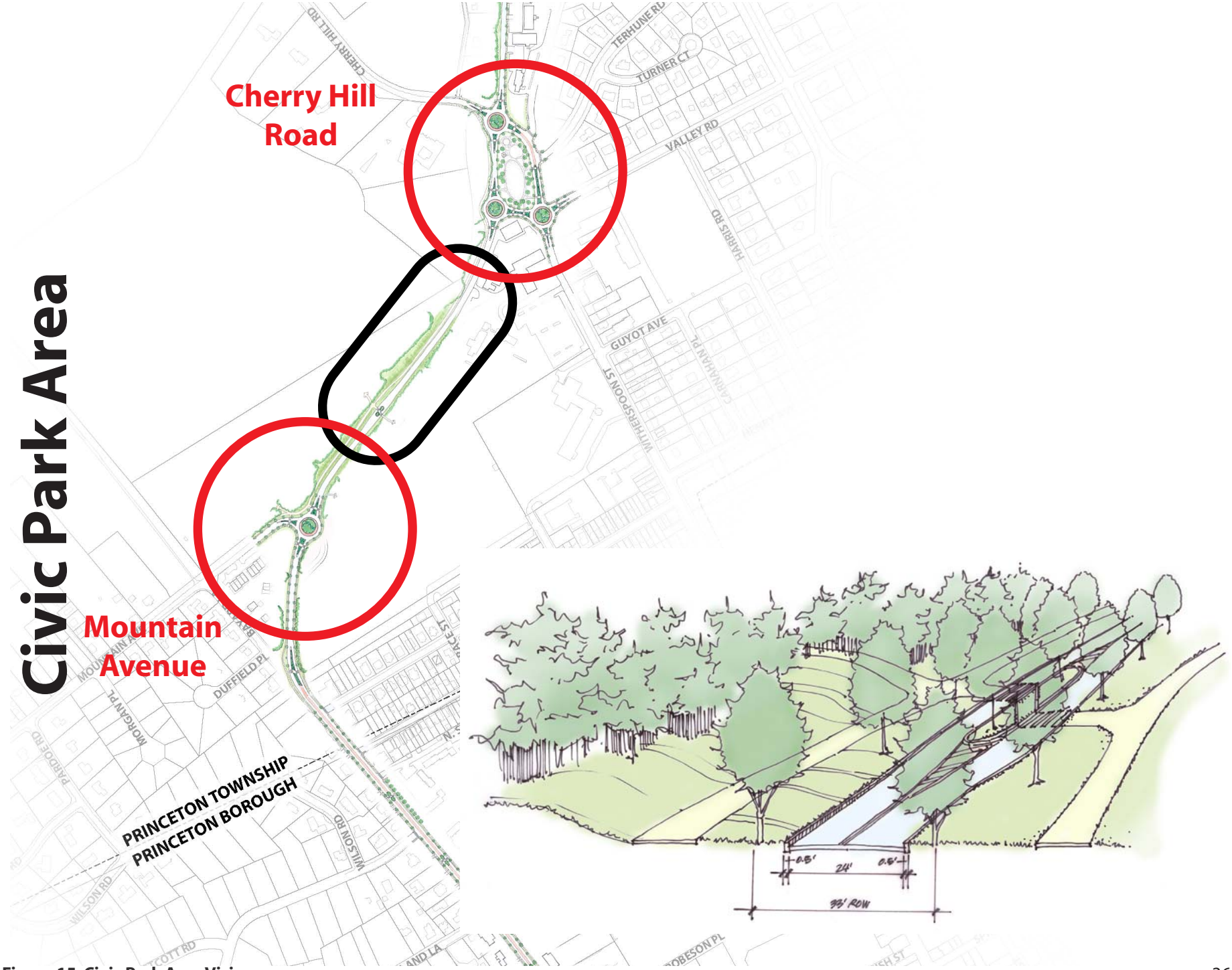


Figure 15: Civic Park Area Vision

Civic Park Area

The Vision Plan proposes replacing the existing jughandle and signalized intersection at the Mountain Avenue intersection with a roundabout. The proposed roundabout would make pedestrian crossings safer and easier, reduce speeding, create additional park land, and improve the intersection's overall aesthetics.

The plan creates for this area a roadway cross-section with a 24 foot curb-to-curb street width. A pedestrian median refuge would be created almost midway between Mountain Avenue and Valley Road where the park berm is at its lowest point, a good place for pedestrians to cross between the "active park" on the west side of Route 206 and the "passive park" along the east side of the road. The median refuge would be coupled with a lateral shift. Raising the roadway elevation through this section would not only highlight the pedestrian crossing and better connect the parks, it would also provide visual interest as it breaks up the visual continuity of the curve in the road; the current configuration encourages speeding.

The signalized intersection at Cherry Hill Road would be replaced with a roundabout, as would the two un-signalized intersections along Valley Road at Route 206 and Witherspoon Street. Mount Lucas Road and Terhune Road would form T-intersections with Witherspoon Street between the proposed roundabouts. Whereas multiple turning restrictions exist today at these intersections, the proposed roundabouts would allow all of the turning movements at each intersection. This configuration would also create a civic space in the large center island.

Figure 16: Mountain Avenue Intersection Improvements

Figure 17: Key Intersection Improvements with New Civic Space

Rural Residential Area

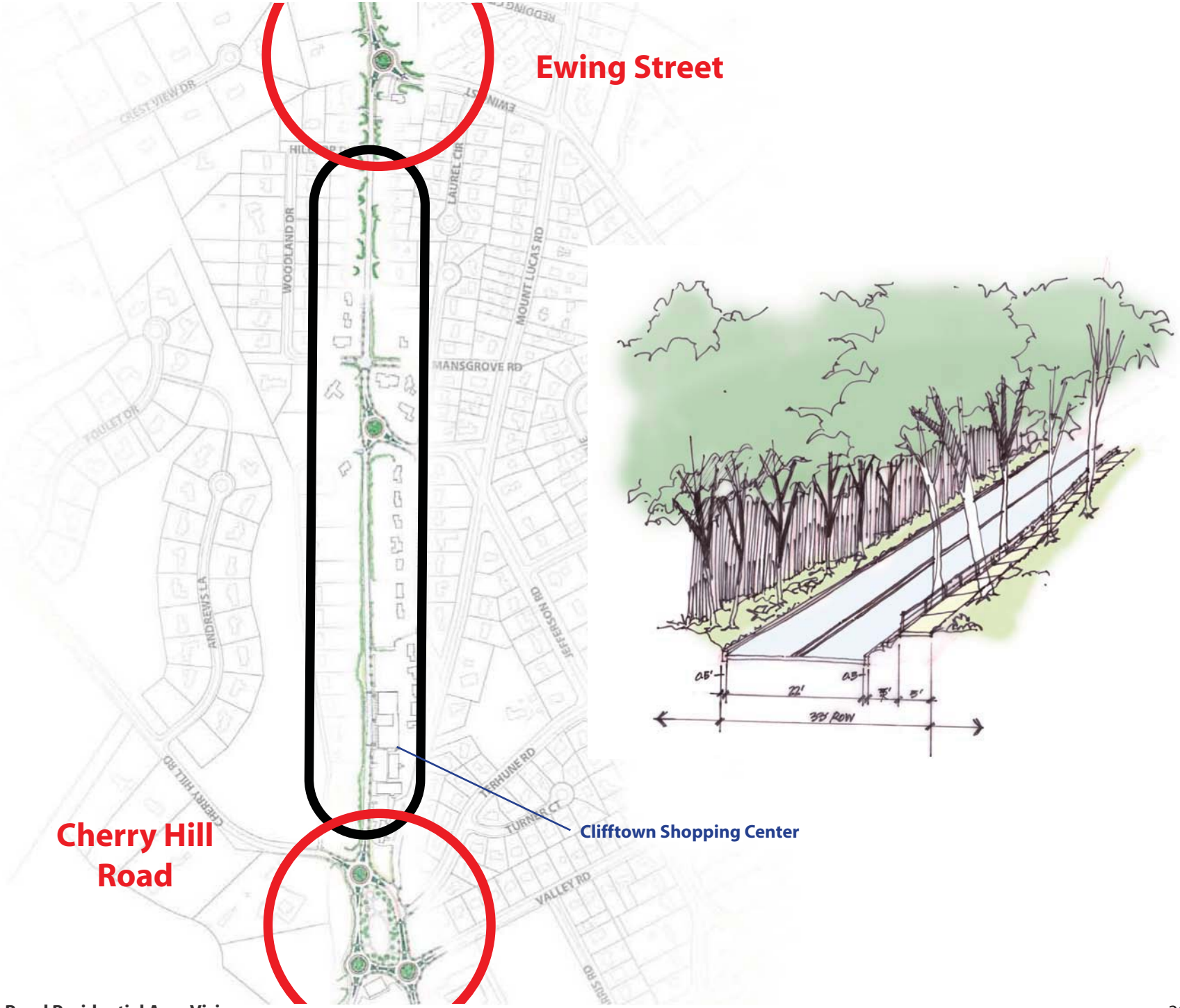


Figure 18: Rural Residential Area Vision

Rural Residential Area

The plan develops a "Rural Residential" cross-section with a curb-to-curb street width of 22 feet and a 5 foot wide sidewalk along one side. The distance between the roadway edge and the sidewalk could vary through this stretch based on site constraints. The main goal in this section is to encourage drivers to slow down by planting more street trees, especially in front of the small commercial strip on the east side of the road.

The asphalt in front of the Clifftown Shopping Center would provide enough room for the street to be shifted laterally towards the businesses. Along with a narrower roadway cross-section, this shift could help calm traffic and improve pedestrian safety. Back-in-angled parking could be used in front of the existing businesses in conjunction with a wider sidewalk, street trees, and façade improvements. With the lateral shift, additional parallel parking can be placed across from the commercial area on the southbound side of Route 206.

The plan provides for a sidewalk system on the Clifftown Shopping Center side of the roadway; this pathway would be integrated into the storefronts. These proposed changes would have the overall effect of pulling Route 206 towards the Clifftown Shopping Center, and in doing so wouldcreate a place that is aesthetically-pleasing and accessible to all modes of transportation.

A roundabout is proposed at the unsignalized intersection of Route 206 and Jefferson Road. Potential traffic calming effects of this roundabout will make it possible to re-open Mansgrove Road to through traffic. Although opening Mansgrove Road is not integral to the functionality of this roundabout, it is generally good policy to keep public streets open because they expand the roadway network and give motorists alternative routes.

A roundabout is proposed at the intersection of Route 206 and Ewing Street. This roundabout would be located just north of the existing intersection. By improving sight distance and slowing traffic, a roundabout would reduce accidents at this location. The plan takes advantage of an existing gas easement to limit the roundabout's impact on private property rights and thereby reduces right-of-way impacts.

Figure 19: Jefferson Road Roundabout

Figure 20: Ewing Street Roundabout

Woodland Area

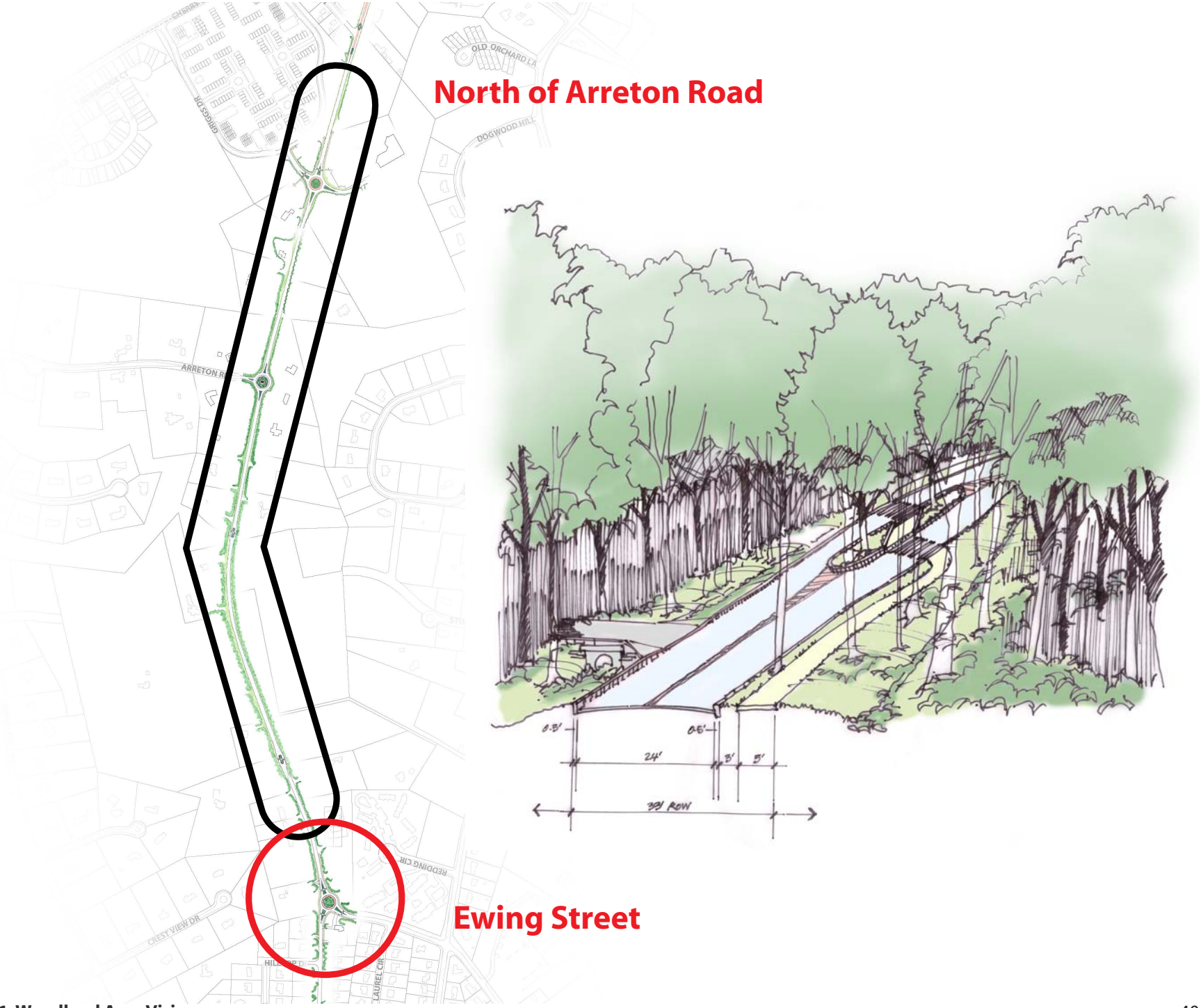


Figure 21: Woodland Area Vision

Woodland Area

The plan proposes for the "Woodland" area a 24 feet wide curb-to-curb cross-section. The area is a candidate for a multi-use path meandering along one or both sides of the road. Typically, the path would be set off from the road, and would conform to the natural terrain and setting of the area. Pedestrian median crossing refuges in this area would be positioned to connect the east and west side systems. The exact location of the refuges has not been suggested here, but they should generally be placed along the straightest segments of Route 206 to deter speeding and maximize pedestrian visibility. A roundabout is proposed at the intersection with Arreton Road as a traffic calming measure.

Figure 22: Pedestrian Crossing Refuge

Figure 23: Arreton Road Roundabout

Northern Commercial Area

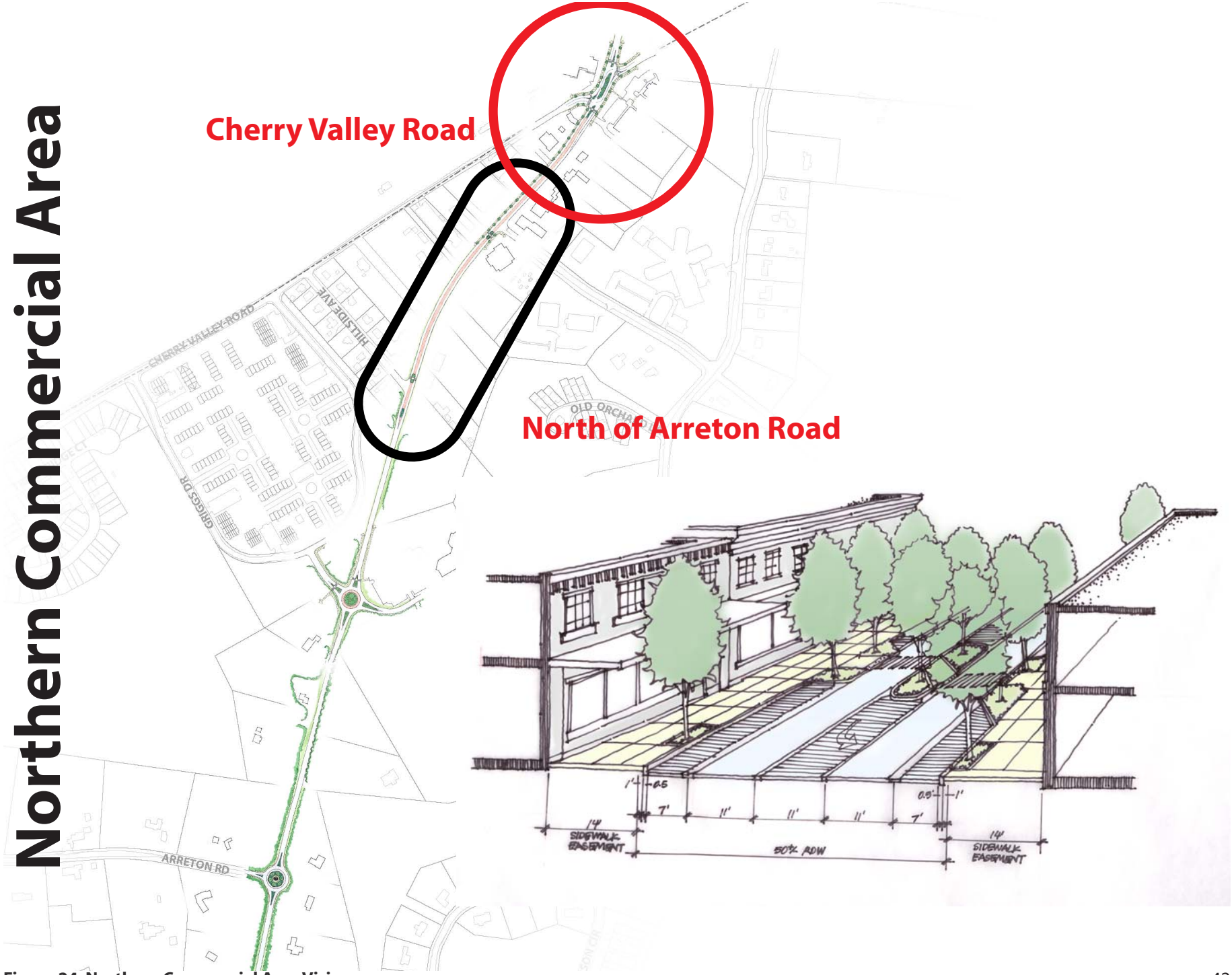


Figure 24: Northern Commercial Area Vision

Northern Commercial Area

The plan proposes a pedestrian median refuge and lateral shift at Hillside Avenue. The cross section for the commercial part of this area is roughly 50 feet wide from curb-to-curb and consists of two travel lanes, a center dual-turn lane, and parallel or back-in-angled parking on both sides. In order to re-create the urban feel of older commercial areas, the plan recommends that zoning setbacks in this area be altered so that buildings can be brought up to the right-of-way line. Pedestrian median refuges should also be placed in the northern commercial area to facilitate crossings.

A roundabout is proposed at the entrance to the Princeton Gateway Office Building along with a new street to the west of Route 206 that connects with Griggs Drive. This new street could give Griggs Farm residents better access to Route 206. The plan includes potential new street network extensions east of and parallel to Route 206 connecting to Herrontown Road. The benefit of these new streets would be to increase the local network and thereby to help distribute trips away from Route 206.

Local officials have taken the initiative to re-configure the Cherry Valley Road intersection and that work is under way. New connecting streets are being built to the north and south of Cherry Valley Road which will provide some necessary turning movements for traffic; these additions to the network in turn will simplify the main intersection. The plan recommends several minor changes to enhance the local plan. They include reconfiguring the single intersection into two single intersections. This change would convert through movements on Cherry Valley into unconflicted left and right turns. Furthermore, the approaches would decrease pedestrian crossing distances and thus increase pedestrian safety. By expanding the intersection in this way, the plan would create a central median civic space and allow for construction of a gateway feature as traffic enters Princeton Township from the north.

Figure 25: Roundabout at Griggs Drive and Princeton Gateway Office Building

Figure 26: Cherry Valley Road Intersection Improvements

Chapter 5: Corridor Analysis

Route 206 is part of a regional system of roadways carrying traffic from the northwestern section of New Jersey to the Route 1 corridor, the city of Trenton and beyond, including a component of the truck traffic connecting from I-287 in Somerset County to I-95 in Mercer County. Many segments of Route 206 south of the Somerville Circle also provides for local circulation and access to community destinations.

Three components of corridor analysis were conducted for the Vision Plan. First, the existing conditions in the study area were analyzed to understand the context and problem conditions within which the Vision Plan elements will operate. Then, the elements of the Vision Plan were analyzed for performance, using the existing conditions as a base. The third component of corridor analysis, corridor context assessment and regional initiatives, was prepared to identify the regional issues which will have a bearing on the developed Vision Plan. As the Vision Plan and its objectives can only be strengthened by pursuing regional action items outside of the Vision Plan corridor, a number of recommendations to support the Vision Plan conclude this chapter.

Existing Conditions

To assess how the Vision Plan would perform, the existing conditions for the Route 206 corridor were first defined using available data from a number of sources, including level of service, expected traffic growth, the NJDOT Management Systems and the NJDOT Desirable Typical Section (DTS).

Route 206 through Princeton Township and Princeton Borough is functionally classified as an urban principal arterial. The functional classification of the route should reflect the function of the roadway now and in the foreseeable future. Classification is based on the character of the traffic served and the degree of land access allowed. Arterials that traverse the state, like Route 206, are intended to serve the regional travel needs of longer distance travelers and will have the highest proportion of long distance users. According to the Federal Highway Administration (FHWA) and the American Association of State Highway Transportation Officials (AASHTO), an arterial "provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control."

Level of Service (LOS)

"Level of service" is a descriptive mechanism which has been developed to indicate how well an intersection performs based on control delay per vehicle. The highest quality of operation with the minimum rate of delay is termed Level of Service A (LOS A). The worst delay condition is LOS F. A more detailed discussion of LOS is included Appendix B on page 105.

The level of service at each major intersection in the study area was analyzed. Table 1 shows existing delay and level of service at each intersection for both the AM and PM peak periods.

The Nassau Street/University Place, Mountain Avenue, and Cherry Hill Road intersections generally perform relatively well, although each has specific problems. Three intersections were particularly problematic. The Route 206/Nassau Street intersection performs very poorly, with very high delay at the eastbound Route 206 approach. The westbound Ewing Street approach performs poorly, with over six minutes of delay as vehicles attempt to enter Route 206. Finally, the Cherry Valley Road intersection is close to failing at every approach.

Existing Traffic and Growth

Available NJDOT and DVRPC Route 206 traffic count data was reviewed for historic traffic growth trends. A site in Princeton Township furnished the most complete information within the study area, with coverage from 2000 to 2005 at a traffic count station located north of Ewing Road. The location captured traffic destined for Princeton and through travel. The data in Table 2 indicates a varied but relatively stable level of traffic. The highest volume recorded was in 2000; the lowest volume occurred in 2004. The DVRPC one-way observation is very close to the 2000 volume data. Table 2 includes 2000 to 2004 data from a station on Route 206 in Montgomery Township north of CR518, which also indicates a varied but relatively stable level of traffic.

In general, two lane rural roads in rolling terrain have a carrying capacity of approximately 22,000 to 25,000 vehicles per day. With this in mind, it is possible that Route 206 has reached its effective service volume. The data in Montgomery Township may also reflect persistent peak period congestion and

Table 1: Existing Level of Service

Intersection	Approach	AM		PM	
		Delay	LOS	Delay	LOS
Route 206 & Route 27	EB (Route 206)	120.9	F	109.9	F
	WB (Nassau Street)	25.2	C	31.8	C
	SB (Route 206)	28.5	C	27.6	C
	Overall	**64.1**	**E**	**56.9**	**E**
Route 27 & University Place	EB (Nassau Street)	14.8	B	15.1	B
	WB (Nassau Street)	3.9	A	6.3	A
	NB (University Place)	42.0	D	39.4	D
	Overall	**17.4**	**B**	**15.6**	**B**
Route 206 & Mountain Avenue	WB (Mountain Avenue)	22.4	C	29.2	C
	NB (Route 206)	19.6	B	9.3	A
	SB (Route 206)	16.9	B	16.8	B
	EB (Mountain Avenue)	56.3	E	44.6	D
	Overall	**24.4**	**C**	**16.5**	**B**
Route 206 & Cherry Hill Road	EB (Cherry Hill Road)	28.0	C	21.3	C
	WB (Cherry Hill Road)	69.0	E	43.2	D
	NB (Route 206)	34.9	C	22.0	C
	SB (Route 206)	29.6	C	27.8	C
	Overall	**36.7**	**D**	**28.0**	**C**
Route 206 & Ewing Street	WB (Ewing Street)	55.2	F	362.6	F
	SB Left (Route 206)	10.4	B	9.4	A
Route 206 & Cherry Valley Road	EB (Cherry Valley Road)	53.3	D	23.5	C
	WB (Cherry Valley Road)	38.8	D	32.5	C
	SB (Route 206)	56.4	E	39.9	D
	NB (Route 206)	29.6	C	79.8	E
	Overall	**44.5**	**D**	**51.6**	**D**

limiting roadway geometry.

From a regional network perspective, traffic growth can also be limited by the adjacent network. Today, Route 206 through the study area is in essence in balance with the adjoining road network. The historic designation of Stockton Street and Nassau Streets serves an important function, as it will preserve both roadways in their current form and constrain growth in traffic from the south. Widening of Route 206 in any length north of Stockton and Nassau Streets would not have a logical terminus and would violate network continuity principles. Any corridor widening of Route 206 based upon traffic growth is not substantiated or recommended for the study area.

Safety Conditions

NJDOT Year 2002 and 2003 crash rate data was analyzed for Route 206 between Stockton Street and Cherry Valley Road. Any segment having an observed crash rate exceeding the statewide average is considered a potential problem location.

Three locations had notable crash statistics in both 2002 and 2003 (See Appendix B, Figures B1 & B2). The highest crash rates in the corridor occurred at the intersection of Route 206 and Nassau Street, which had crash rates almost 400% higher than the 2003 state-wide average. The second highest crash rates were found at the intersection of Route 206 with Ewing Street. The third intersection with high crash rates was Route 206 at Cherry Valley Road. Aside from these three locations, the remaining segments of Route 206 were near or below the state-wide crash rate averages.

NJDOT pedestrian injuries and fatalities data for years 2001 through 2004 was analyzed for the entire stretch of Route 206 through Princeton Borough, and Princeton Township, and at the Nassau Street intersection. Table 3 provides a summary of pedestrian and bicycle accidents between 2001 and 2004, with the locations depicted in Appendix B (Figures B3 & B4). None of the incidents over the four year-period resulted in a fatality.

Over the four-year period, pedestrian crashes occurred along Route 206 near Cherry Valley Road and Mountain Avenue. Multiple incidents occurred at the Paul Robeson and Nassau Street intersections. Pedestrian crashes occurred along

Table 2: Traffic Growth, 2000 - 2004

Location	Year	Count
US 206 just north of Ewing Street (Princeton Township)	2000	23,898
	2001	22,799
	2004	20,987
	2005	*11,707
US 206 between Orchard Road & Opossum Road (Montgomery Township)	2000	16,700
	2001	17,200
	2002	16,900
	2003	17,300
	2004	17,100

Source: NJDOT, DVRPC *One Way

Nassau Street at Mercer Street, Bank Street, and University Place, along with multiple pedestrian crashes at Chambers Street. These crashes can be explained in part by the high level of pedestrian and automobile activity along Nassau Street, in Princeton Borough's historic downtown.

Drainage Conditions

NJDOT conducted Drainage Feasibility Assessments for two locations along the Route 206 corridor. The first study area is located along Route 206 in the vicinity of milepost 55.2. Completed in August of 2005, this study identified flooding and ponding problems across from the Clifftown Center. The Initial Preferred Alternative (IPA) recommended multiple improvements between Cherry Hill Road and Red Hill Road, including construction of new storm sewers, replacement of existing sewers and replacement of two existing culverts at an estimated cost of $1 million. Recommendations from this study should be considered during implementation of the Vision Plan, including the proposed roundabout at Cherry Hill Road and improvements at Clifftown Center.

Completed in April 2001, the second study identified erosion, flooding and icing conditions along Route 206 between mileposts 55.70 (near Ewing Street) and 56.60 (near Arreton Road). The IPA recommended replacement of an existing culvert and installation of embankment protection near Arreton Road at an estimated construction cost of $480,000. NJDOT should consider the Arreton Road recommendations in the Vision Plan during implementation of the drainage improvements.

Vision Plan Performance

The elements of the Vision Plan were then analyzed using the existing conditions and growth data described above as a base. The major intersection elements of the Vision Plan consist of a pair of roundabouts on Nassau Street; a system of three roundabouts in the Route 206, Valley Road and Cherry Hill Road area; five individual roundabouts at Mountain Road, Jefferson Road, Ewing Street, Arreton

Table 3: Pedestrian and Bicycle Accidents 2001-2004

Year	Route 206	NJ 27	Total
2004	1	0	1
2003	0	0	0
2002	6	1	7
2001	1	4	5
Total	**8**	**5**	**13**

Source: NJDOT Crash Records Database

Road and Princeton Gateway/Griggs Drive, and a revised signalized concept at the Route 206 and Cherry Valley/ Princeton Avenue intersection.

To assess the potential performance of these concepts, a capacity analysis was performed to further refine concept scope, and provide assurance that a roundabout is an effective alternative. SIDRA, a program specifically designed to evaluate the capacity and performance of roundabouts, was used for capacity analysis. Along with the program RODEL, these programs are currently used as the standard for capacity analysis and design of roundabouts in the United States. The Highway Capacity Manual (HCM2000) was used in the analysis of the Route 206 and Cherry Valley Road signalized intersection. Traffic volumes and approach lane geometry are input to both intersection and roundabout programs. For roundabouts, the internal diameter of the center island and width of the circulating lane are also parameters. Both analyses analyze performance in terms of average vehicle delay, which is calculated for each approach and as a total. Traffic volumes were based on the data and sources shown in Figures B5-B8 of Appendix B.

As with signals, roundabouts use the same measure of performance, level of service, or LOS. The highest quality of operation with the minimum rate of delay is termed Level of Service A (LOS A), while the highest and worst delay condition is LOS F.

Roundabout Performance

For a single isolated roundabout (Mountain Avenue, Ewing Avenue), existing traffic movement volumes can be transformed to represent the travel pattern through the roundabout. Where multiple intersections are joined to form a system of two or three roundabouts, (the pair of roundabouts on Nassau Street, the system of three roundabouts in the Route 206, Valley Road and Cherry Hill

Road area), the procedure to estimate traffic volumes is more complex. Existing traffic stream volumes are re-routed and re-assigned to the new network. Estimated AM and PM peak period traffic volumes based on the proposed roundabout and intersection configurations are shown in Appendix B Figures B9-B13.

Roundabout operation is related to its size (both inside and outside diameter) and the number of circulating and approach lanes. Generally increasing the diameter or the number of entering and circulating lanes will increase the performance (LOS) under similar volume conditions. Other useful parameters in assessing the expected quality of the design are the anticipated queue length at approach and the saturation ratio. Excessive queue formation is important, in that it is disruptive to adjacent streets and driveways and can cause operational failures at adjacent signals or roundabouts. The saturation ratio is an indication of excess capacity in the design and is useful to understand the effective life of the design and its ability to handle periodic excessive traffic loads.

For all proposed locations in the Vision Plan, the initial roundabout concept used a single lane on approach and for circulating. The single lane roundabout nominal dimension had an inside diameter of 80 feet and a circulating lane of 16 to 20 feet, for a total diameter of between 112 and 120 feet. Initial capacity analysis was performed for this configuration.

The single isolated roundabouts (Ewing Street and Mountain Avenue) are expected to operate at an acceptable LOS A/B for the AM and PM peak periods. By extension, the Jefferson Road, Arreton Road and Princeton Gateway / Griggs Drive locations would also expected to operate acceptably. Although they were not individually analyzed, they are expected to operate better than the Ewing Street and Mountain Avenue locations because Route 206 volumes are generally equivalent, and their side-street traffic volumes are expected to be less. The concept drawings and performance data are shown in Figures B14-B21.

For the complex / multi roundabout concepts, (the roundabouts at University Place - Figure B15, and Witherspoon Street and Valley Road - Figure B18) are expected to operate at an acceptable LOS A/B for the AM and PM peak periods. LOS and queuing problems are expected to occur at Nassau Street, Stockton

Street and Bayard Street and the Cherry Hill Road in the single lane roundabout configuration. Additional approach lanes are potential improvements to achieve both acceptable LOS and reduced queue length conditions. Adding another approach lane on the Nassau and Stockton Street (Figure B14) approaches and an additional approach lane on the Route 206 leg of the Cherry Hill Road (Figure B19) would result in significant reduction in queue length and acceptable performance.

At a corridor level of analysis, the Vision Plan has the potential to improve existing overall performance and level of service on Route 206. Individual element analysis further indicates that a roundabout can be an effective alternative improvement at the locations specified in the Vision Plan. The final configuration, performance and effects, however, can only be determined as the engineering studies on these projects advance.

Signalized Intersection Performance

The proposed dual signal concept with connecting roads for the Route 206 and Cherry Valley/Princeton Avenue intersection performs at LOS B for both the AM and PM peak period. The concept drawing and performance data are shown in Figure B21.

Corridor Context Assessment and Regional Initiatives

Several regional context studies and initiatives by others have a bearing on the Vision Plan and its implementation. Two existing studies provide insight into regional travel patterns and behavior, and a number of regional initiatives support the objectives of the Vision Plan. These are summarized below.

Regional Travel Patterns

Two sources of travel information were used to help understand area regional travel patterns: (1) The Central Jersey Transportation Forum's (CJTF) 2000 East-West Corridor Analysis Study and (2) NJDOT's 1996 Truck Origin and Destination Study of Route 206 in Montgomery Township, Somerset County. These two sources of travel information help to identify the mix of users on Route 206, provide a basis for understanding the user characteristics of Route 206, determine the appropriateness of the current functional classification and explain the current and anticipated role Route 206 (through the Princetons)

serves in the regional network.

CJTF 2000 East-West Corridor Analysis Study

The CJTF is comprised of municipal, county, state officials and regional agencies that convene quarterly to discuss and address issues affecting the region. The early focus of the Forum has been on transportation and land use issues. The Forum determined that east-west access was its highest priority, citing congestion, impacts on local communities and motorists, "hot spots" and concerns about specific improvements.

The 2000 East-West Corridor Analysis Study included a detailed analysis of travel within the three county area, (Mercer, Middlesex and Somerset counties) that forms the core of the Forum area. The Delaware Valley Regional Planning Commission (DVRPC) and the New Jersey Transportation Planning Authority (NJTPA) regional travel models were queried to measure trip activity and patterns across seven major and three minor screenlines. The northern observation (screenline) measured travel on roadways crossing the border between Princeton and Montgomery Townships. The southern observation (screenline) measured travel on roadways crossing the border between Lawrence and Princeton Townships. Highlights of the data from two observations, one north and one south of the plan area, is discussed below.

Northern Screenline

- Approximately 30% of daily trips travel between origins and destinations in Rocky Hill, Montgomery, Princeton Township and Borough and the Route 1 corridor in Mercer County.
- Of the approximate 40% share of trips with one end in the local area, approximately 25% have a trip end in northern Somerset County, 30% have a trip end in Mercer County, Southern or Northern New Jersey.
- Approximately 30% of daily trips are through trips that do not have an origin and destination inside Rocky Hill, Montgomery, Princeton Township and Borough and the Route 1 corridor in Mercer County. Approximately one-half of these trips begin or end in northern Somerset County.
- The through trip component, regional and longer distance travel component, is reduced by approximately one-half to the year 2020. The growth is distributed to trips with internal area trip ends or shorter travel.

- Route 206 is at, or above capacity in both the base (1997) and future year (2020). The volume to capacity ratio (V/C) for the screenline will grow from 0.57 to 0.92. The study predicted the traffic growth would be absorbed by the local roads in the network surrounding Route 206.

Southern Screenline

- Approximately 60% of the daily trips travel between Rocky Hill, Montgomery, Princeton Township and Borough and the balance of Mercer County.
- Another 18% of the daily trips travel between Rocky Hill, Montgomery, Princeton Township and Borough and Pennsylvania and Southern Jersey.
- Approximately 20% are through trips that do not have an origin and destination inside Rocky Hill, Montgomery, Princeton Township and Borough and the Route 1 corridor in Mercer County.
- The screenline in the 1997 base year is approaching capacity at a V/C of 0.95.
- The projected distribution pattern for the year 2020 showed about the same pattern as the base case.

Key to the study was the finding that the construction of the proposed Route 206 Hillsborough Bypass will not change the predicted volume crossing either of the screenlines. The performance of the screenlines in terms of total volume and V/C remain relatively unchanged from the year 2020 analysis without the Hillsborough Bypass.

NJDOT Truck Origin and Destination Study

In July 1996, NJDOT performed a truck origin and destination study of vehicles with three or more axles on Route 206 in Montgomery Township, Somerset County. The study found that significant percentages of truck trips had regional or local origins and destinations:

- 35% of the trucks or 154 trucks had both trip ends in Mercer or Somerset counties.
- Approximately three-quarters of the heavy truck traffic on Route 206 have a local destination. 76% of the trucks had a trip end in either Mercer or Somerset counties.

Related Regional Initiatives

To Princeton Borough and Township, the overall CJTF program has important relevance on decisions to advance regional mobility, manage growth and address network needs. Two forum activity areas important for future performance of the Vision Plan are:

- *The Route 1 Bus Rapid Transit Study* is investigating a high level bus system aimed at providing rapid transit alternatives for the region and modifying auto travel patterns and characteristics. This is a multi-year task.

- *The Route 1 Smart Growth Study*, sponsored by NJDOT, is investigating the regional economy, land use and the transportation framework, with the objective of developing a balanced plan and guide for land use and transportation decision-making. This study is in the first year of a multi-year effort. Major investment in new transportation initiatives, particularly along Route 1, will likely not advance until this study is complete. The study took a collective review of the economic structure and transportation systems, and reconfirmed the poor east-west access conditions in the Princeton area. The Borough and Township should monitor activities, maintain active participation, voice opinions on "east-west" issues and advocate for regional solutions

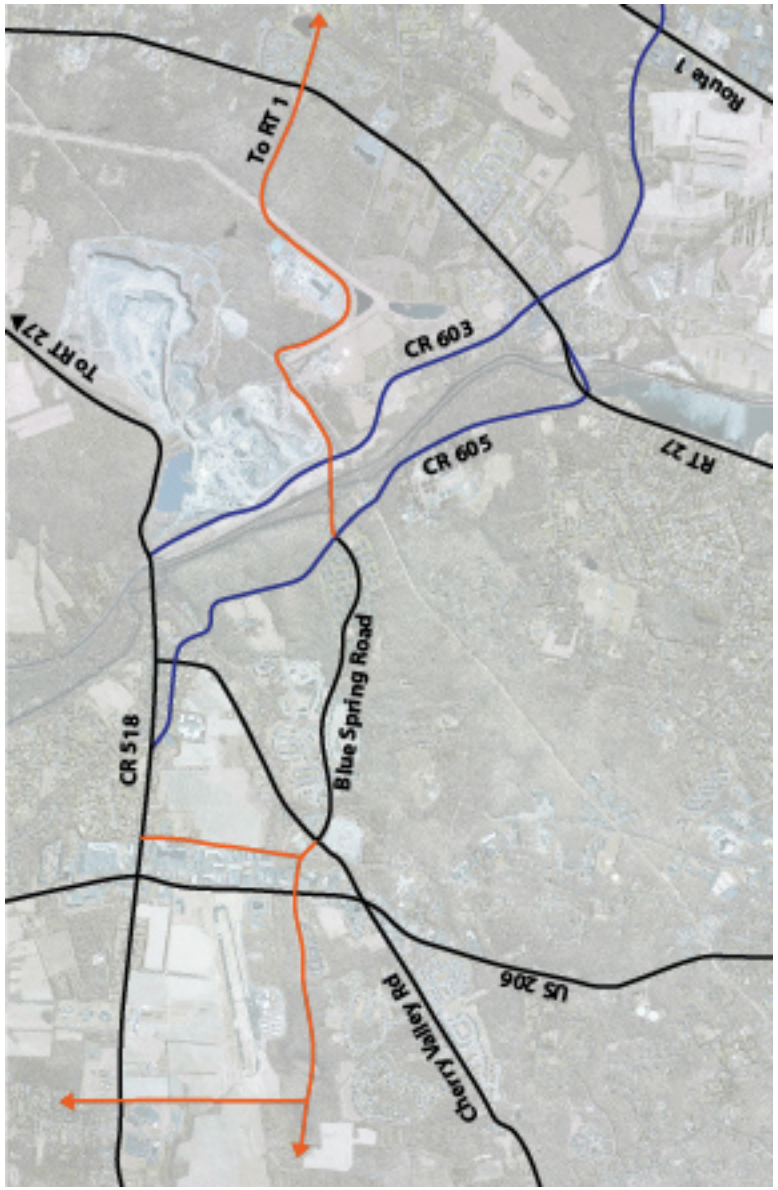
The goals of the Vision Plan will be strengthened by enhancing the regional network. Alternative access to Route 27, Route 1 and additional connections across the Millstone River are important potential components to the regional network. Although outside of Princeton Borough and Township, the figure at right shows potential conceptual opportunities to add network and upgrades that provide regional capacity to Central Jersey.

Regional Actions to Support the Vision Plan

NJDOT Desirable Typical Section

The NJDOT State Highway Access Management Code, Administrative Code

Figure 27: Regional Network Initiatives



Title 16, Chapter 47, establishes a "Desirable Typical Section" (DTS) for every segment of the State highway system. The DTS is the Department's long range plan for highway configuration and is used to determine level of service thresholds for access applications. Within the study area, a DTS has been established for Route 27 and Route 206. Table 4 shows the number of through lanes included in Appendix B of the Access Code. The DTS of any segment of roadway can be changed by Department action.

The number of through lanes assigned to Route 27 and Route 206 in the DTS table are consistent with the present configuration in the Borough and the Vision Plan. However, the DTS cross-section for the segment of Route 206 throughout Princeton Township includes a 14' two-way, left-turn lane. The Vision Plan sutdy indicates that a three lane Route 206 highway is inconsistent with the traffic demand expectations and incompatible with local context and local traffic management objectives. The DTS for this segment should be changed to 2A--Two Lanes with Shoulders--from the current 2C designation.

In addition, Appendix A of the Access Code, Access Classification Matrix Based on Desirable Typical Sections, includes information on Functional Class, Speed and Cross-sectional types. The Vision Plan suggests that the "Cell" classifications reflecting High Speed and Access Level for Route 206 are

Table 4: State Highway Desirable Typical Section By Route & Milepost

RTE	MP	Limits	Desirable Typical Section (DTS)	Functional Classification (FC)
27	0.00 - 1.49	Princeton Borough	Same as Existing Conditions	Urban Principal Arterial
206	54.0 - 54.5	Nassau Street (Route 27) to Borough/Township Boundary	Same as Existing Conditions	Urban Principal Arterial
206	54.5 - 55.8	Borough/Township Boundary to Ewing Street	2 lanes undivided w/o shoulders, w/o 14' 2-way Left-turn Lane	Urban Principal Arterial
206	55.8 - 57.2	Ewing Street to Cherry Valley Road	2 lanes undivided w/o shoulders, w/o 14' 2-way Left-turn Lane	Rural Minor Arterial

Source: Appendix B, State Highway Access Management Code

inconsistent with the Vision Plan and should be researched and changed.

NJDOT Large Truck Network

The U.S. Third Circuit Court of Appeals declared New Jersey's truck access rules unconstitutional in a February 2006 opinion. Under the previous regulations, Route 206 was included in the New Jersey Assess Network, which allowed interstate trucks to exit off the National Network (Interstate System) and onto Route 206 only when seeking reasonable access to food, fuel, repairs or rest. Intrastate trucks having either an origin or destination within New Jersey could use both the National Network and the New Jersey Access Network and thus have access to Route 206.

The NJDOT emergency rules that are in effect until permanent rulemaking leaves the designation of Route 206 and 27 unchanged. Truck traffic patterns and volumes should not change as long as these rules apply. A Classification Count Detail between Arreton Road and Hillside Avenue was performed by the DVRPC on January 11, 2005 to determine the vehicle classifications along northbound Route 206. Of the 11,707 vehicles which passed over the 24 hours period, 214 vehicles (5.9%) were semi-tractor trailers with 4 or more axles. The observed volumes where relatively flat during the early and mid-day period, ranging from 6 to 13 vehicles per hour between the hours of 8 AM to 2 PM. The peak travel period for this group was during a 3 hour period from 8 to 10 AM.

Routine truck traffic data collection and monitoring is necessary to establish benchmarks and trends in truck travel activity. A local truck traffic counting program should be established to monitor volumes. The program would include a single Automatic Traffic Recorder site where quarterly or bi-monthly Automatic Traffic Recorder (ATR) installations would monitor traffic for one week periods.

Recommendations for the Vision Plan

The recommendations in the Vision Plan work within the existing roadway to address needed and local desired changes in a context sensitive manner. A number of factors support this approach:

- There are clear environmental, cultural, historic and land use constraints to effecting major change to Route 206 through the study area.
- Widening of Route 206 in the study area is not supported at a regional planning level. "Destination 2030" Long Range Plan, DVRPC's Long Range Plan for the region (June 23, 2005) does not recommend major capacity improvements for Route 206 within the study area.
- A widening within the study area would not have a logical terminus and would violate network continuity principles.
- A review of existing and projected traffic volumes indicated that any corridor widening of Route 206 in the study area based upon traffic growth is not substantiated.
- There are constraints to the north and south of the study area. A key finding of the CJTF East/West Traffic Study is that the Hillsborough Bypass project does not have a direct influence on traffic in the Route 206 study area.

As a result of all of these factors, facilities other than Route 206 should be examined to supplement network capacity.

Today, Route 206 through the study area is in essence in balance with the adjoining road network. At a corridor level of analysis, the Vision Plan has the potential to improve Route 206's existing overall performance and level of service. Analysis further indicates that a roundabout can be an effective alternative improvement at the locations specified in the Vision Plan. The Plan elements address the need for improvements at critical intersections which are local priorities, such as Ewing Street, and provide safe pedestrian crossing locations.

A number of actions are recommended to advance the objectives of the Vision Plan:

- Functional Classification. Given the constraints to the north and south of the study area, the constraints within the study area and the findings of the Route 206 Hillsborough Bypass Study, Route 206 may well have reached its effective service volume capacity. Redefining the function and classification for Route 206 may be in order.
- A three lane Route 206 highway as currently shown in the NJDOT State

Highway Access Management Code is inconsistent with the traffic demand expectations and incompatible with local context and traffic management objectives of the Vision Plan. The DTS for this segment should be changed to 2A, Two Lanes with Shoulders, from the current 2C.

- Additionally, NJDOT State Highway Access Management Code "Cell" classifications (Appendix A of the Code) reflecting High Speed limits and Access Level for Route 206 are inconsistent with the Plan and should be researched and changed.
- The improvements proposed for the three locations with notable crash statistics should be priorities in the Vision Plan. The highest crash rates in the corridor occurred at the intersection of Route 206 and Nassau Street, which had crash rates almost 400% higher than the 2003 state-wide average. The second highest crash rates were found at the intersection of Route 206 with Ewing Street. The third intersection with high crash rates was Route 206 at Cherry Valley Road.
- The Borough and Township should monitor activities, maintain active participation, voice opinions on "east-west" issues and advocate for regional solutions in the Central Jersey Transportation Forum, and particularly The Route 1 Smart Growth Study.
- With respect to the NJDOT Large Truck Network, a local truck traffic counting program should be established to monitor volumes. The program would include a single Automatic Traffic Recorder site where quarterly or bi-monthly Automatic Traffic Recorder (ATR) installations would monitor traffic for one week periods.
- Recommendations from both NJDOT Drainage Feasibility Assessment Studies should be considered with the proposed roundabout at Cherry Hill Road and improvements at Clifftown Center, and implementation of the roundabout at Arreton Road proposed by the Vision Plan.

Chapter 6: Implementation Plan

Preliminary cost estimates were prepared for the proposed improvements shown in the Vision Plan (See Action Plan on following page). Quantities were calculated for each of the major elements, and then current construction unit costs were applied to determine total costs. An additional contingency percentage was applied to each element as needed for landscaping, utility re-location, maintenance and protection of traffic, and soft costs such as engineering.

Table 5: Action Plan

Actions	Lead	Support	Pipeline	Timeframe	Cost (in Thousands of $)
In-Town Residential Area					**$2,430**
Nassau Street / University Place / Mercer Street Intersections	NJDOT	County	1	M	$1,210
New Street through Seminary	NJDOT		2	L	$195
Sidewalk, Retaining Walls & Pedestrian Refuge Islands	NJDOT		2	S	$1,025
Civic Park Area					**$2,210**
Mountain Avenue Roundabout	NJDOT		1	M	$500
Park Connector Refuge Island	NJDOT		2	M	$45
Cherry Hill Road / Valley Road / Terhune Road Roundabouts	NJDOT		1	M	$1,665
Rural Residential Area					**$1,570**
Clifftown Shopping Center Improvements	LOCAL		n/a	M	$80
Jefferson Road Roundabout	NJDOT		1	L	$510
Ewing Street Roundabout	NJDOT		1	S	$530
Sidewalk & Retaining Wall between Jefferson & Ewing	NJDOT		2	S	$450
Woodlands Area					**$550**
Arreton Road Roundabout	NJDOT		1	L	$190
Multi-Use Trail & Pedestrian Refuge Islands	LOCAL		n/a	L	$360
Northern Commercial Area					**$2380**
Gateway Center Roundabout	NJDOT		1	M	$1,445
Cherry Valley Road Intersection	NJDOT		1	S	$470
Sidewalk & Pedestrian Refuge Islands	NJDOT		2	S	$465
Total					**$8,205**
Other Initiatives					
Desirable Typical Section Update on Route 206	LOCAL	NJDOT		S	
Research/Change Cell Classifications	LOCAL	NJDOT		S	
Monitor 102" / 53' and Double Bottom truck activity on Route 206	LOCAL	NJDOT		S	
Drainage Projects incorporating the Vision Plan	LOCAL	NJDOT		S	
Participate in the Central Jersey Transportation Forum	LOCAL	DVRPC		L	

Appendix A: Public Involvement

1. Advertisements for Workshop 1 and 2
2. Public Attendance - Workshop 1 and 2
3. Comments Received after Workshop 1
4. Comments Received after Workshop 2
5. Press Coverage

Town Meeting on Route 206

Take advantage of a unique opportunity to participate and express your views! Be heard by and learn from world-class traffic consultants as they conduct a design study of Route 206 from Nassau Street to Cherry Valley Road.

Are you concerned?

- About the impact of truck traffic, car traffic, noise and pollution on Bayard Lane and State Road?
- About safely walking, riding a bike or driving along and across these roads in Princeton?
- About the dangers of waiting for the school bus with your children or getting your mail as cars and trucks speed by?
- About safely pulling into and out of your driveway or side streets along Route 206?
- About preserving neighborhoods now divided by State Road and Bayard Lane?

IF SO, NOW IS THE TIME TO MAKE A DIFFERENCE…
COME TO THE TOWN MEETING!

Monday, November 28th at 7:30 pm
Main Meeting Room of the Princeton Township Municipal Building,
400 Witherspoon Street.

If you are unable to attend the meeting on November 28th tune into TV 29 or if you would like to share your concerns please email comments at **cceballos@princeton-township.nj.us** or call Claudia or Cathy at 609/921-7077 to schedule an appointment with the consultants.

Sponsored by Citizens for a Safer Route 206, Princeton Township and Princeton Borough.

The study is made possible by a special grant from the NJDOT.

Two Town Meetings to Improve Bayard Lane/State Road

LAST NOVEMBER MANY PRINCETON RESIDENTS PARTICIPATED IN "PHASE 1," THE NEEDS ASSESSMENT PHASE OF THIS PROJECT, BY DEFINING PROBLEMS ON ROUTE 206. NOW YOUR CONTINUED INPUT IS NEEDED IN "PHASE 2," THE DESIGN PHASE, TO ADDRESS THESE PROBLEMS.

THOSE UNABLE TO PARTICIPATE EARLIER ARE URGED TO JOIN US IN THIS SECOND PHASE: DEVISING A CONSENSUS BASED DESIGN PLAN FOR STATE ROAD/BAYARD LANE.

- **January 9th 7:30 pm:** The consultants will present their findings based on our conversations with them in November. All will have the opportunity to comment, either by speaking or by submitting remarks on cards that will be distributed at the meeting.

- **January 10th and 11th, 10 am to 5 pm**: The consultants will work these two days to accommodate our suggestions into an actual proposal. The public will be able to drop in at the Community Room in Township Hall to view their progress and to make brief comments, but interaction time will be limited. There are real time constraints to produce the proposal in 2 days.

- **January 12th 7:30 pm:** The consultants will present their conceptual vision plan for the road and we will again respond. The process will not end here however. We expect the community will continue to work together to refine this proposal and develop our plan for the road.

All meetings will be held at the **Princeton Township Municipal Building** at 400 Witherspoon Street. The meetings will also be televised on TV 29 for those who cannot attend.

If you have any questions or wish to email comments: **cceballos @princeton-township.nj.us** or Citizens for a Safer Route 206 at **rte206@yahoo.com**; or call Claudia or Cathy at 609/921-7077.

Sponsored by Citizens for a Safer Route 206, Princeton Township and Princeton Borough.
The study is made possible by a special grant from NJDOT.

A2: Public Attendance - Workshop 1 and 2

Public Information (Session #1) November 28, 2005		Attendees
1	Princeton Township Citizen	67
2	Princeton Borough Citizen	29
3	Princeton Township Elected Official	2
4	Princeton Borough Elected Official	1
5	Princeton Township Staff	1
6	Lawrence Township Elected Official	1
7	Press	2
8	Non-Princeton Resident	4
9	Princeton Future (local citizen planning group)	0
10	Transportation & Traffic Committee (Borough citizen advisory group)	1
11	Sidewalk & Bicycle Advisory Committee - SBAC (Township citizen advisory group)	0
12	Princeton First Aid Squad (EMS)	0
13	Princeton Township Commercial Property Owner/ Merchant	2
14	Princeton Regional Planning Board	1
15	Princeton Regional Planning Board Staff	1
16	Princeton University Representative	2
17	Princeton Borough Police	1
18	Delaware Valley Regional Planning Commission (DVRPC)	0
19	Princeton Township Historic Preservation Commission Staff	1
TOTAL		**116**

Public Information (Session #2) January 9, 2006		Attendees
1	Princeton Township Citizen	47
2	Princeton Borough Citizen	13
3	Princeton Township Elected Official	3
4	Princeton Borough Elected Official	2
5	Princeton Township Staff	1
6	Lawrence Township Elected Official	0
7	Press	2
8	Non-Princeton Resident	1
9	Princeton Future (local citizen planning group)	1
10	Transportation & Traffic Committee (Borough citizen advisory group)	2
11	Sidewalk & Bicycle Advisory Committee - SBAC (Township citizen advisory group)	2
12	Princeton First Aid Squad (EMS)	0
13	Princeton Township Commercial Property Owner/ Merchant	1
14	Princeton Regional Planning Board	2
15	Princeton Regional Planning Board Staff	1
16	Princeton University Representative	0
17	Princeton Borough Police	0
18	Delaware Valley Regional Planning Commission (DVRPC)	1
19	Princeton Township Historic Preservation Commission Staff	0
TOTAL		**79**

Public Information (Session #3) January 12, 2006		Attendees
1	Princeton Township Citizen	45
2	Princeton Borough Citizen	14
3	Princeton Township Elected Official	2
4	Princeton Borough Elected Official	3
5	Princeton Township Staff	2
6	Lawrence Township Elected Official	0
7	Press	2
8	Non-Princeton Resident	3
9	Princeton Future (local citizen planning group)	1
10	Transportation & Traffic Committee (Borough citizen advisory group)	3
11	Sidewalk & Bicycle Advisory Committee - SBAC (Township citizen advisory group)	2
12	Princeton First Aid Squad (EMS)	1
13	Princeton Township Commercial Property Owner/ Merchant	1
14	Princeton Regional Planning Board	1
15	Princeton Regional Planning Board Staff	1
16	Princeton University Representative	1
17	Princeton Borough Police	0
18	Delaware Valley Regional Planning Commission (DVRPC)	1
19	Princeton Township Historic Preservation Commission Staff	0
TOTAL		**83**

A3: Comments Received after Workshop 1

Route 206 Problems, Issues, and Comments

Please find a short summary of some of the 206 issues from my point of view.
Thx
RW roberto.weinmann@bms.com

1] One of the most important issues is that Route 206 has been elected by the trucking industry as the shortcut to save 25 miles from rt 287 to south 95 and the corresponding turnpike tolls on their way to Washington/Philadelphia and points south [or North, same]. Truck traffic during regular business hours is not the major problem, but starting Friday and all day and night until Monday early AM, Rt 206 is used as a passage way south or north, mostly by out of state or out of country [Canadian] trucks. In addition to the issues of big trucks on small roads, there is down shifting on downhills, almost impossible turns at 206 and Nassau, etc. Noise, pollution of trucks and cars are a significant problem.
2] Almost impossible to pull in and out of my driveway on Rt 206 [Bayard]. Also almost impossible to cross 206 from Cleveland by car. From my house it is also a very big issue to cross the road [206] to the other side where there are safe sidewalks to get into town. No sidewalk on my side of the street. Rt 206 divides the neighborhood in two. In addition, the intensity and synchronization of lights at Hodge and Nassau result in cars accumulation in front of my driveway at morning and afternoon rush times.
3] It is impossible to ride a bike on 206 without endangering your life.
4] The light at 206 and Nassau does not allow right turn on red from Nassau. However, during this red light , 206 vehicles going east have a green and turn left into Nassau. If it was allowed to right turn from Nassau, then a time could be set on the light to allow pedestrians crossing 206, which even at the light, is almost impossible.

Dear Sirs,

My son and I are so thankful for the LHT . He runs while I bike ride and it is great to not have the fear of narror roads and oncomimg traffic to spoil the enjoyment. There is no better way I feel to spend my tax dollars than to provide outdoor opportunities for recreation that are safe and purposeful. Please do all that is possible to improve the safety of bikers, joggers and walkers on the 206 corridor between Lawrenceville and Princeton. It will be a legacy for our grandchildren to enjoy just as WashinQgton Crossing's open space is for us.

Sincerely,
Sylvia Kocses

To whom it may concern,
I am pleased to learned that there will be a dicussion on creating more viable bike routes. I will make every effort to attend the meeting but in case work doesn't permit I want to voice my opinion now.
My job brought me into this area 3 years ago and after a year I reluctently bought a car. Most of what I do could very easily be done on bike but the roads are too unsafe. For many, bikes are a viable and preferable way for most travel. Not only because of the environmental benefits (noise, pollution, etc) but also because one sees the world very differently and it feels good. I currently live in the village of Lawrenceville but have business in Princeton several times a week. This is a trip I could easily and willingly do by bike if only it were safe. I could easily ride to Carnegie Center if the only safe way to connect to the towpath was shortened. (now it means crossing Lawrenceville pkrep, riding down Lewisville Rd, down Meadow Rd, accross a field, and down a connecting path to the towpath. It takes longer to get to the towpath than it does to get to Carnegie Center once I'm on the towpath. I've heard all kinds of reports that paths can't be built

because there needs to be 2 lanes of ashphalt. A great example of a good bike path is the one that connects from the field at Brearly House to the towpath. It is several feet wide and covered in small stone (someone told me that it is crushed lava?).
Most serious bikers have rain suits and winter bike clothes. There is only a small portion of the year (ice) when biking is not fesible. The benefit to individuals and community are enormous: air quality, pollution, noise, parking, highway costs, fitness, knowing one's area, meeting people and a sense of community, using less fossil fuel, etc.
Michele Carrier

--
Michèle Carrier

Hi,

I just want to say I fully support any initiatives to expand bike access/paths. It is my hope that bikes will be seen not only as a recreational tool, but as a legitimate means of transportation to and from work etc....

Unfortunately i can't attend the meeting...

Gordon lewis

Unfortunately I will be out of town for several weeks--but please inform them of my request. Thank you. Yvonne

In a message dated 11/21/05 12:40:30 P.M. Eastern Standard Time, cceballos@princeton-township.nj.us writes:

YBLEIMAN@aol.com writes:

I wish to include my voice in requesting a pedestrian crosswalk marking on CRT. 206 at the Westcott road intersection. I frequently visit friends (by foot) in Stanworth and crossing anywhere on 206 in that area is impossible! Cars need to be aware that they "could/should share the road" and have appropriate crossing intersections. Thank you.
Yvonne F. Bleiman

1/3/2006
We agree with Holly that the noise problem, here is significant (due to trucks, Fire, Police, Rescue squad transports to nearby hospital, etc.). In fact there are many evenings/nightimes that one of us (myself, wife, daughters) are awaken because of the excess noise (often the loud trucks on 206 or sirens). We are hoping that there will be a fair distrubution of noise pollution in Princeton Township and that it won't unfairly be localized to our segment of town.

Chris and Faith Kotsen

12/28/2005

Garlie A. Forehand

I understand there has been some confusion about my identity as sender of this email. I have lived at 77 Red Hill Road since 1983.

Thank you for the work being done to calm traffic on State Road and other parts of Route 206. Thanks also for your willingness to listen to community views.

I understand that there is consideration of roundabouts on State Road in the vicinity of Valley, Terhune, and Cherry Hill Roads. I am concerned about the effect of a roundabout handling traffic from Cherry Hill Road. As it is now, there are frequent backups in both

directions on Cherry Hill and Mount Lucas. If traffic has to enter the roundabout one vehicle at a time, yielding to traffic in the roundabout, this could cause serious traffic snarls. In addition, there are now right-turn lanes in both directions. As I understand roundabouts, right-turning vehicles would take their turns with crossing vehicles, which would cause additional backups.

I can't envision how a roundabout would affect traffic at Valley and Terhune. If there were a roundabout serving those two streets but not Cherry Hill, there would be an intersection and a roundabout very close to one another. Vehicles on side streets would have to compete for space with the 206 traffic, especially with long trucks.

Claudia's Compilation of RT. 206 Comments before 12/7/2005

THE FOLLOWING ARE EMAILS RECEIVED BY THIS OFFICE REGARDING RT 206.

December 7, 2005
I am a pedestrian who lives in Stanworth Drive. I walk often along Bayard Lane. When it's rainy, the puddles along the street are huge, especially next to the Y. Not only is it difficult to jump over them, but cars often splash filthy water when they pass by, and it's almost impossible to escape.

Rachel Simon

December 2, 2005
We would like to inform NJDOT's consultants that Princeton University has recently embarked on a two-year Campus Planning effort that should be completed by Fall 2007. We will be studying traffic and transportation issues as part of the Campus Plan and would be interested in sharing the data that is being collected for the study, including pedestrian counts, traffic counts, percentage of trucks, and the origins and destinations of traffic. Since the University currently owns property with housing units in the study area and has recently purchased additional adjacent property, the Merwick site, we would like to have further dialogue with NJDOT's consultants. as our plans evolve. Please let me know the appropriate contact at DOT, so we can continue the conversation. Many thanks for the excellent presentation on Monday night. As you can tell, we have a community that is passionately committed to improving the quality of life along the Route 206 corridor.

Pam Hersh
Director
Community and State Affairs, Princeton University

I enjoyed the public presentation provided on Monday evening. Since I have a lot of experience in this corridor and the region, I would like to offer the following observations:

Regional Issues:

Mr Lockwood will quickly discover that there are not regional bypass options for Route 206. •

The State Road corridor has been an important regional roadway since at least the time of the Revolutionary War when soldiers from the Battles of Trenton and Princeton used it to escape to Morristown.
• Most of the trucks and cars using 206 have no good alternative to 206-- if there is one available, it is being used -- for example Princeton Pike, Great Road, etc
• While the Princetons may support the concept of using Province Line Road and Amwell Road as a Princeton bypass, that would be strongly opposed in Lawrence and Montgomery Townships.

• Many of us would like trucks to use NJ 31 instead of US 206, but folks in East Amwell and Hopewell are certainly opposed to that option.
• Although there may be one or two trucks a day using 206 to avoid the tolls on the Turnpike, in general trucks that can use the turnpike do use it. How else can one explain the fact that the Turnpike has some of the highest truck percentages of any highway in the state. The cost of time using backroads in western NJ is substantially greater than the tolls on 206; truckers who must travel way out of their way to reach the turnpike however will want to use 206.

I would like to suggest a radical alternative for consideration.
• Construct a toll financed, truck only road adjacent to the old Reading freight rail line between I-287 in Bridgewater and I-95 in Ewing, or perhaps only as far as the proposed 206 bypass in Hillsborough from which the bypass would be used to reach 287.
• Provide berms or noise barriers to control noise and require a 45 MPH speed limit.
• Provide a cut-and-cover tunnel through Hopewell Borough
• Initially construct a two lane road with some at grade crossings, similar to the Earle Ammunition roadway in Momouth County. Eventually all crossings would b grade separated and a parallel roadway constructed on the opposite side of the roadway to provide a four lane facility.
• Since only trucks would be allowed to use this road, it would have adequate capacity.
• To reduce operational costs and to restrict access, the road could be operated to require use of E-Z Pass, and E-Z Pass would be used to assure that only authorized trucks and not cars are using the roadway.

Without this type of outside the box solution, there can be no solution to the truck problem on US 206 -- trucks are using the highway because they have no adequate alternative route.

Local Issues:
State Road

State Road from Cherry Hill Road to the county line was constructed within an inadequate 50' right-of-way during the early 20th century before folks understood how to build highways.

From a land planning perspective, the Bayard Lane section of 206 is in Transect 4. State Road from the borough line to Cherry Hill Road is in Transect 3 and is well managed. The section over the Princeton Prong should be treated as a Transect 2 road -- allow higher speeds and manage the adjoining lands to maintain a semi-rural appearance, keeping houses set back from the highway or, to the maximum extent possible, use alternative roads from frontage.

After WWII some houses were constructed along the road in this Transect 2 section that are almost unlivable today. I strongly urge the Princetons and NJDOT to consider acquistion of these homes with narrow lots, limited frontage and direct access onto 206 or else the construction of a parallel access road to serve these homes.

I also recommend that NJDOT and the Princetons consider modest widening of the roadway, consistent with its rural character by providing a 34' paved surface marked with 11' travel lanes and 6' shoulders, similar to the highway between Lawrenceville and the Stony Brook, with additional widening to 46' for left turn lanes at intersections. A continuous center turn lane should be provided from in the commercial section at the north end of the township, with a raised landscaped median installed where the turn

Over the ridge, instead of sideawlks provide a meadering trail on each side of the roadway locaed within easements on private property where necessary.

Consider reconstructing the reverse curve section between Mountain Avenue and Cherry Valley Road by providing a raised landscaped median separating 17' wide roadways on either side marked with 12' travel lane and 5' bike lane. Provide a mid-block pedestrian linkage between North and South Community Parks in the tangent section

linking the two curves near the tennis courts

Bayard Lane
Construct a continuous sidewalk on the west side of the street where it is currently missing.

Rebuild the sidewalk on the east side to better comply with ADA requirements

There is an old section of Bayard Lane that is now a cul-de-sac that intersects Mountain Avenue west of the 206 interchange. Consider constructing a multi-use trail from the end of the cul-de-sac through the adjoining properties to Wilson Road. This would provide residents of the western section of Princton Borough with improved pedestrian and bike accesss the recreational facilities in South Community Park.

Charles Carmalt
Transportation Planner

Dear Ms. Ceballos,

Would you kindly transmit the following remark concerning the current state of Route 206?

> The overwhelmingly most important issue concerning Route 206 is the disruptive and incongruous presence of huge trucks, both day and night. The situation will not be improved unless their frequency can be drastically curtailed. If I've understood correctly, truck drivers take 206 in order to avoid highway tolls. Perhaps there would be some way to have the tolls reduced on the relevant stretch of highway? Otherwise, it might help to considerably narrow 206, introduce curves, speed bumps and anything else that would render it unattractive to truck thru-traffic. Of course, the idea solution would be a by-pass, perhaps through Route 31. Thanks for your attention.

- D. O.

To whom it may concern,

I am terribly concerned with the lack of pedestrian- and bike- friendly right-of-ways on Rt. 206. I live on Hillside Avenue, just off 206, on the northern part of town. There is no safe way for me to bike or walk into town. This is very disappointing to me.

I am mostly interested in seeing crosswalks on 206 near the Princeton-Montgomery border and a safe bike lane on 206.

We also have had numerous car accidents in just the past year at the intersection of Hillside Ave, Rt. 206, and the entrance to a medical complex opposite Hillside. It is very dangerous idling on 206, facing north, waiting to turn left onto Hillside Ave. I fear that I am going to be rear-ended everytime I make that turn.

Thank you for your time and consideration in this matter.
Janelle Wilkinson

I was unable to attend the meeting at the Township Municipal Buiding last night, but I do want to join in the chorus of voices raising concerns about the noise and danger of traffic on Route 206 in our neighborhood. My family has been in Princeton for over 30 years, and the changes in traffic have been shocking. I would not even ride a bicycle here anymore. Route 206 has becoming particularly dangerous and noisy. We live one street over, on Laurel Circle, and if it as bad as it is for us, I can scarcely imagine how bad it is for those living directly on the road. I would add to the list of concerns drainage problems, as well.

So much has been paved over that the highway becomes like a river in heavy downpours, which only adds to the danger. The road should not be widened. Use of it should be put under heavier constraints!

Please keep me on any mailing lists going out to residents. If t here are meetings in the future, my husband or I will try to come.

Sincerely,
Leslie, Stuart, and Benjamin Mitchner

Hi,

I'm a Princeton resident, with a house on Bayard. I attended the meeting Monday evening, but would be glad for the opportunity to learn a bit more about the possibilities for 206. I understand that the consultancy that the township has engaged has slots to meet residents Wednesday and Thursday, for most of the day, and that appointments, while not required, are advised. Are any slots available from 10-2 either day? If so, please let me know, and I'll be there.

Nicholas R. Karp

I am very concerned about the current and future safety of Route 206 in Princeton, specifically the portions known as Bayard Lane and State Road. I live on a small street off of Bayard Lane known as Greenholm Circle. Current conditions make it near impossible at times to turn left or right onto Bayard Lane from Greenholm. Walking or bicycling is also risky business. Fast moving semi-tractor trailers do not belong on the streets of this neighborhood as they are too large to negotiate turns and are often forced to jump curbs to complete turns which compromises already congested traffic conditions while also jeopardizing the safety of pedestrians and cyclists.

Although I am unable to attend the meeting on November 29 I am very interested in participating in any future meetings regarding the study that is being conducted by NJDOT. Please include me in any future correspondence or e-mail loops that are generated.

Thank you for your time and consideration.

Denise Comsudis

Dear Mr. or Ms. C. Ceballos:
I cannot attend the meeting because I have a class this Monday evening. I would like to put in my two cents though. One of the things that keeps me from riding my bike around town more often is that several of the main roads are completely bike unfriendly. Rte. 206 is one of the worst, especially at peak hours. New Jersey drivers are not famous for their awareness and courtesy, so if there is anything the boro or township can do to make the roads more bike friendly I would not only appreciate it, but use Amy bike more often, and that would mean one less Jersey driver on the road, which is a good thing.
I believe that more people would be inclined to ride bikes around if the roads were safer. I moved here in the mid '80s, and several years after I arrived, a Princeton professor was killed in a bike accident. That convinced me that unless I was riding in broad daylight on a weekend, I was not safe on a bike. Making specific bike paths will help convince everyone that this area is bike friendly. Look at Davis California, and Irvine California -- they have bike lanes all over the place. It adds to the qualiAty of life when you give a transportation option, and you reduce traffic.
And yes, I support the Lawrence Hopewell Trail. Take care, and thank you for reading my opinion.

Noemi de la Puente

206 Pedestrian Barriers:

1. Crossing between Nassau Street and the Monument Drive where Bayard Lane begins. Pedestrians do not have a walking period between light changes. Motorists heading north onto Bayard from Stockton, after the green arrow, are busy avoiding oncoming traffic from Nassau Street heading south to 206 (or turning north to 206) and have difficulty simultaneously monitoring the pedestrian crosswalk. In addition, the left front roof pillar of a typical motor vehicle interferes with the line of sight to pedestrians on the crosswalk.
2. The Nassau Street/Monument Drive locus is one end of the "downtown" area of Princeton and is a gateway into a pedestrian area but there is little that connotes an entrance or that is welcoming to pedestrians, or that conveys a pedestrian friendly "frame of mind" to visitors and local residents alike. Crosswalks are poorly marked and easily ignored by motorists.
3. Unmarked crossing at Westcott Road… a problem for folks walking between the Westcott/Wilson Road neighborhood and the downtown. This is especially troublesome since Westcott is a collector for a sizable neighborhood. It is also troublesome because Princeton University housing for senior academic visitors-in-residence (Stanworth) is directly opposite Westcott's intersection with 206, and Stanworth residents use Westcott as an entrance for neighborhood strolls. In addition, a break in 206 traffic for both lane directions is very infrequent at many times during the day and especially in the morning from 7:30 to 9:00 am. The speeds of northbound motorists heading downhill are often over the 30 mph limit.
4. Unmarked crossing at Cleveland Lane… similar to Westcott although the problem is smaller in scale (but may become a more significant problem in the future if higher density housing is built on the site where Princeton Hospital currently has its rehabilitation facility (Merwick)… it looks like Princeton University will purchase this property and do exactly that).
5. Crossing at Birch Avenue. Pedestrians must cross similar traffic as at Westcott but motorists heading south around the bend just north of Birch are often speeding and not seen until the last second (blind curve). (Also, suggest you discuss with Princeton Township planning staff what the intentions are for the future location of the Emergency Rescue Squad. One site that has been mentioned is directly opposite where Birch Avenue intersects with 206. Another site mentioned is the township's garage opposite the police entrance to Township Hall. Selection of either of these sites would impact the design of and traffic on 206.)
6. Crossing at Mountain Road. Pedestrians heading east off of Mountain conflict with right turning southbound motorists who are looking for cars from the jug-handle on the left instead of pedestrians on their right. Major township recreational facilities lie on either side of 206 here, so pedestrian access is of particular concern.
7. Crossing at Cherry Hill Road. Pedestrians heading east on the sidewalk on Cherry Hill Road have no sidewalk opposite 206 to cross to. They must first cross Cherry Hill Road (three lanes) and then 206 (three lanes) and avoid right turning motorists in the process. Crossing is not well marked on 206. This crossing singularly connects a sizable neighborhood to schools, the municipal complex, and the downtown, as well as a neighborhood mini-mall and doctors' offices just north of the intersection along or nearby to 206.
8. Crossing 206 from homes on the west side of 206 between Jefferson and Ewing. Motorists seldom obey the speed limit in either direction with nary a break in traffic during rush hour… heavy trucks intensify the problem at all hours.
9. Griggs Farm neighborhood effectively cut-off from Princeton. There is no embrace of 206. There is no safe connection to the businesses along the tree-less stretch just north of Griggs Farm, and no connection to the path that begins at the CVS on the corner of Cherry Valley Road. The path continues on into Princeton through a corner of Montgomery Township and onto Mt. Lucas Road.
10. We suggest you contact Princeton Regional Schools to ask about 206 as a barrier which causes students to be bused even though the students may live close enough to walk to school.

206 Bicyclist Barriers (problems crossing 206):

1. Safely navigating the Nassau St./Bayard Ln./206 intersection from

any direction. On bike, forced to take entire lane when going straight or turning (from any direction) to prevent cars from squeezing you out. Some turning scenarios place you in the middle of the road and waiting while cars go by on each side.
2. Left turns onto 206 southbound from North and South Stanworth Drives, Leigh Avenue, and Birch Avenue… a big problem for bicyclists trying to cross 206 and onto Westcott for points south and west. They are forced to somehow navigate 206 for at least one block. From Birch, this includes avoiding turning and entering cars into the gas stations.
3. Left turns for Bicyclists heading south on 206 at Ewing and Jefferson. Traffic moving beyond the speed limit against them and from behind.
4. Left turns for Bicyclists heading north on 206 at Hillside to cross over to Herontown and vise-versa. This is a connection that brings bicyclists from the Hillside/Griggs Farm neighborhood over to the path along Mt. Lucas.

206 Motorists Barriers:
1. Left onto southbound 206 from Herrontown Road… related to Bicyclist Barrier #4.
2. Left onto northbound 206 from Hillside… related to Bicyclist Barrier #4.
3. Southbound left onto Ewing… motorists come over the hill and come upon the junction too quickly… related to Bicyclist Barrier #3.
4. Southbound left onto Terhune… cars back up, no turn lane.
5. Left from Birch Ave., Leigh Ave., and the Stanworth Drives onto 206 southbound… similar to pedestrian crossing problem and bicycle left turn problem… Pedestrian Barrier #5 and Bicyclist Barrier #2.
6. Northbound left from Westcott… similar to pedestrian problem… Pedestrian Barrier #3
7. Northbound left from Cleveland… similar to Wescott
8. Right turn for large trucks heading south from Bayard to Stockton. They are forced to make a wide right to avoid the curb due to the tight radius. They usually veer into the oncoming area of the intersection. In addition, they often make the turn at the end of the light sequence and veer into the oncoming lane of left-turning motorist/bicyclists. The northbound left-turning traffic must wait for the truck and therefore the green arrow sequence ends for them before they can get started and causes conflict with motorists heading onto Stockton from Nassau and pedestrians crossing Bayard Lane. Related to Pedestrian Barrier #1 and 2

General Problems Along 206:
1. Bicyclists heading north or south along the Bayard Lane section of 206 must share the narrow 10-foot lanes, which are vertically curbed (they are not sloped to allow a bicyclist to travel close to the curb). Motorists (including many large trucks) frequently travel over the speed limit. Sewer grates must be avoided, further narrowing the effective travel lane. Vehicles follow bicyclists too closely. Conflict results from a fight for the road.
2. In the section from Nassau to Hodge, pedestrians are afforded adequate sidewalks but bicyclists are forced to either share the road (with frequent bumper to bumper traffic) or share the sidewalk. Speeds are often lower in this section because of this but can be over the limit in non-busy periods.
3. The section from Hodge to Birch serves pedestrians on only one side. This section has no provision for bicyclists… sharing the lane is inappropriate for the speeds and volume. Northbound sidewalk along Bayard Lane between Hodge and North Stanworth Drive is well above the roadway grade… the grass median forms a steep incline. There is no sidewalk for pedestrians heading south from Westcott Road to Cleveland Lane, and on to Hodge Road. The path along Bayard from Westcott Road to Birch on the west side of 206 is narrow, slanting, and in poor condition.
4. The section of 206 from Birch Avenue to Cherry Hill Road does have a few pedestrian facilities and has shoulders in most locations for bicyclists. Paths around Community Park South connect with 206 close to Birch Avenue and at Mountain Avenue, but do not continue north to Valley Road (by the police station and municipal building). There is no northbound pedestrian route from Community Park South to Cherry Hill Road along the east side of 206.
5. Pedestrians or bicyclists living along, or wishing to use, the entire

section of 206 north of Cherry Hill Road find little in the way of provisions along the roadway, shoulder treatments are inconsistent. This entire section is designed exclusively for motor vehicles. A glaring problem is the lack of a pedestrian/bicyclist connection north of Cherry Hill Road to the shops and stores (mini-mall) and professional offices just north of Cherry Hill Road. The shoulders have been eliminated north of Cherry Hill Road for a left-turn lane, which leaves no room for bicyclists, and there are no sidewalks. Related to Pedestrian Barrier #7. Another glaring problem is the lack of adequate pedestrian facilities and trees (to create a pedestrian environment and signal motorists to slow down) from Griggs Farm to Cherry Valley Road… related to Pedestrian Barrier #9.

Prepared by the SBAC of Princeton Township Contact: Ron Lessard 609 989 0071

December 26, 2005

Bob Kiser
Princeton Township Engineering Department
400 Witherspoon Street
Princeton, New Jersey 08540

Dear Bob:

I gather from my own meeting with the consultants that our opposition to the building of bike and pedestrian trails along Route 206 has been solidly registered. I now wish to state my concerns about a planning issue in Princeton that is not being discussed openly--but it has been in the background for over a year--and it could have a profound impact on the Route 206 planning process that is presently underway.

I recall learning (over a year ago) that the Rescue Squad was contemplating a move from Harrison Street to Route 206 at Bayard Lane (with a back-up location at Valley Road, as well as some other sites). I gather that the proposed relocation to Bayard Lane was dropped due to neighborhood opposition. However, I understand a relocation to Valley Road is still under consideration. This would be a disservice to the entire Princeton community for several reasons--the most obvious of which are that moving the Rescue Squad to Route 206 at Valley Road would place it on a two-lane road that is already too heavily used, and that the relocated Princeton Medical Center will not be easily accessible—while the current Harrison Street location affords a straight shot to Route 1.

As a resident of the township, one of my primary goals for the current 'traffic calming' exercise is to reclaim Route 206 for Princeton residents—be they pedestrians, bicyclists, or drivers of cars. As you know from the magnitude of citizen response at recent meetings, many township residents want to restore and preserve the residential character of our neighborhoods.

We also desire a more humanly scaled 'flow' from our residential neighborhood into the rest of Princeton. We want to have pedestrian access to the borough--unimpeded by an even larger cluster of municipal buildings. We want access to the library and to the amenities of the central shopping district of Princeton—all of which are within comfortable walking distance from our neighborhoods.

We don't want an even larger "municipal center" that would present both a visual and a physical barrier. Route 206 presently functions as a significant barrier. We most certainly do not wish to reinforce this by adding another large municipal service garage. Instead, we want to reverse this trend by making Route 206 into the two-lane residential roadway it was designed to be, with the housing of emergency and law enforcement vehicles dispersed through the township and borough as much as possible.

We also want a diminution of the noise level from all large vehicles–including emergency vehicles--in this section of the township and borough. We already have both the police department on Valley

Road and the fire department garage on Witherspoon. Part of the motivation for the traffic calming effort on Route 206 is to reduce, if not eliminate, noise pollution from the long-haul trucks. If we are successful at reducing the volume of trucks, we don't wish to replace those trucks with an even higher concentration of emergency vehicles.

My request is that we use this opportunity to plan for a safe Route 206 by using context-sensitive design measures that preserve and restore our residential neighborhoods. This implies that the wider Princeton community must share the responsibility for housing our much needed and very fine Rescue Squad.

Please ensure that this letter reaches the design consultants so that these matters can be addressed openly when they return in January.

With best regards,

Holly Houston
(sent via email)

(609)683-4542

TRAFFIC MOVEMENTS AT "PRINCETON GATEWAY PARK"

Prepared by Charles A. Alden , 18 April 2005 Email: aldencharlesa @ aol.com

* South bound on Rt. 206
  right turn onto Cherry Hill Rd.
  straight, toward Stockton St.
  left onto Valley Rd. (not presently permitted)

* North bound on Rt. 206
  right onto Valley Rd.

* North bound on Witherspoon St.
  right onto Valley Rd.
  straight toward Mt. Lucas Rd.

* West bound on Valley Rd.
  right onto "Gateway Park East" (extension of Witherspoon St.)

* North bound on "Gateway Park East"
  straight onto Mt. Lucas Rd.
  left toward Rt. 206 north or south bound

* South bound on Mt. Lucas Rd.
  right toward Rt. 206 north or south bound

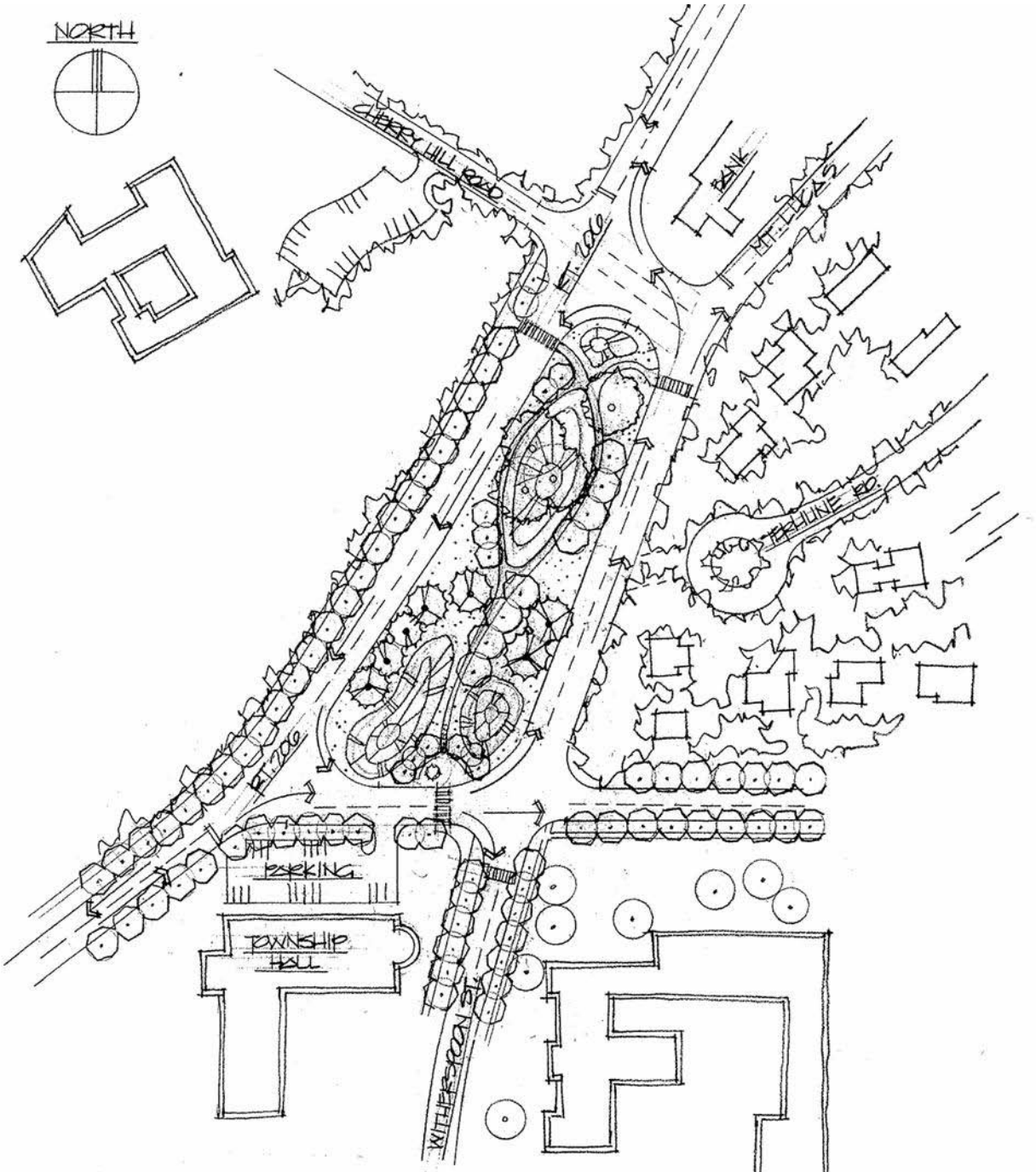
* West bound on Cherry Hill Rd. (east of Rt. 206) toward Rt. 206
  right onto Rt. 206 north
  straight onto Cherry Hill Rd.
  left onto Rt. 206 south bound

* East bound on Cherry Hill Rd.
  right onto Rt. 206 south
  left onto Rt. 206 north bound

* East bound on Valley Rd. (west of Witherspoon St.)
  right onto Withespoon St.
  straight onto Valley Rd. (east if Witherspoon St.)
  left onto "Gateway Park East"

* South bound on Terhune Rd.
  not permitted, perhaps (terminates at new cul du sac, perhaps)

Note: speed limit to be posted as 25 mph, except on Rt. 206 south bound, which shall be 35 mph.



NORTH GATEWAY PARK

Oil Paintings
Slide Photographs

Charles A. Alden
19 Craven Lane, Lawrenceville, NJ 08648

Tel / Fax : 609-896-0838
Telephone : 609-896-5988

E-mail Address
aldencharlesa@aol.com

23 Red Hill Road
Princeton, New Jersey

January 4, 2006

Mr. Bob Kiser
Township Engineer
Princeton Township Municipal Hall
Princeton Township, New Jersey

Dear Mr. Kiser:

By way of introduction, my name is John B. Smiley; and I am a resident of Princeton Township, living at 23 Red Hill Road.

My purpose in writing to you is to express my deep concern about the forthcoming proposal from the Consultant. The word that is coming to us is that their report will perhaps propose the creation of one or more large round-abouts on Route 206.

Frankly, I do not see how such roundabouts would work either smoothly or efficintly in our circumstance, especially if one is constructed to include the area where Cherry Hill Road intersects on the one side and where Valley Road, Terhune Road and Mt. Lucas Road-Witherspoon Street intersect on the other side.

What concerns me is that the access from these four roads into the roundabout would be very difficult. Quite often, especially in the early morning and late afternoon, a stream of traffic travels Route 206 in both directions. Then with the number of cars trying to enter the roundabout from these busy avenues, I envision long lines waiting for access and long, long waiting times before access is achieved.

For now, I am waiting patiently to see what the con-sultation team will put forth for our over-travelled 206; and I am particularly concerned about the roundabouts.

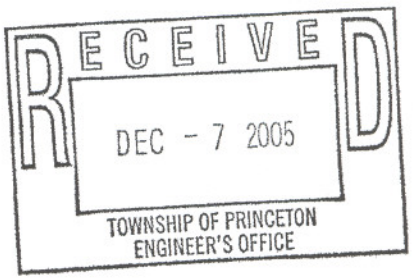
I thank you for your consideration of my worries. And I wish you the very best for the new year.

Sincerely yours,

John B. Smiley

John B. Smiley
23 Red Hill Road
Princeton, New Jersey 08540
(609) 430-0933

December 4, 2005



Mr. Robert V. Kiser, P.E.
Township Engineer
Engineering Department
400 Witherspoon Street
Princeton, NJ 08540

Dear Mr. Kiser:

The close proximity to the public schools was a strong factor to many of us when choosing to buy or rent in our neighborhood. We would all prefer that our children walk or bike safely to school rather than be driven by parents or caretakers. Presently, there is no safe crossing at Cherry Hill Road and Mount Lucas for pedestrians, bikers or vehicles. There is also no safe crossing for the Terhune/Mount Lucas-Witherspoon intersection. In addition, there is no crosswalk from Laurel Road to the sidewalk at Mount Lucas Road. Even if children cross Mount Lucas safely, the existing eastside Mount Lucas sidewalk is very narrow, adjacent to the street and therefore unsafe.

We ask that the Princeton Township Engineering Department study the intersections of Cherry Hill Road, Terhune, Route 206 and Witherspoon/Mount Lucas Road. Please provide options for safe travel for pedestrians, bikers and vehicles from Laurel Road into town at that presently dangerous intersection.

Please take these concerns into account during the ongoing State Road 206 planning process. We hope that interim improvements to pedestrian and biker safety can be made before the Rte 206 project is complete. Please also ensure that the neighborhood described in this letter is safely walkable during construction of any round-abouts or other traffic calming devices on Rte 206.

Thank you for your consideration to our request.

Sincerely,
Lower Laurel Road Neighbors

Signature/Name	**Address**
Kim Groome & Kevin Curran William, Elizabeth & Catherine Curran-Groome	2 Laurel Road
Alec & Molly Palmer Roger & Brian Palmer	6 Laurel Road

A4: Comments Received after Workshop 2

Route 206 Vision Plan Comments/Feedback

PRINCETON ENVIRONMENTAL COMMISSION
400 Witherspoon Street
Princeton, New Jersey 08540
609-921-1359
M E M O R A N D U M
To: Regional Planning Board of Princeton
From: Wendy Kaczerski, Vice-Chair
Princeton Environmental Commission
Date: February 23, 2006
Re: Route 206 Joint Vision Plan and Traffic Calming Study

At the February 22, 2006 Princeton Environmental Commission meeting the following points were raised as issues of concern requiring further information regarding the Route 206 Joint Vision Plan and Traffic Calming Study:
• Concern expressed for difficulty entering Route 206 where there is no proposed round-abouts once traffic lights are eliminated.
• Emergency vehicles slowing due to roundabout configuration.

• Noise pollution from the necessity of trucks changing gears to slow down at roundabout approach.
• Redirected truck traffic (to avoid roundabouts) effect on alternate routes in the Township and Borough (Mt. Lucas Road, Route 31, Route 202).
• Impact on trees: tree removal, tree canopy.

• Safety issue re: large trucks going by while people are mid-way across the road in the island.
• Impact on historical aspects of Route 206, particularly in the Borough.

• Public education problems with roundabout etiquette (similar to 4 way stop signs).
• Concern for children's safety at pedestrian crossings with absence of traffic lights.
• Fundamental dichotomy in the Plan because of NJDOT's history of the increased widening of Route 206 from the Somerville Circle through Hillsborough and Montgomery Townships.
• Extreme concern expressed regarding the NJDOT proposed Arreton Road and Route 206 Drainage Plan which would eliminate 27 mature, healthy trees, negatively impacting the canopy along the corridor and be counter-productive to the broader vision of this proposal.

Sorry I had to miss the last Gladdings presentation, and as a result, have this question: what specifically does the suggested plan offer in the way of pedestrian and bicycle accommodations on ROute 206?

I downloaded the presentation and saw lots of roundabouts and pedestrian crossing islands, but couldn't figure out if there were ultrawide sidewalks or bike lanes included in the redesign of the road way.

Thanks for answering my question.

Betty Wolfe
Princeton resident and project coordinator for
Lawrence Hopewell Trail

Subject: Pedestrian safety, traffic calming, etc.
As noted at today's Traffic Safety Committee meeting, there is a very interesting study on the safety and effectiveness of crosswalks. It should be read by anyone proposing a crosswalk at an unprotected location. Feel free to share the site with your colleagues.
The paper was prepared by the UNC Highway Safety Research Center

for the FHA, "Safety Effects of Marked vs Unmarked Crosswalks at Uncontrolled Locations." It is thorough, well designed, elaborate, and statistically robust. I printed out some of the charts displaying the principal conclusions, including the accident rates, some of which might be characterized as counterintuitive. It seems that pedestrian behavior is influenced by perception and the type of facility, and that traffic calming and better pedestrian crossing design are paramount. Here is a summary by John Madera of the DVRPC, and the web site for the paper:
SAFETY EFFECTS OF MARKED VERSUS UNMARKED CROSSWALKS AT UNCONTROLLED
LOCATIONS: FINAL REPORT AND RECOMMENDED GUIDELINES
http://www.trb.org/news/blurb_detail.asp?id=5700

The Pedestrian and Bicycle Information Center has posted on its website a report produced by the U.S. Federal Highway Administration that examines whether marked crosswalks at uncontrolled locations are safer than unmarked crosswalks under various traffic and roadway conditions. The report provides recommendations on how to provide safer crossings for pedestrians.
The report includes analysis of 5 years of pedestrian crashes at 1,000 marked crosswalks and 1,000 matched unmarked comparison sites. Detailed data were collected on traffic volume, pedestrian exposure, number of lanes, median type, speed limit, and other site variables
As there are about 60 pages, for those wanting to skip the methodology - interesting as it is - I suggest reading the abstract and then moving to the results charts such as those on pages 37 and 38, and the "Other Considerations" on p.58-59.
Mike Suber

2/6/2006
To: Lee Solow; Bob Kiser; Committee Chairs -

We would like to thank you for the opportunity of attending both the traffic safety committee and walkway and bicycle working group this past week. We have both been impressed by the interest and openness to public comment throughout this process and join our neighborhood in support of the overall vision plan for Route 206.

We would like to emphasize a number of issues that we brought up during the committee meetings, and ask that you include these in the comment section:

• We are very much in favor of a crossing point at Mansgrove Road; we hope that interim measures discussed at the meeting (e.g., paving a walkway across the current strip blocking Mansgrove Road to permit pedestrian, bicycle and stroller access) can be provided soon;
• Calming the traffic in both directions (from Ewing and up from Cherry Hill/Jefferson is extremely important to our neighborhood; if a round-about at Jefferson is not desirable, we hope that the Township will consider and study alternate calming measures (e.g., pedestrian island, etc.);
• As we shared with you, we hope that the Township will also include other measures to insure that motorists (and truckers) are aware of the presence of pedestrians/cyclists, particularly at the crossings - and have confidence that Princeton will determine the best possible measures to assure pedestrian safety;
• We hope that the area at Cherry Hill/Witherspoon/Valley Road will also receive attention, as quickly as is feasible, given the problems mentioned at the meeting, as we feel this is an important transit point, particularly for children and young people using both the school and township recreational facilities;
• Re: the above group of intersections - we also hope that some interim measures can be studied and advocated for with the state DOT, and ultimately developed (e.g ., left turn signal, but perhaps there is something else, as well?) to make this point safer for pedestrians and less stressful for vehicles;
• We hope that our question regarding milling down route 206 (we believe from Cherry Hill to Cherry Valley roads?) can be addressed, as we understand that such milling is often one of the strategies used

in traffic calming - and would also help some of the erosion, drainage problems we see at the side of the road;
• Finally, we are very much in favor of the extension of walkways along route 206 where ever possible, and fully support efforts in Princeton to make this a more walkable/bikeable community.
Many thanks again for your hard work.

Jeanne Fountain
&
Ericka Deglau

I was at the meeting a couple of weeks ago and couldn't stop talking to my friends and neighbors about the presentation on the plans for 206. I live very near the Ewing/206 intersection and think the roundabout proposed for that area looks great!

I have gone on the web and looked for the other areas of the country that are using roundabouts to see if I could find any problems that we weren't anticipating and found only the complaints of someone in a wheelchair and someone who was anticipating that it would be confusing. My feeling about the proposed roundabouts and other traffic calming devices is that it would make it much easier for those in wheelchairs.

I think this will make our property values hold and the folks on 206 who try to sell their houses will have a much easier time of it.

All in all, I think it is a great plan and the presenter was wonderful. He seems to really know his business, and more than that - he knows how to handle a group of concerned citizens.

Clearing the way for Brilliance

Jennifer Guy
Consultant

I saw the article in the 1/26 Town Topics re: plans for traffic re-routing on 206. I went to the [http://www.stateroad206.com/]www.stateroad206.com website and downloaded the presentation and reviewed it.

My family and I are residents of Montgomery. We live in the Woodsedge development off of Rutgers La, which is off of Cherry Valley Rd.

When traveling north bound on 206, I always make the left onto Hillside Ave. because the traffic at the corner of 206 and Cherry Valley Rd (where the Mobil station is) is always backed up during rush hour times and there is no left turning lane or turning signal at the intersection.

On slide 88 of your presentation, you show 206 divided with an island that looks like you will not be able to make the left onto Hillside anymore. You then show the proposed changes for the intersection at Cherry Valley Rd and 206 on slide 90 that has an island right in the middle of the intersection and a bunch of split off lanes coming from all directions.

1) There is no indication on these slides if traffic signals will be at each of these intersection points.

2) If there will be traffic signals, then will there be a left hand only signal for the left lane onto Cherry Valley from 206?

My concern is that local residents of these intersections will face even more frustrating delays in getting to their homes then they experience now, if proper signals are not in place and if the time allotted to making left hand turns is not of sufficient length (and this is true at any intersection (making a left from Cherry Valley onto 206 north bound, or for example making a left southbound from 518 onto 206). Having

short duration left signals will just cause traffic to back down the pipes even furthe
I think it would be a good idea to update this document to make it explicitly clear as to placement of proposed traffic signals and durations of such signals. 206 as it is designed today really favors straight though traffic and penalizes local residents. I hope this new plan will make things better.
Thank You,
Warren Pfeffer

In today's Town Topics the letter to the Editor from the group Citizens for a Safer Route 206 sparked my interest in the Ian Lockwood presentation. I would like to pass along some comments that have occurred to me since first hearing about the roundabouts, etc.

I drive on Faculty Road quite often and have observed the roundabout from its construction to the traffic flow today. Here are some of the observations I've made from that installation which raise questions in what I have read from the Lockwood ideas.

1. I have heard nothing about how left turns will be accomplished at such locations as Paul Robeson Pl and 206, and Nassau at 206.

2. Do families living along 206 realize they may lose some of their property in order to install roundabouts, bike paths and sidewalks?

3. I cannot imaging pedestrians seeking safety on a roundabout in order to cross the street. With the density of traffic on 206 how will one ever reach the other side without a light?

4. By slowing traffic, hopefully we will be safer, but I can only imaging the agitation in adding another 10 or 15 minutes to reach the west end of Princeton from downtown.

5. Where do the 18 wheelers fit into this scheme? We won't eliminate all, maybe some. Will they be able to make a right or left turn without riding over corners of the roundabout? (Note: At Faculty Road the pavers permit the 18 wheeler or larger vehicle to negotiate the turn without tearing up the turf or center garden.

6. I also appreciated the comments made by the EMS squad. I don't think their comments or mine are meant to be negative but are just to raise some concerns.
7. I also looked at the web site. It would be nice if the download could be reduced in size or some smaller illustrations of the roundabouts could be made public.
8. In closing I think roundabouts scare the general public. We think traffic circles. I just completed a traffic safety course at the PHS Adult Program. The instructor was most out spoken about traffic circles... calling them the most dangerous.
9. I don't consider the roundabout on Faculty Road dangerous, it seems to work well. Would these work on Route 206.....I don't know.

Thanks for the opportunity to comment.

H. Edward Nyce

In general, we approve of this attempt to alter complex traffic patterns, reduce speed levels, create greater pedestrian access, and enhance the aesthetic quality of State Road/Route 206 as it weaves through Princeton.

We ask that the endorsement of the full plan or concept await further study.

We are whole-heartedly in favor of continued citizen involvement in the study and refinement of the concept.

We also recognize that there are sections of State Road/Route 206 that

demand immediate attention. An example is the Ewing Street intersection.
This dangerous intersection should be addressed in accordance with the overall context-sensitive design concept and with active citizen input as soon as possible.

Thank you for providing us this opportunity to improve the quality of life in Princeton.

Holly Houston
Maryellen Smiley
Jack Smiley
Emma Forehand
Garlie Forehand
Princeton, NJ 08540

Being a statistician by training, I would like to see the traffic counts, accident counts and projections for the various Route 206 intersections for which the "Route 206 conceptual vision plan" proposes roundabouts.

I see the graph in the PowerPoint presentation that shows the boundary between "Over" and "Under" in the Entering-vs-Circulating two-dimensional space, but I did not see the corresponding part of the video presentation, so I don't know whether there was any discussion of how close we would be to going "Over". I do remember a comment that at least one of the roundabouts would be close to the limit, but not *how* close. And I don't know what kind of quantitative analysis has been done of how fast traffic is growing, which we need to project how soon we'll go over the limit.

Thanks!

Rod Montgomery

As a driver, I find the plan generally attractive. Traffic calming strikes me as a Good Thing. My experiences driving through the little roundabout at the University entrance on Faculty road have been generally pleasant, after some initial confusion. Back-in parking sounds like a Nifty Idea that's worth trying.

Narrowing the traffic lanes and dividing the roadway sound OK, but the effect of center dividers on emergency vehicles needs very careful attention. The consultant talked about roundabouts being sized to handle large fire trucks, and I see that that shouldn't be a problem *for roundabouts that are not blocked*. But I didn't hear him mention the effects of narrowed roadways and center dividers on emergency vehicles at all. I do see one slide in the PowerPoint presentation that seems to show that most of the length of each divider would be a bricked area, flush with the surfaces of the traffic lanes, which emergency vehicles could easily cross when necessary, rather than a hard-to-cross raised grass strip, so I suspect that the problem is more one of communication than one of substance. But all the what-if cases need to be carefully worked through with the fire and rescue people who will have to cope with them, and I'm dismayed that that wasn't done as part of the preparation of this conceptual vision plan.

I like the two-roundabout proposal for the complex of intersections at Bayard Lane, Stockton Street, Mercer Street and University Place, and the proposed cut-through from Stockton to Mercer, behind the smaller memorial. That cut-through would be one-way, right?

It took me a while to become comfortable with the proposed roundabout system at Cherry Hill Road: it didn't look at first like cars trying to turn left from Mount Lucas and Terhune onto Witherspoon would have a decent chance during heavy-traffic periods. But I finally realized that they could easily turn *right* initially and then use the roundabout for a U-turn, a maneuver the current traffic light does not support.

I wonder whether the roadside parking on the southbound side of 206, across from Clifftown Center, is a good idea? Drivers coming from the north are going to have to go down to the roundabout to get headed back north anyway; wouldn't it be safer just to keep all the parking on the same side as the stores?

I like the roundabout for the very dangerous Ewing Street intersection: I've had an accident there myself and several close calls. Besides the improved safety for turning traffic, I'd expect the slowdown in the roundabout to reduce the tendency for drivers coming over the top of the hill -- in whichever direction -- to blast down the other side.

As a bicyclist and pedestrian, I am very skeptical about trying to make Route 206 between Valley Road and Hillside Avenue pedestrian- and/or cyclist-friendly. My personal impression is that, for the next thirty years or so at least, there are going to be enough heavy trucks, going fast enough, along that stretch of 206, making noise and belching exhaust as they strain to climb that hill, to make it intolerable for pedestrians and cyclists. Maybe putting a roundabout at Ewing Street, and narrowing the traffic lanes, can reduce the exhaust fumes, noise and vibration for the houses and yards in that area, but I find it unbelievable that anyone will want to walk or cycle along 206 there.

More generally, concerning the implications for bicyclists of the whole plan, I've read that, although roundabouts are safer than other kinds of intersections for motorists and pedestrians, they are extra-dangerous for bicyclists. The root of the problem seems to be that a roundabout tempts cyclists to mix suicidally with the motor vehicles, rather than dismounting and negotiating the roundabout safely as pedestrians. I don't think that's a reason to reject the plan, but I do think it's worth keeping in mind when thinking about signage and rules for bicyclists as roundabouts get built.

I'd very much like a safer bicycle route from Griggs Farm (where I live) into town. But I really think the way to provide that is to provide safer access to the existing bicycle-friendly routes into town via Mount Lucas Road and Bunn Drive, not to try to do something with 206.

As a resident of Griggs Farm, I am ambivalent about adding the proposed new connection from Griggs Drive, near William Paterson Court, to a new roundabout on 206.

The negative pole of my ambivalence is my concern that Griggs Drive would become the main road between 206 and the housing developments near Griggs Farm, along Cherry Valley Road.

I'm especially concerned about the safety of Griggs Farm's children as they cross Griggs Drive, going between their homes and the adjacent municipal park. Maybe it would be enough to install speed humps near the park. But the safest thing to do would probably be to close the Griggs Drive access to Cherry Valley Road, and force all traffic from Cherry Valley Road to use the Billy Ellis Lane access. That way, children going to and from the park would only have to dodge their Griggs Farm neighbors' cars, plus the occasional maintenance or delivery truck.

The major downside I see, to forcing traffic onto Billy Ellis Lane, is that Griggs Farm residents walking their dogs would have to cross the heavier-traffic road -- the dog-walking area is on the outer side of the road -- and some of the dog-walkers would be children.
On balance, though, I think it would be better to trade a little more danger for the relatively few dog-walkers for keeping the heavier traffic away from the larger number of children using the park.

The matter needs careful professional study and attentive dialogue with the people of Griggs Farm, especially the parents.

There was a connection from Griggs Drive to 206 -- in a slightly different place -- in the original proposed plan for Griggs Farm. But that was back in the 1980s, before the other developments along Cherry Valley Road were built, and before there was a public park to

stimulate the flow of children across Griggs Drive. So I don't think it's safe just to assume that, because a 206 access might have been OK back then, it'll be OK now.

The positive pole of my ambivalence has two parts. First, the new access would be convenient for my neighbors and me for getting to and from the south via 206. Second, the new roundabout would probably make it safer to cross 206 than it is now, on foot or walking a bike, on the way to Herrontown Road and the sidewalks/bikeways along Mount Lucas Road and Bunn Drive. But a sidewalk/bikeway along the southbound side of 206, from Griggs Farm to Herrontown Road, would probably provide an equally safe path to Herrontown Road at far lower cost.

Roderick Montgomery

Honorable Mayor Phyllis Marchand
Bill Hearon, Township Committee Person
Bob Kiser, Township Engineer

Princeton Township and Borough Committee Members

January 22, 2006

As residents of the Woodland Drive and adjacent Hilltop and Mansgrove Roads neighborhood, we are writing to express our strong support of the recent design proposal for Route 206, from Cherry Valley Road to Nassau Street, presented in the January 12 public meeting. We urge the Township and Borough to act quickly to arrive at the consensus needed to move this plan forward and to obtain State backing for it, so that these badly needed changes are made as expeditiously as possible.

We feel that the proposal speaks to the most pressing needs of the Princeton community. It aims to calm the traffic that comes through Princeton on State Road/Bayard Lane, and to make the road safer for pedestrian as well as vehicular usage. In its current state, the road in effect splits Princeton in two, and makes it extremely difficult to gain access from one part of town to another, particularly for pedestrians. By slowing down traffic, while maintaining its flow, and providing for pedestrian walkways, crossings and safe zones, it reopens pedestrian access between neighborhoods, to town, to area parks. Most important, it makes this dangerous route safer for cars, property, and people.

Many people from our neighborhood were present at the meetings during which the working format of the design project was explained and the proposal presented. We had the opportunity to study the plans in more detail on line, and to discuss aspects of the plan among ourselves. We are all in agreement that our most pressing concern is the speed of traffic in the Ewing St. vicinity, where there have been numerous accidents, as well as traffic continuing northward past Cherry Hill Road and Jefferson St. Our neighborhood is impacted by speed and traffic flow going in both directions from these spots, by the noise of engine braking, and by accidents at dangerous intersections. Furthermore, because of the traffic situation, we are unable to safely walk or bicycle beyond the confines of our immediate neighborhood. We feel that the suggested roundabouts, together with the sidewalks and means to cross the road, address this problem in the best possible way. We also feel that the overall aesthetics of the proposal, along the entirety of the roadway, with plantings and the visual slimming of the road, would add much to the character of Princeton as a whole, in addition to meeting our town's needs for traffic safety.

Sincerely,

John & Susan Panzica

1/23/06

To: Bob Kiser

Erika Rush
Dave Cox
Ian Lockwood

Let me first say that you all have done a wonderful job with this project. The level of citizen and municipal cooperation and communication should serve as a model for projects in the future.

In general we think that this is an excellent plan. We have two areas of concern however. They are:

1) If the Ewing Street roundabout is to be done first, it cannot be done in a vacuum. There must be other features done at the same time south of and (especially) north of Ewing to slow the traffic before it gets to the roundabout. Whether this is the roundabout at Arreton Rd. or center islands to narrow the road (preferably both) to the north and the roundabout at Jefferson to the south, something must slow the traffic before it gets to the intersection at Ewing where speeds of 50mph are common. As Ian has told us over and over signage will NOT be enough to slow the traffic if the road still tells people to go fast! We believe that if this is not done the roundabout will not work well and may do more harm than good.

2) An effort should be made to investigate whether smaller roundabouts are feasible. The 120' roundabouts just seem too big for the neighborhood feel we are trying to achieve for the road.

We realize that certain aspects may have to be tweaked as we progress to deal with environmental, community, financial concerns etc., but on a whole this plan is a great place to start our effort to take back our road.

Sincerely,

Don Greenberg
Mary Anne Sabogal

We greatly appreciate the concept of traffic calming on Route 206 presented on January 12. In a separate message, we will join some of our neighbors to provide more detailed comments.

We'd like to express special appreciation for the work of the Citizens for a Safer Route 206 Working Group. This group has performed pivotal work on behalf of the community. They were instrumental in initiating exploration of traffic calming, and are a key link in communications among community
members, officials, and researchers. Without the Working Group, citizen involvement would have been much more difficult.

It is important that the functions of the Working Group be continued and enhanced as planning for Route 206 goes on.

Mary Ellen Smiley
Jack Smiley

Emma C. Forehand
Garlie A. Forehand

Princeton, NJ 08540

1/23/2006

Connie O'Dea kindly shared with us her "Comments re "Vision Plan" for Princeton's State Rd/Bayard Lane/Stockton:."

We would like to express strong agreement with Connie's suggestion of a pedestrian island in the vicinity of Jefferson Road and Mansgrove. That would work better than the roundabout proposed earlier. A roundabout would be a real problem for Red Hill Road and vice versa.

Red Hill Road is a one-lane private drive that provides access to the homes on the road. It cannot handle through traffic that could leave the roundabout there and go to Cherry Hill Road. The wide area at the State Road entrance to Red HillJ could at most accommodate two cars --one entering and one leaving Red Hill. This could create backups in a roundabout as traffic has to wait to turn onto Red Hill.

We appreciate Connie's thoughtful suggestion of a pedestrian island.

Emma C. Forehand
Garlie A. Forehand

Comments re "Vision Plan" for Princeton's State Rd/Bayard Lane/ Stockton:

I find the initial "starter ideas" to be very thought-provoking, a very good beginning, and a valuable contribution. I understand the constraints on the study did not permit generation of alternative solutions, and that the community will now be able to develop alternatives in its follow-up discussions.

Some ideas for which I particularly feel that alternatives need to be developed before the plan is adopted relate to the neighborhood I know best, the stretch of road from Cherry Hill Road to Ewing St. My family's home has been located in this neighborhood since l957.

1. Clifftown Center: the beautification of the Clifftown Center is an excellent idea. I'd like to see ideas for improved parking in the existing rectangular parking lot, instead of some of the starter ideas proposed on January 12th.

2. Jefferson/206: the conceptualized roundabout at the Jefferson Road intersection with Route 206 seems out of place in this very established, wholly residential neighborhood which has a great number of environmental assets packed into a small area which is a natural basin. The Ewing intersection seems much more appropriate for a roundabout, and we have already been warned by people experienced with roundabouts in other countries that too many in row becomes counterproductive. Another drawback to locating a roundabout at Jefferson is that it would heighten the visibility of the private, single lane Red Hill Road, bringing increased traffic on the private way and causing safety issues and other burdens for the homeowners there.

I would prefer to see some kind of pedestrian island/median, relating to the Mansgrove intersection, and probably including sidewalks along the existing Jefferson to connect to the existing sidewalks on Laurel and Mt. Lucas.

The benefits of this alternative would be a). to provide the pedestrian connection currently lacking for the residents on the western side of State Road ; b).without causing excess burden on surrounding homeowners, as a roundabout would; c.) while preserving and even enhancing the existing natural environment of the little "basin" and the larger neighborhood; d.) no eminent domain; e.) further cue drivers that this is not a highway neighborhood, but a "lived-in" one; f.) contribute to the pleasant visual interest that the Consultants told us works as a traffic-calming technique in itself. Also, I wonder if it would not cost a great deal less and if it could be implemented much sooner than could a roundabout.

3. Sidewalks: I think there are numerous safety concerns with sidewalks adjacent to the roadway on either side of State Road between Cherry Hill and Jefferson, and that there are other alternatives that make use of existing sidewalks on parallel roads.

4. Lowering the surface of the road: I think this particular context sensitive solution has a great deal of potential for our neighborhood, but was dismissed due to the high cost of milling down the road, rather than simply paving over the existing road surface as it becomes distressed. I understand that, but think it should still be considered for the "long-term." As was discussed in several "sidebar" discussions

Thursday night, after the meeting, the road surface along State Road has risen over the years. Simply the fact that the road surface has become higher in relation to the houses on either side of it has probably contributed to the fact that the road has physically come to dominate the neighborhood.

I suggest that bringing the elevation of the road surface back down to a more proper relationship to the homes along it would be a very desirable element to include in the vision plan, at least for the most densely residential stretch of State Road, that is, between Ewing and Cherry Hill Road. Perhaps it could be planned for when the next repaving is scheduled to be done. It was pointed out to me by one of the consultants that lots of little details, including this particular one, are what add up to a big positive effect.

Thank you again for all the hard work and great ideas.

C. O'Dea,
January 23, 2006

Comments from Trinity Church
1/23/2006
Dear Claudia,
I spoke with the rector of Trinity Church, the Reverend Leslie Smith, on Friday and he informed me that the Church will definitely have comments to make when they have reviewed the available material on the project, but had not seen any of the material relating to the project as of that point.
Thank you.

Honorable Mayor Phyllis Marchand
Bill Hearon, Township Committee Person
Bob Kiser, Township Engineer

Princeton Township and Borough Committee Members

January 22, 2006

As residents of the Woodland Drive and adjacent Hilltop and Mansgrove Roads neighborhood, we are writing to express our strong support of the recent design proposal for Route 206, from Cherry Valley Road to Nassau Street, presented in the January 12 public meeting. We urge the Township and Borough to act quickly to arrive at the consensus needed to move this plan forward and to obtain State backing for it, so that these badly needed changes are made as expeditiously as possible.

We feel that the proposal speaks to the most pressing needs of the Princeton community. It aims to calm the traffic that comes through Princeton on State Road/Bayard Lane, and to make the road safer for pedestrian as well as vehicular usage. In its current state, the road in effect splits Princeton in two, and makes it extremely difficult to gain access from one part of town to another, particularly for pedestrians. By slowing down traffic, while maintaining its flow, and providing for pedestrian walkways, crossings and safe zones, it reopens pedestrian access between neighborhoods, to town, to area parks. Most important, it makes this dangerous route safer for cars, property, and people.

Many people from our neighborhood were present at the meetings during which the working format of the design project was explained and the proposal presented. We had the opportunity to study the plans in more detail on line, and to discuss aspects of the plan among ourselves. We are all in agreement that our most pressing concern is the speed of traffic in the Ewing St. vicinity, where there have been numerous accidents, as well as traffic continuing northward past Cherry Hill Road and Jefferson St. Our neighborhood is impacted by speed and traffic flow going in both directions from these spots, by the noise of engine braking, and by accidents at dangerous intersections. Furthermore, because of the traffic situation, we are unable to safely

walk or bicycle beyond the confines of our immediate neighborhood. We feel that the suggested roundabouts, which regulate the speed and flow of traffic, together with sidewalks and means to cross the road, address this problem in the best possible way. We also feel that the overall aesthetics of the proposal, along the entirety of the roadway, with plantings and the visual slimming of the road, would add much to the character of Princeton as a whole, in addition to meeting our town's needs for traffic safety.

Sincerely,

Marvin & Patricia Ostberg

Karen and Jim Reeds
Terry Vaughn

Joan Bartl
Mircea Savu
Jeanne Fountain & George Blooston
Melissa Panter & Pierre Emric
Sue & Michael Osborne
Hillary Hays & Tony Kline
Sharon & Kieron Burke
Edwin & Janet Yost
Donna Nitchun
Michael & Jacqueline Barry
Janis Runkle & Amy Campbell
Francesca Sebenick
Jennifer & James Knill
Sarah Whiting & Ron Witte
Uri Eisenzweig & Ericka Deglau
Vladimir & Georgia Visnjic

1/20/2006

ms. ceballos -

what is the next planned step in moving forward with the roundabout ideas proposed at the lengthy meetings recently. the neighborhood wants to make sure we keep this thing moving. initially we want to see a focus on at least the ewing/206 corner - the most dangerous intersection locally. we have heard there had been a proposal for a jug handle there. instead we want to see more emphasis given to the proposal for a roundabout.

marv and pat ostberg
60 woodland drive

To: R. Kiser, C. Ceballos
From: Residents of State Road neighborhood
Date: January 2, 2006 (signatures updated to January 10, 14)
Re: "Gateway" at Valley Road intersection on State Road

We are hopeful and enthusiastic about the prospect of "taming the traffic" on State Road in our neighborhood. We want to highlight a need we perceive and make a suggestion that could help meet that need.

The area from Valley Road north on State Road in Princeton has traditionally been a single-family home, residential neighborhood. This area has historically encompassed the whole "quadrant" extending from Valley Road to Ewing, including Mt. Lucas, Laurel Road and Circle, Red Hill, Mansgrove, Woodland and Hilltop, Terhune and others as well as State Road.

Over the years there have been progressive degradations to the residential character of our neighborhood. One of these was the expansion of the "strip mall" below Mount Lucas Road, a block claimed for commercial use that is out of character with the traditional residential character of the neighborhood. Another was the construction of the large township municipal services building that

actually physically turns its back on our neighborhood.

Our hope and suggestion is that the current planning work be used as an opportunity to stop, and even reverse, the progressive degradation of this established neighborhood. We believe adhering to the traditional and natural residential character of this area – and even reversing the damage already done where possible – will help to cue drivers that they are in a residential area and must drive appropriately.

We propose as one important step an appropriately designed "gateway" at the intersection of Valley Road and State Road to announce to drivers that they are entering a residential area and that 'the driver is not king' here, but must share the space with other occupants.

We have all witnessed how drivers coming north on State Road along the "Big Curve" that starts at the end of Bayard Lane seem to fall into a "highway driving" mentality. "The highway opens up," one driver said. The speed limits are rarely observed here. Once drivers enter our residential area, the neighborhood seems to be "tuned out" as drivers make their speedy transit northward.

A gateway at the Valley Road intersection to announce entry into a residential neighborhood could well counter the highway driving mentality that the Big Curve induces, and improve safety on this section of State Road.

We trust that the consultants have an entire vocabulary of gateway concepts to draw upon. One that has been suggested is a roundabout. We would certainly welcome seeing others as well.

Emma Forehand
Garlie Forehand
Holly Houston
Connie O'Dea
Bob Rodgers
Jack Smiley
Maryellen Smiley
Hector Baraona
Heidi Schwarzenberg

Signatures added between January 2 and January 10:

Maria DiBattista
Chris Kotsen
Faith Kotsen
Richard B. Middleton
Karen Chin
Jamie Zaninovich

Signatures added January 14:
Robert Pinals
Ella Pinals

Hi

After reading the article in the Trenton times, I just had to write.

The idea of putting "rotaries" on route 206 has got to be the worst idea ever. You have got to be kidding me. Route 206 from 295 in Lawrenceville to the Somerville circle needs to be bulldozed, widened, and made into a 4 lane limited access highway. trying to slow down an already bad situation, is only going to make things worse. Traffic goes slow enough during rush hour. we need to speed things up not slow them down. This road should have been widened years ago. You had the chance to do it back in the 70's and 80's.with the 295 connector that never went in. New jersey is one of the most crowed places on EARTH. and to think you can stop it from growing is nuts. NJ needs to widen and rebuild most of its connector roads and stop trying to hold on to this image of small town life. That went out years ago.

route 206 ,31 and 27 just to name a few all need to be made 4 lane limited access roads.

But that's just my opinion.

Chris Shiarappa
Pennington NJ

1/17/2006

My views coincide with those expressed by Dr. and Mrs. Robert Pinals. I am perhaps even more concerned since my property is directly opposite the the convenience store. I have had to spend time, effort and money over the years to clean up litter blowing across Route 206 onto my property.
Richard B. Middleton, Ph.D., C.C.M.,

The message below is forwarded with the Pinals' permission.

1/13/2006

We are residents of Red Hill Road, but were unable to attend the meetings with the Consultants for the State Road Planning project. We are strongly opposed to a preliminary plan which would allow parking on the west side of Rte 206, opposite the strip mall. This would result in cars parking in our back yards and would defeat the efforts we have been making over many years to shield our properties from the highway by tree planting and other measures. Dr. & Mrs Robert S. Pinals, 17 Red Hill Road

1/17/2006

Hello:

My overall impression of the plan is that it's well though out and presented, although I would never have imagined that so much could be said about backing in to angled parking spaces. Perhaps it went more quickly in the meeting.

As a Red Hill Rd Resident, I have a concern about 2 roundabouts: Red Hill Rd and 206, and Cherry Hill and 206. Either are fine, but both are not. Each roundabout will make it very difficult to make a left turn while pulling out of Red Hill Rd. It'll be hard to spot gaps in the traffic coming from the left and unlikely that traffic on the right will yield to exiting Red Hill Road traffic. They don't at the moment, and will be less likely to do so when they are going to have to yield again at the roundabout a few feet further along. I can accept being unable to make a left hand turn out of one of the Red Hill Road exits if it really does help keep traffic noise down, but not out of both.

I also do not think you need parking on rt. 206 south by Cliff Towne center. The parking lot, with improved access, would be adequate and I think it'll be hazardous to encourage back-in parking and parallel parking on opposite sides of the road while trucks are getting ready to slow down at a roundabout. It would also be a good idea to put in a raised median at Cliff Towne center. Northbound traffic that goes to the strip mall heads home on the southbound lane by pulling a u turn as they exit the parking spaces. It is an understandable short cut but its dangerous. If it was harder to do it, they'd use the parking lot.

Generally, I like the extended medians with pedestrian crossings. Some thought should be given to illuminating them and possibly also having some traffic signals.

Overall, though, as I said, I like the way the study is going.

Best Regards,

Rupert Hinton

Rupert Hinton

1/17/2006

My views coincide with those expressed by Dr. and Mrs. Robert Pinals. I am perhaps even more concerned since my property is directly opposite the convenience store. I have had to spend time, effort and money over the years to clean up litter blowing across Route 205 onto my property. I recall a Sunday morning some years ago when I rang the Township Police Dept. (in the old bldg.) tto report clouds of litter blowing across the highway onto my back yard; the officer who answered could look out of his window to observe the problem! I am apprehensive that additional parking, closer to my property, would exacerbate this regrettable situation.
(Prof.) Richard B. Middleton, Ph.D., C.C.M..

1/13/2006
I have been working as a community volunteer in the areas of traffic, transportation, parking, pedestrian issues, and bicycling issues for a number of years (Borough Traffic and Transportation Committee, Ad Hoc High School Parking Committee, etc). So I had a sense of what was possible in altering 206. I thought the consultants would design something along those lines. Fortunately, I was wrong.

Please tell everyone who worked on the 206 project that I think it is extraordinary. It is the best design that I have ever seen, far better than I ever thought possible. I particularly commend all of the officials who started out with very different ideas, but who were open to the consultants' new concepts, and who ultimately adopted the new concepts (such as roundabouts and narrowing 206 instead of widening it).

I hope we will be able to keep up the momentum and actually implement all of the starter ideas, even if it takes 25 years.

Yours,
Phyllis Teitelbaum

Peter Tarquinio
694 Ewing Street
Princeton, NJ 08540
petetarq@gmail.com
609-658-3908

January 9, 2006

Re: State Road – Route 206 Traffic
Ewing Street and Route 206 Intersection

I attended the meeting on January 9, 2006, which addressed several issues of route 206 – state road starting at the intersection of Nassau street and ending at the other end by cherry valley road, in Montgomery township.

I hereby would like the township, design board, and residents to address/evaluate the following issues.

1. Noise – approaching Ewing Street and Route 206 Intersection (this part of 206 is on incline)
    - Speed up noise associated with trucks going up hill approaching an intersection, roundabout, or signal at Ewing street
    - Stopping noise associated with slowing down of cars, truck, approaching the Ewing street from the north
2. Signaling
    - Reduce speed signal (Flashing Light) should be installed on the south bound side approaching Ewing street. Make sure that traffic light are not blinking in someone's bed-room
    - Speed stripes are to be evaluated – to reduce the speed from the top of the hill between Ewing Street and Cherry Valley Road
    - Evaluated limiting left turns – during certain hours
        - No Left turn onto 206 south from Ewing street
        - No left turn onto Ewing street from 206 heading south toward Ewing street
3. Run Off - Water
    - Make sure run-off does not effect the Ewing street and 206 intersection
4. Snow Removal
    - Snow accumulation when county and township snow plows clean the roads
5. Joggers and Bikers
    - Encourage joggers and cyclist to use the sidewalks that have installed for them. To many times I see them using the road
6. Evaluate the moving of the round-about of signal further north than the current Ewing street – 206 intersection
7. Establishing grants
    - For beautification – to great grand entrance
    - for the property owners to modify the properties in the event of the propped modification adversely effect them

I am flabbergasted that Glatting-Jackson would propose extending Alexander Road to Rt. 206 through the Seminary. It looks like an out-of-town planner's solution to our traffic problems. But one must realize that there are historic buildings between the two roads. How can the needs of both traffic management and historic preservation be maintained?

Step outside the box. Try a system of one-way streets. Make Nassau/Stockton one way from Mercer to Library. Make Library one way from Stockton to Mercer. Make Mercer one way from Library to Nassau.

Not only does this reduce traffic congestion, but it discourages trucks from using Rt. 206 from I-95 to north of Princeton. They would have to take I-95 ~~to~~ or I-295 to Rt. 1 north to Washington Rd. to Nassau St. to Rt. 206 northbound.

There is no "Princeton Bypass" but this is the best thing we can do to cut down on truck traffic in town and have less hazardous intersections in town.

Dan Rappoport
apt. 5M Holly House
Princeton
924 9417

23 Red Hill Road
Princeton, New Jersey 08540

January 23, 2006

Mr. Bob Kiser
Engineeering Department
369 Witherspoon Street
Princeton, New Jersey 08540

Dear Mr. Kiser:

As a resident of Red Hill Road in Princeton Township, I feel I must share with you my concern about one of the suggestions proposed by the consultants for the State Road project.

While the plan in general has some merit, there is one idea which I think needs to be carefully examined. I refer to the proposed parking in front of the strip mall. The suggestion, as proposed, shows parking spaces on both sides of Route 206.

I cannot think of one good reason to support parallel parking on the opposite side of the highway at the mall. Indeed, it would back up traffic, create a hazard as drivers exit their cars from the parking spaces, and further endanger them as they try to maneuver a crossing of Route 206. The mall has a more-than-adequate parking lot for the few businesses in the mall, which negates the need for on-street parking on Route 206.

If you think that Bill Hearon would be interested in reading this letter, I would appreciate your sharing it with him.

Thank you for your efforts in working for the good of the Princeton community in this matter.

Sincerely yours,

Maryellen Smiley

Maryellen Smiley
23 Red Hill Road
Princeton, New Jersey 08540
(609) 430-0933

Summary of Issues:

Missing = ENVIRONMENTAL

(This is not synonymous with "Beauty/Aesthetics")

This element was sorely missing from entire presentation + solutions

Cyclists using pedestrian facilities is very bad idea & very dangerous to pedestrians

Roundabouts:

What is to keep impatient drivers from driving up on the "truck ramp" to pass or "squeeze by" just as they now pass on the right?

- Is there any news about plans in adjacent regions?
- How will the Hillsborough transload facility affect plans?

206 Concerns

1. The excessive noise of some trucks which can be heard blocks away
2. Pedestrian SAFETY at Cherry Hill/206 crossing
3. The size and speed of trucks
4. We don't want to plan for increased traffic — rather we'd like to see less traffic
5. Too many accidents on 206

In consideration of pedestrians who need to cross 206, especially those who live north of Cherry Hill what w the possibility of a pedestrian elevated crossover, ?

M. Smiley
Rd Hill Rd

Questions - D. Buffery (23 Hillside Ave)

1) When/if you add a street light, do you also consider the existence of other lights within close proximity? Fx example, there are 2 light immediately before 206 + Ewing St. going south on Ewing St/Harrison St.

2) Will you consider opening an exit ~~directly~~ from the Griggs Farm development to connect directly into Rt. 206 (thereby eliminating use of Hillside Ave. as the main connection between 206 + the development?

3) Consider bike rd from Hillside to town.

CAN YOU DO SOMETHING TO MAKE VALLEY RD/206 + BACK OF TWP CPX A BETTER INTRO TO OUR NEIGHBORHOOD? (Also, any thing to improve ugly strip mall?)

① Not all trucks are equal. Some trucks make much more noise. Is there a way to quiet them?

② Will a round-about be able to handle access onto a main road during bumper to bumper rush-hour?

- The summary of our public comments was good, but the presentation of 206 as an 'incomplete street' hardly addressed the need for bicycle compatability. (as I know was reflected in a number of our comments). Whatever design we create needs to consider bicycle uses as well as car and pedestrian uses.

- I like and support the idea of a series of roundabouts as a good management response to our 206 problems.

- Overall, the presentation and responses to questions was great, professional, and positive, just as they were back in November. It all made me hopeful and encouraged, as before, and I appreciate all your effort on this project.

How can the lessons learned from this process be brought to bear on Mt Lucas Rd (a current alt. to 206) Elm Rd (another 206 alt.) and the feeder Rds to 206 - Harrison/Ewing, etc? Can you teach our local staff to be more thoughtful & creative?

The truck issue needs to be backed by other measures than just roundabouts

My humble opinion

R. Weinmann

Most Canadian trucks save 24-40$ in tolls + mileage

My major concerns
1 are ing speeds on 206 NJ Ewing
2 Safety overall
3 Safety at Ewing + 206 N

[illegible] 350 State

Dan, you offered 3 options for the Ewing intersection:
#1: Do nothing
#2: Light with left turn lane or jug handle
#3: Roundabout

Isn't there a 4th option, much cheaper than #2 or #3, and closest to #1 in effectiveness especially with regard to noise?

#4: 25 mph speed limit with repeated speed bumps the length of the hill, each bringing traffic down to 15-20 mph repeatedly. This will solve the speeding problem in spades, which is the primary cause of all the other problems - safety, pedestrian access, noise, etc.

Thank you for listening.

Peggy Christ
(property owner at Ewing intersection)

1/9/06
mchrist@ur.rutgers.edu

WHAT KIND OF OPPOSITION CAN WE EXPECT FROM THE EXTREMELY POWERFUL TRUCK LOBBY?

HOW DO ROUNDABOUTS COMPARE TO ROTARIES?

WHEN YOU OFFERED A "TAKING BACK OUR ROAD" PROPOSAL, HOW CAN YOU GUARANTEE THAT THE TRUCKS WILL COOPERATE? EVERYDAY TRUCKS MAKE RIGHT TURNS GOING SOUTHBOUND AT THE NASSAU ST / 206 INTERSECTION BY TURNING ~~RIG~~ LEFT INTO THE LEFT TURN LANE THEN TAKING OUT CURBING ON THE RIGHT SIDE. THEY DON'T SEEM TO CARE.

IF PEOPLE DONT OBEY "YIELD," "STOP," OR "PEDESTRIAN CROSSING" SIGNS IN PARKING LOTS OR SHOPPING MALLS, WHY WILL THEY OBEY THESE SIGNS IN/ON A ROADWAY?

P.S. PLACES YOU HAVE MENTIONED LIKE FLA. DO NOT HAVE TO CONTEND WITH TRANSIT NORTH TO SOUTH. FLORIDA IS AN END OR BEGINNING!

THANK YOU!

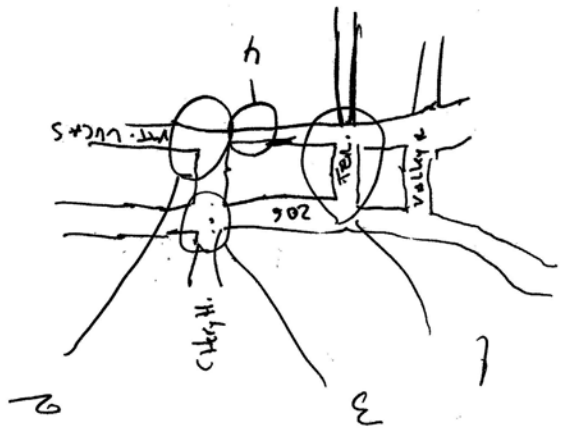
LISA DOYLE
336 STATE ROAD

TONY BALDINO
28 WOODLAND DR.
PRINCETON

SUGGESTION FOR THIS AREA

(BACK)

1. TRAFFIC BETWEEN MT. LUCAS & 206 ELIMINATED OR ONE WAY OR LIKE VALLEY RD. 206 COMMISSION
2. DIFFICULT FOR TRAFFIC COMING FROM MT. LUCAS ONTO EAST
3. TRAFFIC NEEDS LEFT TURN SIGNAL.
4. WIDEN THIS AREA FOR TRAFFIC GOING TO 206N & MT. LUCAS



AUGUST 2005

22 MONDAY
23 TUESDAY
24 WEDNESDAY
25 THURSDAY

Week 33

FRIDAY 19
SATURDAY 20
SUNDAY 21

"Injustice anywhere is a threat to justice everywhere."
—MARTIN LUTHER KING, JR.

A5: Press Coverage

Coverage of the two workshops appeared in the following articles in local and regional papers:

"Packed house airs concerns about Rt. 206 in Princeton," Rachel Silverman, Princeton Packet, Princeton, N.J. , November 29, 2005

"Solving Route 206 Traffic Problems Will Take Time, Consultant Says," Matthew Hersh, Town Topics, Princeton, N.J. Wednesday, November 30, 2005

"Roundabouts described as solution for Route 206 traffic," Marjorie Censer, The Princeton Packet, January 10, 2006

"Public comment sought on Rt. 206," Scott Morgan, Register-News, January 12, 2006 (www.registernews.com)

"Plan for Route 206 roundabouts gets positive response," Marjorie Censer, The Princeton Packet, Princeton, N.J., January 13, 2006

"Study sees roundbouts as traffic antidote," Peter Spencer, Star-Ledger (Newark), January 2006

"Seeking ways to slow traffic on Route 206," Cathy Bugman, Sunday Star-Ledger (Newark), January 8, 2006

"Round look for 206?", Chris Sturgis, The [Trenton] Times, January 16, 2006.

"A Long and Winding Road," Robert Strauss, The New York Times, May 28, 2006

Appendix B: Corridor Analysis - Technical Information

Levels of Service

As summarized in the Highway Capacity Manual 2000 (HCM2000), "level of service" (LOS) is a quality measure describing operational conditions within a traffic stream, generally using service measures such as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Six levels of service are defined and identified with a letter designation that corresponds to the operating condition. Levels of Service range from "A", which is the best operating condition, to "F", which is the worst.

At signalized intersections, factors that affect the approach capacities include: traffic volume, traffic movements, traffic composition, geometric characteristics, arrival patterns, traffic signal timing, and human factors. A descriptive mechanism has been developed which indicates, on the basis of control delay per vehicle, the relative smoothness of intersection operation (described as "level of service"). The various levels of service and delays are summarized in Table 1.

Delays cannot be related to capacity in a simple one-to-one fashion. It is possible to have delays in the LOS "F" range without exceeding roadway capacity. High delays can exist without exceeding capacity if one or more of the following conditions exist:

- long signal lengths;
- the particular traffic movement experiences a long red time; or,
- the progressive movement for a particular lane group is poor.

Table B1: Signalized Intersection Level of Service Criteria

LOS	Expected Delay	In Seconds*
A	Very low delay, good signal progression; most vehicles do not stop at intersection.	<= 10
B	Good signal progression; more vehicles stop at intersection than Level of Service A.	> 10 and <= 20
C	Fair progression; significant numbers of vehicles stop at intersection.	> 20 and <= 35
D	Unfavorable progression; congestion and cycle failures become noticeable; longer delays; high v/c ratios; most vehicles stop at intersection.	> 35 and <= 55
E	Considered the limit of acceptable delay; poor progression; high v/c ratio; frequent cycle failures.	> 55 and <= 80
F	Unacceptable delay; poor progression; over-saturation; many cycle failures; v/c ratios >= 1	> 80

Source: HCM2000
* Average Control Delay per Vehicle (sec)

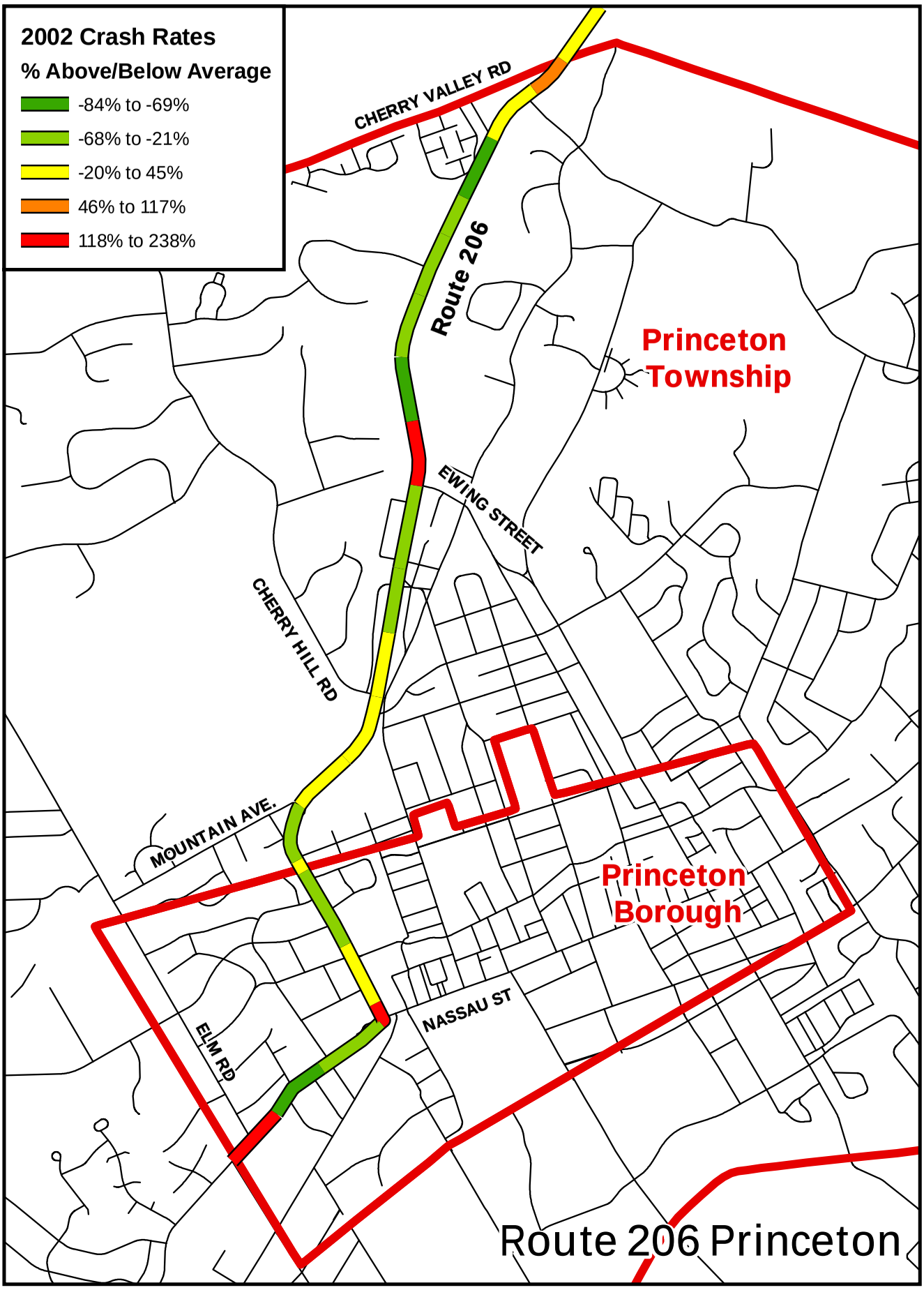

2002 Crash Rates
% Above/Below Average
-84% to -69%
-68% to -21%
-20% to 45%
46% to 117%
118% to 238%
CHERRY VALLEY RD
Route 206
Princeton Township
EWING STREET
CHERRY HILL RD
MOUNTAIN AVE.
Princeton Borough
NASSAU ST
ELM RD
Route 206 Princeton

Figure B1

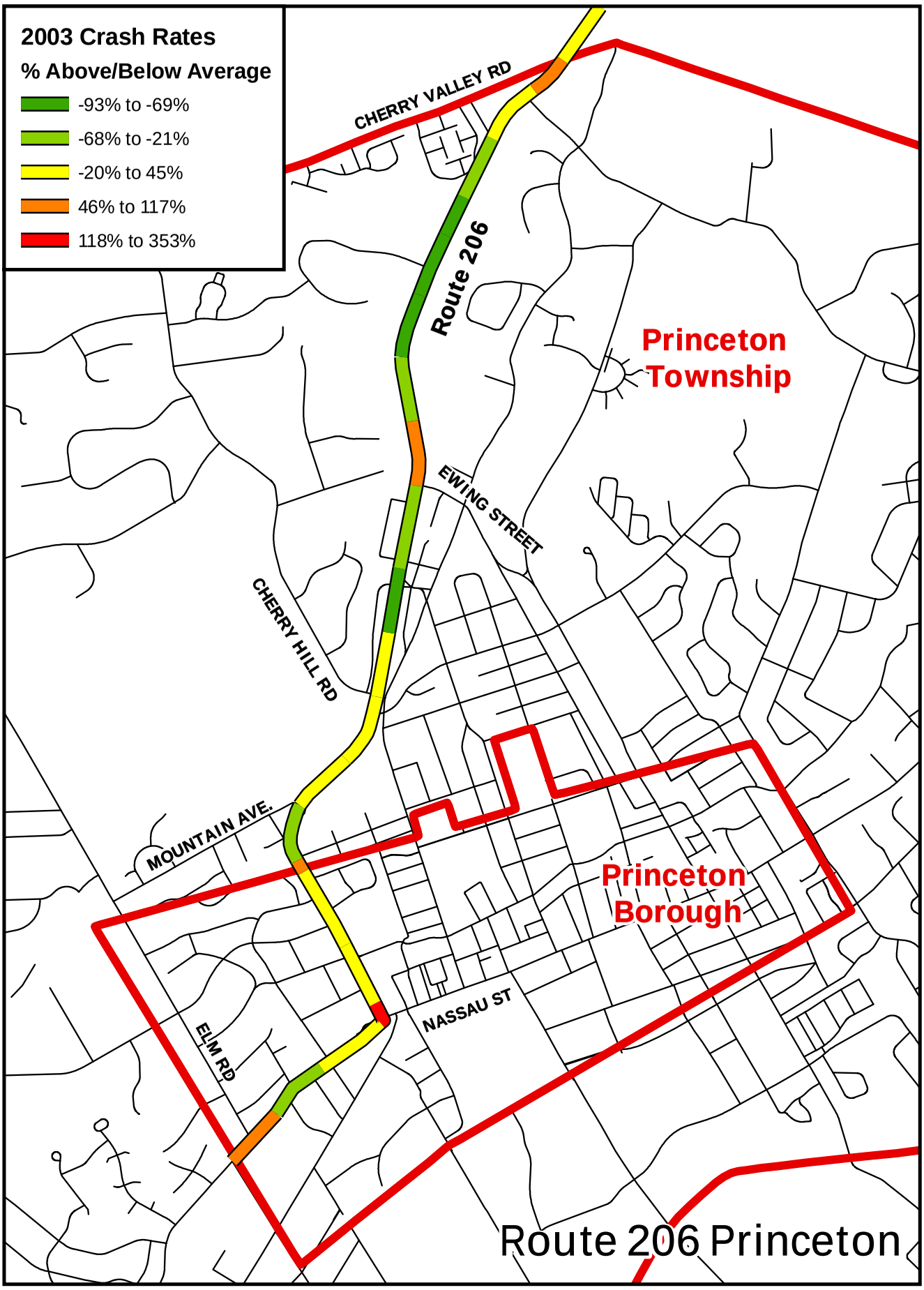

2003 Crash Rates
% Above/Below Average
-93% to -69%
-68% to -21%
-20% to 45%
46% to 117%
118% to 353%
CHERRY VALLEY RD
Route 206
Princeton Township
EWING STREET
CHERRY HILL RD
MOUNTAIN AVE.
Princeton Borough
NASSAU ST
ELM RD
Route 206 Princeton

Figure B2

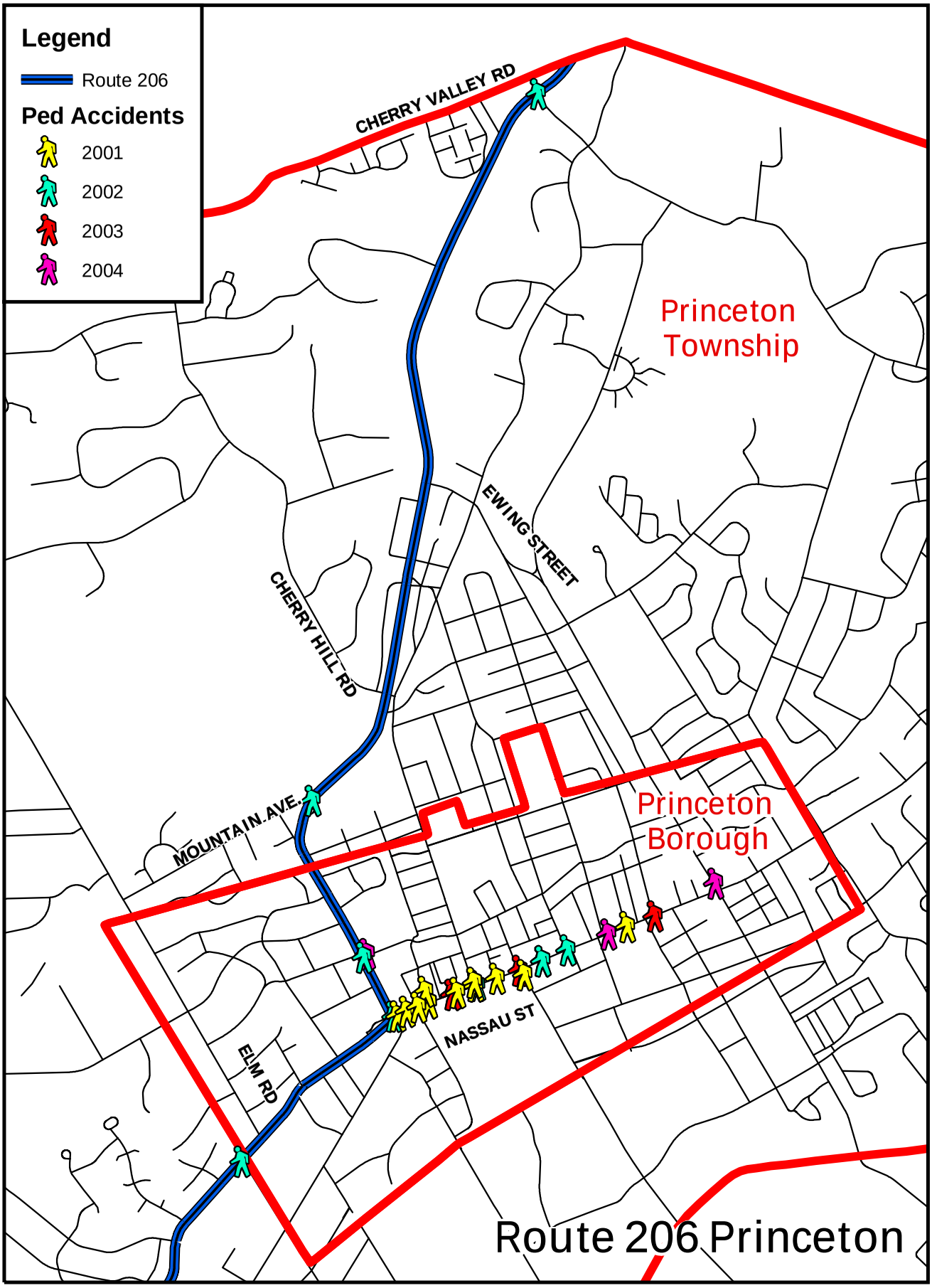

Legend
Route 206
Ped Accidents
2001
2002
2003
2004
CHERRY VALLEY RD
Princeton Township
EWING STREET
CHERRY HILL RD
MOUNTAIN AVE.
Princeton Borough
NASSAU ST
ELM RD
Route 206 Princeton

Figure B3

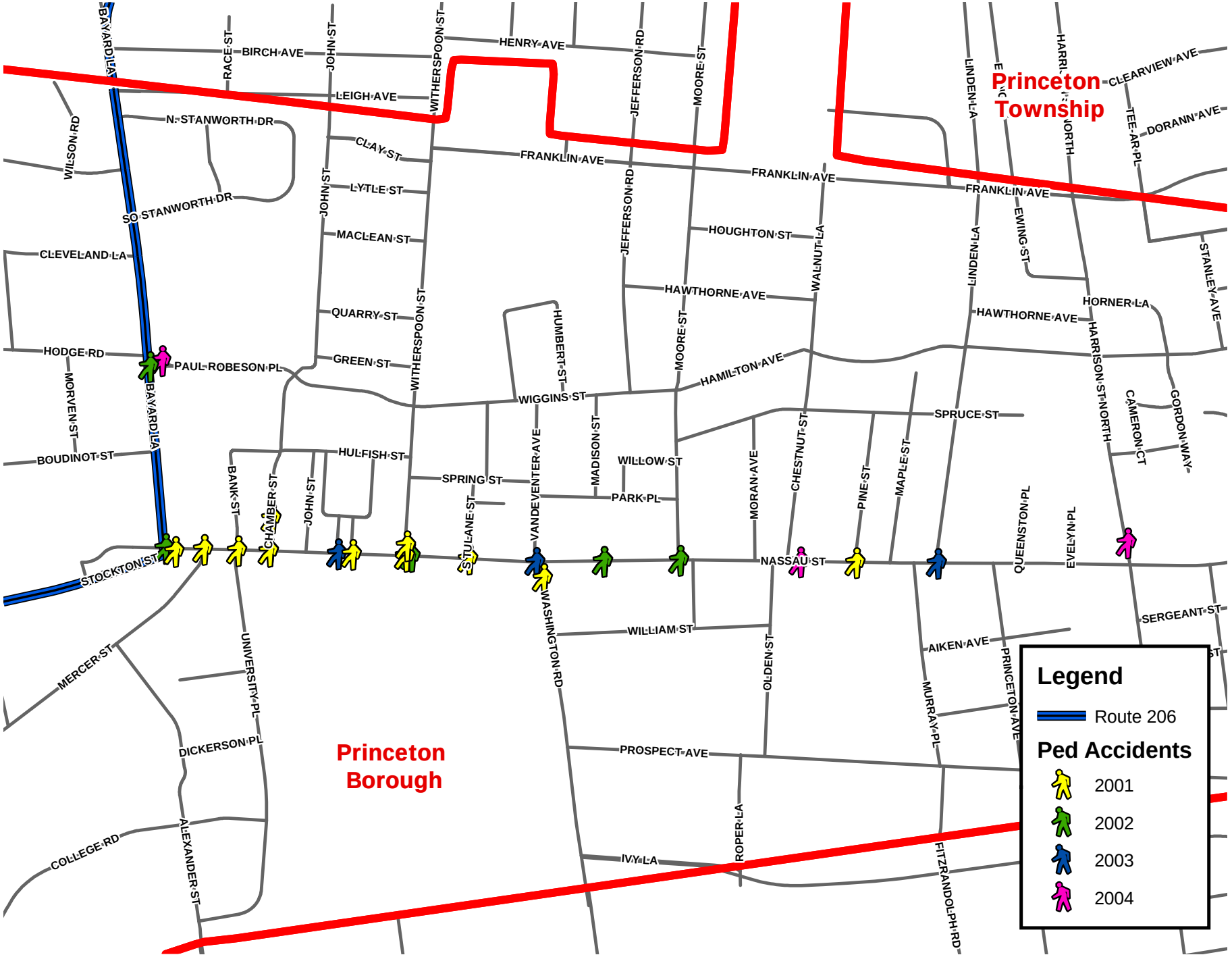
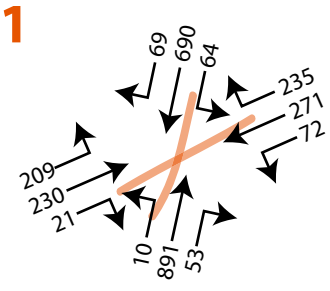

Princeton Township
Princeton Borough
BAYARD LA
RACE ST
BIRCH AVE
JOHN ST
WITHERSPOON ST
HENRY AVE
JEFFERSON RD
MOORE ST
LINDEN LA
HARRISON ST NORTH
CLEARVIEW AVE
TEE AR PL
DORANN AVE
LEIGH AVE
N STANWORTH DR
WILSON RD
CLAY ST
FRANKLIN AVE
LYTLE ST
SO STANWORTH DR
MACLEAN ST
HOUGHTON ST
WALNUT LA
EWING ST
STANLEY AVE
CLEVELAND LA
HAWTHORNE AVE
HORNER LA
QUARRY ST
HODGE RD
PAUL ROBESON PL
GREEN ST
HUMBERT ST
HAMILTON AVE
MORVEN ST
WIGGINS ST
SPRUCE ST
CAMERON CT
GORDON WAY
BOUDINOT ST
HULFISH ST
SPRING ST
MADISON ST
WILLOW ST
PARK PL
MORAN AVE
CHESTNUT ST
PINE ST
MAPLE ST
QUEENSTON PL
EVELYN PL
BANK ST
CHAMBER ST
STOCKTON ST
STULANE ST
VANDEVENTER AVE
NASSAU ST
WASHINGTON RD
SERGEANT ST
WILLIAM ST
AIKEN AVE
MERCER ST
UNIVERSITY PL
OLDEN ST
MURRAY PL
PRINCETON AVE
DICKERSON PL
PROSPECT AVE
COLLEGE RD
ALEXANDER ST
IVY LA
ROPER LA
FITZRANDOLPH RD
Legend
Route 206
Ped Accidents
2001
2002
2003
2004

Figure B4

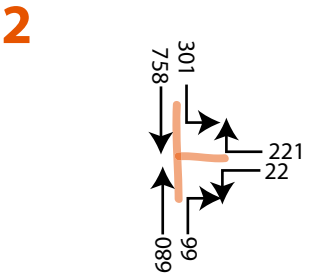
AM Peak

Source: DVRPC November 2005

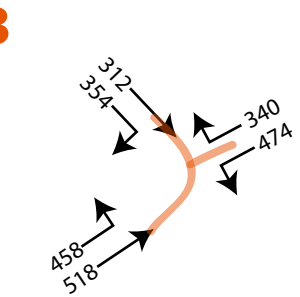
206 & Cherry Valley



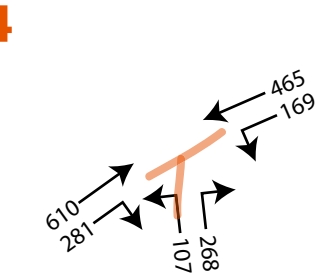
206 & Ewing



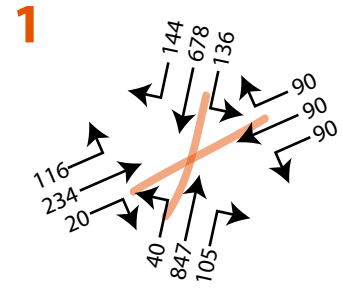
206 & Nassau

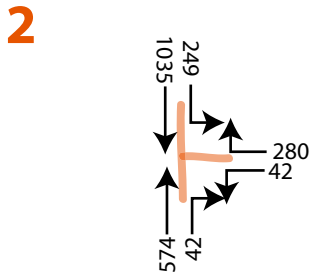


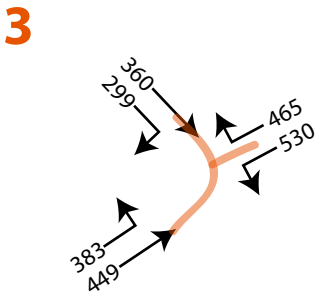
Mercer & Nassau

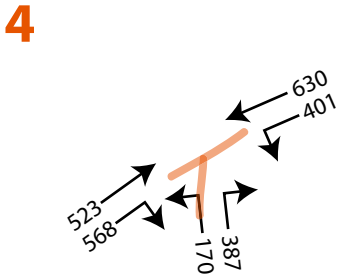


PM Peak









Intersection Traffic Counts

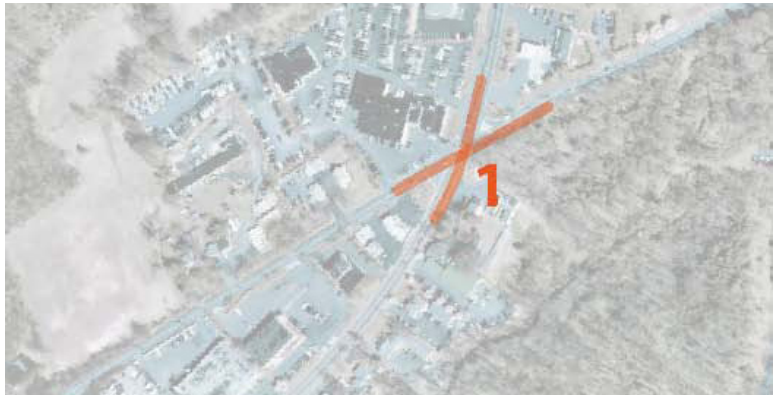
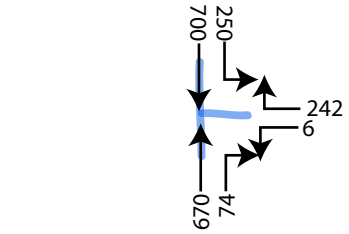


Figure B5

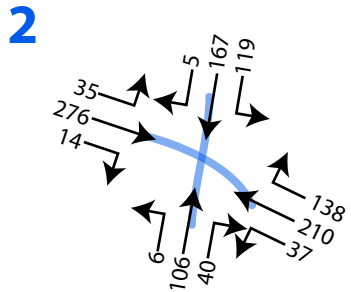
AM Peak

Source: Urbitran 2000-2002

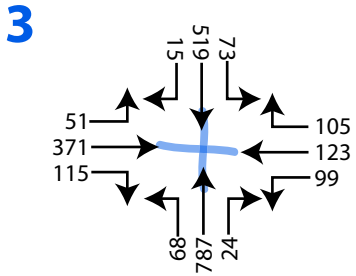
206 & Ewing



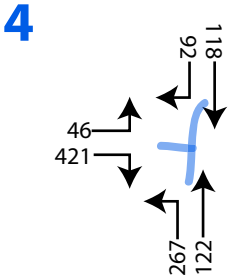
Mt Lucas & Ewing



206 & Cherry Hill



Mt Lucas & Cherry Hill



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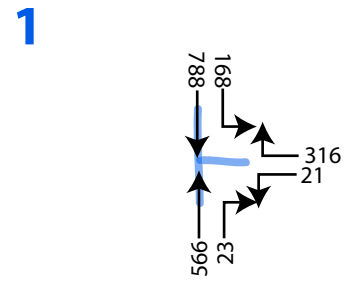
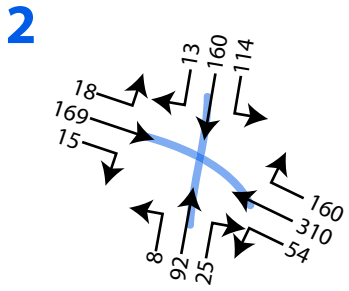
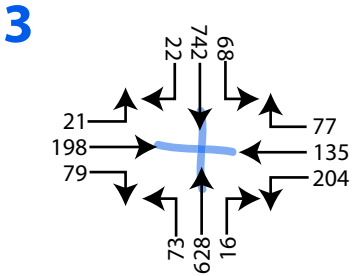
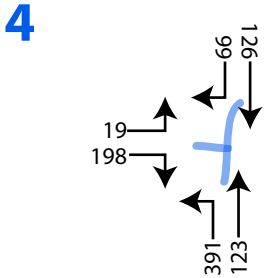








Intersection Traffic Counts

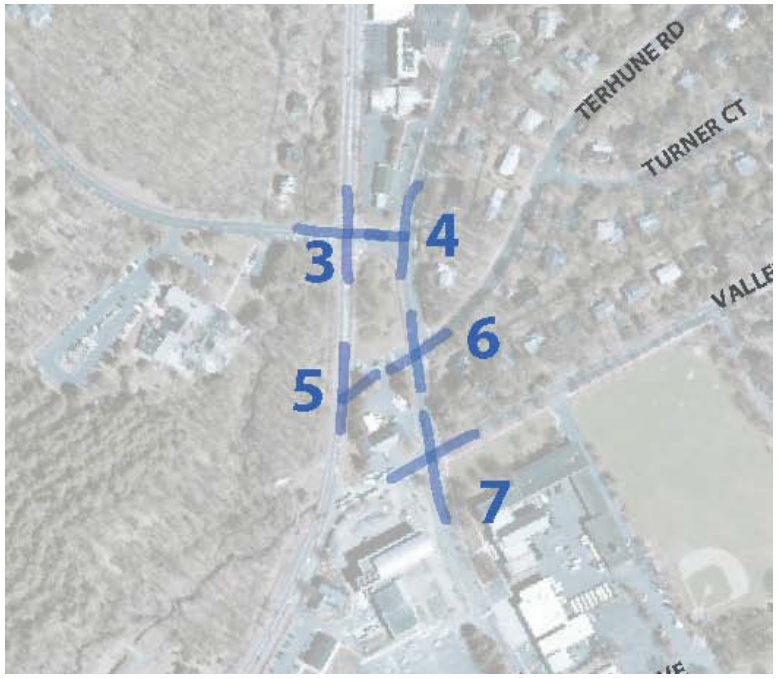


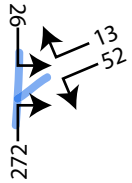
Figure B6

AM Peak

Source: Urbitran 2000-2002

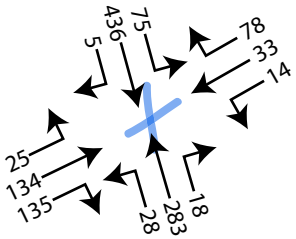
206 & Terhune

5



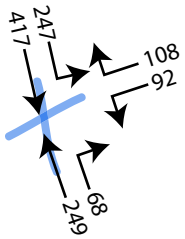
Mount Lucas & Terhune

6



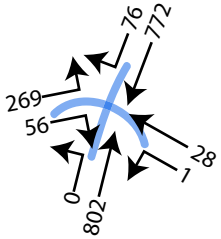
Witherspoon & Valley

7



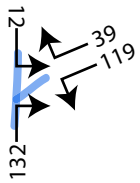
206 & Mt. Ave

8



PM Peak

5



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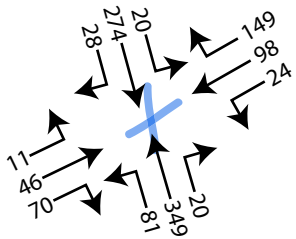

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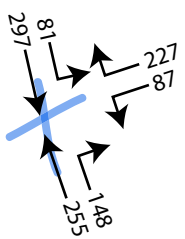

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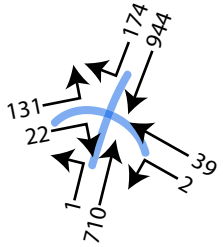


Intersection Traffic Counts

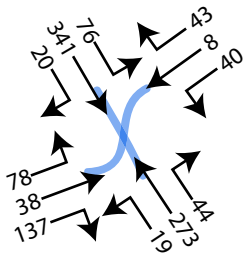
Figure B7

AM Peak

Source: Urbitran 2000-2002

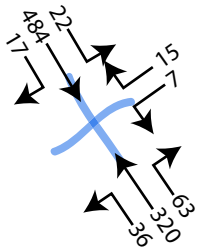
Witherspoon & Birch/Henry

9



Witherspoon & Leigh

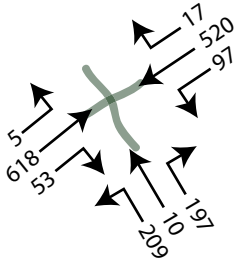
10



Source: NJDOT, September 2002

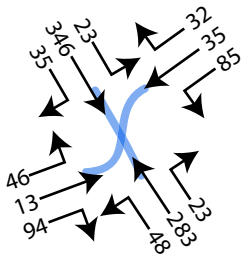
27 & University Place

1



PM Peak

9



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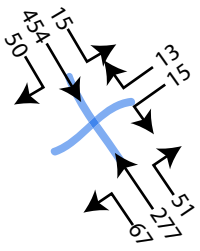

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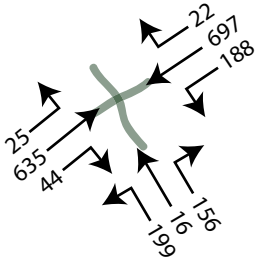


Intersection Traffic Counts

Figure B8

Route 206 & Nassau Street

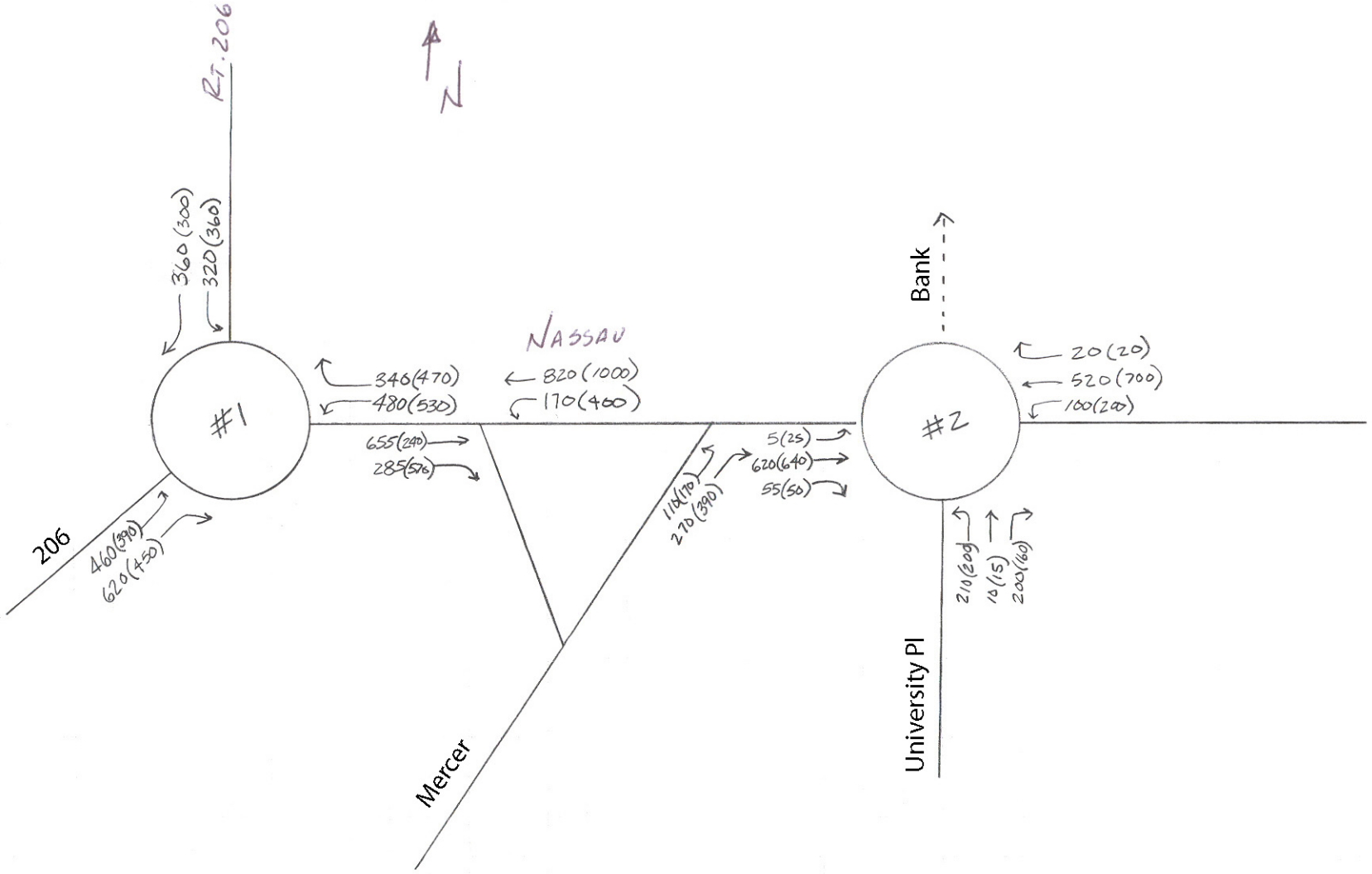


Figure B9

Route 206 & Mountain Avenue

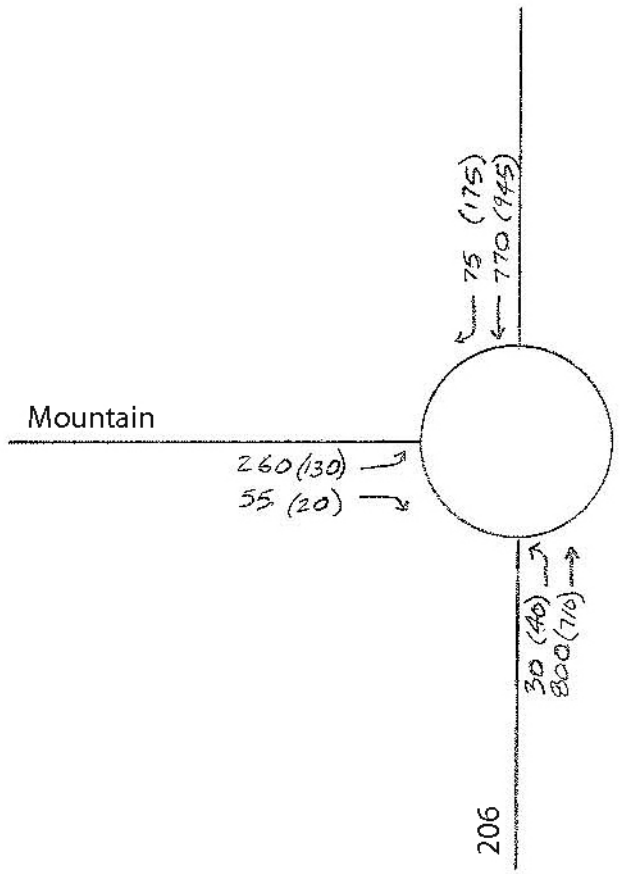


Figure B10

Route 206 & Cherry Hill Road

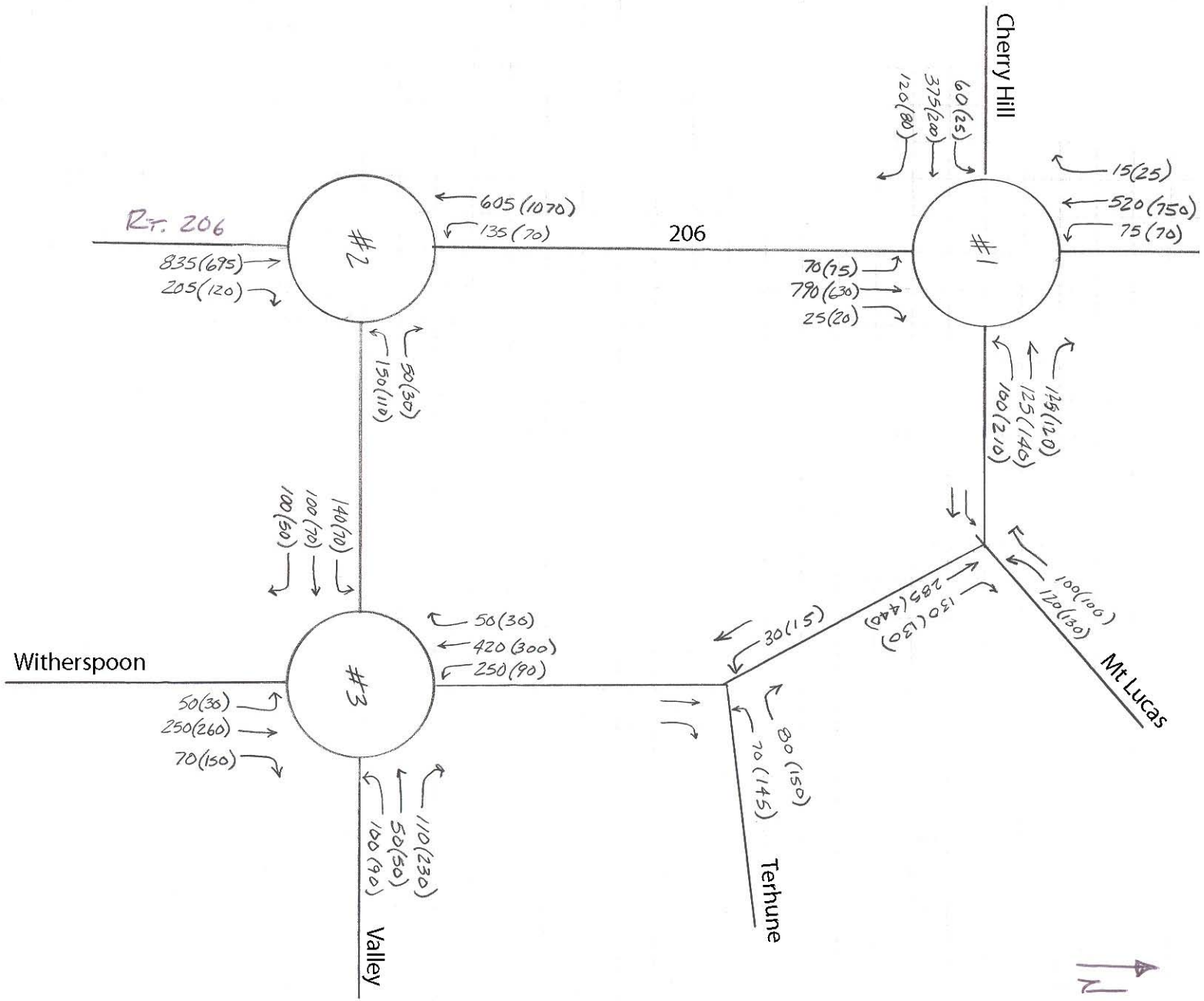


Figure B11

Route 206 & Ewing Street

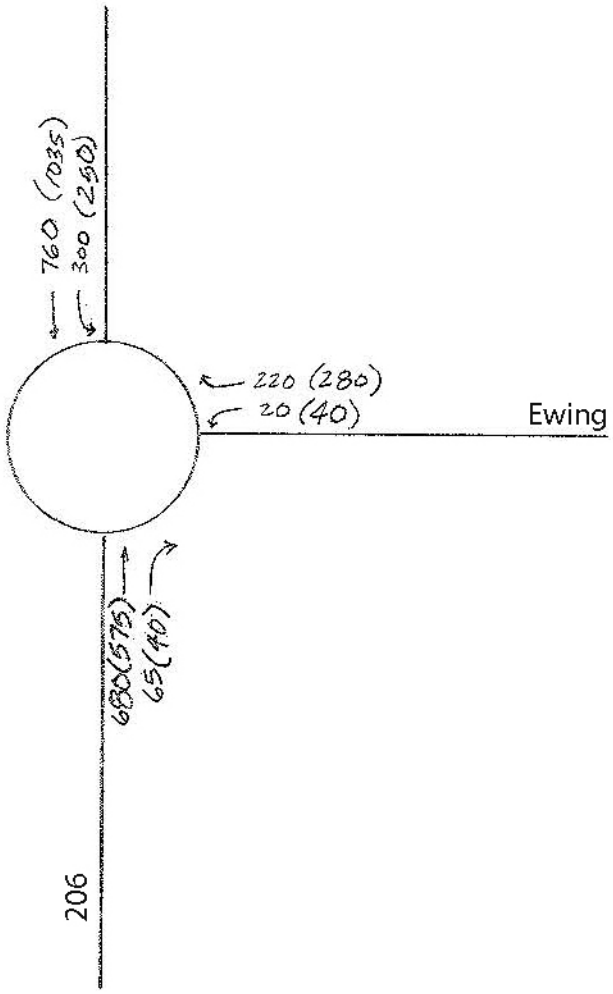


Figure B12

Route 206 & Cherry Valley Road

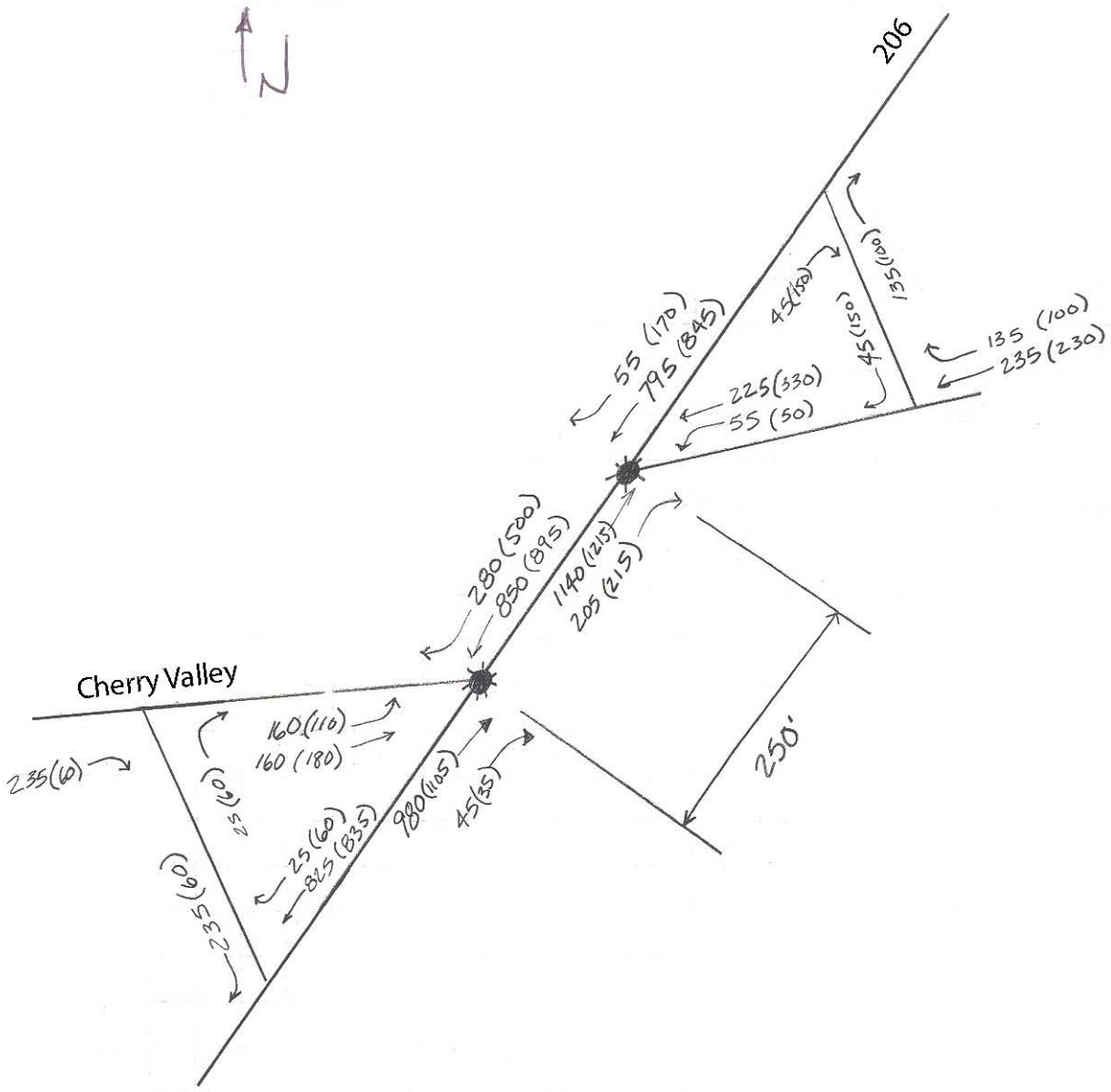


Figure B13

Route 206 & Nassau Street				
Loc	Lane Config	AM Peak/PM Peak		
		LOS	Saturation	Vehicles Per Hour
1		B/B	.90/.85	680/660
2		E*/C	1.13/.94	1080/840
3		C/F*	.97/1.15	820/1000
Overall LOS: D/D				

*Long Queues at Entry

Improved Configuration			
2		A/A	.55/.46
3		A/A	.45/.52
Overall LOS: A/A			

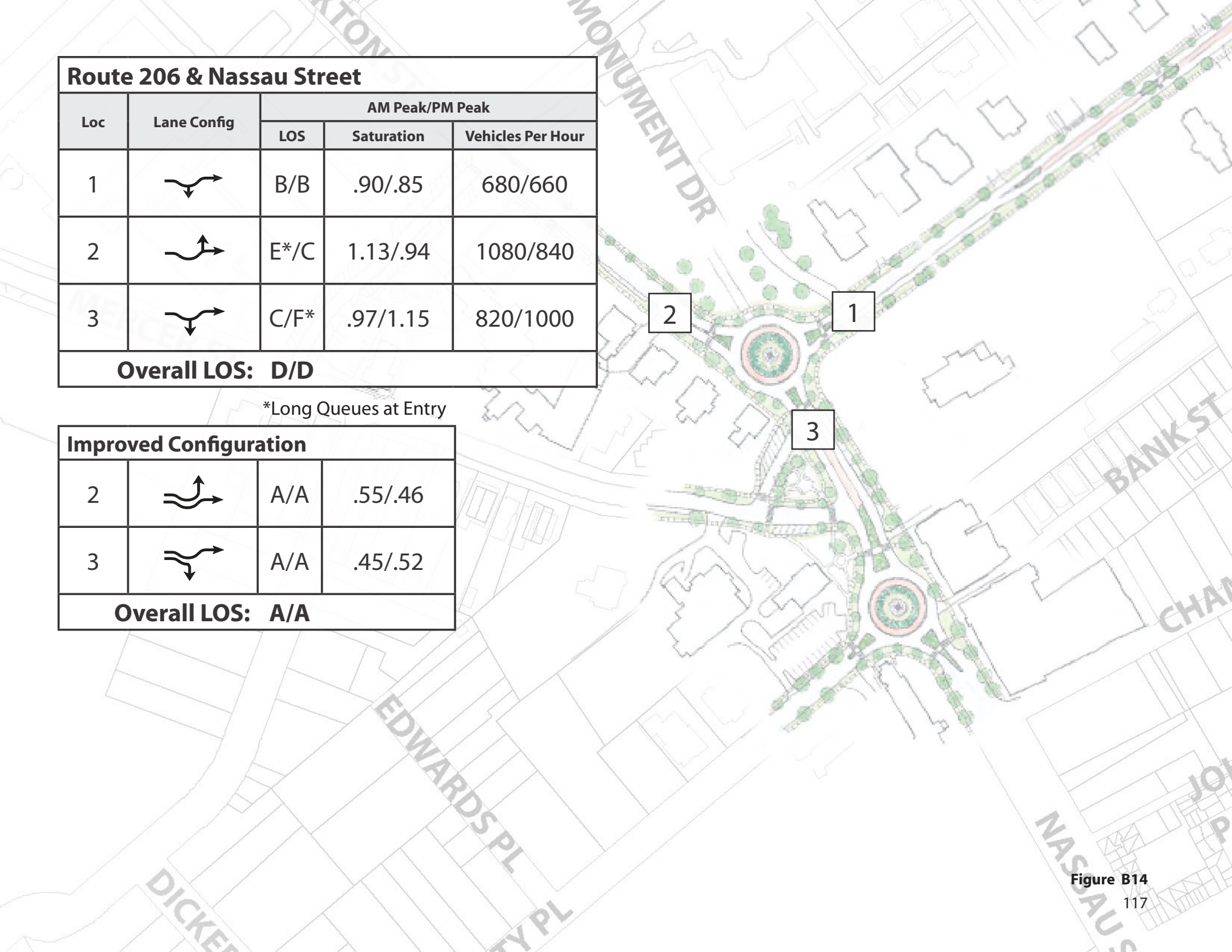


Figure B14

Nassau Street & University Place				
Loc	Lane Config	AM Peak/PM Peak		
		LOS	Saturation	Vehicles Per Hour
1		A/A	.55/.67	680/715
2		B/B	.61/.61	420/375
3		A/B	.62/.89	640/920
Overall LOS: A/A				

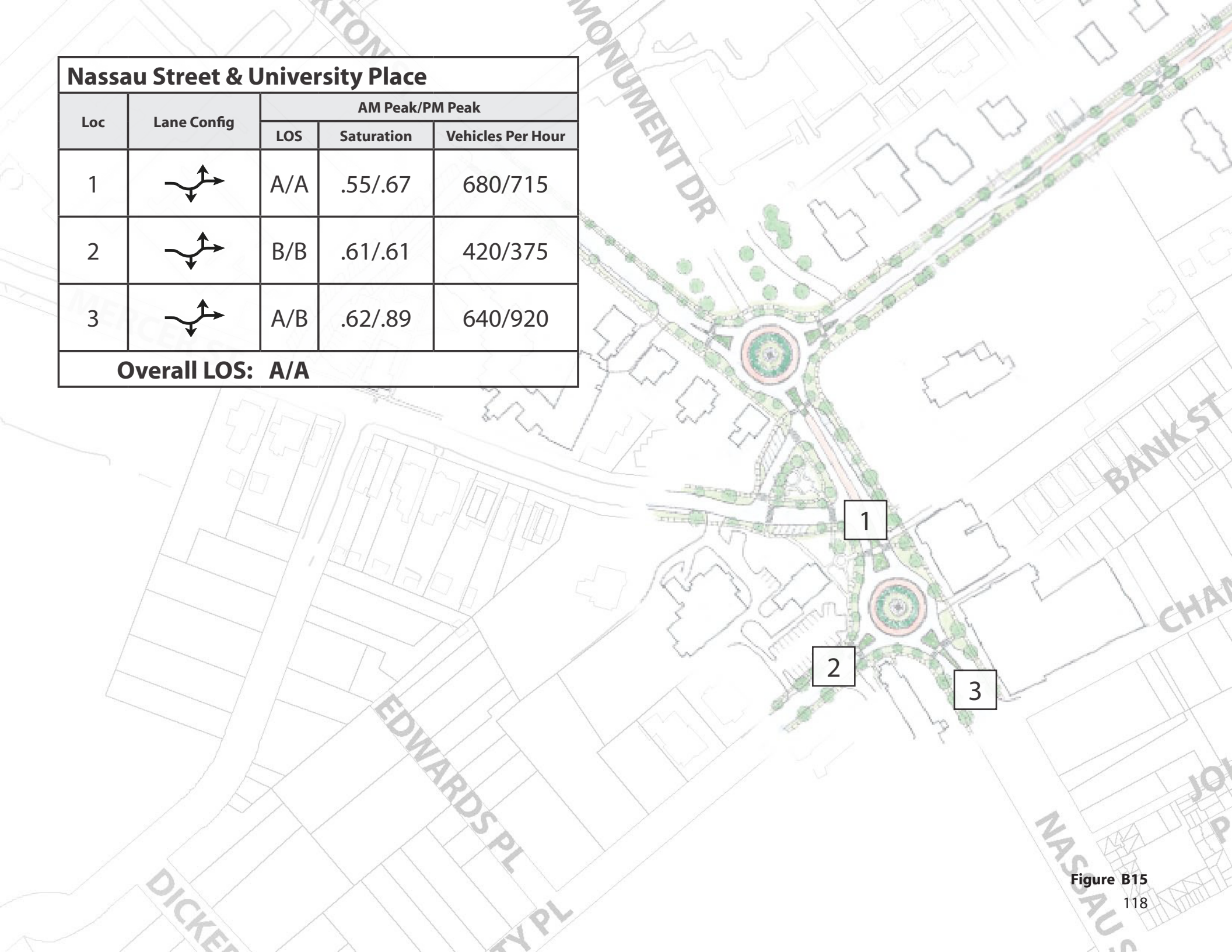
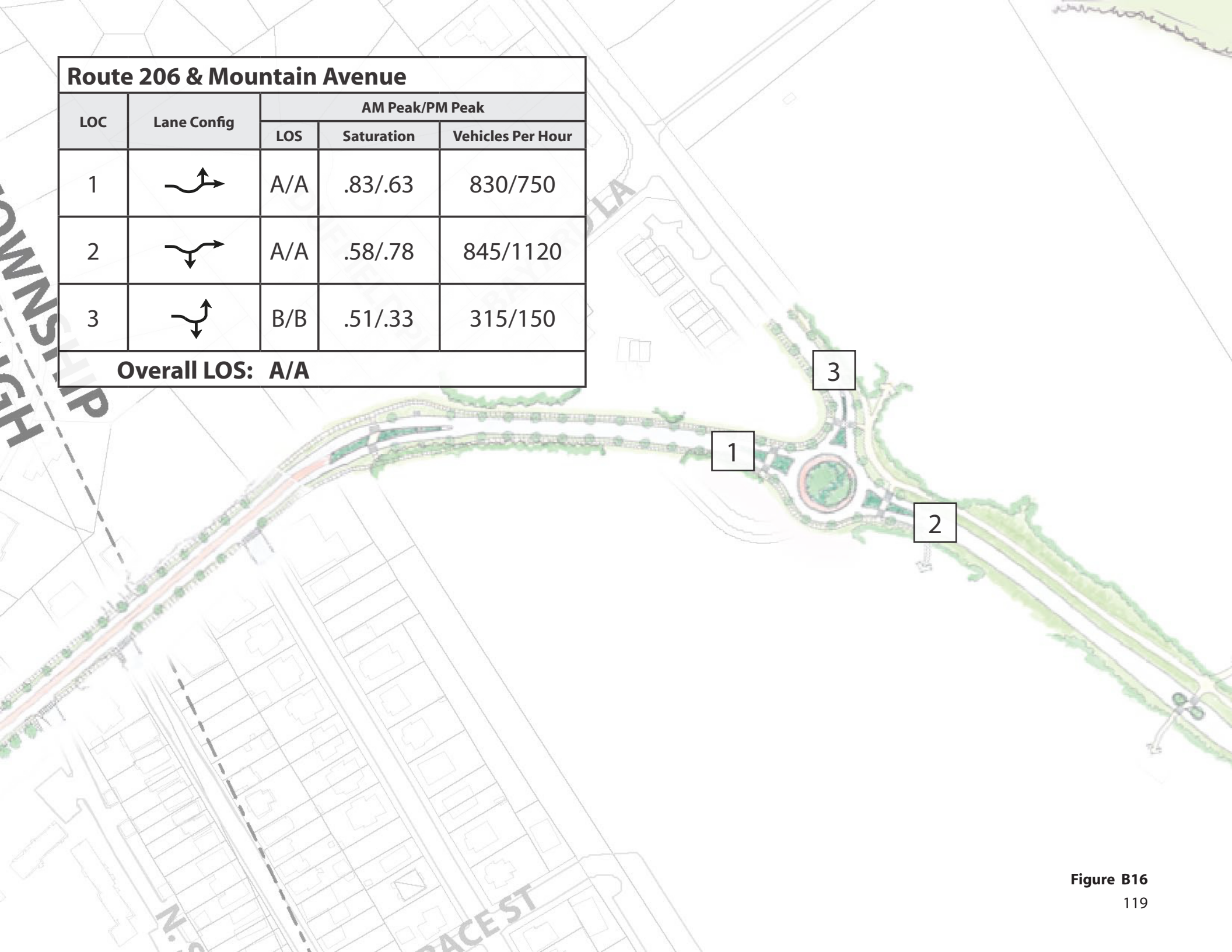


Figure B15



Route 206 & Mountain Avenue				
LOC	Lane Config	AM Peak/PM Peak		
		LOS	Saturation	Vehicles Per Hour
1		A/A	.83/.63	830/750
2		A/A	.58/.78	845/1120
3		B/B	.51/.33	315/150
Overall LOS: A/A				

Figure B16

Route 206 & Valley Road				
Loc	Lane Config	AM Peak/PM Peak		
		LOS	Saturation	Vehicles Per Hour
1		A/A	.86/.62	1040/815
2		B/B	.46/.22	200/140
3		A/A	.64/.90	740/1140
Overall LOS: A/A				

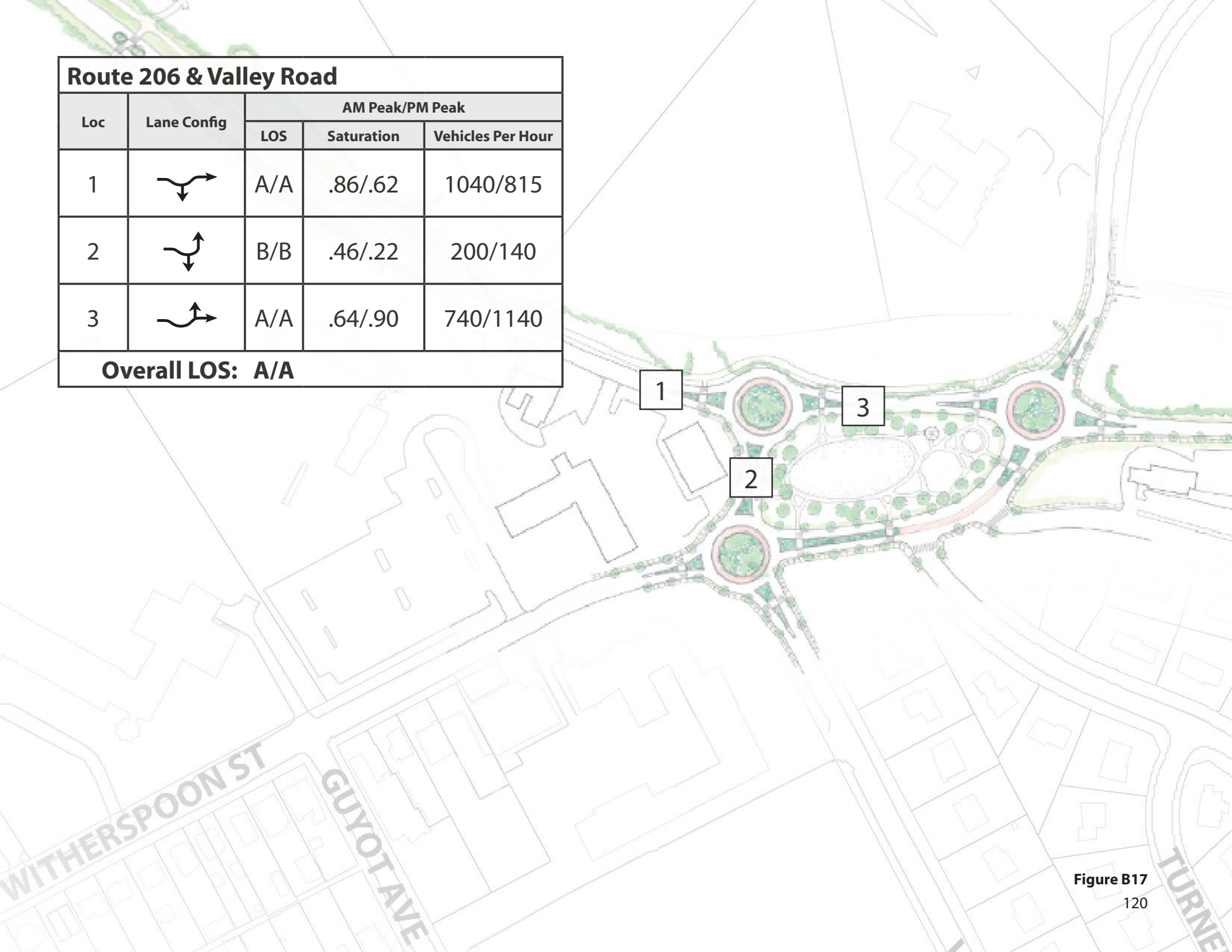


Figure B17

Witherspoon St & Valley Road				
Loc	Lane Config	AM Peak/PM Peak		
		LOS	Saturation	Vehicles Per Hour
1		A/A	.47/.42	370/440
2		A/A	.32/.41	260/370
3		A/A	.66/.38	720/420
4		B/A	.61/.24	340/190
Overall LOS: A/A				

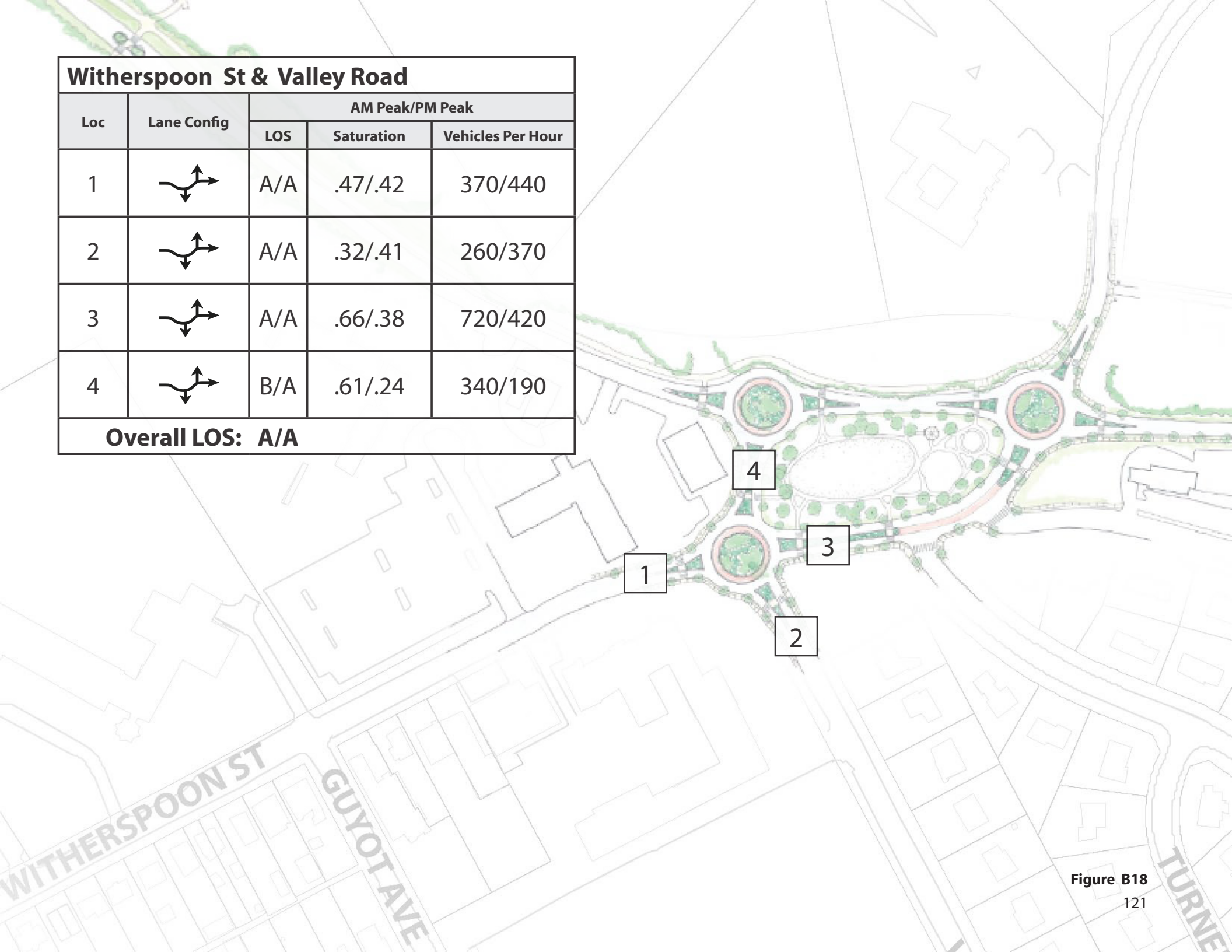


Figure B18

Route 206 & Cherry Hill Road				
Loc	Lane Config	AM Peak/PM Peak		
		LOS	Saturation	Vehicles Per Hour
1		F*/A	1.20/.75	885/725
2		C/C	.72/.88	350/470
3		A/D*	.63/1.02	610/845
4		D/C	.93/.89	555/305
Overall LOS: D/C				

*Long Queues at Entry

Improved Configuration			
1		D/A	.54/.36
3		A/B	.30/.47
Overall LOS: C/B			

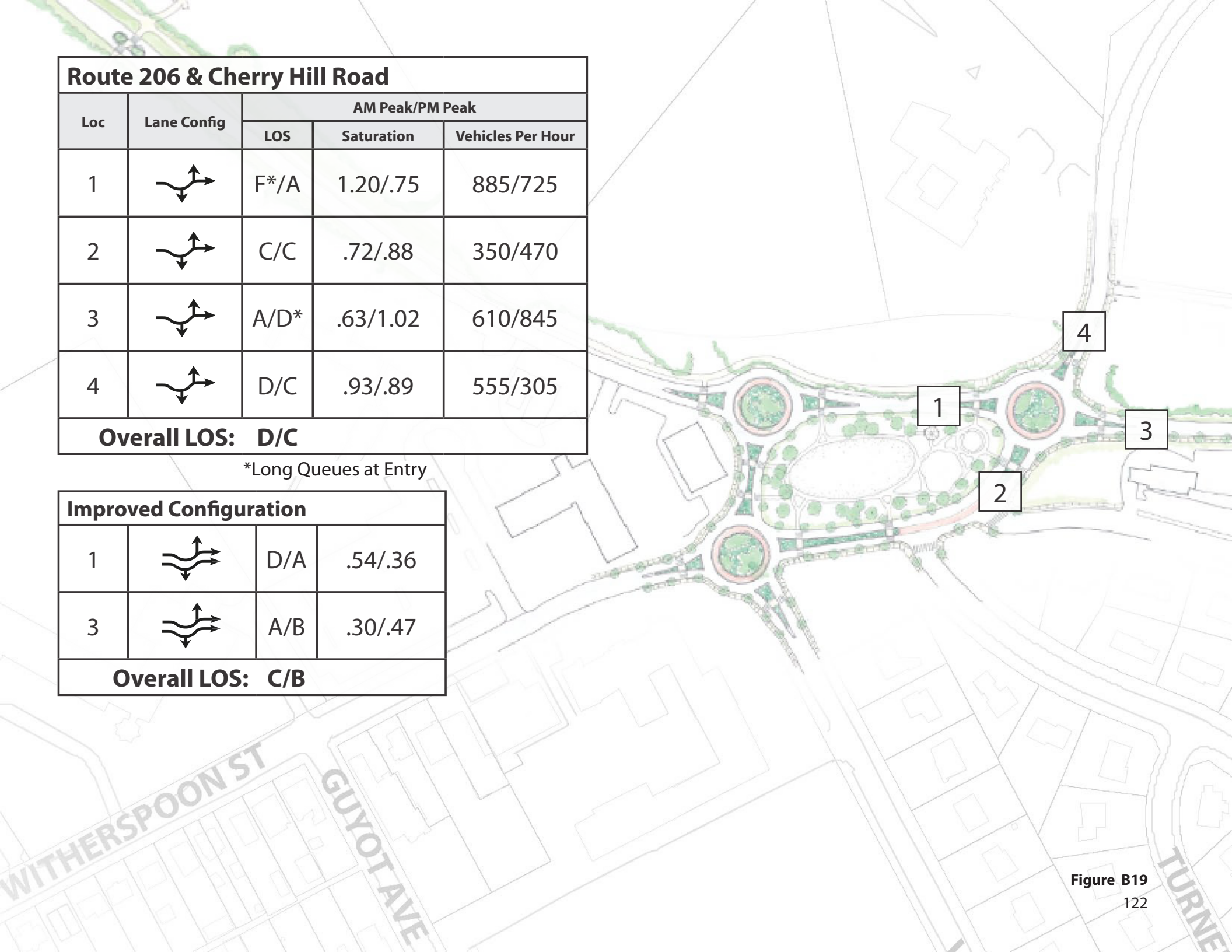
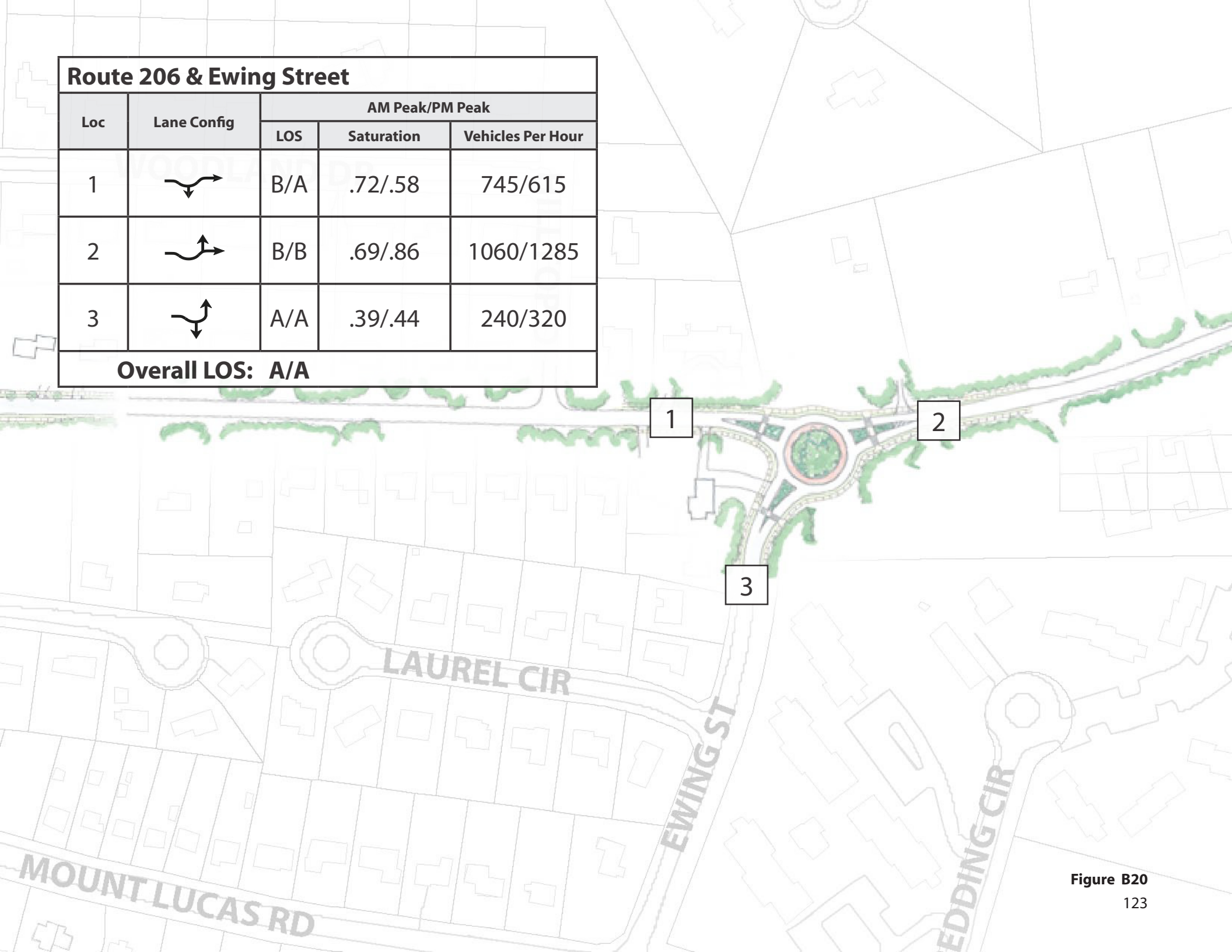


Figure B19



Route 206 & Ewing Street				
Loc	Lane Config	AM Peak/PM Peak		
		LOS	Saturation	Vehicles Per Hour
1		B/A	.72/.58	745/615
2		B/B	.69/.86	1060/1285
3		A/A	.39/.44	240/320
Overall LOS: A/A				

Figure B20

Route 206 & Cherry Valley Road	
Location	AM Peak/PM Peak
	LOS
1	B/B
2	B/C
Overall LOS:	**B/B**

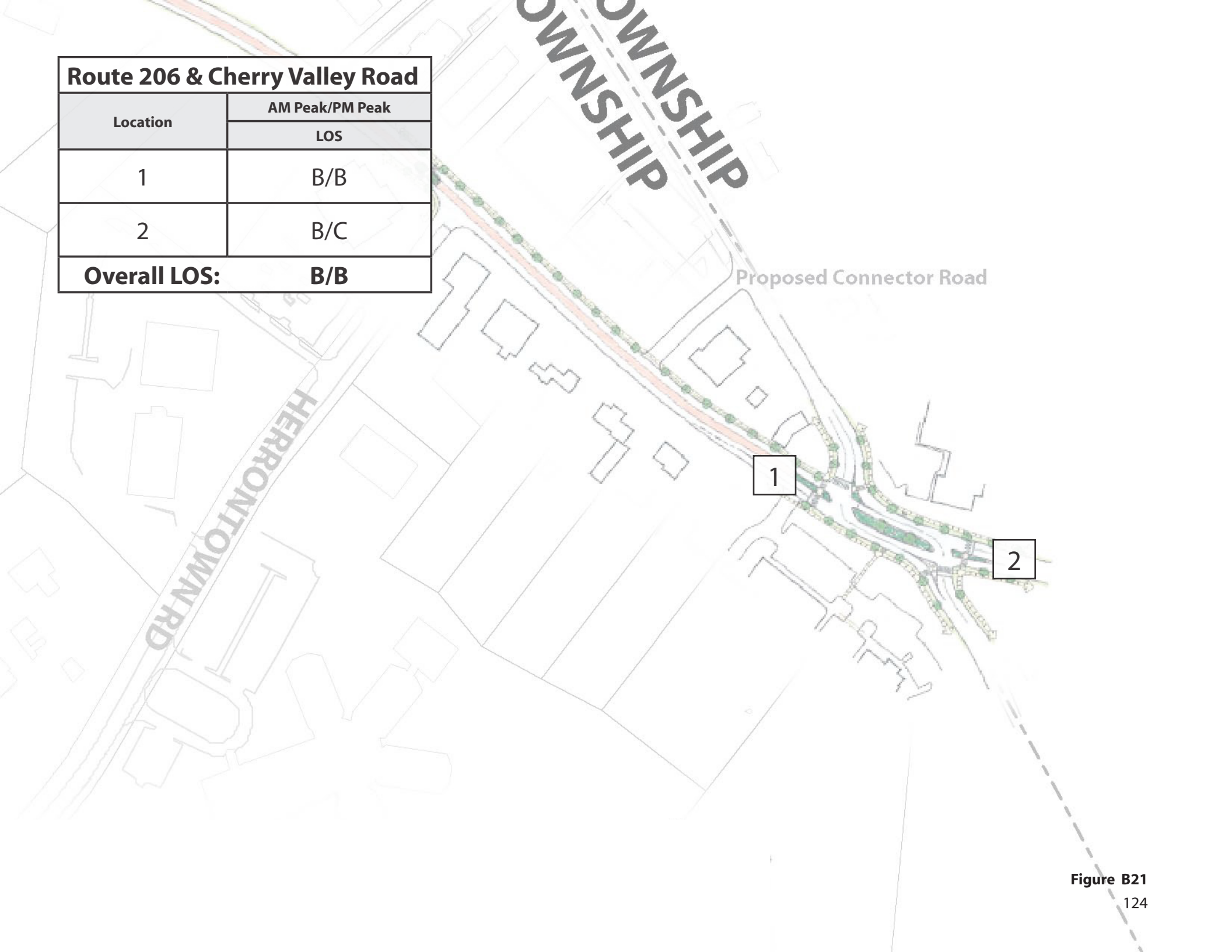


Figure B21