VILLAGE OF MACEDON

New York State Route 31 Circulation, Accessibility, and Parking Study

FINAL REPORT







TAGE

NYS ROUTE 3

Presented to

VILLAGE OF MACEDON and GENESEE TRANSPORTATION COUNCIL WITH FINANCIAL ASSISTANCE FROM THE FEDERAL HIGHWAY ADMINISTRATION

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CHAPTER 1: INTRODUCTION

1.1 Background

New York State Route 31 (NYS Route 31) is a vital arterial and one of the most traveled highways in Wayne County. The function of the highway, including accessibility and mobility within the corridor are directly related to the quality of life and economic vitality of the Village of Macedon. In addition, changing land uses surrounding the Village affect highway function and these changes are driving the need to evaluate traffic and circulation within the Village. The Village of Macedon is the first populated area encountered by people traveling east along NYS Route 31 and the New York State Canal System (or Erie Canal) from Monroe County, and thus serves as a gateway to Wayne County from the greater Rochester area.

The Village has strong historic ties to the Erie Canal and the canal era. Historic settlement and growth of Macedon was generally the result of the canal era economy through the transportation of agricultural goods and development of tanneries and mills associated with regional trade of the past. Today, the Village is comprised of a mix of industrial, small commercial and residential land uses associated with NYS Route 31 as a traditional "Main Street."

From a transportation perspective, the Village is primarily served east to west by NYS Route 31 and the Erie Canal and north to south by NYS Route 350/31F and Erie Street. Like many rural villages near expanding suburbs, Macedon relies on NYS Route 31 for access to the Village businesses, churches, and community facilities. However, as growth around the Village occurs, traffic volume plays a role in the perceived safety of NYS Route 31 as a traditional "Main Street." One major factor in the increasing traffic volume is recent residential and commercial growth within the Town of Macedon (particularly west of the Village). This growth, associated with "out-migration" from suburban Rochester is expected to continue which will generate additional traffic. A second factor is the increase in truck traffic resulting from the High Acres landfill which is located in the Town of Perinton in adjacent Monroe County. This has resulted in an

increase of trucks traveling through the main Village intersection of NYS Route 31 and NYS Route 350/31F.

In recognition of these changing trends and traffic patterns, the Village is seeking to take a proactive approach to planning for traffic safety, circulation, and pedestrianization. At the same time, the Village would like to benefit from recent growth by enhancing the character of the community and taking advantage of the canal as a statewide recreational resource. Therefore, the impetus for this project is two-fold. The first is to address traffic, circulation, and parking within the Village and to improve pedestrian and vehicle safety. The second is to maximize new economic opportunities by improving Main Street in a way that will attract and enhance the experience of visitors and local businesses.

This study will enable the Village to further advance strategies developed in past years such as building upon initiatives outlined in its Comprehensive Plan, as well as earmark specific projects for which to seek funding assistance that the Village has previously been unsuccessful in doing, largely due to the lack of planning studies such as this. By listening to and involving local citizens and business owners, the Village of Macedon and the Genesee Transportation Council (GTC) can leverage the existing historic elements along the corridor and enhance the community's character. The project will also seek solutions that will strengthen and expand local businesses by capturing the interest of increasing numbers of motorists who routinely use the corridor. Lastly, efforts will include developing methods to increase parking and improve pedestrian accessibility to the entire area, especially around the Canal and Lock 30, which are reportedly underutilized as recreational destinations.

1.2 Study Area

The study area is the Village's Main Street District along NYS Route 31, including adjacent roadways and land uses from Kemp Drive to the west, Quaker/O'Neill Road to

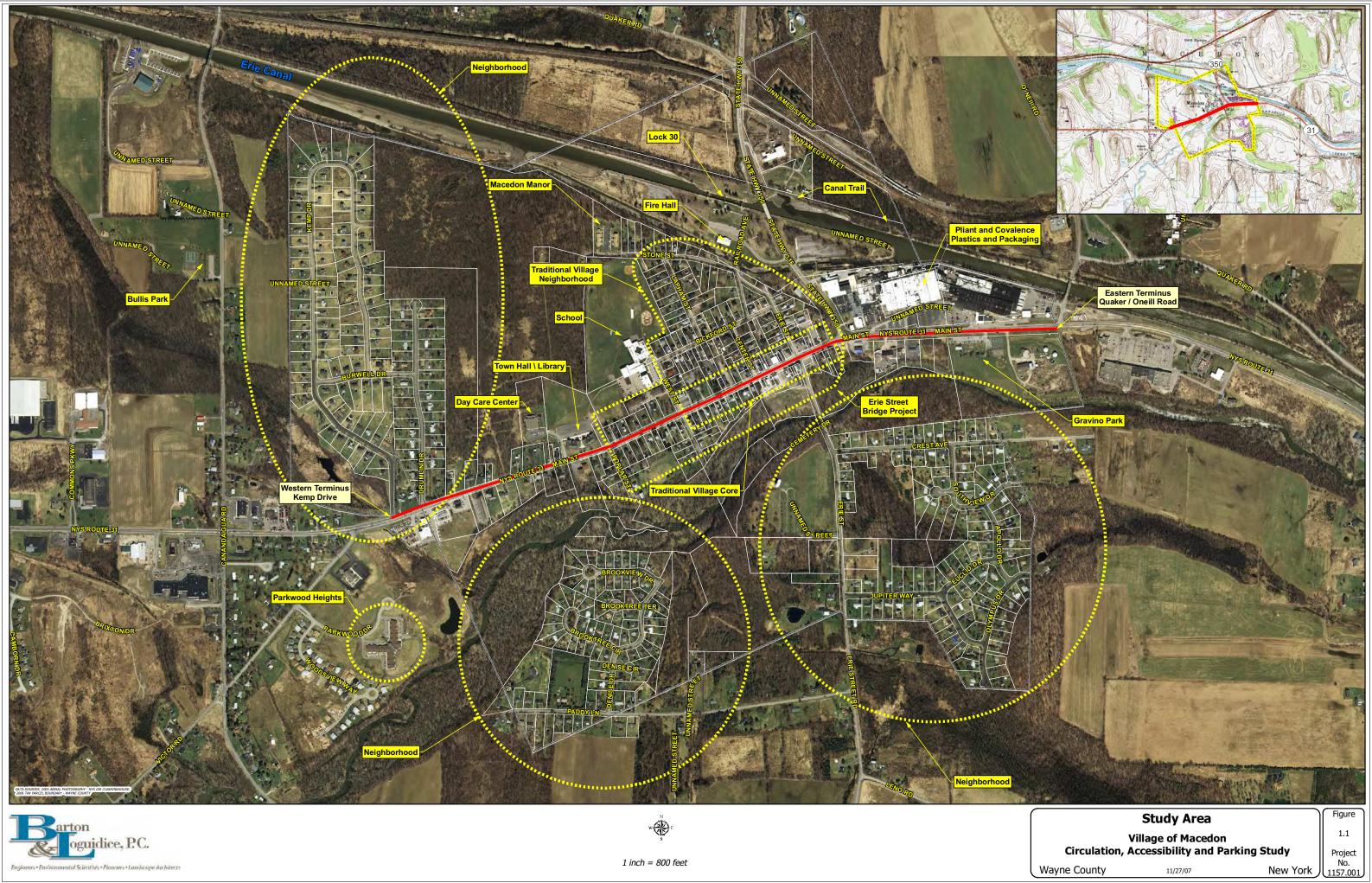
the north and east, and Paddy Lane to the south and including the canal and Lock 30 to the north (Figure 1.1).

1.3 Known Issues and Goals

One of the first steps in the study was to clearly define the primary issues that the study intended to address as well as the desired study outcomes. Through emerging discussions with the Steering Committee, field evaluations, and comments received at the public meetings, the following known issues and goals emerged:

Known Issues:

- Lack of sufficient parking supply;
- Increasing vehicular and truck traffic;
- Missing links for bicycle/pedestrian accessibility and circulation, specifically to:
 - Lock 30
 - Canalway Bike Trail
 - o Gravino Park
 - Neighborhoods
 - Pliant Corp. Manufacturing Plant
 - Business District
 - McDonald's and Movie Theater
- Limited traffic controlled intersections and pedestrian crossing opportunities;
- Difficulty for buses and children/pedestrians to access and cross NYS Route 31;
- Increased commercial development to the west (Town of Macedon);







- Anticipated positive and negative spin-off effects of increased development;
- Relatively stagnant economic growth; and
- Aesthetically challenged streetscape.

<u>Goals</u>:

- Improve circulation, accessibility, and parking for pedestrians, bicyclists, and motorists;
- Maximize the economic vitality and livability of the community;
- Enhance the community character;
- Create an aesthetically appealing and well functioning gateway to Wayne County;
- Improve existing and/or develop new linkages between origins and destinations;
- Encourage compatible development and redevelopment;
- Promote sustainability (understanding the interconnections among economy, society, and environment);
- Promote tourism via the Canal System; and
- Identify physical, regulatory, and funding opportunities.

1.4 Purpose of Study

The purpose of this study is to develop feasible transportation planning and design concepts, with compatible zoning, to facilitate the aforementioned issues and

goals in the Village of Macedon's Main Street District for pedestrians, bicyclists, and motorists that are consistent with general community goals and expectations.

This study is being funded through the Genesee Transportation Council's (GTC) Circulation, Accessibility, and Parking (CAP) Program. The GTC, in conjunction with the Village of Macedon, has retained Barton & Loguidice, P.C. (B&L) to assist in completing this study.

1.5 Study Process

Principal to this study is the inventory and evaluation of vehicular and pedestrian circulation, accessibility, and parking along and adjacent to the corridor. In addition, the study will analyze forecasted conditions and needs, assess short and long-term demands, and recommend context-sensitive solutions for future consideration. Finally, the study will make physical planning and land use policy recommendations for implementation.

1.6 Document Layout

Outlined in Chapters 1 through 4 is an inventory of existing conditions with respect to on and off-street parking characteristics, traffic volumes, level of service (LOS), highway geometrics and structural limitations along the corridor, existing and proposed commercial or industrial developments, and speed and accident rates. The summary also includes a review of local zoning laws and land use policy. Chapters 5 through 7 document the needs and opportunities assessment, the development and analysis of alternatives, recommendations and potential funding sources. The Appendices (separately bound) include the turning movement counts, accident summary sheets, a photographic record of land use and structures and documentation from the public information meetings.

1.7 Study Participants

A Steering Committee comprised of representatives from several agencies provided continuity and oversight throughout the entire study process. Study Participants included representatives from: the Village of Macedon, Palmyra-Macedon School District, Palmyra-Macedon Chamber of Commerce, GTC, and the New York State Department of Transportation (NYSDOT).

In addition, there were two (2) Public Information Meetings (PIM) held at strategic milestones throughout the project. These sessions were designed to solicit public input on issues as well as on preliminary design concepts and recommendations.

1.8 Existing Plans and Studies

Over the past decade several regional and local planning efforts have been completed that have potential implications for the NYS Route 31 Corridor study area in the Village of Macedon. These documents were reviewed at the beginning of the study to ensure that the results of these previous efforts were known and complemented by this study. The documents that were reviewed are summarized below:

1.8.1 Regional Planning Documents

Long Range Transportation Plan (LRTP) for the Genesee – Finger Lakes Region: 2007-2027 Update. The mission of the Genesee Transportation Council is "to maximize the contribution of the transportation system to the social and economic vitality of the nine-county Genesee-Finger Lakes Region". This plan was developed to be consistent with this mission and to provide a long-range (20 years) guide for existing and future transportation system capabilities, needs and strategies. This plan is designed to provide a base framework for planning and implementation of transportation improvement projects in the region. The goals of the LRTP are as follows:

- 1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- 2. Increase the safety of the transportation system for motorized and non-motorized user.
- Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.
- 4. Increase the accessibility and mobility options available to people and freight.
- 5. Protect and enhance the natural environment, cultural heritage and community appearance, and promote energy conservation.
- 6. Promote efficient system management and operations.
- 7. Facilitate partnerships in planning, financing, and the execution of transportation initiatives.

2006 Regional Land Use Monitoring Report: Per the Report Abstract prepared by the Genesee/Finger Lakes Regional Planning Council (G/FLRPC), "this report provides information on the issuance of new building permits in 2006 to identify areas of growth within the Genesee-Finger Lakes Region that might require transportation planning and service modifications."

2006 Regional Population Forecasts: This G/FLRPC report includes population projections to the year 2040 for all counties, cities, towns, and villages in the Genesee/Finger Lakes Region. A top down approach was used, where the region was capped within New York State, and then each county within the region, and finally all the municipalities within the counties were finalized. 2004 Regional Development Analysis: Prepared by the Genesee / Finger Lakes Regional Planning Council, this analysis was completed to help identify anticipated land use patterns in the region. This report collected and analyzed all regional municipal land use regulation and control documents including zoning, subdivision, site plan, and other local land use laws to determine deficiencies and potential updates

2002 Regional Trails Initiative: Prepared by Alta Transportation Consulting, Inc., Northeast Greenways, Inc. and Larsen Engineers, P.C., this project was to develop a comprehensive and achievable action plan for community leaders to create and maintain a safe, accessible, and functional regional trail system that is fully integrated with the existing transportation system and constitutes a nationally recognized distinguishing feature of this region. The plan outlines specific strategies and projects for the future extension of the Rochester, Syracuse & Eastern (RS&E) Trolley Trail from the Town of Perinton into the Town and Village of Macedon, ultimately linking up to the Erie Canalway Trail.

1.8.2 Local Planning Documents and Studies

1996 Village of Macedon Master Plan: The Village Master Plan was intended to serve as a guide document for existing and future growth and development, however, although still in effect, it is rarely utilized. The Master Plan did identify a few priority projects that directly impact the NYS Route 31 corridor. These projects include:

- Diverting Erie Street South to the traffic light at Rt. 350. This project was initiated by the County and has been completed.
- Widening the corner of Erie Street South and NYS Route 31 to provide for a right turn lane. This project has been completed.

- Developing a linear park system from Gravino Park west to Poplar Street. This project would effectively provide pedestrian connections throughout the Village via alternative means of transportation.
- Opening up Canal properties to develop canal-related commercial businesses. Preliminary planning stages were initiated however no progress has been made. Funding is a major limitation.
- Mitigating traffic congestion on NYS Route 31 at the western end of the Village.
- Installing a traffic light at West/Race Streets and NYS Route 31.
- Replacing trees along Main Street in the Business District. Plant more trees for shade and aesthetic value along this corridor.

It is important to note that while the Master Plan identifies important projects as catalysts for improvements, preliminary discussions with the Steering Committee reveal that the Village is lacking in the implementation of many planning recommendations. It is also noteworthy that there is a local perception that many of the recommendations of the plan have not been realized.

1995 New York State Canal Recreationway Plan was developed by the New York State Thruway Authority (NYSTA) and the New York State Canal Corporation (NYSCC) in 1995. The plan was prepared for the Canal Recreationway Commission which was formed as a 24-member body consisting of State and local agencies as well as private citizens. Members of this Commission, appointed by Governor Cuomo, were selected to represent diverse canal interests from all geographic locations along the canal system. The goal of the plan was to develop "a conceptual framework for fostering the development of the canal system into a canal recreationway system." Improvements to the canal system and Canalway Trail in the Macedon area are a direct result of this planning effort. While funding for proposed improvements tends to come slowly for smaller communities, adjoining communities like Pittsford and Palmyra have leveraged grants through various public and private sources by having sound planning objectives for canal revitalization in their communities.

As outlined in the plan, Macedon serves as a gateway between the Drumlins Region and the Metro Rochester Thematic Region of the Canal Recreationway Plan. The Drumlins Thematic Region is programmed to incorporate the history of canal towns and the connectivity of this historic transportation route between the many Villages along the way in to recreational improvements and interpretive facilities. The planning concept is to make trail, park and boater improvements that reflect connectivity between the canal, the Village, and other villages along the canal system between Rochester and the Seneca Canal. Lock 30 is programmed in the plan as a canal service area and improved docking and minor boater services like fuel, boater pump-out facilities, restrooms and docking improvements were originally slated for this area.

Lock 30 Park in the Village of Macedon is a predominant recreation feature within the community and the Village is a stopping point along the Statewide Canalway Trail. The park and lock facility are adjacent to three earlier canal sites. The current spillway was part of the 1840 enlargement and a building once used as the State Warehouse for grain is located on the north bank near NYS Route 350. On the east side of NYS Route 350, Old Lock #61 of the enlarged barge canal can be found, making Macedon one of the few "two lock" towns along the canal. It is now used as part of the spillway for Lock # 30.

The Lock 30 Park currently offers camping, picnic areas, a boat ramp, and access for boaters or trail users to the Village of Macedon. However, it should be noted that the access to the Village is not delineated nor is there a clearly identified connection between the two locations. The Macedon Trail's Association Stone Street Trail offers a south shore contrast to the more formal Heritage Trail

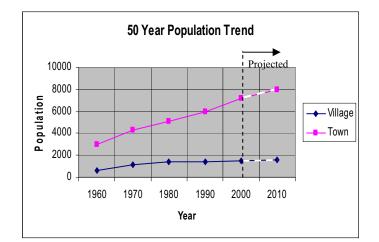
and bikeway on the north shore of the canal. West of Lock 30, all three alignments of the canal may be seen side by side including the Original Clinton's Ditch of the 1820s, the Enlarged of the 1840s, and the current of 1910s.

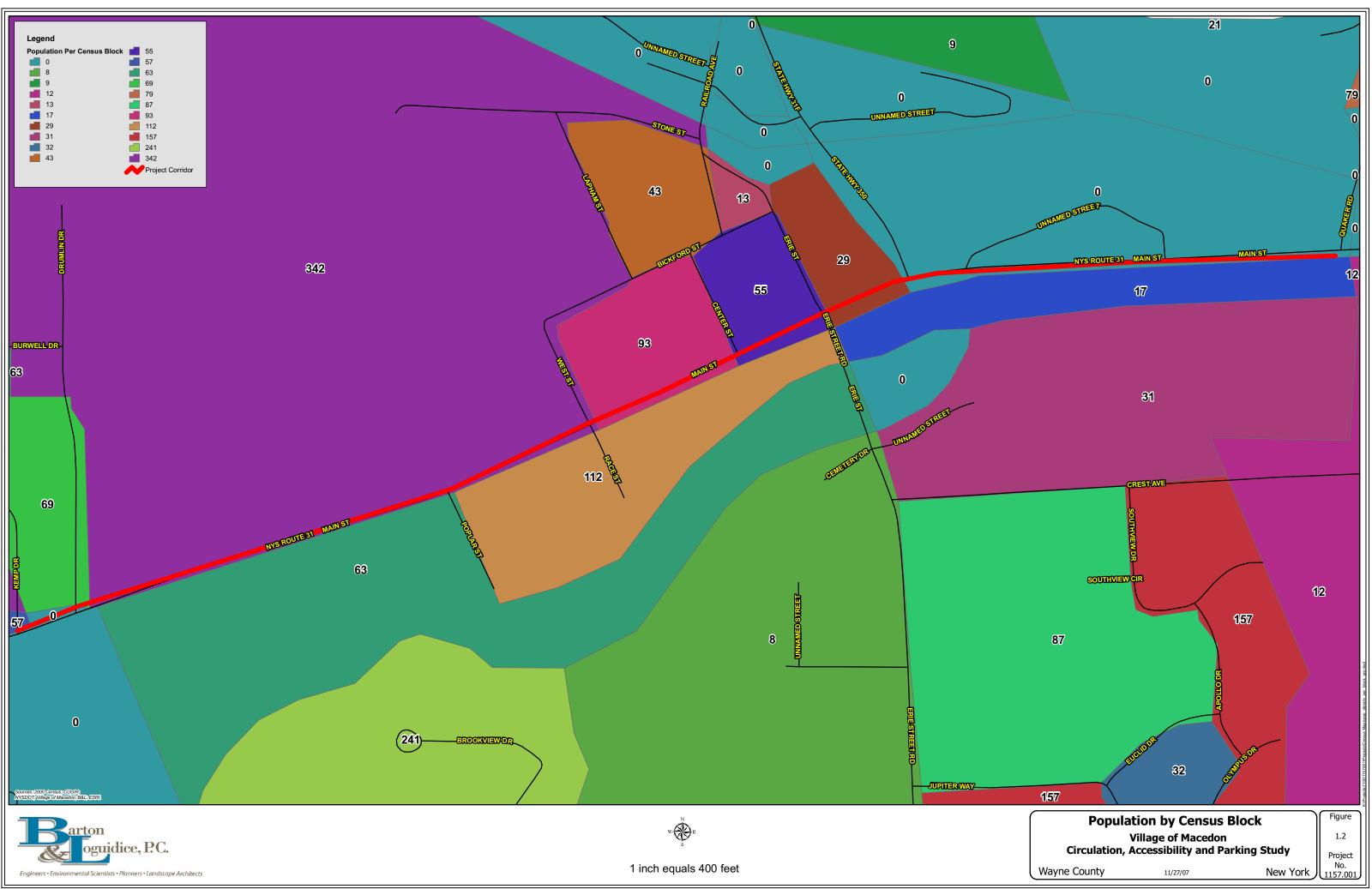
1.9 Demographic Overview

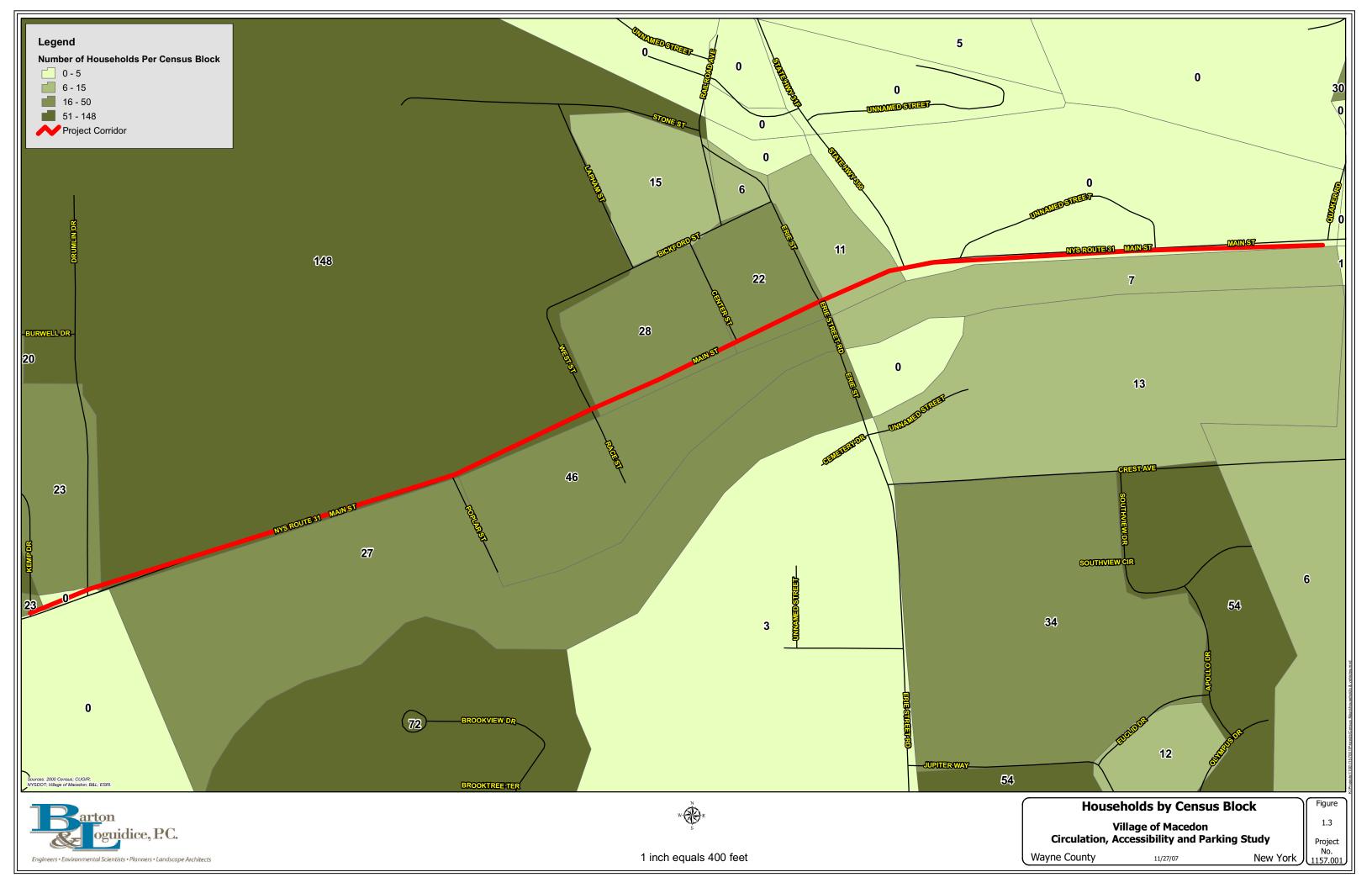
For the purposes of this study, demographic data was collected utilizing the 2000 U.S. Census Blocks and GIS parcel data provided by GTC. Due to the relatively small project study area, data for the smallest of these geographic units, the census blocks, was utilized. Please refer to Figure 1.2 - Population by Census Block, Figure 1.3 – Households by Census Block and Figure 1.4 Median Age by Census Block.

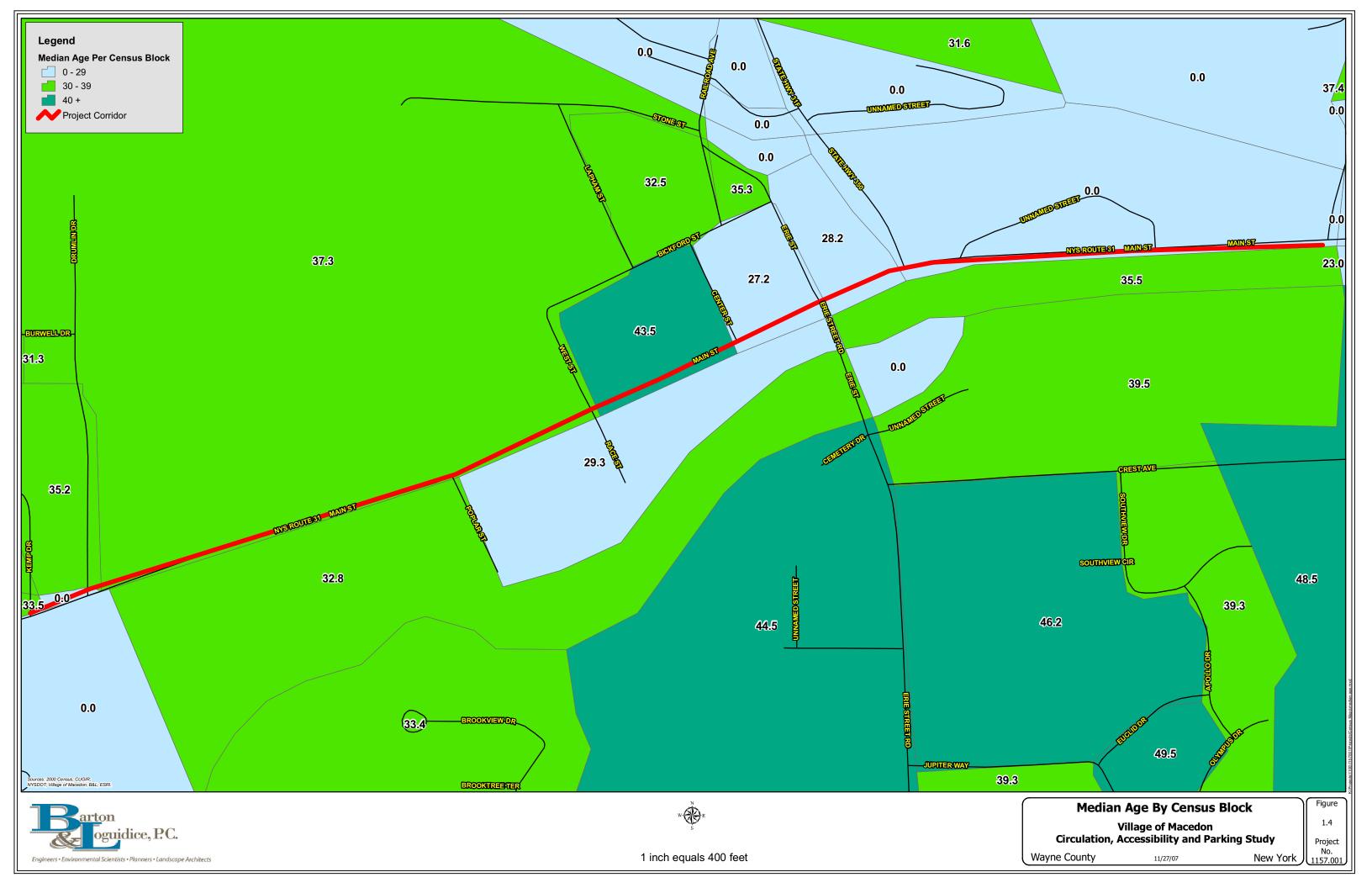
1.9.1 Population Profile

As represented in the following chart, at the time of the 2000 Census, the population of the Village of Macedon was 1,496 people. Although updates to the 2000 Census were unavailable at the time of this writing, an interim estimate by the U.S. Census Bureau of the 2006 Village population is 1,515 individuals. This represents an estimated 1.3% increase in population over the past seven years. Prior to 2000 there was a population increase of 7.2% between 1990 and 1999 representing an estimated 8.5% increase since the 1990 Census. The Village encompasses a land area of 1.2 square miles reflecting a total population density of 1,246 persons per square mile.









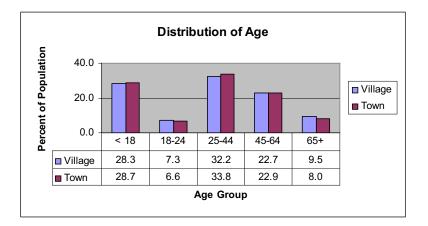
In the year 2000 there were 558 households and 412 families residing in the Village. Out of 558 households, 39.4% contain children under the age of 18 living at home. The family structure in the Village, as defined by the U.S. Census, is as follows:

Married couples living together	=	61.1%
Female with no spouse present	=	10.4%
Non families (per U.S. Census)	=	26.0 %
Individual Households	=	22.4%'

Of the total households in the Village, 7.9% were comprised of a senior citizen aged 65 or older living alone. The average household size in 2000 was 2.6 individuals.

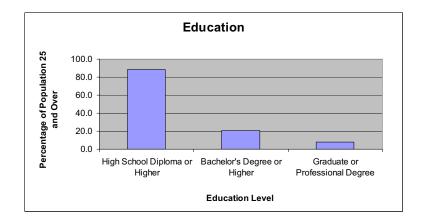
The racial makeup of the Village of Macedon is 97.3 % white, 1% black, and 0.6% of residents considering themselves to be two or more races. The remaining 1.1% of the population is Native American, Asian, or Hispanic/Latino.

The average age of Village residents is 35 years and the distribution of age groups among the population is diverse. The most populous age group includes people between the ages of 25 and 44 years (32% of the population), which suggests that the largest number of residents is within prime wage earning years and within the prime age for having children. The general distribution of age suggests that there is not a significant number of senior citizens proportional to the rest of the population. While consideration of seniors is very important, this group is not particularly dominant within the community and there is not a high percentage of senior citizen commuters, at least within close proximity of the corridor. The following chart illustrates the age distribution within the community.



1.9.2 Education

According to the 2000 Census, the Village has a fairly well educated population with 88.2% of all residents holding a high school diploma or higher education. Over 20% of the population holds a Bachelors Degree or higher and 7.7% has Graduate or professional degrees (see Chart below).



Macedon Elementary School is the only educational facility within the Village. In the year 2006, total enrollment at the school was 462 pupils and the number of professional and teaching staff is estimated at 46 people. The average annual attendance rate for all 462 pupils in 2005 was 96% suggesting that the average number of students attending programming at the school at any given day is approximately 443 students.

1.9.3 Housing

According to information provided in the 2000 Census, there are 588 residential units in the Village. Unit density is approximately 481 units per square mile. Of the total number of residential units, 405 are owner occupied and 160 units are renter occupied (duplex or multi-family buildings). The remaining 23 units are either contained within commercial units (i.e. mixed use = 19) or are no cash rent units (4). Based upon these figures, 28% of the local housing stock in the Village is rented.

The median asking price for owner occupied units in 2000 was \$65,000 with an average of 6.5 rooms in each unit. The asking price reflects the median price that the market is willing to bear for the purchase of a single-family unit within the Village at the time of the 2000 Census. In 2005, based on County tax roles the median assessed value of a single-family unit was \$104, 800. This indicates that the value based upon market demand is somewhat lower than the median appraised value of units in the Village. Of the total 297 owner occupied units in the Village, 30 are second mortgages and 66 are mortgages with home equity loans.

The median monthly rental cost for non-owner occupied units is \$538 and the median gross rent is \$530 on a Village-wide basis. The average rental unit contains 3.9 rooms.

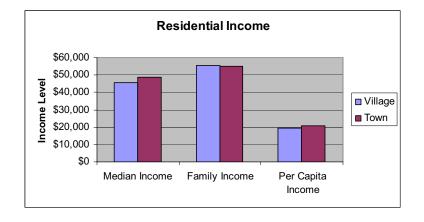
Almost one-third of the housing stock in the Village was constructed prior to 1939 (177 units). Therefore, approximately 33% of housing in the Village is more than 60 years old. Almost half of the housing stock or 47% was constructed during a 20 year period between 1960 and 1979. More recently, a list was compiled indicating the number of building permits issued between 1996 and 2006. The number of permits and average cost are listed below:

- 1996: 4 buildings, average cost: \$142,500
- 1998: 1 building, cost: \$125,000
- 2002: 6 buildings, average cost: \$151,500
- 2005: 2 buildings, average cost: \$177,500
- 2006: 12 buildings, average cost: \$166,400

Therefore, approximately 25 buildings have reportedly been constructed in the Village over the past 11 years.

1.9.4 <u>Income</u>

The Median Income for a household in the Village was \$45,774 in the year 2000 and Median Family Income was \$55,728. At that time total Per-Capita Income for the Village was \$19,503 which compares to a Town-wide Per-Capita Income of \$20,810. Income among Village residents is fairly consistent with the income level of Town residents (see Chart below).



At the time of the 2000 Census, 5.6% of families and 7.1% of individuals were living below the poverty level in the Village. Individuals under the age of 18 accounted for 8.6% of those below the poverty line for their age group. Of those aged 65 and over, 12 % were living below the poverty level.

CHAPTER 2: EXISTING TRANSPORTATION NETWORK

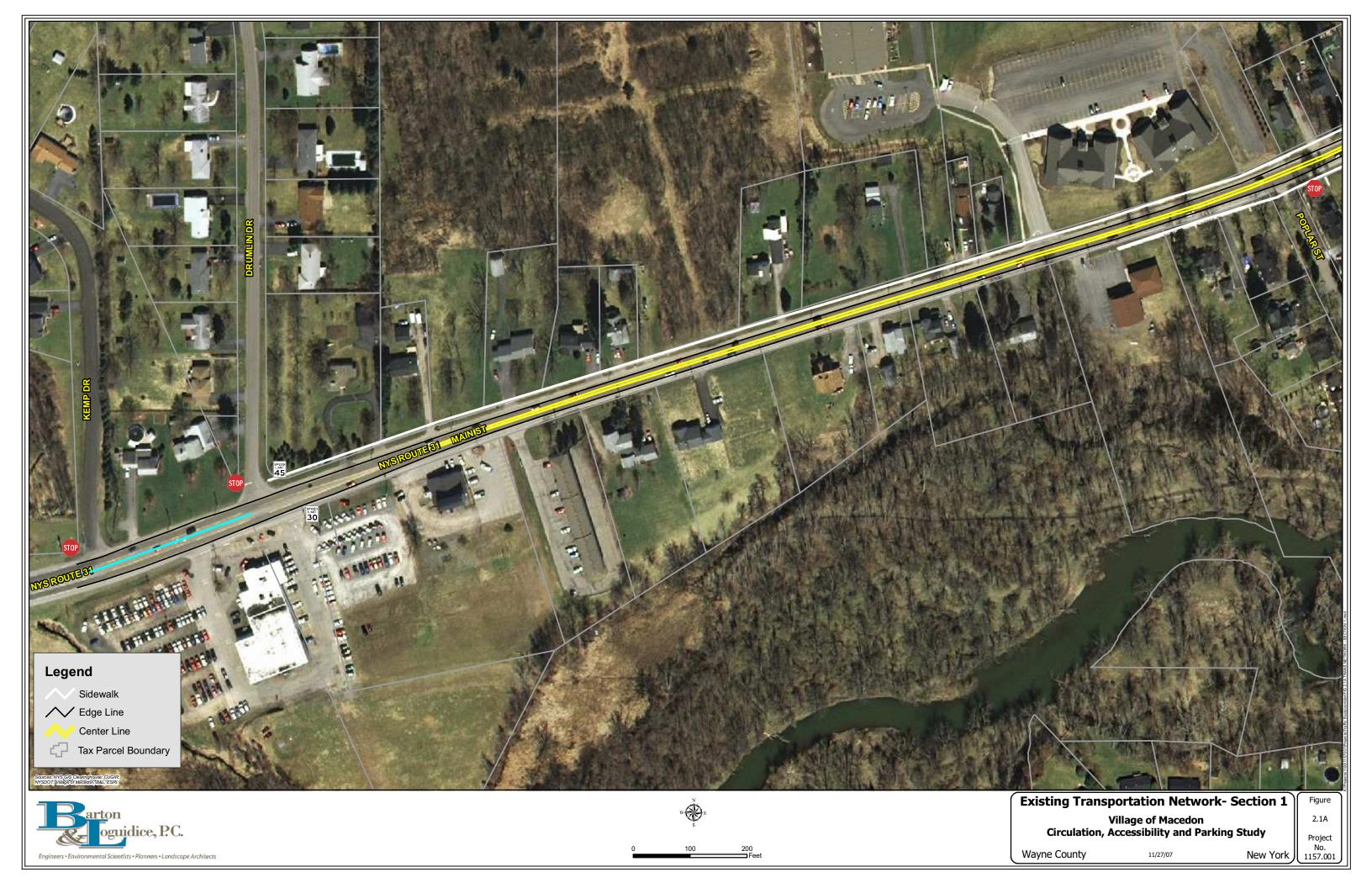
The various data sets utilized for purposes of this study were obtained from available reports/documents as provided by the GTC, NYSDOT, the New York State Geographic Information System (GIS) database, Wayne County, and from field visits.

2.1 Roadway Features

The NYS Route 31 corridor, within the study limits, is classified as a two-lane Principal Arterial with 12-foot wide travel lanes and varying shoulders of 2 to 8 feet; however, within the central business district, in addition to the approximate 8' shoulder there is also a parking lane of approximately 9'. There is stone curb with an 8-foot curb offset on both sides of NYS Route 31 through the Village of Macedon from the NYS Route 350 intersection to approximately the Macedon Town Hall driveway on the north and to approximately 200 hundred feet further to the west on the southside. The westbound approach to the NYS Route 350 intersection has a designated 12-foot right turn lane and the eastbound approach includes a designated 12-foot left turn lane. A bidirectional turn lane forms approximately 200 feet west of the Drumlin Drive intersection which turns into a designated left turn lane at Victor Road outside of the study area.

The entire corridor is striped double yellow, i.e., no passing zones (Figures 2.1A, 2.1B and 2.1C). The posted speed limit is 30 mph for the majority of the study area with the exception of the 45 mph postings at the east and west terminus of the Village. Specific grades and curve data between Drumlin Drive and Center Street were obtained from 1947 reconstruction design plans and are noted below.

- Crest Curve 360' E of Drumlin Drive: +2.04% grade entering, -0.30% grade exiting, VC length = 250', Sight Distance = 586'
- Sag Curve 900' E of Drumlin Drive: -0.30% grade entering, +0.70% grade exiting, VC length = 200', Sight Distance > 2000'





Engineers	 Environmental 	Scientists • Planner.	· Landscape	Architec
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- Sag Curve 1470' W of West Street: +0.70% grade entering, +1.61% grade exiting, VC length = 200', Sight Distance > 2000'
- Crest Curve 980' W of West Street: +1.61% grade entering, +0.22% grade exiting, VC length = 200', Sight Distance = 876'
- Sag Curve 550' W of West Street: +0.22% grade entering, +1.24% grade exiting, VC length = 200', Sight Distance > 2000'
- Crest Curve 280' W of West Street: +1.24% grade entering, -3.20% grade exiting, VC length = 300', Sight Distance = 393'
- Sag Curve 420' W of Center Street: -2.50% grade entering, -0.80% grade exiting, VC length = 200', Sight Distance > 2000'

Design Criteria

- 40 mph design speed
- 7% maximum grade
- 345' minimum sight distance

There are no known non-standard grades or sight distances within the study area.

The right-of-way width along NYS Route 31 within the project limits varies but is reportedly 66 feet through much of the study area.

There are 10 intersections along the project corridor as listed below and including the approximate angle at which they intersect NYS Route 31.

Intersection	Ownership	Approximate Angle
Quaker Road	Town	70°
Pliant & Covalence Plastics Driveway	Private	90°
NYS Route 350	State	90°
Erie Street	County/Village	90°
Center Street	Village	90°
Race/West Street	Village	90°
Poplar Street	Village	90°
Macedon Town Hall Driveway	Town	90°
Drumlin Drive	Village	70°
Kemp Drive	Village	70°

2.2 Traffic Control Devices

There are two (2) signalized intersections along the study section of the corridor - at the Pliant & Covalence Plastics driveway and at the NYS Route 350 intersection. The NYS Route 350 traffic signal is a mast arm signal and is owned and



New Traffic Signal at NYS Route 350 and Erie Street

maintained by NYSDOT. The signal at the Pliant & Covalence Plastics driveway is a span-wire signal which is owned and maintained by the Village of Macedon. The remainder of intersecting streets and the Macedon Town Hall driveway are unsignalized and controlled by a stop sign(s).



School Crossing Sign at West Street

There is a flashing school crossing sign

facing EB traffic immediately west of the West Street intersection. The Village of

Macedon has a No Parking Restriction from November 15 to March 31 between the hours of 11 PM and 7 AM. There is also a 2-hour parking limit in the Village core between 8 AM and 6 PM.

2.3 Pavement Conditions

According to the New York State Highway Sufficiency Ratings, the pavement rating for NYS Route 31 within the project limits is 6 (Fair). The dominant distress is isolated and consists of general alligator cracking. Alligator cracking is defined as "interconnected cracks forming a series of small polygons resembling an alligator's hide within the wheel paths on flexible pavement types." According to the Sufficiency Rating Manual, the last work done within the project corridor was in 1994 and consisted of a 1" to $1\frac{1}{2}$ " single course overlay. The corridor is scheduled for milling and overlay next year by NYSDOT in conjunction with the Erie Street Bridge reconstruction project.

The following table provides a general description for each of the NYSDOT Pavement Ratings:

Pavement Rating	Description	Details
U	Under Construction/ No Data	Not rated due to on-going work or no data was available.
1-5	Poor	Distress is frequent and may be severe. These sections are flagged by NYSDOT for further investigation and possible action.
6	Fair	Distress is clearly visible.
7-8	Good	Distress symptoms are beginning to show.
9-10	Excellent	No pavement distress.

2.4 Transit

The Rochester Genesee Regional Transportation Authority (RGRTA) oversees public transportation in the seven counties of Monroe, Genesee, Livingston, Orleans, Wayne, Wyoming and Seneca. The Regional Transit Service, Inc. (RTS) is a subsidiary of the RGRTA and provides public transit service between Wayne County and the City of Rochester.

The Village of Macedon is also served by the Wayne Area Transportation Service, Inc. (WATS) which has routes that loop throughout Wayne County and connect with the RTS Park & Ride in Webster for transportation to Downtown Rochester.

There are two (2) existing bus stop locations within the project limits, both offering RTS and WATS service. The north curb line of NYS Route 31 at Center Street is equipped with both signage and a bus shelter; while the other stop, located directly across the street on the south curb line, is signed.



Center Street Intersection

2.5 Streetscape

The primary function of NYS Route 31 is to provide optimum mobility from a local and regional perspective. However, the streetscape plays an equally important role as a major travel corridor and a neighborhood street. The NYS Route 31 corridor currently does not appear to generate the vitality it could. The existing streetscape along the length of the study area exhibits two types of environments: the traditional residential village and the downtown business district area. The downtown area, to some degree, appears somewhat blighted and economically distressed. This is largely a result of no defined entrance into the Village from the east; instead, it is dominated by the Pliant and Covalence Plastic Materials plant. The business district area lacks historic architecture and building materials, and primarily serves the automobile with an excessively wide right-of-way and no distinguishable crosswalks. Aging roadway characteristics and an apparent lack of commercial investment mark the stagnant activity currently present within this portion of NYS Route 31. West of Center Street, however, the corridor resembles a unique neighborhood character with mature tree-lined road frontages and accommodating sidewalks. Yet, the entrance into the Village from the west is once again diminished by a lack of gateway character and incompatible land use.

The next phase of this project will identify opportunities for streetscape enhancements and amenities for targeted areas along the NYS Route 31 corridor. The intent of future enhancements is to provide a quality public presence and improve safety mechanisms while acting as a catalyst for new private investment in these targeted areas and along the corridor as a whole.

2.6 Bicycle and Pedestrian Facilities

A growing asset of the region's transportation system, bicycle and pedestrian facilities offer an alternative to the automobile for some trips and quality of life improvements. For transportation purposes, bicycle, pedestrian, and multi-use facilities are only as successful as the places they provide access to. As such, a summary of existing facilities, circulation routes, and community connectivity is outlined in this section. For the



NYS Route 31 Westbound East of West Street

purposes of this study, bicycle and pedestrian facilities include sidewalks, crosswalks, bicycle lanes, trails, and other routes that purposefully move people. Figure 2.2 provides an overview of all existing facilities within and adjacent to the project study area.

2.6.1 Existing Sidewalks

There are approximately 4,500 linear feet of concrete sidewalks along the NYS Route 31 study area and within proximity to the Village downtown area to accommodate



Village of Macedon Central Business District







1 inch = 600 feet

Bike/Ped Facilities

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Existing Erie Canalway Multi-Use Trail

QUAKERRD

S ROUTE 31

1 1 Am

- Planned Multi-Use Trail
- Existing Multi-Use Facilities
- Existing Pedestrian Facilities
- Existing Bicycle Facilities

NYS ROUTE 31 MAIN ST

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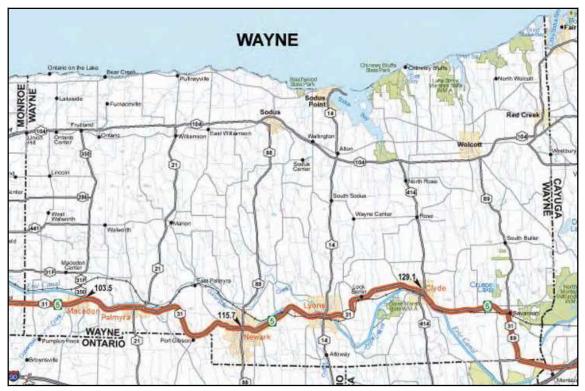
Bicycle & Pedestrian Facilities			Figure	
	Village of Macedon		2.2	
-				
Wayne County	11/30/07	ing Study New York	No. 1157.001	

pedestrian traffic. The entire sidewalk system within the Village boundary is maintained by the Village Department of Public Works. Typically between four and five feet wide, excluding the additional snow storage area within the Central Business District, the Village's sidewalk system appears to be in relatively good condition, with minimal heaving, cracking, and deterioration. Some sidewalk segments have clearly been constructed or improved more recently than other sections. A sidewalk runs along the north side of NYS Route 31 from the western Village boundary to NY Route 350, providing pedestrian connectivity from adjacent neighborhoods to the Macedon Town Hall, the public library, the school, and downtown businesses. Additionally, there is a sidewalk connection from the Pliant & Covalence Plastic Materials plant to NYS Route 31, providing pedestrian access for employees. The south side of NYS Route 31 also has sidewalks from the Town Hall to a portion of Gravino Park. However, the sidewalk facility ends and transitions into a gravel path up to the main entry into the park. There is a gap in the sidewalk system on the south side of NYS Route 31 just east of the NY 350 intersection due to right-of-way width constraints.

Generally, the existing sidewalk system within and adjacent to the project study area is adequate to accommodate safe and efficient pedestrian travel while also linking neighborhoods to important social and civic institutions within the village downtown.

2.6.2 Existing Bicycle Facilities

The following map indicates that NYS Route 31 is part of the designated NYS Route 5 Bike Route, which ultimately links Buffalo to Albany and parts east to the State line. Its shoulders within the Village boundary are a minimum of 8 feet wide, which satisfies minimum design standards for bicycle facilities per NYSDOT's Highway Design Manual. For the purposes of this study, roadway shoulders were evaluated as bicycle facilities in those areas where sidewalks are provided as a separate parallel facility.



Source: NYSDOT - NYS Route 5 Bike Route Map

There is approximately 3,415 linear feet of road shoulders suitable for bicycle travel within the NYS Route 31 study area. Along much of both sides of the NYS Route 31, shoulders are generously wide, especially within the business district area of the corridor. Even where on-street parking is permitted, there is still adequate width to accommodate bicyclists both eastbound and westbound.

Shoulder width in front of the Pliant & Covalence Plastic Materials plant and within general proximity of the NY 350 intersection is reduced significantly due to the need for turning lanes on NYS Route 31. In this area, the roadway shoulders exhibit an approximate two foot offset, rendering this section of NYS Route 31 unsafe for bicycle or pedestrian travel.



NYS Route 31 Right Turn Lane at NYS Route 350

Further east toward Gravino Park however, shoulder widths taper out to approximately eight feet, again providing sufficient width to provide connections to the park and areas east of the Village.

2.6.3 Existing Multi-Use Facilities

For the purposes of this study, multiuse facilities have been categorized as those areas where separate sidewalks are not provided and road shoulders are suitable to accommodate bicycle and pedestrian traffic. Essentially, NY 350 north of NYS Route 31 and the newly realigned Erie Street south of NYS Route 31 can function as multi-use



Quaker Road

facilities with adequate road shoulder width. This facility provides direct access to the Statewide Erie Canalway Trail system in the northern portion of the Village, linking the Village with walkers, joggers, bicyclists, and hikers from adjacent communities and the larger Rochester metropolitan area.

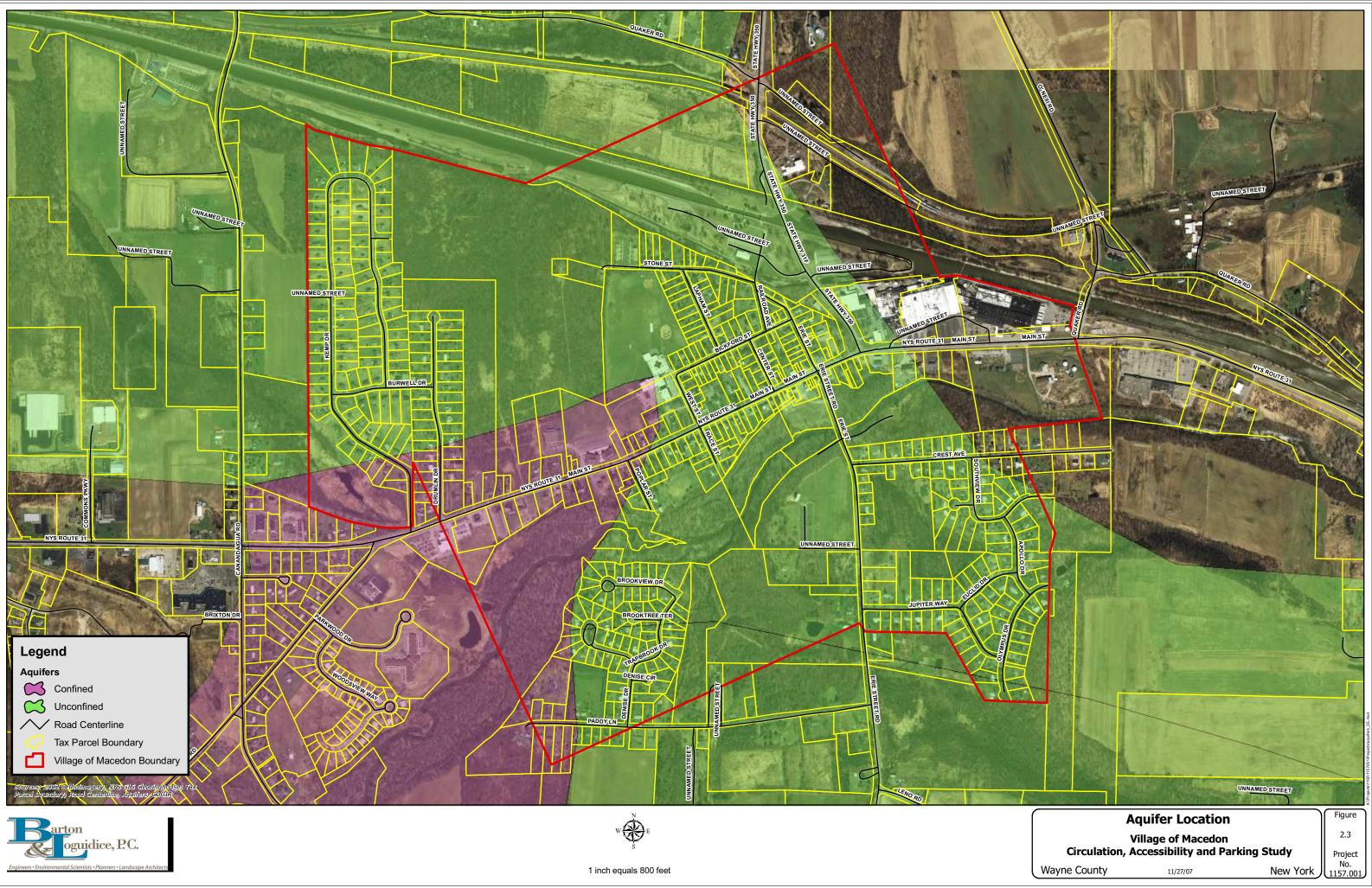
NYS Route 350 and the reconstructed Erie Street are important roadways to preserve as bicycle and pedestrian facilities until such time as off-road connections from the Canalway trail are potentially constructed linking to the Village downtown area, adjacent neighborhoods, the school, and other Main Street destinations. Various studies and plans have identified the need to enhance the island between the existing and historic section of the Erie Canal with a marina, overlook docks, concession buildings, and future multi-use trail spurs south into the Village downtown as a means to ignite local tourism (see Graphic below). Recommendations and strategies to implement such concepts will be further evaluated during future phases of this study in order to maximize opportunities to link up to the NYS Route 31 corridor.



2.7 Environmental Factors

Environmentally sensitive areas within the Village of Macedon were reviewed as part of this project. These sensitive areas included important aquifers, flood zones, agricultural lands, and wetlands.

Aquifer locations were examined to determine the limits of these important water sources. Confined and unconfined aquifers are mapped within the Village boundary as indicated on Figure 2.3. Aquifers are important in establishing a drinking water source for an area and providing water for other activities. Unconfined aquifers are sometimes also referred to as water table aquifers, because their upper boundary is the water table. Confined aquifers have the water table above their upper boundary and are typically found below unconfined aquifers. Activities conducted within the boundaries of

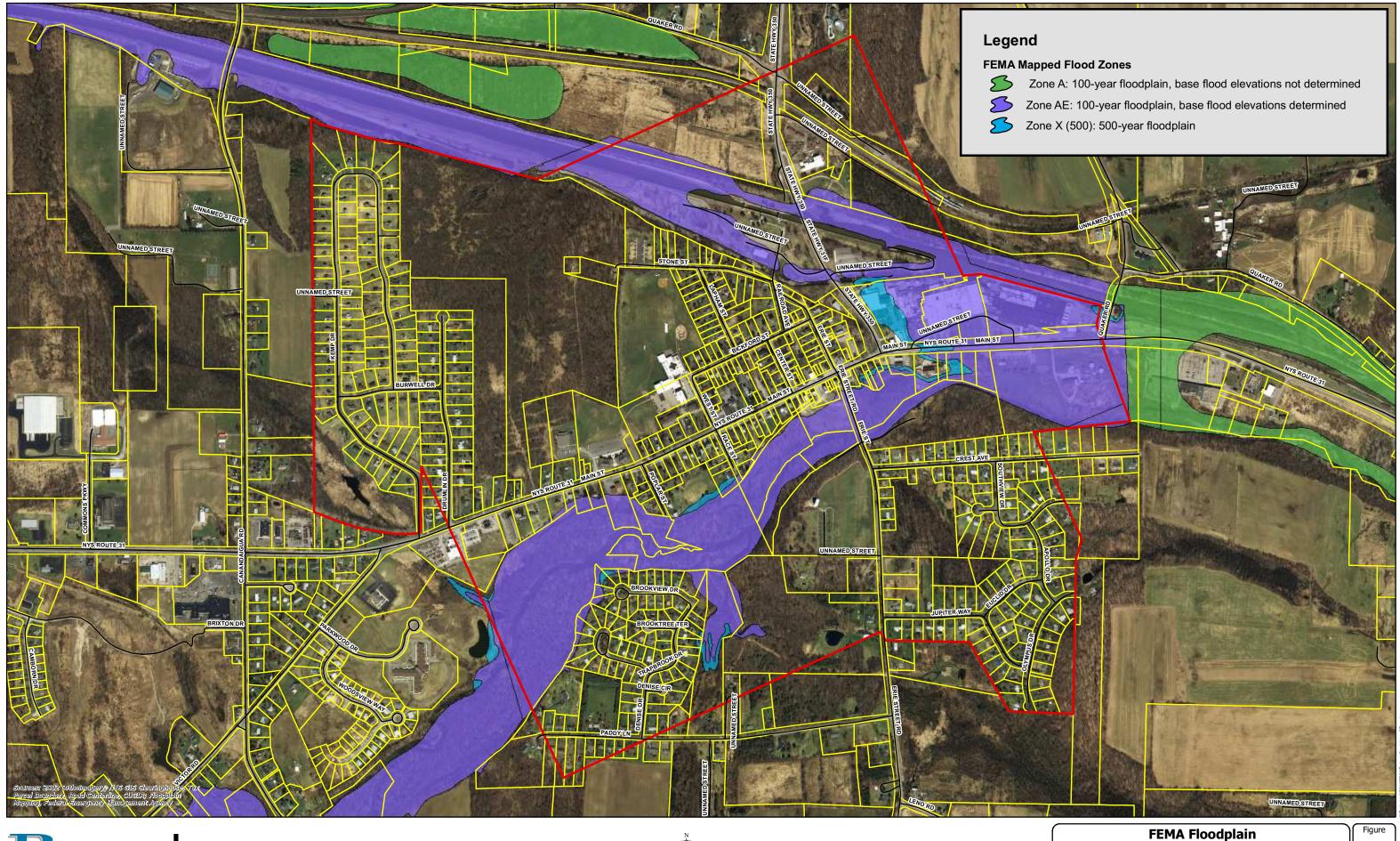


an aquifer are normally reviewed to make sure no adverse impacts to the aquifer will occur.

The Federal Emergency Management Agency (FEMA) flood mapping can be found on Figure 2.4. This identifies the 100-year and 500-year flood zones, Zones AE and X, respectively, which are mapped along the Erie Canal and Ganargua Creek, within the Village of Macedon. These mapped flood zones often correspond to National Wetland Inventory (NWI) wetland locations.

The New York State Department of Agriculture and Markets regulates activities that impact or alter mapped agricultural districts. Numerous agricultural districts are located outside of the Village of Macedon, but none are located wholly or partially within the Village limits (Figure 2.5).

The New York State Department of Environmental Conservation (NYSDEC) freshwater wetland mapping was reviewed and is shown on Figure 2.6. A portion of NYSDEC wetland MA-26 falls within the Village limits near the intersection of NYS Route 31 and Kemp Drive. This wetland and its 100-foot adjacent area are regulated by NYSDEC. NWI mapping was also examined. This mapping showed the presence of five Federal wetlands and/or waters located wholly or partially within the Village boundary. The majority of these mapped locations are associated with the Erie Canal and Ganargua Creek.







1 inch equals 800 feet

Village of Macedon Circulation, Accessibility and Parking Study

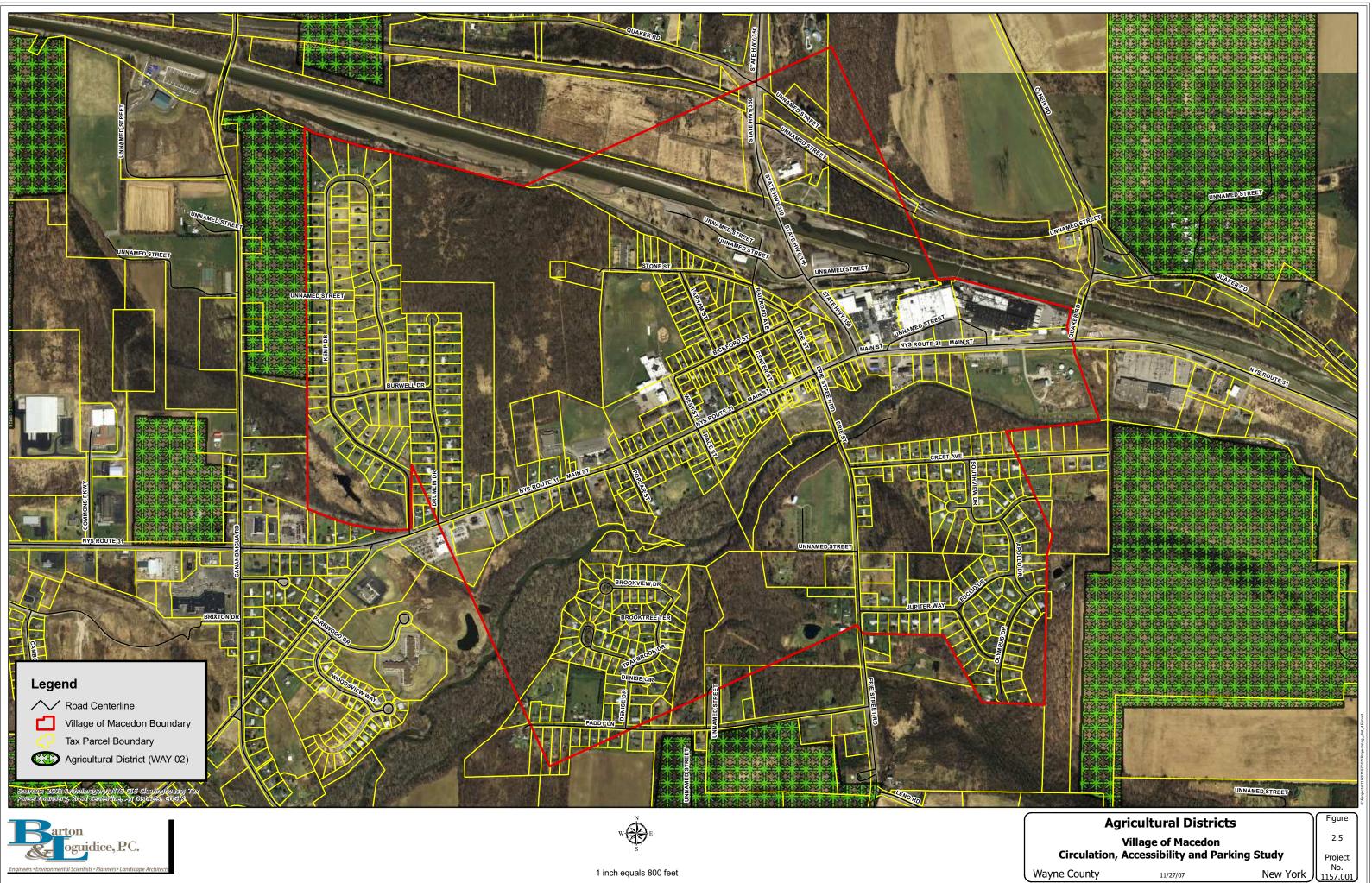
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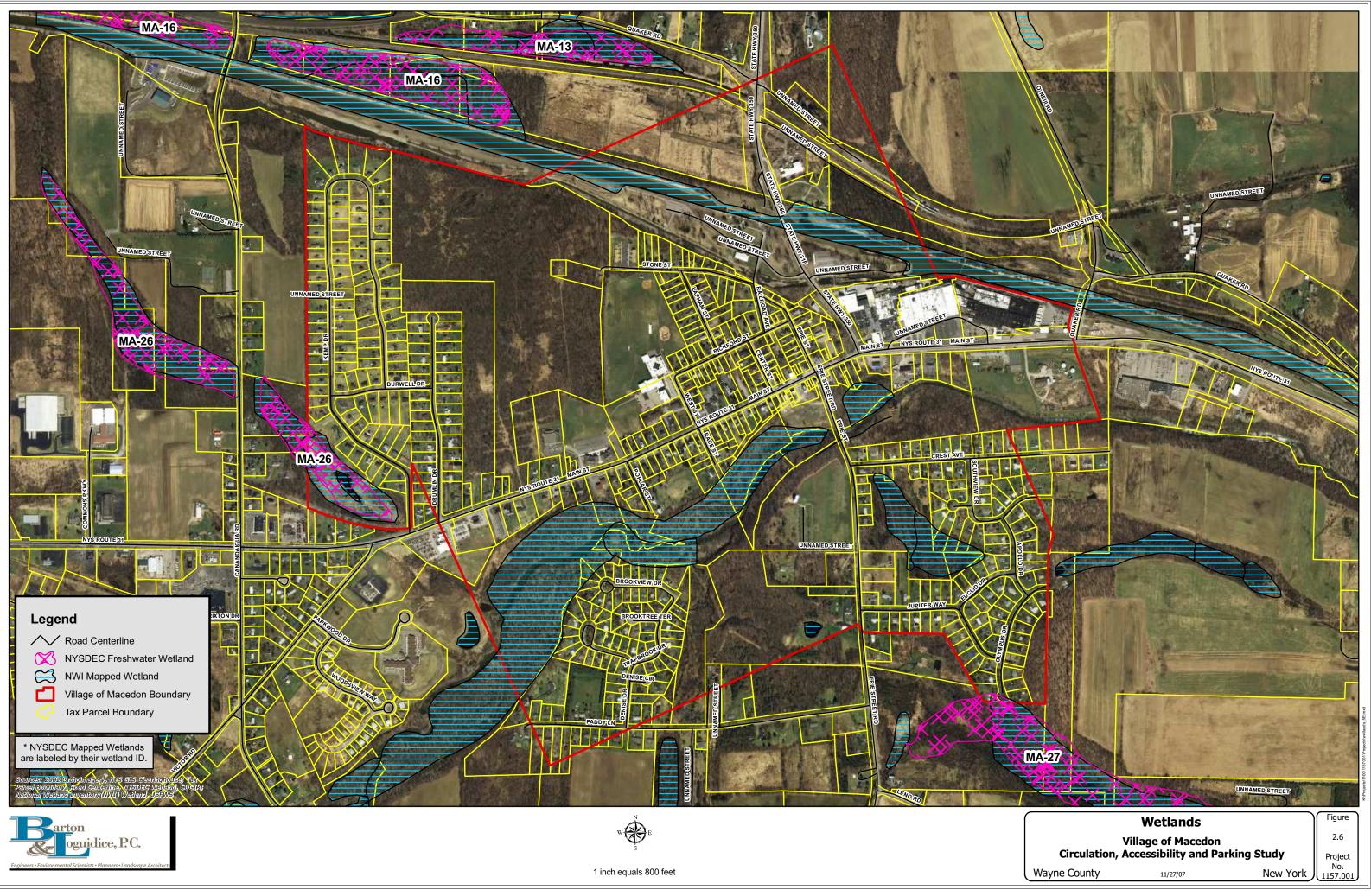
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CHAPTER 3: EXISTING TRAFFIC CONDITIONS

3.1 Traffic Volumes

Traffic data for NYS Route 31 was obtained from NYSDOT, GTC, Waste Management Parkway Expansion-Phase III Traffic Study, and additional field investigations. The data collected included traffic volumes, annual average daily traffic (AADT) data, AM and PM peak hour turning movement data, heavy truck percentages, and PM peak hour volumes from the GTC travel demand model. The traffic volumes were collected and the AADT's were calculated by NYSDOT in 2003 and 2006. The peak hours have been identified as 7:00 – 8:00 AM and 4:15 – 5:15 PM. The data is summarized below:

Year	Segment Location	AADT (vehicles/day)	Heavy Truck %
2003	Victor Road to NYS Route 350	12040	15.0%
2006	NYS Route 350 to Quaker Road	11638	7.9%

The GTC PM peak hour travel demand model volumes are based on existing NYSDOT/Wayne County data and estimated future development/growth within and outside the project corridor. The table below depicts the model's un-factored peak hour volumes on NYS Route 31 at multiple locations within the project corridor for 2007, 2020, and 2027. The 2020 and 2027 volumes are projections based on estimated retail, manufacturing, employment, and household forecast data for the Village of Macedon and the surrounding area.

	Vehicles per Hour			
Location	2007	2020	2027	
East of NYS Route 350	831	926	1007	
West of NYS Route 350	868	919	949	

Turning movement data was collected at the Victor Road, Town Hall Driveway, West Street and Quaker Road intersections in October 2007 during the AM and PM peak hours (see Appendix A - separately bound). The turning movement data for Erie Street and NYS Route 350 was collected in 2005 as part of preliminary studies for the Erie Street Bridge Reconstruction project. The collected data is shown on the turning movement diagrams in Figures 3.1 and 3.2. The turning data was used to calculate levels of service for traffic movements within the studied intersections. The level of service results for each restricted movement is also shown in Figures 3.1 and 3.2. The results of the level of service analyses are discussed in Section 3.3.

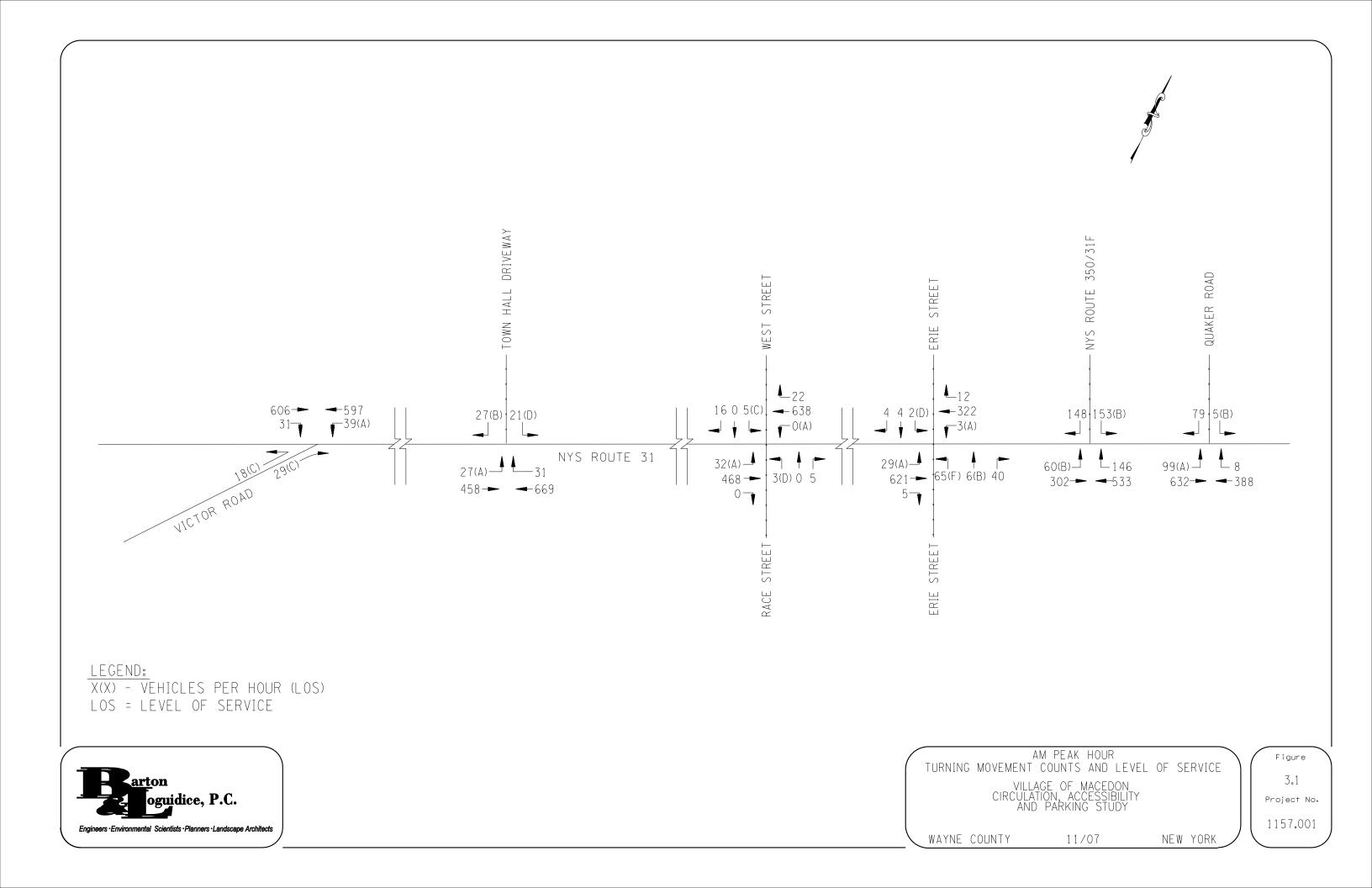
Waste Management High Acres Landfill truck traffic utilizes the NYS Route 350 intersection and the NYS Route 31 corridor west of this intersection for access to and from the NYS Thruway. The landfill is in the process of a Phase III expansion. Based on the Parkway Expansion-Phase III Traffic Study the permitted amount of waste accepted at the landfill is not going to increase, so no additional truck traffic to the landfill is expected as part of this Phase III expansion.

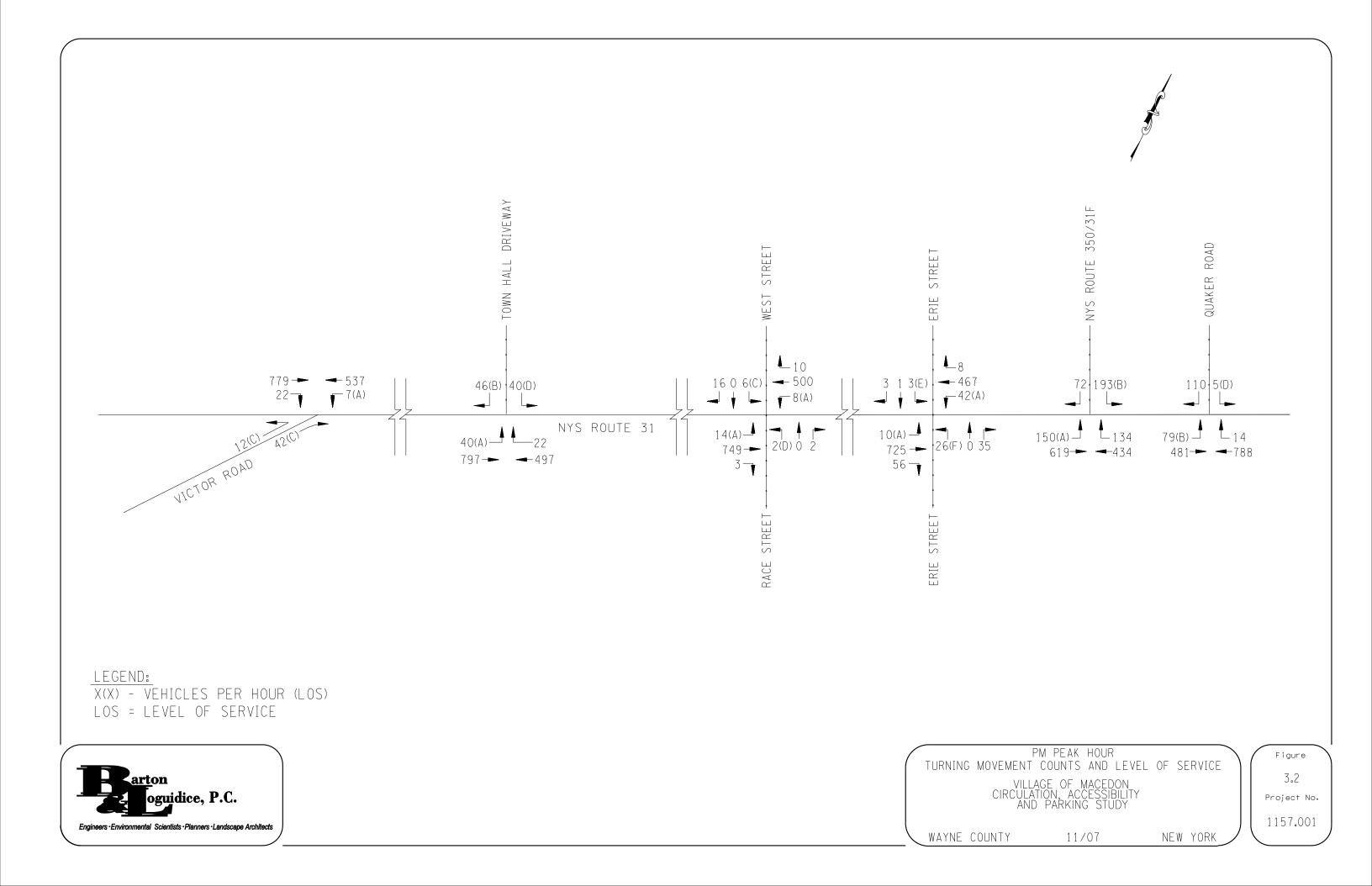
3.2 Level of Service

The intersections within the project were analyzed using Synchro 6.0 based on methods presented in the 2000 Highway Capacity Manual.

The Level of Service (LOS) for intersections is defined in terms of delay time (seconds). The LOS criteria are stated in terms of average stopped delay per vehicle for a 15-minute analysis period (peak hour factor adjustment) and range from "A" to "F."

An overall intersection LOS of "D" or better is generally considered acceptable in an urban area. The following tables illustrate the intersection rating based on the time of delay per vehicle:





Level of Service Criteria for Signalized Intersections				
Intersection Rating	Description	Delay in Seconds		
А	Little or no delay	<10.0		
В	Minor, Short delay	>10 to 20		
С	Average delay	>20 to 35		
D	Long, but acceptable delay	>35 to 55		
E	Long, approaching unacceptable delay	>55 to 80		
F	Long, Unacceptable delays	>80		

Level of Service Criteria for Unsignalized Intersections				
Intersection Rating	Description	Delay in Seconds		
Α	Little or no delay	<10.0		
В	Minor, Short delay	>10 to 15		
С	Average delay	>15 to 25		
D	Long, but acceptable delay	>25 to 35		
E	Long, approaching unacceptable delay	>35 to 50		
F	Long, Unacceptable delays	> 50		

The following table summarizes the intersection levels of service for the unsignalized and signalized intersections.

Level of Service Summary				
Intersection	AM Peak Hour	PM Peak Hour		
Quaker Road	Unsig	nalized		
EB-Left/Thru	A	В		
SB-Left/Right	В	D		
NYS Route 350/31F	Signalized			
EB-Left	В	А		
EB-Thru	A	В		
SB-Left/Right	В	В		
WB-Thru	В	А		
WB-Right	A	А		

Level of Service Summary (continued)				
Intersection	AM Peak Hour	PM Peak Hour		
Erie Street	Unsig	nalized		
NB-Left	F	F		
NB-Thru/Right	В	С		
EB-Left/Thru/Right	A	Α		
SB-Left/Thru/Right	D	E		
WB-Left/Thru/Right	А	А		
West/Race Street	Unsignalized			
EB-Left/Thru/Right	A	Α		
WB-Left/Thru/Right	А	С		
NB-Left/Thru/Right	D	D		
SB-Left/Thru/Right	С	С		
Macedon Town Hall	Unsig	nalized		
EB-Left/Thru	A	Α		
SB-Left	D	F		
SB-Right	В	В		
Victor Road Unsignalized		nalized		
WB-Left	А	С		
NB-Left/Right	A	С		

Most of the intersections within the project corridor function at acceptable levels of service and delays. The northbound left turn movement off the existing location of Erie Street functions at a level of service F during both the morning and afternoon. This is a function of the traffic volumes and minimal gaps on NYS Route 31, restricting the left turn movement off of Erie Street. The relocation of the southern leg of the Erie Street intersection, connecting it to the NYS Route 350 intersection, as part of the Erie Street Bridge reconstruction project is intended to produce acceptable levels of service and delays once operational. The existing traffic signal at the NYS Route 350 intersection will also be rehabilitated to accommodate this relocation as part of the Erie Street Bridge project. Please note that at the time this section on Existing Traffic Conditions was originally written, the Erie Street Bridge project was under construction. As of the writing of this Final Report, the project has been completed and is operational. Macedon Town Hall driveway's left turn movement also functions at a failing level of service during the afternoon peak hour due to its multi-purpose and the high traffic volumes on NYS Route 31. This driveway is used by the Town Hall, a day care, library, and school buses exiting the elementary school grounds.

3.3 Accident Analysis

Accident data was collected for the most recent three years between July 1, 2004 and June 30, 2007 from the NYSDOT Information Management System. The data included reportable and non-reportable accidents on NYS Route 31 between Victor Road and Quaker Road. It should be noted that complete accident data using the Safety Information Management System is only available through December 2003. The accident data was summarized and analyzed using the Highway Safety Analysis Software, Version 3.0.

Based on the information provided, there were a total of 23 accidents documented along the corridor within the project limits. The breakdown by accident severity is as follows: Fatal = 0 (0.0%); Injury = 8 (34.8%); Property Damage = 6 (26.1%) and Non-Reportable = 9 (39.1%). Over 50% of the accidents can be contributed to following too closely, unsafe speed, driver inattention or failure to yield the right-of-way. Five accidents involved a collision with deer.

Intersection and non-intersection accident rates were calculated and compared to statewide accident rates for similar functional classes. Listed below is the overall segment accident rate for the entire corridor and a summary of the intersections with more than one accident. It is anticipated that when complete accident data beyond 2003 becomes available, the calculated accident rates would increase slightly.

Segment/Intersection	Accidents per Million Vehicle Miles (Acc/MVM)	Accidents per Million Entering Vehicles (Acc/MEV)	Number of Accidents	Statewide Accident Rate
Victor Road		0.06	1	0.16
Victor Road to Poplar Street	1.07		7	2.19
Poplar Street		0.06	1	0.16
West/Race Street		0.06	1	0.35
West/Race Street to NYS Route 350	2.03		8	2.19
NYS Route 350		0.22	5	0.59

The overall corridor accident rate is well below the statewide accident rate and the individual intersections are also below statewide averages.

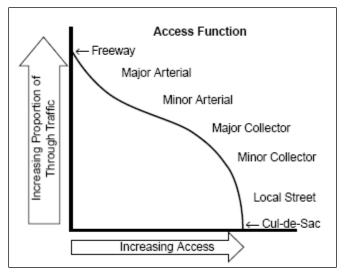
No accident clusters were identified within the project corridor. The accidents do not appear to be related to any non-standard road features and no correctable patterns were identified. A complete summary of the accident data can be found in Appendix B (separately bound).

3.4 Access Management and Parking

3.4.1 Access Management

The efficient management of access is critical to long-term preservation of the NYS Route 31 corridor through the Village of Macedon. For any roadway, as

shown in the diagram provided by the Transportation Research Board's 2003 Access Management Manual, there is a tradeoff between access and mobility with higher volume. More regional roadways, such as Interstate highways, provide the highest mobility with the



most amount of access control down to local streets with a priority on local access. The NYS Route 31 corridor is a major east/west arterial, so the need to preserve the mobility function of this corridor is extremely important, not only to the viability of the downtown business area of the Village, but also to the regional transportation network.

The NYS Route 31 corridor, within the study area, has approximately 95 driveways, or curb cuts, over an approximate 1.25 mile length of roadway. There are approximately 44 driveways along the northern side and 51 along the southern side of NYS Route 31. The majority of these driveways serve private residences where trips to and from are significantly less than a driveway serving a commercial establishment. This is particularly true west of Center Street. However, between Center Street and State Route 350, essentially the business district area, there are approximately 24 driveways primarily serving commercial or service uses. Many of these driveways serve parking areas to the side or rear of Main Street buildings and a few of the driveways are shared between at least two buildings. However, the length of roadway between Center Street and NYS Route 350 is approximately 280 feet (or 5/100 of a mile). This equates to an average of nearly 480 driveways over the course of a mile if this pattern were to extend over that length. Also, it should be noted that the only traffic signals along the study area are at the intersection of NYS Route 350 and NYS Route 31, and in front of the Pliant & Covalence Plastic Materials plant. Signalization and timing of the traffic light at the plant is not adequate for the non-peak work hour traffic times and may need to be adjusted to better suit the demands of the corridor during these periods.

Section 1103 Access Control, of the Village ordinance prohibits the construction of more than one access drive per parcel, use, or groupings of uses in attached buildings or structures. Additionally, shared driveways and marginal access roads are encouraged by the Village's parking regulations. This will be particularly important for the future functional preservation of this roadway.

3.4.2 Parking

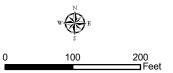
Parking has been identified as a primary issue and future need of the Village. In order to accommodate future development interests and capitalize on tourism from the Canal and through traffic; opportunities for future parking must be identified in order to accommodate potential demand. A preliminary review of the existing parking conditions within the NYS Route 31 study area has estimated that there is the potential to provide approximately 330 parallel parking spaces adjacent to the road shoulders. However, it should be noted that on-street parking is not permitted along most of the NYS Route 31 corridor, particularly west of West Street, which contributes to the current lack of parking. This is likely due to Zoning Codes which requires a minimum of 2 off-street parking spaces per residential unit, which is the primary land use west of West Street.

In addition, there are roughly 310 parking spaces available at existing public parking areas including the Town Hall, various municipal parking lots, and the parking area at Gravino Park. Figures 3.4A, 3.4B, and 3.4C illustrate where current and potential on-street parking areas are in addition to private and public off-street parking facilities.

Chapter 5 – Needs and Opportunities Assessment, includes a more detailed review of parking needs and potential solutions.



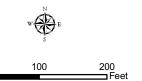




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	3 spaces at 20' were indicated rather than 4 at a lesser length Some spaces were measured which were already marked on Route 31 pavement and they were 19' to 23'.	
	2) The ends of spaces are presumed to be 5' from driveway rad	ius
1	intersections with main roads and 20' from street intersection Also, 20' from packaging plant driveways (semi trucks turning	S.
	 Within currently unmarked private parking lots, an 8' width an 18' length were used. 	d
	4) 15' from hydrants.	
	5) 4 = Private	57001/Droite
	6) 11 = Public	
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	Parking Inventory- Section 1 Village of Macedon	Figure 3.4A
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- 2) The ends of spaces are presumed to be 5' from driveway radius intersections with main roads and 20' from street intersections. Also, 20' from packaging plant driveways (semi trucks turning).
- 3) Within currently unmarked private parking lots, an 8' width and 18' length were used.
- 4) 15' from hydrants.
- 5) 👍 = Private
- 6) **11** = Public

Parking Inventory -Section 2

Village of Macedon Circulation, Accessibility and Parking Study

Wayne County

11/26/07

Study New York

Figure

3.4B

The number of parking spaces shown are based on:

- 20' length for parallel parking along roads with the number being a minimum. For instance, if the measurement was 74', 3 spaces at 20' were indicated rather than 4 at a lesser length. Some spaces were measured which were already marked on Route 31 pavement and they were 19' to 23'.
- 2) The ends of spaces are presumed to be 5' from driveway radius intersections with main roads and 20' from street intersections. Also, 20' from packaging plant driveways (semi trucks turning).

4) 15' from hydrants.

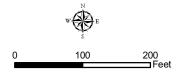
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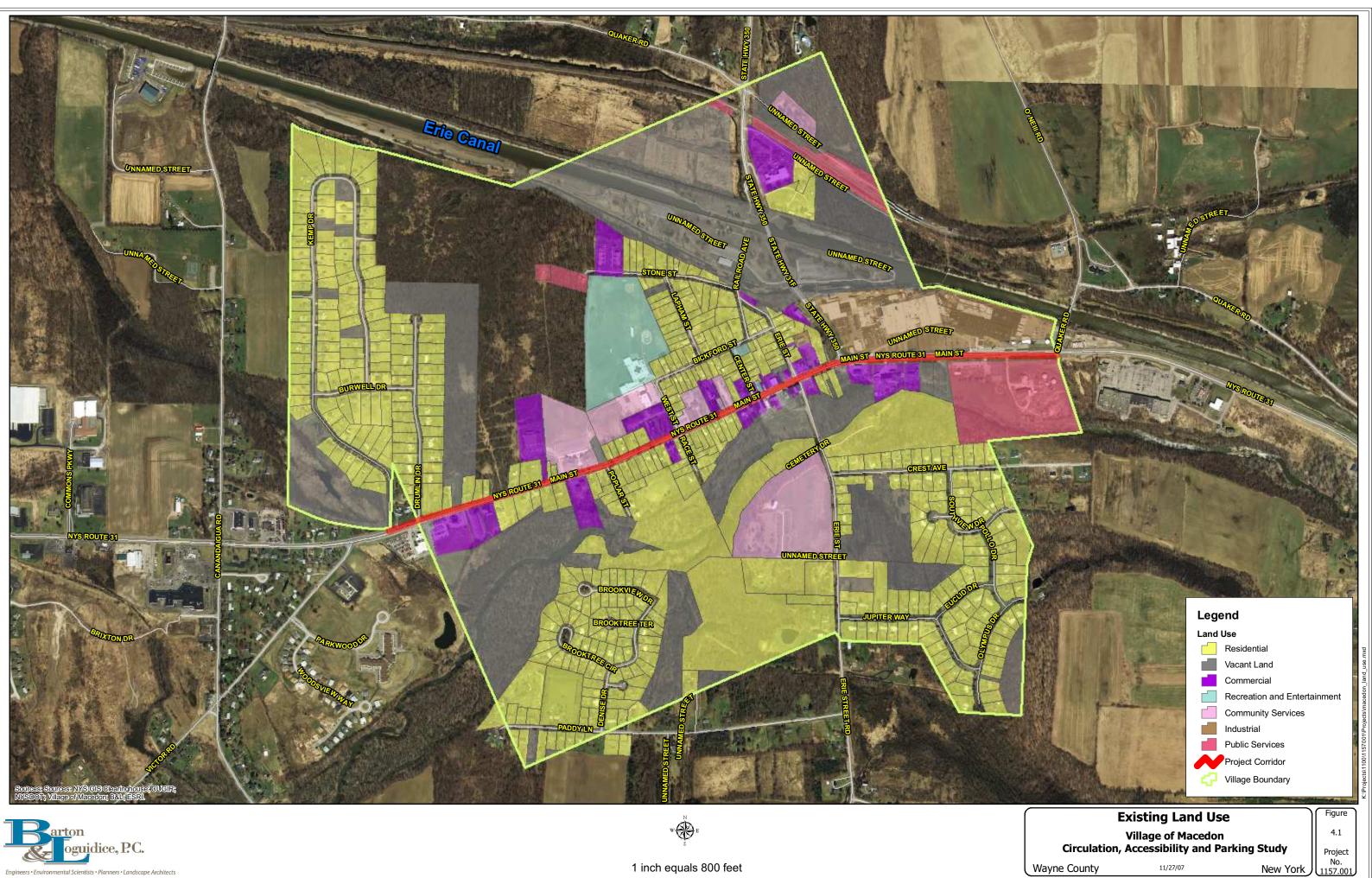


CHAPTER 4: EXISTING LAND USE AND ZONING

4.1 Land Use

Existing land use along the NYS Route 31 corridor exhibits primarily a mix of residential, small retail, public service, and personal service establishments, notably automobile repair shops and sales businesses. There are currently nine service uses that cater to the automobile in some way, from McLouth Chevrolet Sales to Future Classics Auto Sales and Collision, and the Mobile Gas Station and Express Mart. Many of these are in what is considered the village downtown business district and are typically not the types of uses local residents and visitors consider walking to as destinations. Figure 4.1 illustrating existing land use patterns in the Village indicate these automobile services uses as being commercial establishments along with other small retail entities. If those nine parcels are eliminated from the commercial land use as shown on Figure 4.1, the Village's downtown commercial and retail base would be limited to a few unique specialty shops such as Ultimate Images Professional Photography, Lost Worlds, Books Etc, and a floral shop – typical Main Street type businesses.

West of Race and West Streets, land use fronting along NYS Route 31 transitions to a traditional residential form with historic structures and deep lots. North of the corridor, residential development primarily exhibits a traditional village neighborhood with a couple of block patterns reminiscent of late nineteenth and early twentieth century development patterns. South of the corridor, however, exhibits a more contemporary style of residential development with organic roadway alignments and cul-de-sacs. Similar development patterns have more recently been constructed north of the corridor as well on the western edge of the Village. Characteristics from these more suburban-type subdivision developments have been evaluated as part of this study to ensure their needs and demands are incorporated into the overall corridor study area.







Covalence Specialty Materials dominates the gateway entry into the Village downtown from the east and completely blocks any potential access to the Erie Canal from Gravino Park located across the street. The length of road frontage on the Covalence Property is totally devoid of any streetscape amenities or plant screenings, resulting in an unpleasant entry into the Village for motorists and an unsafe environment for pedestrians.

The breakdown of land use based upon the New York State Real Property Tax Codes as contained in the Wayne County GIS data files is as follows:

Res	Residential Land Use- Village of Macedon (2006)				
Property Class	Description	# of Parcels	Total Acres		
210	Single Residence	446			
220	Two Family	24			
230	Three Family	5	295		
240	Rural Residence	1			
281	Multi-Purpose	2			
311	Res. Vacant	29	164		
312	Res. Vacant W/improve	2	104		
411	Apartments *	7	8		
	TOTAL	516	467		

* According to NYS Real Property Classification codes, apartments owned by commercial enterprises are listed as commercial properties. However, for the purposes of NYSHUD, they are counted as residential units.

Industrial Land Use - Village of Macedon (2006)				
Property Class	Description	# of Parcels	Total Acres	
340	Vacant Land Located in Industrial Areas	5	19	
714	Light Industrial	1	25	
715	Heavy Manufacturing	3		
	TOTAL	9	44	

Commercial Land Use - Village of Macedon (2006)			
Property Class	Description	# of Parcels	Total Acres
330	Vacant Commercial	14	82
411	Apartments * (see note on previous page)	7	
418	Inns, Lodges, Boarding and Rooming Houses, Tourist Homes	1	
421	Restaurants	2	
423	Snack Bars, Drive-Ins, Ice Cream Bars	1	_
431	Auto Dealers - Sales and Service	1	
433	Auto Body, Tire Shops, Other Related Auto Sales	4	_
434	Automatic Car Wash	1	_
438	Parking Lot	4	
442	Mini Warehouse (Self Storage)	1	32
449	Other Storage, Warehouse and Distribution Facilities	1	
465	Professional Building	2	
470	Miscellaneous Services	1	_
481	Downtown Row Type (with common wall)	6	
482	Downtown Row Type (detached)	2	
483	Converted Residence	3	
484	One Story Small Structure	4	
485	One Story Small Structure - Multi occupant	2	
486	Mini-mart	1	
	TOTAL	58	114

The land use summary of lots and parcels dedicated to different land uses listed above is not an estimate of the acreage within zoning districts dedicated to certain land uses. It is a summary of acreage for each land use classification based upon the Wayne County GIS data available for taxed parcels in the year 2006 (Property Classification Codes, N.Y.S. office of Real property Services). Due to the coordinate system method of calculation (NAD 1983), there may be minor differences in acreage between specific parcels indicated on real property tax maps and surveys produced by a licensed land surveyor (L.S.).

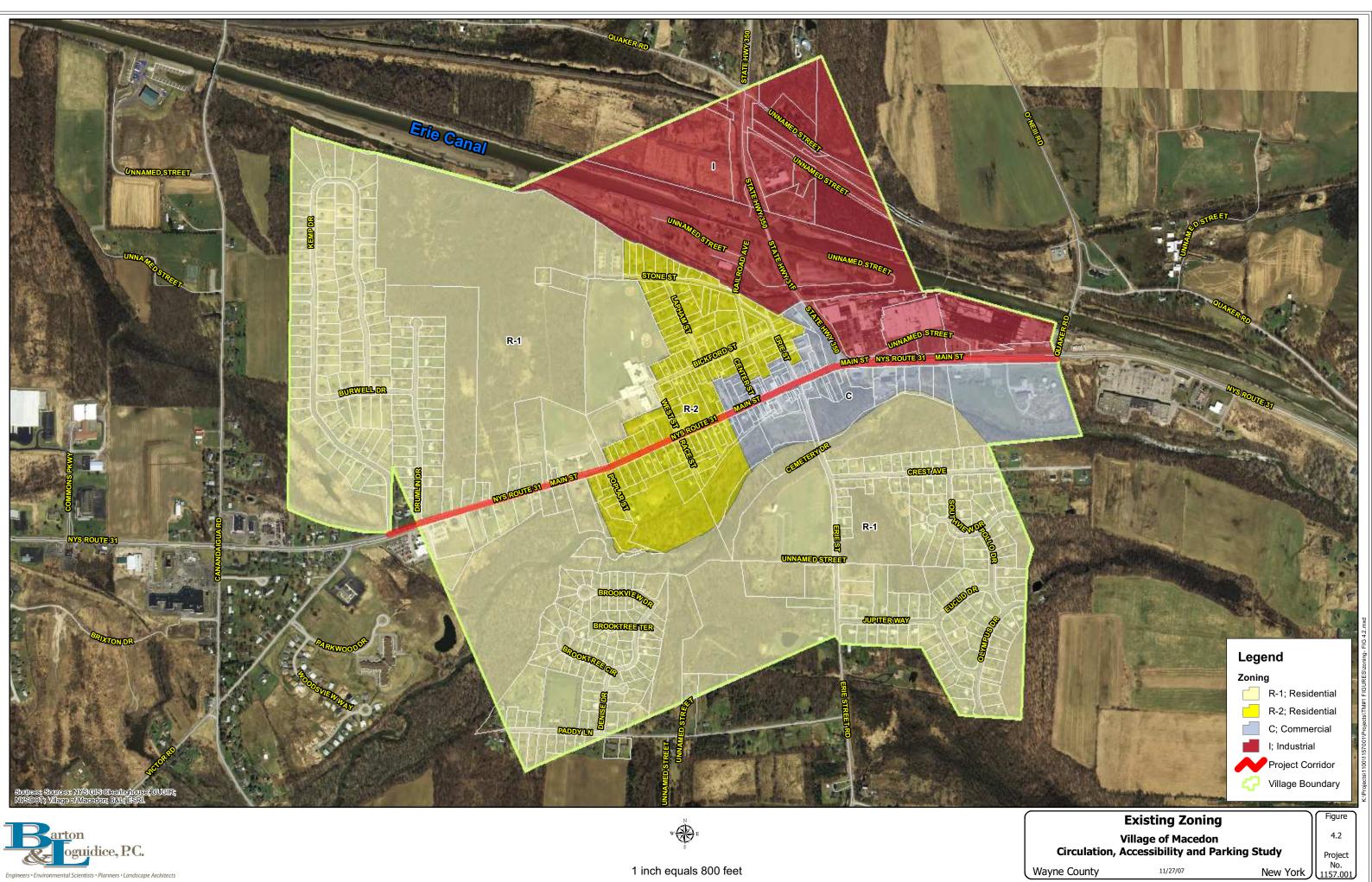
4.2 Zoning Districts and Regulations

Zoning districts within the project study area include the following (Figure 4.2):

- Residential (R-1)
- Residential (R-2)
- Commercial (C)
- Industrial (I)

The Village's existing Zoning Ordinance dates back to 1989 and likely needs to be evaluated to ensure it still accomplishes what the Village determines as its long-term vision for future growth and development, particularly within its downtown business area. Evidence that the existing Zoning Ordinance or local Site Plan review procedures may need an update is the number of auto body shops, automotive accessory, and other automobile service-oriented businesses along the Main Street downtown. These uses or business are not typically what a village downtown would be predominantly characterized by and, therefore, would not be permitted by right or by special permit in that particular area. Most importantly, these types of businesses, being that they are intended to serve the automobile, are not typically destinations to which one can walk or bike. The result could likely be an increase in traffic and temporary outdoor storage of vehicles which could detract from the aesthetic value of the Village; while at the same time limiting the available rental or ownership opportunities for businesses that are more appropriate for "Main Street" environments, such as coffee shops, clothing stores, delicatessens, cafés, etc.

The existing zoning ordinance also does not include any type of regulatory framework that emphasizes the relevance of walking, biking, and general pedestrianoriented uses and/or facilities. Specific provisions for downtown mixed-use development, multi-use or multi-modal facilities, universal design, and overall pedestrian connectivity would help the Village blur the distinction between the traffic congested







roadway and sidewalks and storefronts. The identification of potential adjustments to the Village's regulatory controls will be outlined in future phases of this study.

Additionally, vacant property is scarce within the Village along NYS Route 31, and the local Zoning Ordinance should be able to protect those assets and ensure the appropriate type of development occurs at such time there is demand for it. Several economic indicators suggest that opportunities exist in the corridor that would support future development and redevelopment within and adjacent to the Main Street corridor. As a result, the Village may be well positioned to evaluate the spatial locations and boundaries of its existing zoning districts and their permitted uses; and establish "transitional" districts where uses that are not appropriate for the business district may be more suitable and can still be easily accessed by the general public and be quite visible. This would foster existing and future local market demands while providing appropriate land use policy and long-term growth and development along the corridor. As such, specific needs and opportunities with respect to land use policy and transportation management will be evaluated and summarized in future project phases.

4.3 Best Practices

Most of the communities in New York State with sound policies for pedestrianization and circulation incorporate those policies into their municipal Comprehensive Plan. While these policies tend to be conceptual in nature, they have strong legal precedence and reflect the planning goals and objectives of the community. Some communities, like the Village of Skaneateles, NY, simply state these goals and objectives in their plan document. Others, like the Village of Pittsford, NY, include visual representations of their plan for pedestrian accommodations, streetscape amenities, and circulation. Then others, like the City of Saratoga Springs, NY, include rendered master plans into their planning documents in order to provide the framework for future improvements. Incorporating these concepts and goals into planning documents is extremely important. Comprehensive plans form the basis for local zoning and land use regulations. Typically, zoning laws do not legislate pedestrian amenities relating to traffic and circulation policy but, by including these within a community's planning documents, they are then later referred to during the site plan review or subdivision approval process.

Detailed below is a summary of the policies of four other municipalities in order to provide some insight into the approach that other communities are taking.

4.3.1 City of Saratoga Springs, New York

Saratoga Springs is a leader in advancing the concept of a walkable community and an integrated system of traffic, parking, and bicycle-pedestrian routes. The local government has embraced the concept of an integrated multimodal system of sidewalks, trails, bicycle lanes, and interconnections with parks, parking, and businesses. Their Comprehensive Plan contains many recommendations for improving multi-modal systems throughout the community. Several of these recommendations are as follows:

- Develop a Comprehensive Sidewalk Plan that identifies priority areas for new sidewalk construction and rehabilitation, including links to the City recreation/ice rink [and local destinations and trails].
- Develop a Comprehensive city-wide multi-use (including bicycle) trail plan that integrates existing pedestrian, road and open space systems, and provides critical linkages. (This Multi-Use Trail Plan was later adopted in 2006.)

- Provide linkages (such as trails, bikeways, recreationway, wildlife corridors, greenways) between existing areas of protected open space and natural resources.
- Enhance pedestrian circulation to and within downtown.
- Advance pedestrian/bicycle emphasis with enhanced pedestrian/bicycle circulation to the Downtown area.
- Provide pedestrian/bicycle access to existing and planned future recreational uses.
- Create a more vibrant neighborhood atmosphere with new development created in walkable blocks.

As a result of these recommendations, Saratoga Springs adopted a formbased zoning law and developed performance standards for streets and trails within the community.

4.3.2 Village of Skaneateles, New York

The Village of Skaneateles in Central New York is known regionally as an ideal Village that has benefited from their historic streetscape. While traffic congestion and truck traffic is becoming an issue due to the economic success of the community as a tourist destination, the Village owes its pedestrian friendly atmosphere to the retention of historic buildings and places. One of the main reasons for their success is the fact that very few of the buildings or spaces in the Village have been removed or replaced with modern amenities. However, strict zoning is enforced and the Village has a thorough Architectural Review process that requires new buildings or infill development to conform to the historic character of the Village. In addition, the Village has incorporated several policies in their 2005 Joint Comprehensive Plan with the Town of Skaneateles. Relevant policies include:

- A system of sidewalks, footpaths, and bikeways that will facilitate movement in the Town and Village by means other than motorized vehicles.
- Provide and implement a long-range plan for the establishment of a system of pedestrian and bikeways.
- Accommodate an interconnected system of pedestrian and recreational trails and bikeways that incorporate natural features such as the Skaneateles Creek corridor (a designated greenway along the outlet of Skaneateles Lake).
- A policy that new residential subdivisions should expand on the Village's traditional grid-network of interconnected streets and sidewalks as part of the local subdivision review process.
- A provision of sidewalks for new development in areas of the Town that are adjacent to the Village.

In addition, the Village has developed an informal strategy to retain or improve rear lot municipal parking areas and to promote the sharing of access drives so that residents and visitors can easily park in municipal and private lots and walk to local businesses. This strategy includes cooperation with local business owners to allow people to use their private lots for overflow parking. Many businesses also require their employees to park in the Village municipal lot and walk to their place of employment so that parking is more available to those conducting business or shopping in the Village. All of these policies are designed to reduce resident dependence on motor vehicles and create a more pleasing experience for tourists. Interestingly enough, the Village has been successful in addressing truck traffic by using local law enforcement to ensure that trucks traverse the Village in a safe manner or utilize alternative routes to their destinations.

4.3.3 Village of Pittsford, New York

The Village of Pittsford is, perhaps, the best example of community planning as it relates to traffic, circulation, and pedestrianization. They have also been extremely successful in utilizing the canal system and Canal Recreation Plan to its fullest advantage. While the population growth surrounding Pittsford is a major factor in its success, it is evident that the residents enjoy a sound economy and quality of life due to many planning policies that are in place.

The Pittsford Comprehensive Plan was adopted in 2006 and contains very strong recommendations for traffic circulation and pedestrianization. The canal system is programmed as an integral component of parking and circulation plans and business improvement within the Village hinges on a pedestrian friendly environment that is integral to the canal system and Canalway Trail.

This Comprehensive Plan includes detailed recommendations and conceptual master plans that are beyond the scope of this discussion. However, most of the recommendations of the plan are summed as follows:

"To meet the goals of the Comprehensive Plan, Village streets must be made safe and friendly for pedestrians. The Village's pedestrian environment has suffered from volume enhancing highway projects. Widening Village streets may lower property values, destroy the scale and historic character of Village streets, increase noise and pollution, reduce available parking, hurt retail business, reduce the residential quality of life, discourage pedestrian activity, endanger pedestrians, increase the rate of vehicular speeds, and provide no permanent solution to the problem of traffic volume. Further widening of streets is contrary to the goals of the Village in providing a pedestrian friendly Village. Arterial streets should retain wide treed medians between the curb and the sidewalk and where the width permits, street parking will be permitted. Future street improvement projects should include traffic calming measures balancing traffic needs with the other civic activities sharing the public right-of-way. No driveway or side street should be wider than two lanes. The use of right hand turning lanes should be avoided."

All of the conceptual plans and recommendations for traffic and circulation in the Village are tied to this "vision statement." As a result, incorporation of this vision has benefited the Village both financially and from a traffic safety standpoint by incorporating sound transportation planning into local land use policy.

4.3.4 Town of Lysander, New York

The Town of Lysander New York is one of the more progressive communities with respect to highway transportation planning in New York State. This is one of few Towns that have actually adopted a Zoning Regulation that requires developers to build portions of the Town trail system within their development. In 2003, the Town developed a *Long-Range Transportation Plan* through extensive negotiations between the Planning Board, the Town Engineer, and developers for each of the current project proposals in the Town. This plan programs a system of local roads and multi-modal trails that are tied to future growth. The Town employs many planning efforts designed to ameliorate the traffic impacts of residential development, improve traffic circulation, and provide long term multi-modal linkages within the community. Several of these policies include:

- Local Zoning requires developers to program and construct sidewalks and walkways as part of the site plan and subdivision approval process.
- Growth management to reduce long range impacts by eliminating the potential for uniform zone changes to a higher density within the most populated area of the Town.
- Strategic highway planning to eliminate double-loading (driveways on both sides of the roadway) along arterials and collector roads as a measure to reduce side friction and turning movements.
- Comprehensive Plan and Zoning Laws programmed to convey traffic to the collector system at controlled intersections via an interconnected system of secondary roads.
- Access management that programs access points to major highways and arterials.
- A planning policy of "no net gain of additional intersections or driveways" beyond those programmed in the Long Range Transportation Plan.
- Development of an internal circulation system of streets and walkways in proposed subdivisions is designed to mitigate neighborhood vehicle trips to major highways.
- Requiring neighborhood interconnectivity and walkways to prevent frequent stops by school busses during peak commuter hours.
- Pick up points redirecting school buses to internal neighborhood streets in order to minimize stops along major highways.

- Requiring developers to build interconnected subdivisions are required of developers in order to maximize vehicular and pedestrian safety within neighborhoods.
- Development of a multi-modal trail and pedestrian system that is incorporated into all future subdivisions.
- Provide an integrated bicycle pedestrian system throughout the most populous portions of the community.

In 2001, Lysander developed a comprehensive trail plan for the most populated portion of the Town. The intent of this plan is to provide interconnectivity between existing neighborhoods (including the Radisson Community) and the Village of Baldwinsville so that residents have an alternate choice to using the automobile. This plan also incorporates future residential areas and open spaces into the system and is designed to promote public access to the New York State Canal system. The plan was developed in anticipation of improvements to the New York State Canalway trail.

4.4 Analysis of Potential Future Development Buildout

The Genesee/Finger Lakes Regional Planning Council conducted a Regional Development Analysis in 2004 to help identify anticipated land use patterns throughout the region, including the Town and Village of Macedon. Computations were developed based upon existing land use, potential future land use derived from local zoning regulations, and constraints to development such as floodplains, steep slopes, wetlands, etc., to determine the land available for development and the zoning capacity of the respective municipality. For the purposes of this study, zoning capacity is the amount of development that could legally occur given current provisions as outlined in the ordinance. An outline of this analysis as it pertains to the Town and Village of Macedon, including the Town and Village of Palmyra is outlined below.

4.4.1 <u>Residential Development Analysis</u>

The analysis below was conducted by the Genesee/Finger Lakes Regional Planning Council. For the purposes of the study, "land available for development" reflects lands classified by the municipality's Real Property Assessor as Agricultural or Vacant, but zoned for Residential development.

Residential Development Analysis												
Municipality	Land Available for Development (in acres)	Scenario A Projected # of Lots Assuming Small Lot Size (in acres)	Scenario B Projected # of Lots Assuming Large Lot Size (in acres)	Scenario A - % of Available land for Development Projected to be Developed (Assuming Small Lot Size) (in acres) 2020 2040		Scenario B - % of Available Land for Development Projected to be Developed (Assuming Large Lot Size) (in acres) 2020 2040						
Macedon (T)	7,771	7,476	4,984	5.3%	7.5%	8.0%	11.3%					
Macedon (V)	189	548	274	6.5%	10.5%	13.0%	20.9%					
Palmyra (T)	9,622	3,801	1,629	1.6%	2.5%	3.8%	5.9%					
Palmyra (V)	147	1,322	176	N/A	N/A	N/A	N/A					

4.4.2 Commercial Development Analysis

Similarly, "land available for development" reflects lands classified by the municipality's Real Property Assessor as vacant or commercial, and are per the Village's local Zoning ordinance.

Commercial Development Analysis												
		Range		Permitted	2020		2040					
Municipality	Commercial Category	Low	High	Sq. Footage Per Zoning	Low	High	Low	High				
Macedon (T)	В	25,000	99,000	2,236,723	3.35%	13.41%	5.59%	22.35%				
Macedon (V)	E	0	999	303,799	0%	.99%	0%	1.64%				
Palmyra (T)	В	25,000	99,000	0	0%	0%	0%	0%				
Palmyra (V)	E	0	99,000	27,703	0%	10.82%	0%	18.03%				

A – High rate of construction: Over 100,000 SF of new commercial construction in a 5 year period.

B – Moderate to high rate of construction: 25,000 to 99,999 SF of new commercial construction in a 5 year period.

C – Moderate rate of construction: 7500 to 24,999 SF of new commercial construction in a 5 year period.

D – Low to Moderate rate of construction: 1000 to 7499 SF of new commercial construction in a 5 year period.

E – Low rate of construction: 0-999 SF of new commercial construction in a 5 year period.

4.5 Photographic Record

A general photographic record of the area land uses and structures was also developed as part of the existing conditions inventory. The photos document site conditions, structure conditions, signage, and landscaping. A description log with corresponding photographs is included in the Appendix C (separately bound).

CHAPTER 5: NEEDS AND OPPORTUNITIES ASSESSMENT

5.1 Needs and Opportunities Assessment

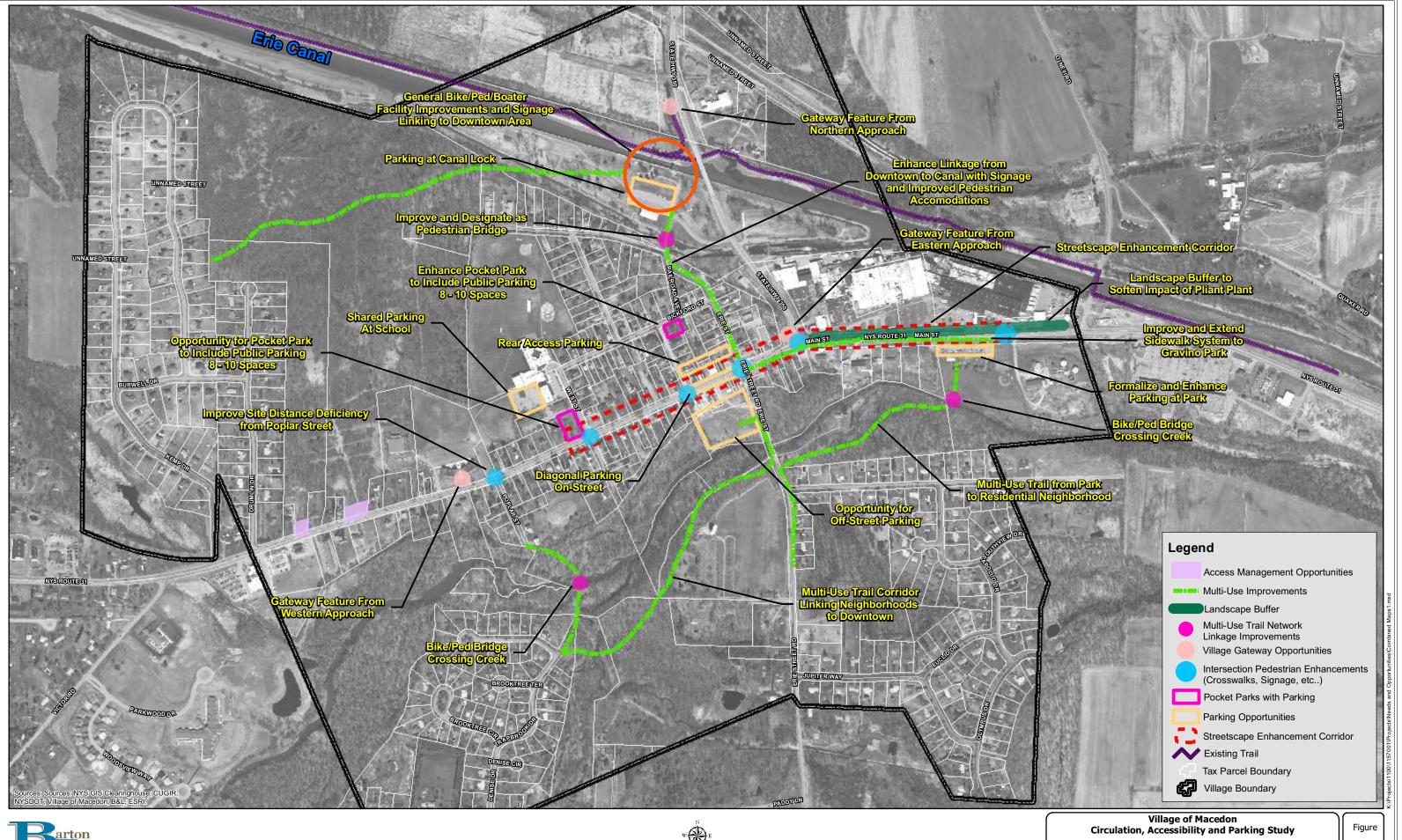
Based on the data and information collected for the Existing Conditions Inventory, an assessment of specific physical, operational, design, policy and regulatory gaps has been completed in an effort to identify opportunities relevant to the study area's enhancement. The results of this analysis are summarized in the following sections and depicted on Figure 5.1.

5.2 Draft Evaluation Criteria

As part of this process, we have developed Draft Evaluation Criteria in order to measure the extent to which potential opportunities will address the identified needs and issues of the project. These criteria, which are based on the Known Issues and Goals documented in Chapter 1, were developed from the initial Project Application to the Genesee Transportation Council for funding, the subsequent Request for Proposals and from discussions with the project Steering Committee.

The Evaluation Criteria have been grouped into categories and focus on the primary objectives of the project.

- 1. <u>Accessibility & Circulation</u>
 - A. Provide improved access and circulation for **pedestrians** to and from adjacent properties and neighborhoods along the corridor.
 - B. Provide improved access and circulation for <u>bicyclists</u> to and from adjacent properties and neighborhoods along the corridor.
 - C. Provide improved access and circulation for **motorists** to and from adjacent properties and neighborhoods along the corridor.







Needs and Opportunities Assessment

Wayne County

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New York

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- D. Provide improved access and circulation for <u>pedestrians and</u> <u>bicyclists</u> to and from Lock 30 along the Erie Canal and the Central Business District of the corridor.
- E. Improve existing and/or develop new linkages between origins and destinations.
- 2. <u>Aesthetics</u>
 - A. Create an aesthetically pleasing and well functioning gateway to the Village from the East, West and North (Lock 30 area).
 - B. Enhance the community character / streetscape.
- 3. <u>Parking</u>
 - A. Improve / increase parking availability within the Central Business
 District of the Village.
- 4. <u>Safety</u>
 - A. Improve School Bus access to and across NYS Route 31.
 - B. Improve School Crossing signage and striping.
 - C. Extend sidewalks to create a continuous / complete network.
 - D. Improve / increase traffic controlled pedestrian crossing locations.
- 5. <u>Economic Development</u>
 - A. Promote tourism via the Canal System.

6. Land Use

- A. Encourage compatible development and redevelopment.
- B. Promote sustainability.
- 7. <u>Regulatory Controls</u>
 - A. Identify Zoning Ordinance revisions relative to parking, permitted land uses, site plan review process, pedestrians and bicycles.
 - B. Identify Master Plan revisions, as appropriate.

5.3 **Opportunities Screening Matrix**

To work in conjunction with the Draft Evaluation Criteria mentioned above, an Opportunities Screening Matrix was created to assist in ranking the potential opportunities against the project goals. To quantifiably measure which opportunities satisfy the project goals; we have simply utilized a point system whereas one point is given to each opportunity that meets one of the evaluation criteria. In short, the more points an opportunity has; the more project goals it will accomplish.

The table below is a summary of the Opportunities Screening Matrix showing the total number of project goals identified in the scope that would be met by each of the opportunity categories. The total is based upon the assumption that all of the sub-opportunities (indicated on the matrix) are implemented.

		c	PPORTUNITY	CATEGORIE	S	
Transfer Street	GATEWAYS	STREETSCAPE (Note 1)	PARKING	BICYCLE & PEDESTRIAN	TRAFFIC	POLICY
PROJECT GOAL	1A 1B.	2A	3A 3G.	4A 4F.	5A 5H.	6A 6D.
CATEGORIES	2 Opportunities	1 Opportunities	7 Opportunities	6 Opportunities	8 Opportunities	4 Opportunities
ACCESSIBILITY & CIRCULATION 1A 1E. 5 Goals	2 of 5	4 of 5	3 of 5	5 of 5	4 of 5	4 of 5
AESTHETICS 2A 2B. 2 Goais	2 of 2	2 of 2	2 of 2	2 of 2	2 of 2	2 of 2
PARKING 3A. 1 Goal	0 of 1	0 of 1	1 of 1	1 of 1	1 of 1	1 of 1
SAFETY 4A 4D. 4 Goals	0 of 4	2 of 4	1 of 4	1 of 4	4 of 4	0 of 4
ECONOMIC DEVELOPMENT 5A. 1 Goal	1 of 1	1 of 1	1 of 1	1 of 1	1 of 1	1 of 1
LAND USE 6A 6B. 2 Goals	0 of 2	1 of 2	2 of 2	2 of 2	2 of 2	2 of 2
REGULATORY CONTROLS 7A 7B. 2 Goals	0 of 2	2 of 2	1 of 2	2 of 2	0 of 2	2 of 2
Total Goals Met if ALL Opportunities Implemented	5 of 17	12 of 17	11 of 17	14 of 17	14 of 17	12 of 17

Note 1: Potential options include: refuge islands, decorative pavement treatments, street trees & ornamental plantings, pedestrian scale lighting, wayfinding signage, street furniture, bike racks, traffic calming elements, building façade rehabilitation.

Figure 5.2 is the entire matrix depicting the results of the evaluation of opportunities.

5.4 Public information Meeting #1

In order to gain public sentiment regarding the potential opportunities, a ranking exercise was conducted at the Public Information Meeting, with 45 citizens participating. Each person was asked to rank each opportunity as either a High, Medium or Low priority, based on their personal preference.

According to the results, the potential opportunity that was ranked the highest priority according to 67% of the attendees is to complete a sidewalk system that is

VILLAGE OF MACEDON NEW YORK STATE ROUTE 31 CIRCULATION, ACCESSIBILITY AND PARKING STUDY

Opportunities Screening Matrix

													POTEN	ITIAL	OPPOR	тили	TIES											Í	
		GATE	WAYS	STREETSCAPE (See Note 1)			I	PARKIN	G				BICY	CLE & F	PEDESTR	AN				TRAF	FIC AND	STRUC	TURAL				POI	LICY	
	EVALUATION CRITERIA	1A.	1B.	2A.	3A.	3B.	3C.	3D.	3E.	3F.	3G.	4A.	4B.	4C.	4D.	4E.	4F.	5A.	5B.	5C.	5D.	5E.	5F.	5G.	5H.	6A.	6B.	6C.	6D.
	(PROJECT GOALS)	East & West Entry to CBD	From North - Erie Canal Lock 30	Various Elements (See Note 1)	Alley between Erie Street & Center Street	On-street diagonal parking in CBD	Public Parking - South of the Village Hall	Defined Parking at Gravino Park	Overflow parking at School	Defined Public Parking w/ Signs, Curbs, Etc.	Shared Use Parking	Bike Lanes	Complete Sidewalk System-ADA Compliant	Multi-use Trail Network	Rehab. old Erie Canal Bridge to Ped. Bridge	Improved / New Transit Shelters	Improved Facilities at Canal Lock.	Install Traffic Signal at West Street	Upgrade or Eliminate Traffic Signal at Pliant	Realign Access at Gravino Park & Pliant	Eliminate Western- most Driveway from Pliant	Improve Sight Distance at Poplar Street	Repair Pavement and Re-stripe Roadway	New Parking "Bulb- outs"	Improved Ped. / School Crossings & Signage / Striping	Update Zoning to Revise Permitted Land Uses	Establish a Business Imprvmnt. District (BID) Overlay	Improve Site Plan Review Procedure	Developer Provisions for Peds.
ACCE	SSIBILITY & CIRCULATION					1			· ·	I			0		<u> </u>	I			L	1		1	1	1					
1A.	Improve access & circulation for <u>pedestrians</u> to/from adjacent properties and neighborhoods			•									٠	٠	•	•	•	•	•					•	•				•
1B.	Improve access & circulation for <u>bicyclists</u> to/from adjacent properties and neighborhoods			•								•		•	•		•						•						•
1C.	Improve access & circulation for motorists to/from adjacent properties and neighborhoods	•		•	•		•	•		•		٠						•	•	•	•	•	•	•					
1D.	Improve access & circulation for <u>pedestrians &</u> <u>bicyclists</u> to/from Lock 30 & CBD		•	•						•	•	•	•	٠	•		•						•	•					•
1E.	Improve existing and/or develop new linkages between origins & destinations.							•				•	•	٠	•		•												•
AEST	HETICS									, in the second s								_											
2A.	Create an aesthetically pleasing & well functioning gateways to the Village.	•	•	•				•									•						•	•			•		
2B.	Enhance the community character / streetscape	•	•	•				•		•		•	•	٠	•	•	•							•		•	•	•	•
PARK	ING																												
3A.	Improve / increase parking availability within the Central Business District of the Village.				•	•	•	•	•	•	•						•			•				•		•			
SAFE	ГҮ																												
4A.	Improve School Bus access to and across NYS Rt. 31.			•														•				•	•		•				
4B.	Improve School Crossing / Pedestrian signage and striping.			•																		•	•		•				
4C.	Extend sidewalks to create a continuous / complete network.							•					•	•	•		•					•	•		•				
4D.	Improve / increase traffic controlled pedestrian crossing locations.																	•	•	•		•	•	٠	•				
ECON	OMIC DEVELOPMENT																												
5A.	Facilitate tourism (Canal)		•	•		•	•	•		•	•	•	•	•	•		•							•	•		•	•	
LAND	USE																												
6A.	Foster development and redevelopment.				•	•	•			•	•						•							•		•	•	•	•
6B.	Promote sustainability.			•		•	•	•		•	•	٠	•	٠	•	•	•							•	•	•	•	•	•
REGU	LATORY CONTROLS																												
7A.	Identify Zoning Ordinance Revisions			•	•	•				•		•		•												•	•	•	•
7B.	Identify Master Plan Revsions			•								•		•	•		•									•	•	•	•
	# OF 17 GOALS MET	3	4	12	4	5	5	8	1	8	5	9	7	10	9	3	12	4	3	3	1	5	8	10	7	6	7	6	9

Note 1: Potential options include: refuge islands, decorative pavement treatments, street trees & ornamental plantings, pedestrian scale lighting, wayfinding signage, street furniture, bike racks, traffic calming elements, building façade rehabilitation.

compliant with the Americas with Disabilities Act. The second highest priority, receiving 62%, is to improve the signage and pavement markings for pedestrians and school crossings, while 60% chose defined public parking with signs, curbs, etc. as the third highest priority.

Additionally, over 50% of the attendees also ranked requiring development provisions for pedestrian accommodations, establishing a Business Improvement District Overlay and Improved facilities as the Canal / Lock 30 as the next 3 highest priorities.

The results of the rankings according to High, Medium and Low Priority are detailed in the following tables, respectively.

Opportunities Ranking from Public Information Meeting #1 Total Surveys Completed = 45

HIGH PRIORITY

Potential Opportunities	# of Votes	%
Complete Sidewalk System Compliant with the Americas with Disabilities Act	30	67%
Improve Pedestrian / School Crossings / Signage / Striping	28	62%
Defined Public Parking with Signs, Curbs, Etc.	27	60%
Require Development Provisions for Pedestrian Accommodations	26	58%
Establish a Business Improvement District Overlay	24	53%
Improved Facilities at Canal / Lock 30	23	51%
Public Parking - South of Village Hall	22	49%
Repair Pavement & Re-Stripe Road	20	44%
Update Zoning to Revise Permitted Land Uses	20	44%
East & West Entry to Central Business District	18	40%
Multi-Use Trail Network	18	40%
Combined: Refuge Islands, Decorative Pavement Treatments, Street Trees/Ornamental Plantings, Pedestrian Scale Lighting, Wayfinding Signage, Street Furniture, Traffic Calming Elements	17	38%
Defined Parking at Gravino Park	16	36%
Improve Site Plan Review Procedures	16	36%
Alley between Erie Street & Center Street	15	33%
Realign Driveway at Gravino Park to be Opposite Driveway at Pliant Corporation	15	33%
Install New Parking Bulb-Outs	15	33%
Dedicated Bicycle Lanes	14	31%
Shared-Use Parking	13	29%
Eliminate Western-most Driveway from Pliant Corporation	13	29%
North Entry to Central Business District	12	27%
Install Traffic Signal at West Street	12	27%
Rehabilitation of old Erie Canal Bridge into Pedestrian Bridge	11	24%
Upgrade or Eliminate Traffic Signal at Pliant Corporation	11	24%
On-Street Diagonal Parking in Central Business District	9	20%
Overflow Parking at School	9	20%
Improve Sight Distance at Poplar Street	7	16%
Improved / New Transit Shelters	1	2%

Opportunities Ranking from Public Information Meeting #1 Total Surveys Completed = 45

MEDIUM PRIORITY

Potential Opportunities	# of Votes	%
Dedicated Bicycle Lanes	20	44%
North Entry to Central Business District	19	42%
Street Furniture	19	42%
Traffic Calming Elements	19	42%
Realign Driveway at Gravino Park to be Opposite Driveway at Pliant Corp.	19	42%
East & West Entry to Central Business District	18	40%
Shared-Use Parking	18	40%
Rehabilitation of old Erie Canal Bridge into Pedestrian Bridge	18	40%
Alley between Erie Street & Center Street	17	38%
Overflow Parking at School	17	38%
Upgrade or Eliminate Traffic Signal at Pliant Corporation	17	38%
Decorative Pavement Treatments	16	36%
Defined Parking at Gravino Park	16	36%
Street Trees / Ornamental Plantings	15	33%
Multi-Use Trail Network	15	33%
Improve Sight Distance at Poplar Street	15	33%
Improve Site Plan Review Procedures	15	33%
On-Street Diagonal Parking in Central Business District	14	31%
Public Parking - South of Village Hall	14	31%
Improved / New Transit Shelters	14	31%
Install New Parking Bulb-Outs	14	31%
Refuge Islands	13	29%
Wayfinding Signage	13	29%
Install Traffic Signal at West Street	13	29%
Update Zoning to Revise Permitted Land Uses	13	29%
Defined Public Parking with Signs, Curbs, Etc.	12	27%
Improved Facilities at Canal / Lock 30	11	24%
Eliminate Western-most Driveway from Pliant Corporation	11	24%
Pedestrian Scale Lighting	9	20%
Complete Sidewalk System Compliant with the Americas with Disabilities Act	9	20%
Repair Pavement & Re-Stripe Road	9	20%
Establish a Business Improvement District Overlay	9	20%
Improve Pedestrian / School Crossings / Signage / Striping	7	16%
Require Development Provisions for Pedestrian Accommodations	7	16%

Opportunities Ranking from Public Information Meeting #1 Total Surveys Completed = 45

LOW PRIORITY

Potential Opportunities	# of Votes	%
Improved / New Transit Shelters	23	51%
On-Street Diagonal Parking in Central Business District	18	40%
Street Furniture	17	38%
Overflow Parking at School	16	36%
Refuge Islands	14	31%
Improve Sight Distance at Poplar Street	13	29%
Decorative Pavement Treatments	11	24%
Install Traffic Signal at West Street	11	24%
Eliminate Western-most Driveway from Pliant Corporation	11	24%
North Entry to Central Business District	9	20%
Defined Parking at Gravino Park	9	20%
Upgrade or Eliminate Traffic Signal at Pliant Corporation	9	20%
Wayfinding Signage	8	18%
Alley between Erie Street & Center Street	7	16%
Pedestrian Scale Lighting	6	13%
Shared-Use Parking	6	13%
East & West Entry to Central Business District	5	11%
Rehabilitation of old Erie Canal Bridge into Pedestrian Bridge	5	11%
Improved Facilities at Canal / Lock 30	5	11%
Street Trees / Ornamental Plantings	4	9%
Traffic Calming Elements	4	9%
Public Parking - South of Village Hall	4	9%
Dedicated Bicycle Lanes	4	9%
Multi-Use Trail Network	4	9%
Repair Pavement & Re-Stripe Road	4	9%
Install New Parking Bulb-Outs	4	9%
Establish a Business Improvement District Overlay	4	9%
Require Development Provisions for Pedestrian Accommodations	4	9%
Defined Public Parking with Signs, Curbs, Etc.	2	4%
Realign Driveway at Gravino Park to be Opposite Driveway at Pliant Corp.	2	4%
Update Zoning to Revise Permitted Land Uses	2	4%
Improve Site Plan Review Procedures	2	4%
Complete Sidewalk System Compliant with the Americas with Disabilities Act	0	0%
Improve Pedestrian / School Crossings / Signage / Striping	0	0%

CHAPTER 6 – ALTERNATIVE DEVELOPMENTS, ANALYSIS, AND RECOMMENDATIONS

The purpose of this Chapter is to summarize various alternative development concepts for NYS Route 31 that focus on opportunities that satisfy project goals and objectives, and take into account the highest number of improvement priorities as established during two public information meetings in the Village of Macedon.

6.1 Design Criteria

The project design criteria for the NYS Route 31 Circulation, Accessibility and Parking Study is based upon the 1999 AASHTO "Guide for the Development of Bicycle Facilities", the 2004 AASHTO "Geometric Design of Highways and Streets, Chapters 2, 17 and 18 of the NYSDOT's "Highway Design Manual", and the "Manual of Uniform Traffic Control Devices."

	DESIGN CRITERI	A - NYS Route 31	Principal Arte	rial
	Element	Standard	Existing	Proposed
A	Minimum Design Speed	37 mph min. (Approx. 60 km/hr)	30 mph min.	30 mph min. (Approx. 48 km/hr)
В	Sidewalks	5 ft. min.	4 ft. min.	5 ft. min.
С	Shoulder Width Minimum: Desirable:	0 ft min. 2 ft desirable	2 ft. min. 8 ft. max.	TBD
D	Maximum Grade	7%	Varies <3 %	< 3%
E	Minimum Horizontal Radius	443 ft		
F	Design Superelevation Rates Max: Rollover at Pavement Edge Rollover between Travel lanes	4% 8% 4%	N/A	4% 8% 4%
G	Stopping Sight Distance	279 ft.	N/A	279 ft.
н	Signage	Comply with MUTCD	N/A	Comply with MUTCD
I	Pedestrian Accommodations	Comply with ADA & HDM Chapter 18	N/A	Comply with ADA & HDM Chapter 18
J	Max. Pavement Cross Slope	1.5 – 2.0 %	0-2%	2%
к	Pedestrian Facility Vertical Clearance	7 ft		7ft

The existing speed limit along NYS Route 31 is 30 mph (48 km/h) through the downtown area and exhibits 45 mph postings toward the east and west termini of the project corridor at the Village boundary. It is recommended these speed limits remain as recent context sensitive design guidance from State and Federal transportation agencies allow for setting design speeds equal to the posted speed limit, rather than at the existing 85th percentile travel speed. This design criteria is intended to allow communities to develop designs that achieve the travel speeds appropriate for a given area; in this case, particularly for the Village of Macedon downtown area where much of the Village economic, civic and institutional operations are located, and where pedestrian activity is and should be greatest. As such, motorists would be expected to drive 30 mph in the downtown area and 45 mph at the east and west ends of the NYS Route 31 corridor within the Village. This study has determined that these speeds provide a balance between the needs of the commuters and the functional aspects of the corridor (vehicular mobility), and local land uses and aesthetics that the Village would like to build upon in the future.

6.2 Design Alternatives

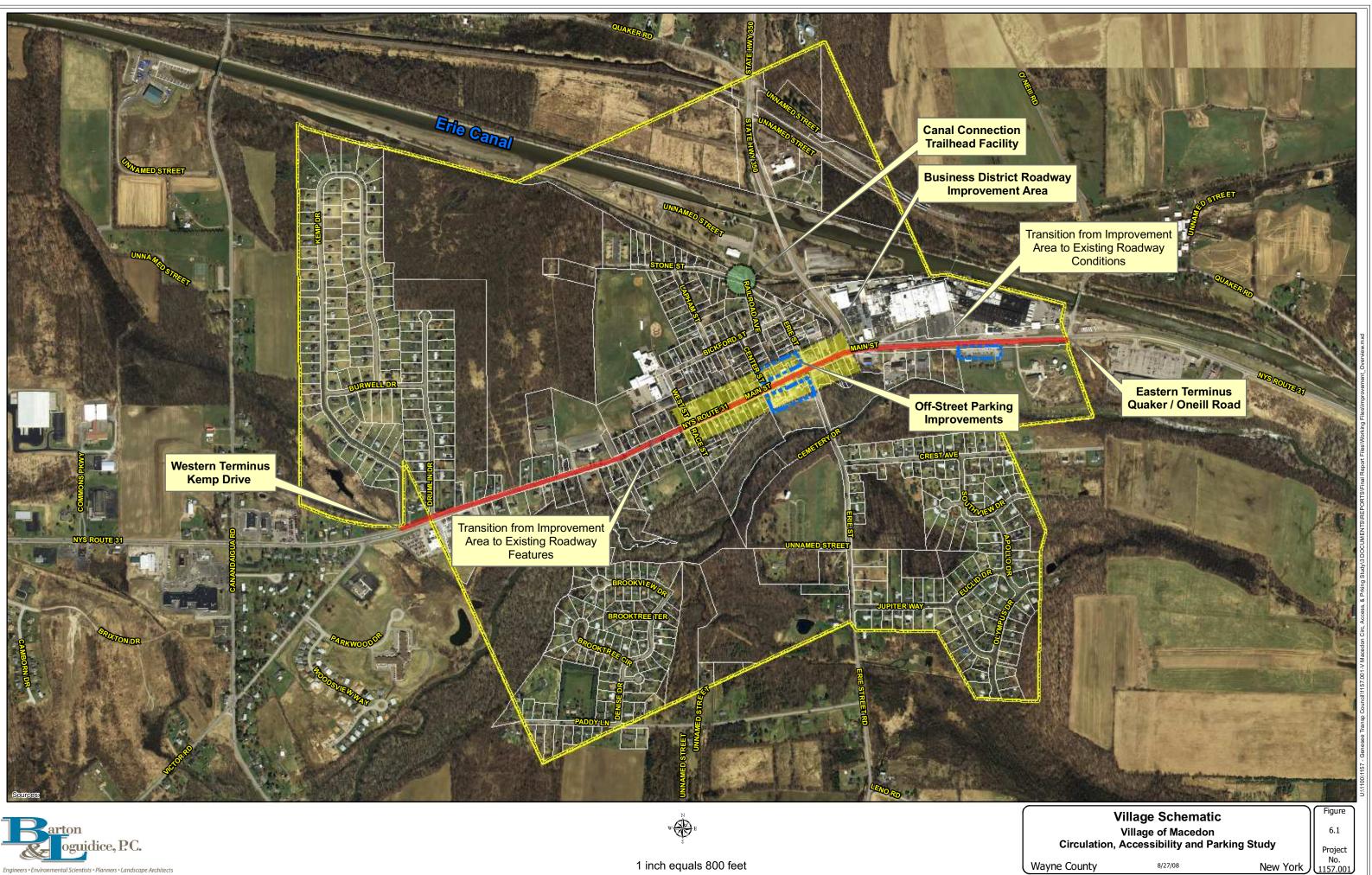
The following sections outline design alternatives for the NYS Route 31 corridor, and provide suggested improvements to off-street parking facilities, pedestrian and bicycle facilities, and linkages to community resources such as Village parks and the historic Erie Canal Trail.

6.2.1 <u>NYS Route 31</u>

The central issue raised during the development of design alternatives for the NYS Route 31 corridor was how to improve the streetscape and vibrancy of the downtown area with provisions for pedestrians and bicyclists while maintaining critical functional and safety provisions of the corridor. To that end, and based upon findings of the existing conditions inventory and analyses, the corridor was broken into two components for evaluating design alternatives – the portion of NYS Route 31 in the downtown area (Erie St. to West St.) and segments of the corridor not within the downtown area. Generally, this study determined that the eastern and western segments of the corridor outside of the downtown area as defined on Figure 6.1 functions satisfactorily with regards to vehicular mobility, accessibility to adjacent properties, pedestrian accommodations and safety. Much of the public sentiment established at the two Public Information meetings focused on the downtown area as the most critical area for future improvements, largely due to desires to increase business opportunities and enhance the general character of the heart of the Village. As such, five design alternatives were considered for the NYS Route 31 corridor, particularly within the downtown area. These alternatives included a No-Build situation, and four redesign scenarios – all of which maintain the existing road right-of-way of approximately 58' to 60'. They are outlined below.

6.2.1.1 No-Build Alternative

The No-Build alternative assumes no improvements would be made other than routine maintenance and that existing conditions would remain into the future. The NYS Route 31 corridor would remain a twolane principal arterial with 12-foot wide travel lanes and varying shoulder widths of two to eight feet throughout the corridor. The corridor within the downtown area would remain in its current condition with eight foot shoulders in addition to nine foot parking lanes – a right-of-way entirely too wide which encourages vehicular travel speeds higher than the posted 30 mph limit with minimal provisions for pedestrians and bicyclists. As such, this alternative is not recommended for further consideration because of poor future traffic operations, the lack of provisions for pedestrians and bicyclists, and generally does not satisfy the goals and objectives of the NYS Route 31 Circulation, Accessibility and Parking study.







1 inch equals 800 feet

Wayne County

8/27/08

New York 儿

6.2.1.2 Preferred Alternative

Through evaluation of the various design alternatives for the downtown segment of NYS Route 31 outlined in the sections below and through the public consensus building efforts of the two Public Information meetings and consultations with the project committee, **the preferred alternative as illustrated in Figures 6.2A, 6.2B and 6.2C was determined to include design components that satisfy the most needs, goals and objectives of this study.** Specifically, this alternative includes the following:

- Modest streetscape improvements within the existing 8-10 foot wide pedestrian realm between the existing curb lines and building storefronts.
- Two 11-foot travel lanes.
- An 11-foot Two-Way Left Turn Lane (TWLTL) delineated by a flush curb.
- Two five-foot designated bike lanes to enhance bicyclist's mobility within the corridor and to strengthen connections to community resources throughout the Village.
- Two eight-foot parallel parking lanes defined by parking bulb-outs.

The primary improvement mechanism proposed in this alternative is the **two-way left turn lane**. Continuous TWLTL's are common access management treatments when combined with driveway consolidation (discussed in parking improvements in Section 6.2.2). TWLTL's simultaneously provide a separate lane for left turning vehicles and







1 inch = 600 feet

Bike/Ped Facilities

_

Existing Erie Canalway Multi-Use Trail

QUAKERRD

S ROUTE 31

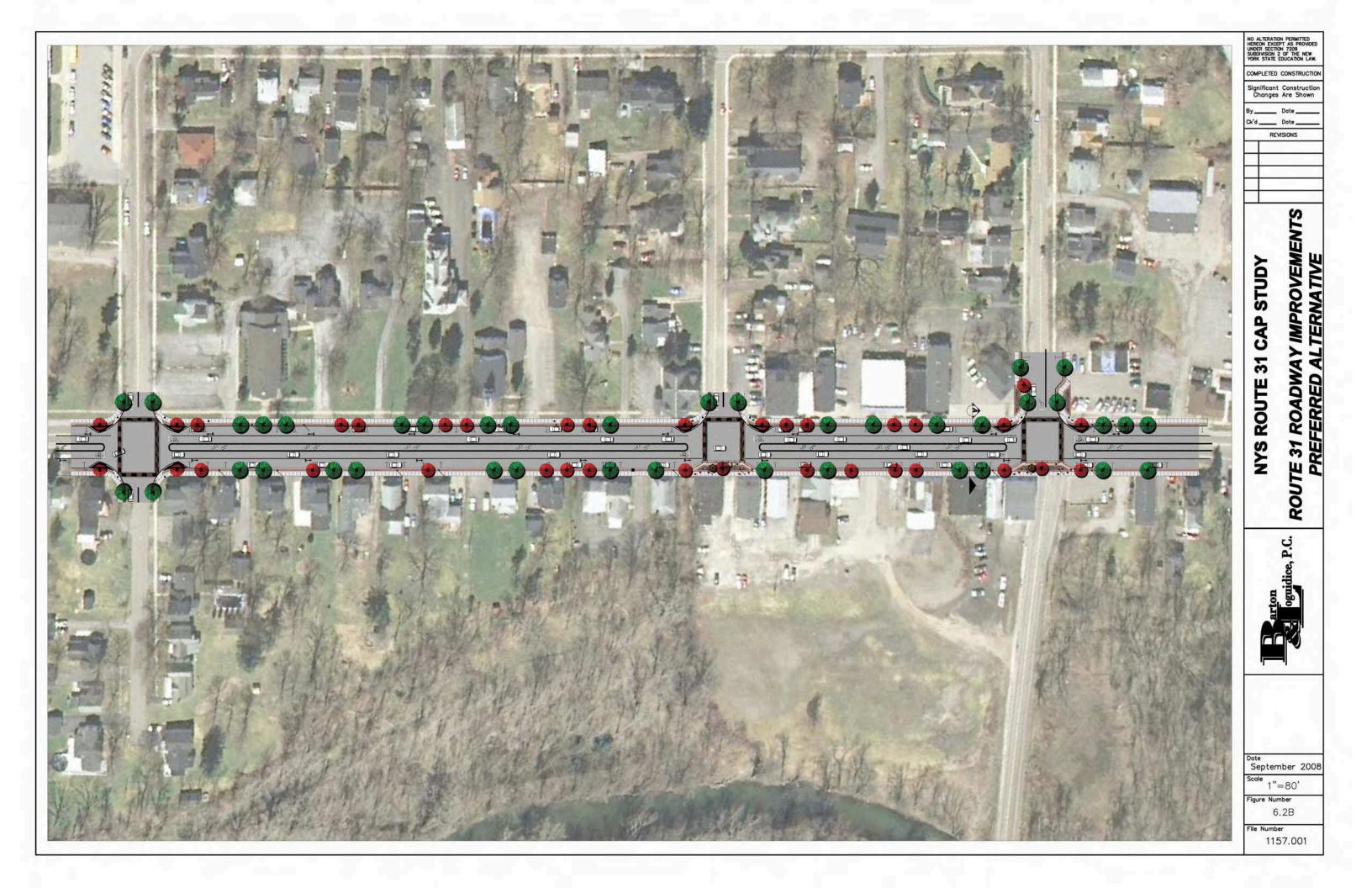
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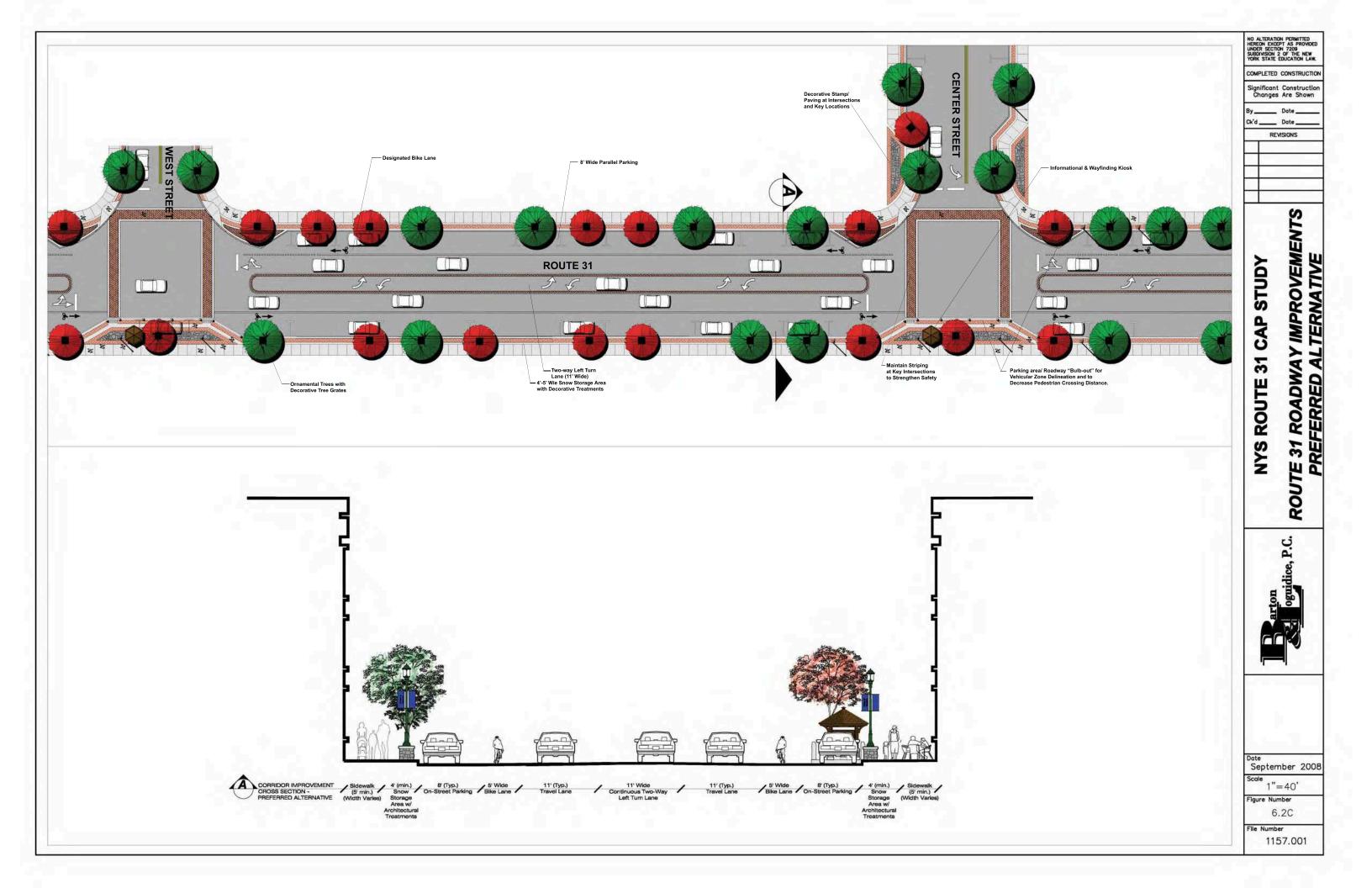
- Planned Multi-Use Trail
- Existing Multi-Use Facilities
- Existing Pedestrian Facilities
- Existing Bicycle Facilities

NYS ROUTE 31 MAIN ST

UPITER WA

Bicycl	e & Pedestrian Fac	ilities	Figure
	Village of Macedon		2.2
Circulation,	Accessibility and Park	king Study	Project
Wayne County	11/30/07	king Study New York	No. 1157.001





property access. Typically, they are used as the center lane of three or five-lane highways.

The need for a TWLTL is based upon the fact that as traffic volumes continue to increase, level of service along the NYS Route 31 corridor would begin to deteriorate without a center turn lane to separate turning traffic from the east and west bound through lanes, which help provide unimpeded mobility within the overall corridor. In general, TWLTL's function well when traffic levels are moderate, the percentage of turning volumes are high, and the density of driveways is low to moderate – all characteristics of the NYS Route 31 corridor as it exists today. Based upon AASHTO's 2004 "A Policy on Geometric Design of Highways and Streets", TWLTL's will function very well on most three-lane arterials where traffic volumes average 10,000 to 17,000 vehicles per day. Existing volumes for the NYS Route 31 corridor are approximately 12,250 vehicles per day.

Also central to the preferred design alternative is the proposed **designated five-foot bicycle lanes** on both sides of the corridor. As defined in the 1999 AASHTO "Guide for the Development of Bicycle Facilities", a Bike Lane is a *portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicycles.* Bike lanes are typically incorporated into roadway designs as one-way facilities that provide more predictable movements by the bicyclist and the motorist, thereby increase awareness and safety. Some signage typically associated with designated bike lanes are shown below.





M7 Series Sign

D11-1 Optional Designation Sign

Important to the overall functionality of the proposed bike lanes is the connectivity not only to destinations along the immediate corridor within the project limits, but also to regional bike and pedestrian facilities. It is critical that designated bike lanes do not just terminate at the project limits, but rather extend outward via shared roadway shoulders, other designated bike lanes in nearby communities, and / or link to regional trail networks such as the Erie Canal Trail towpath.

Other important design features proposed as part of the preferred alternative are the incorporation of provisions for pedestrians such as improved cross walks, parking bulb-outs, and general streetscape improvements such as better street tree definition and tree pits and grates, enhanced street furniture to accommodate walkers and transit users, and informational and wayfinding signage to enhance pedestrian awareness of local destinations and events throughout the Village and region.

A sample materials palette suggested for use throughout the preferred design concept is illustrated below:

Roadway:



Asphalt

Bike Lanes:



Parking Lanes:



Concrete



Asphalt Bike Lanes w/ Concrete Parking

Crosswalks:



Stamped Concrete



Concrete & Brick Pavers



Colored Concrete



Striped Asphalt



Stamped Asphalt

Sidewalks:



Scored Concrete



Concrete Unit Pavers



...w/ Stormwater Planters

Corners:



Concrete Unit Pavers



Scored Concrete

Evaluation of Preferred Alternative

To effectively evaluate this alternative, an analysis of benefits (pros) and deficiencies (cons) were discussed throughout the Public Information meetings. They are summarized below:

Pros

- Improve safety provisions with textured crosswalks, signage, lighting, parking / crosswalk bulb-outs, etc.
- Enhanced gateway treatments to the Village of Macedon downtown area.
- Increases provisions for pedestrians.
- Parking / crosswalk bulb-outs on all corners of intersections to further define parking lanes and decrease pedestrian crossing distances.
- Greater and safer accessibility to adjacent properties.
- Two-way Left Turn Lane would allow for better mobility within the two through travel lanes.
- Increases traveler exposure to storefronts and local attractions.

<u>Cons</u>

- Potential long-term vehicular conflicts associated with increases in traffic volumes and driveway density.
- No increase in on-street parking capacity.

Estimated Project Costs

The costs as outlined below are estimates of probable construction costs in 2008 dollars. Any fee escalation in proposed materials such as asphalt over time would need to be factored into project and budgetary planning exercises when pursuing future funding opportunities or capital improvement planning.

	NYS Route 31 Corridor Impro Village of Macedon, Wa						
	-						
ltem No.	Description of Work	Quantity	Units		Unit Cost		Cost
1	Surface Transportation/ Site Work						
	Clearing & Grubbing (incl. tree limb pruning)	1	LS	\$	8,000.00	\$	8,00
	Excavation/ Grading	1	LS	\$	25,000.00	\$	25,00
	Drainage Improvements	1	LS	\$	15,000.00	\$	15,00
	Concrete Curbing	2682	LF		25.00		67,05
	Concrete Sidewalk	1020	SY	\$	55.00	\$	56,10
	Concrete Pavers	620	SY	1000	60.00	\$	37,20
	New Roadway Striping & Signage	1	LS		25,000.00		25,00
	Decorative Crosswalks & Warning Signage	10	EA		7,000.00		70,00
		S	urface Trans	spor	tation Subtotal	\$	303,35
2	Site Amenities						
	Landscaping	1	LS	\$	15,000.00	\$	15.00
	Lighting	15	EA	\$	4,500.00	\$	67,50
	Protective Bollards	15	EA	\$	600.00	\$	9.00
	Signage	6	EA	\$	250.00	\$	1,50
	Bike Racks	6	EA	S	800.00	\$	4.80
	Trash Receptacles	6	EA	\$	1,000.00	\$	6,00
	Kiosks	2	EA	\$	1,000.00	\$	2.00
	Benches	10	EA	S	1.000.00	\$	10.00
			Site A	me	nities Subtotal	\$	115,80
		Subtotal		÷		\$	419.15
		Construction	Contingenc	y (1	5%)	\$	62,87
		All Projects				\$	482,02
naineer	ring Design/Survey/Legal (Easement Acquisition) (25%):					\$	120,50
	tion Administration Services (7%):					\$	33,74
TOTAL	PROJECT COSTS:					s	636,27

It is recommended that the Village of Macedon work with County and State agencies such as the Genesee Transportation Council and the NYSDOT in efforts to attain funding assistance to implement the proposed improvements as outlined above. Although phasing the improvements is an option for implementation based on available funding, the estimate of probable costs for improvements warrants construction as part of a single project. However, enhancements outside of the Right-of-Way such as façade restoration and parking could be phased by the Village working with private owners to render agreements for such improvements.

6.2.1.3 Alternative #2 - Curbed Landscape Median with Bike Lanes Concept

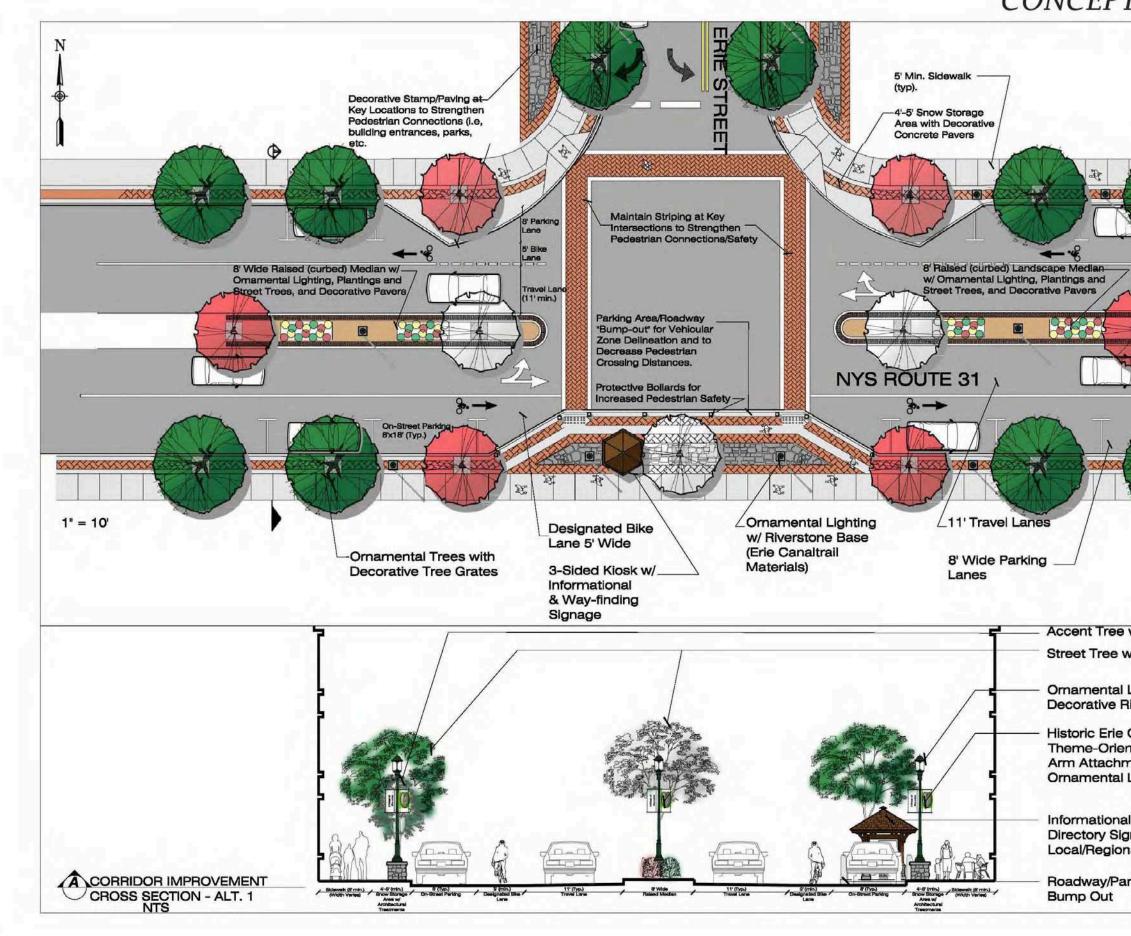
As illustrated on Figure 6.3 this alternative incorporated many of the streetscape design components proposed in the preferred alternative discuss in the prior section. However, this alternative suggests an eight foot curbed landscape median be introduced to the roadway design primarily as a traffic calming and aesthetic feature within the NYS Route 31 corridor in the downtown area of the Village of Macedon. This alternative also proposes the striping and signage for designated bike lanes.

Public input gathered at the informational meetings on all the design alternatives resulted in this alternative scoring lower than the preferred alternative, largely due to maintenance and accessibility concerns relating to the curbed landscape median dividing the east and west bound through lanes. Furthermore, an analysis of benefits (pros) and deficiencies (cons) relating to this alternative were summarized throughout the Public Information meetings. They are outlined below:

<u>Pros</u>

- Enhanced gateway treatments to the Village of Macedon downtown area.
- Improved safety provisions with textured crosswalks, signage, lighting, parking / crosswalk bulb-outs, etc.
- Increases provisions for pedestrians and bicyclists.

CONCEP



TUAL DESIGN	
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w/ Decorative Tree Grate w/ Decorative Tree Grate	
Lighting w/ Riverstone Base Detail Canal nted Banner nent for	
Lighting al Kiosk (3 Paneled) w/ gnage & nal Interpretation arking Area	

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- Traffic calming measures to keep traffic speeds manageable.
- Increases traveler exposure to storefronts and local attractions.

<u>Cons</u>

- Access to some adjacent properties could be an issue with raised medians.
- No increase in on-street parking spaces.

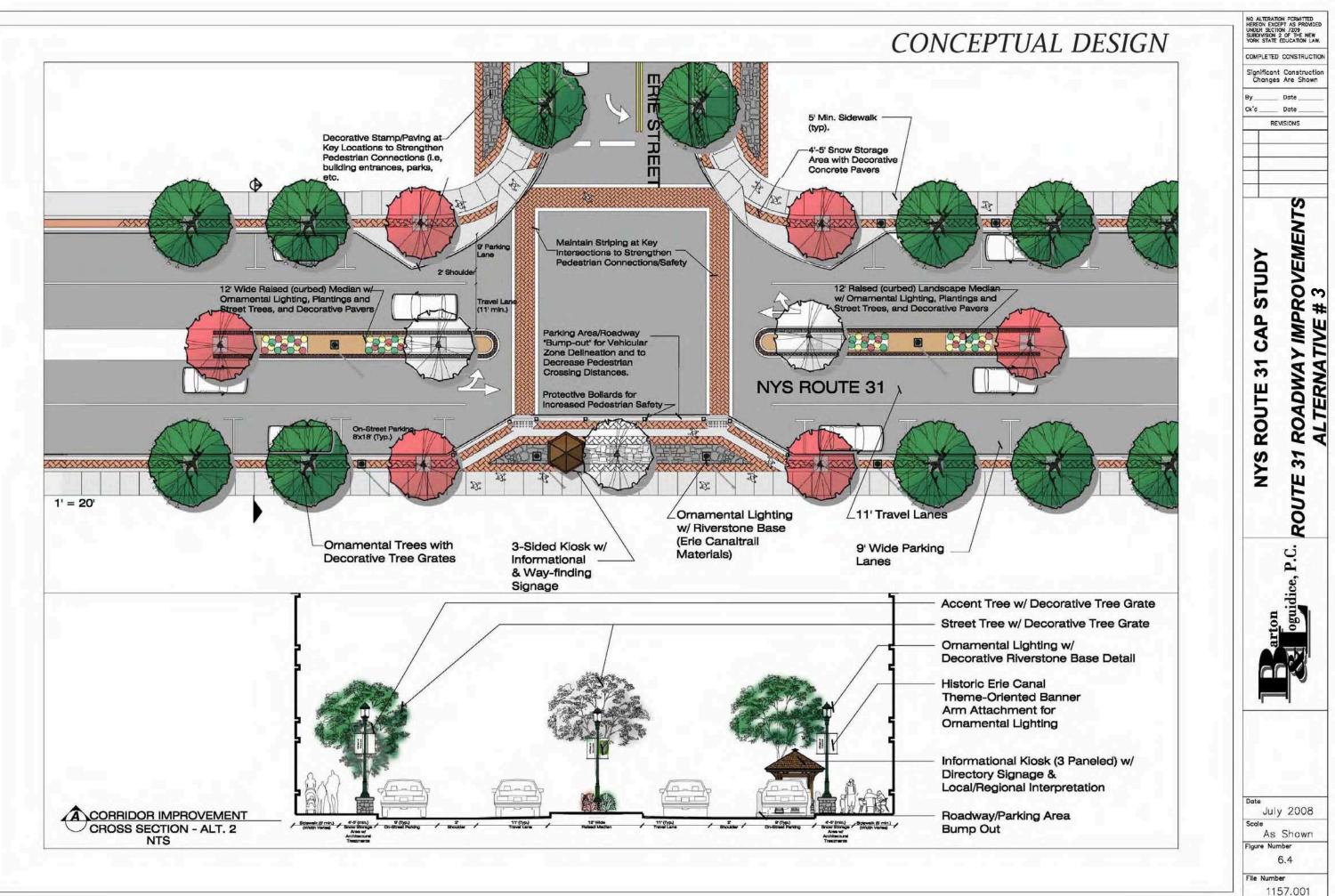
Based upon the above evaluation summary of this alternative and public comments gathered at the Public Information Meetings, this alternative does not fully meet identified project goals and objectives nor advance the vision of the Village of Macedon; therefore, it is not considered feasible and is removed from any further project discussion.

6.2.1.4 Alternative #3 - Curbed Landscape Median without Bike Lanes Concept

As illustrated on Figure 6.4 this alternative mirrors Alternative 2. The only difference is that this alternative does not include designated bike lanes. Furthermore, an analysis of benefits (pros) and deficiencies (cons) relating to this alternative were summarized throughout the Public Information meetings. They are outlined below:

Pros

• Enhanced gateway treatments to the Village of Macedon downtown area.



- Improved safety provisions with textured crosswalks, signage, lighting, parking / crosswalk bulb-outs, etc.
- Increases provisions for pedestrians.
- Traffic calming measures to keep traffic speeds manageable.
- Increases traveler exposure to storefronts and local attractions.

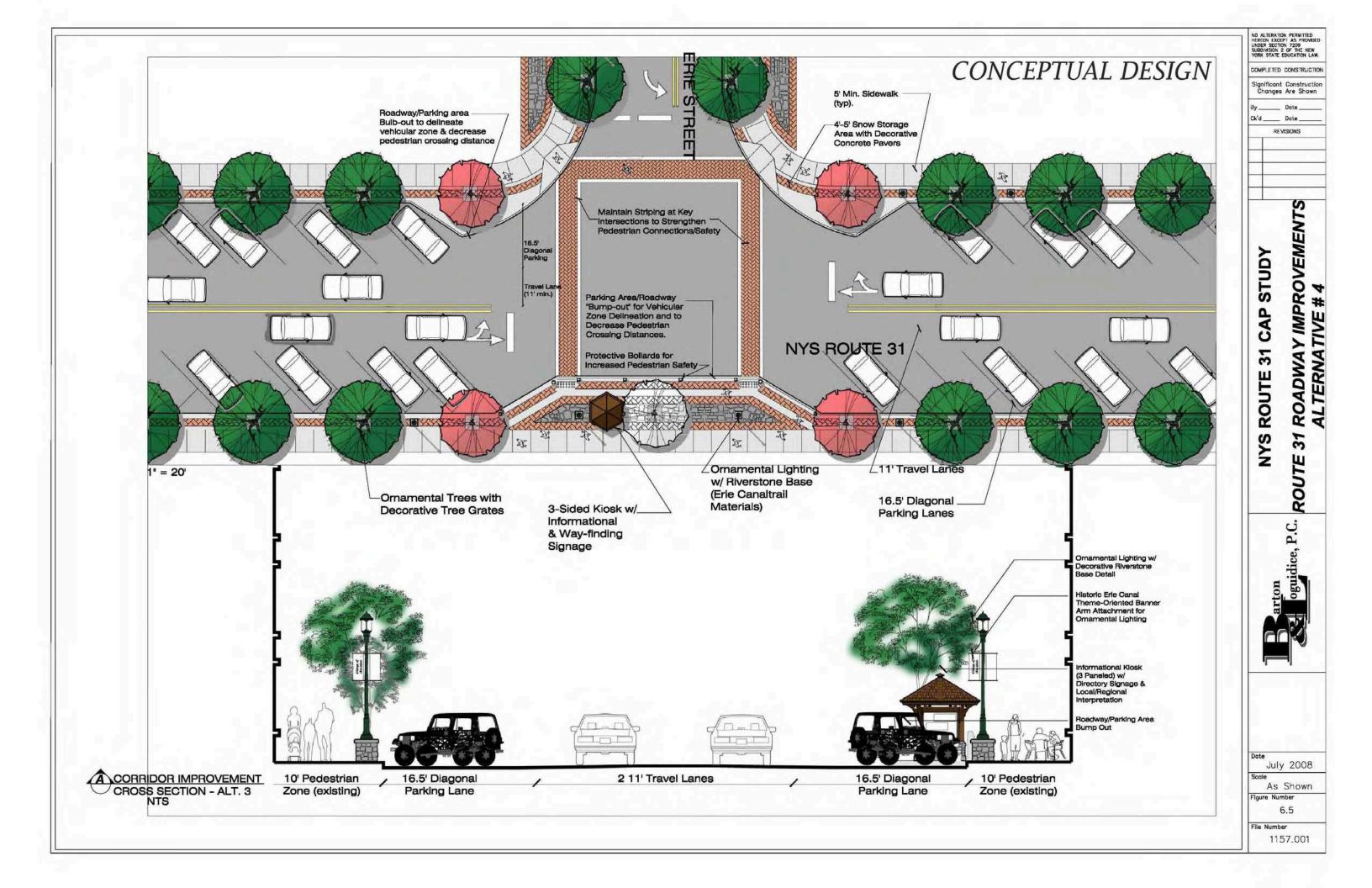
<u>Cons</u>

- Access to some adjacent properties could be an issue with raised medians.
- No increase in on-street parking spaces.
- No designated facility for bicyclists.

Based upon the above evaluation summary of this alternative and public comments gathered at the Public Information Meetings, this alternative does not fully meet identified project goals and objectives nor advance the vision of the Village of Macedon; therefore, it is not considered feasible and is removed from any further project discussion.

6.2.1.5 Alternative #4 - Diagonal On-Street Parking Concept

The primary design feature proposed for this alternative as shown in Figure 6.5 is the alteration of existing on-street parking from parallel parking to diagonal. Parking, both on-street and off, has been a central focus of this Circulation, Accessibility, and Parking study. Therefore, an analysis of how to increase on-street parking was warranted, in addition to



opportunities for increased off-street parking (discussed in later sections). Again, the theme for enhanced streetscaping design components is similar to all other alternatives, yet this alternative does not include any additional traffic lanes or a center median feature. Rather, this alternative proposes to utilize two 11-foot travel lanes and expand the existing eight to nine foot parking lane to 16.5' diagonal parking lanes on each side of the road within the downtown business area.

Historically, this portion of NYS Route 31 within the Village of Macedon was comprised of diagonal on-street parking. Macedon's neighbor's, the Village of Palmyra, still exhibits diagonal parking within its business district. However, as vehicular travel became more popular in the 1950's and design practices focused more on how to accommodate the automobile, parallel parking within the Village of Macedon was likely seen as increasingly unsafe and troublesome. Interestingly enough, the historic right-of-way width that once accommodated parallel parking still exists today.



Diagonal Parking along NYS Route 31, Village of Macedon, Date Unknown Courtesy of http://www.macedonhistoricalsociety.org/

An analysis of benefits (pros) and deficiencies (cons) relating to this alternative were discussed throughout the Public Information meetings. They are outlined below:

<u>Pros</u>

- Enhanced gateway treatments to the Village of Macedon downtown area.
- Improved safety provisions with textured crosswalks, signage, lighting, parking / crosswalk bulb-outs, etc.
- Increases provisions for pedestrians.
- Traffic calming measures to keep traffic speeds manageable.
- Increase in on-street parking capacity.
- Increases traveler exposure to storefronts and local attractions.

<u>Cons</u>

- Safety issues and increase in vehicular conflict points associated with backing out from diagonal parking into the travel lanes.
- No designated facility for bicyclists.

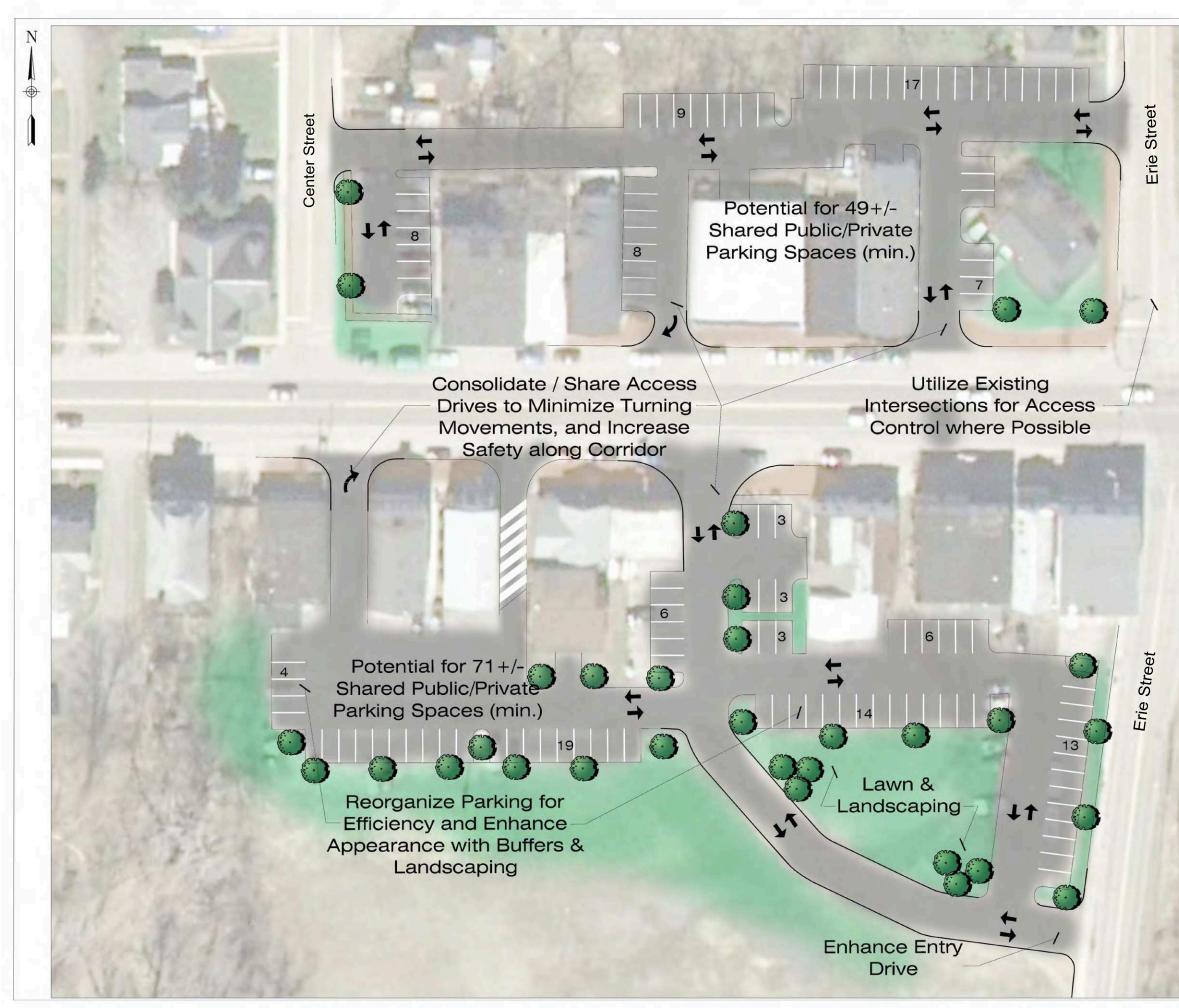
Based upon the above evaluation summary of this alternative and public comments gathered at the PIM's, and particularly because this alternative exhibits a non-standard design feature with the diagonal parking, it does not fully meet identified project goals and objectives nor advance the vision of the Village of Macedon; therefore, it is not considered feasible and is removed from any further project discussion.

6.2.2 Parking and Accessibility Alternatives

As mentioned throughout this report, one of the primary issues regarding the economic climate of the Village of Macedon is the real or perceived lack of parking. This is particularly true with regards to off-street parking. The findings of this study reasonably conclude that there is ample on-street parking to accommodate the current and long-term demand for travelers looking to stop in the Village of Macedon. However, this study also can conclude that off-street parking capacity is a serious issue, and its inadequacy has proven to suppress the local economy by stifling development or redevelopment within the Village downtown area.

Figure 6.6 illustrates recommended alternatives for further consideration related to increasing off-street parking with direct accessibility onto and off of NYS Route 31. Concept designs for parking facilities oriented behind existing buildings, and sharing or consolidating access from NYS Route 31 convey the potential for a significant increase of off-street parking capacity. It is important to note that for such a scenario to come to fruition, it would require cooperative agreements between public and private landowners of the various parcels shown in the concepts. As such, it is recommended the Village pursue or encourage reciprocal easements between the owners of property shown in Figure 6.6 as a mechanism to implement such a scenario.

Also important is identifying the potential to consolidate access driveways where possible to improve access management and mobility along NYS Route 31. Figure 6-6 conceptually shows the driveway to the west of Village Hall being used as a pedestrian alley and closing it to vehicular traffic, and utilizing the existing driveway to the east as a central access point for the larger off-street parking facility. Formalizing off-street parking would greatly increase visibility and awareness of parking within the downtown area, and create a greater sense of



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marketability for commercial properties that share these facilities as it would provide off-street parking for employees, owners, and customers – something that is lacking currently for many of the business owners in this area.

Another suggested improvement regarding parking and accessibility along the project corridor is focused on Gravino Park on the south side of NYS Route 31 across from the Covalence Specialty Materials plant. Currently, the main access driveway for the Covalence Specialty Materials plant is slightly offset from the driveway to the park. The plants driveway has a semi-actuated signalized light for periods when work shifts are at their peak travel hour. The offset driveways to the north and south for these two facilities creates confusion for drivers and increases potential conflict points associated with multiple turning movements into and out from both sides of NYS Route 31. Based on the analyses conducted throughout this study, a recommended improvement would be to realign the main access driveway to Gravino Park with the Covalence Specialty Materials plant driveway as an access management mechanism for NYS Route 31. This would allow users of both facilities to utilize the new fourway signalized intersection, thereby improving safety and accessibility to the north and south of the corridor. This is conceptually illustrated on Figure 6.7.

6.2.3 Pedestrian Accommodations and Connectivity

One of the more important issues that arose out of the public information meetings was the need to enhance provisions for pedestrians – making the Village of Macedon more walkable for its residents and visitors. Central to accommodating this need is linking the Village downtown area and outlying residential neighborhoods to community assets and resources such as the Erie Canal trail, parks, schools, etc. As illustrated on Figures 5.1 and 6-8, multi-use trail networks and linkages are shown schematically as a means to provide for greater community connectivity within the Village of Macedon, enhancing the ability for residents to travel without using their automobiles.

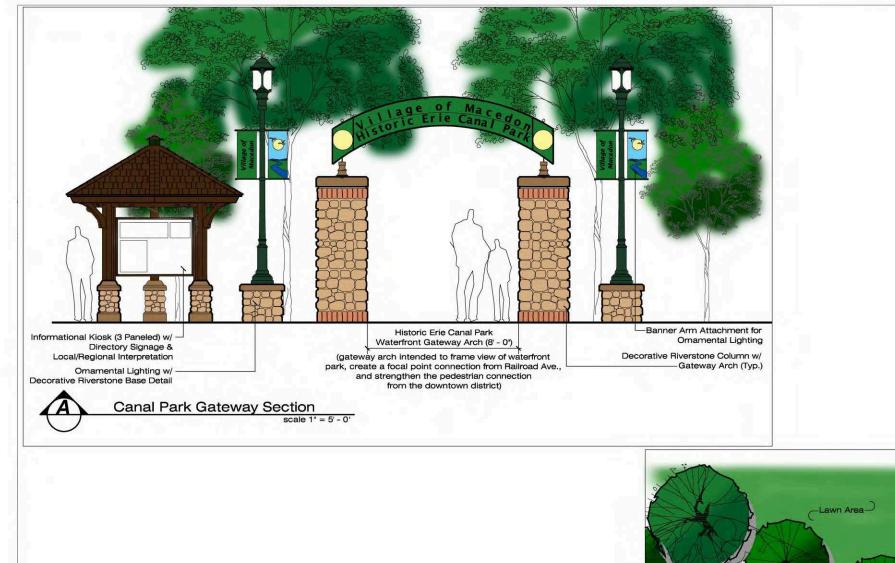


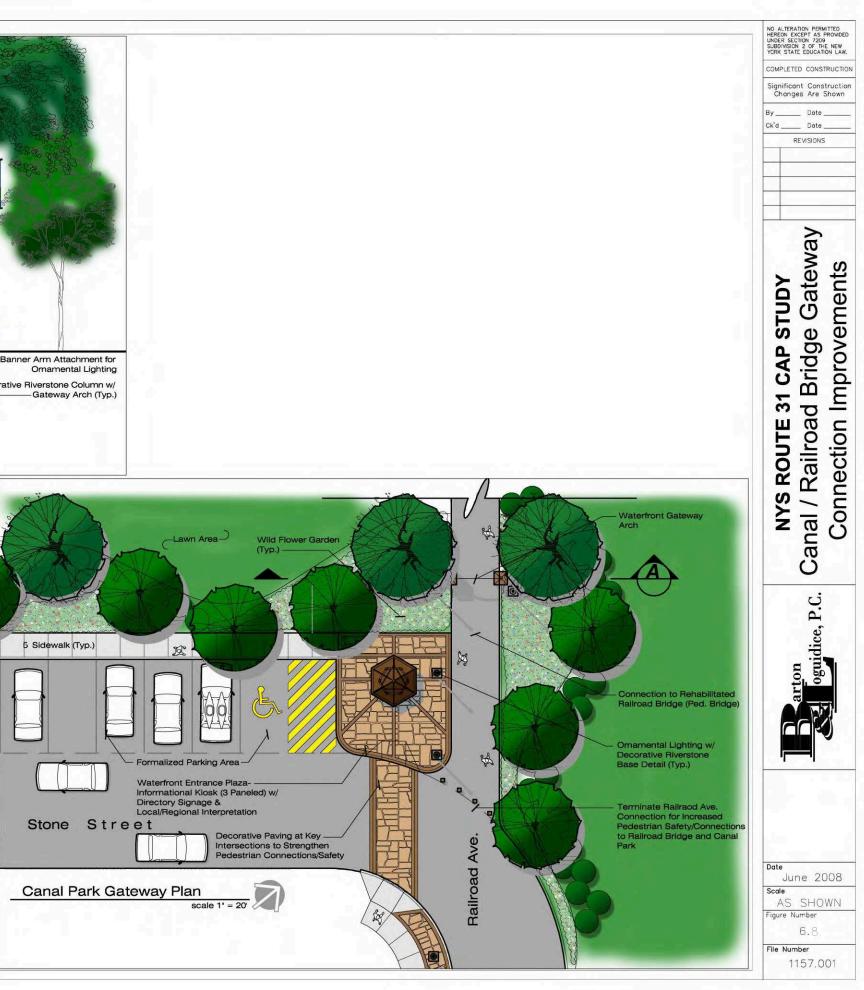
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Terminate Access Outo Route 31	NYS ROUTE 31 CAP STUDY ACCESS & PARKING IMPROVEMENTS AT GRAVINO PARK
	Dote June 2008 Scole 1" = 40' Figure Number 6.7

The Village largely consists of adequate sidewalks and road shoulders suitable for pedestrian travel. However, there is a lack of connectivity, particularly from the Village downtown area, to the larger community. Throughout this study and through the public participation process, once such resource that was found extremely important to draw attention to was the Erie Canal trail and park facility in the northern portion of the Village. As such, a recommendation of this project is to conduct a site selection analysis of potential property to construct a trailhead / parking facility linking the Village downtown and residential neighborhoods to the canal. This is shown conceptually in Figures 6.2A and 6.8 on land adjacent to the former Railroad Bridge and Railroad Avenue. Central to this design concept is providing a destination node for people traveling by car and by foot. Such a facility should include informational and wayfinding signage that is linked to similar signage within the downtown area, seating, parking, lighting, landscaping, and general improvements that thematically link the facility to the NYS Route 31 corridor as well as the Erie Canal system.

As mentioned above, another recommendation to improve pedestrian connectivity would be extending sidewalks from the Village downtown area to Gravino Park. Currently, there is a gap in the system between the two areas, making it difficult and unsafe for pedestrians to walk. This suggestion is shown schematically on Figures 6.2A and 6.7.

To conclude, all of the design alternatives and recommended improvements discussed above are interrelated to some extent, both physically and informationally. Based on the detailed analysis conducted throughout this Circulation, Access, and Parking study, and as a result of the public visioning sessions, the preferred conceptual design alternatives for the NYS Route 31 corridor and improvements to surrounding areas meet the overall goals and objectives of this project.





6.3. Land Use Policy and Design Considerations

Upon review of the Village's current zoning regulations, particularly with regards to permitted land uses, it can be surmised that local governing regulatory controls may not still accomplish the type of development the Village desires. This is illustrated by the number of commercial businesses catering to the automobile in some way or another, particularly within the Village downtown area. The purpose of zoning is to help regulate and encourage various land uses, densities, and site development practices. It is the local regulatory tool enabling the Village of Macedon to implement its economic vision consistent with its cultural heritage and established values.

Many communities across New York State now understand the economic benefits of reformulating the traditional single use zoning practices, historically referred to as Euclidean Zoning, to exhibit and encourage form-based zoning and mixed use development types, especially those communities that have a distinct downtown commercial district or area like Macedon. The Village could benefit from truly identifying a vision for future development, and updating its zoning controls to achieve that vision, which should address building facades and structural treatments in addition to site work. This would provide predictability for potential developers, which translates into economic marketability of buildings and vacant sites. Therefore, it is recommended that any future changes to local zoning regulations be drafted to support infill and provide a clear articulation of their intent. They should encourage the rehabilitation of existing structures, including clear timetables whereby "grandfathering" of uses and site controls become terminated when rehabilitation or new construction is proposed.

Currently, the Village's Site Plan review procedures as outlined in the local zoning ordinance includes language that encourages proper siting and management of off-street parking facilities. However, it is evident that these regulations are not properly enforced, either because of land uses that are "grandfathered", or due to a lack of review enforcement at such time developments are in their proposal stage before the Village planning board. A recommendation of this study that relates to parking

improvements strongly encourages adequate enforcement of such site development regulations, particularly site controls that encourage shared access to off-street parking facilities for NYS Route 31 businesses, parking to the side and rear of businesses, landscape buffers for parking facilities, and incorporating pedestrian accommodations and lighting to increase safety.

Generally, any new development or redevelopment of property within the recommended primary improvement area of NYS Route 31 should be required by the Village to tie into the existing and improved sidewalk system, provide pedestrian accessibility to and from the front door and from side or rear parking areas, meet ADA accessibility requirements, and, if appropriate, provide provisions for bicyclists.

CHAPTER 7 – SUMMARY OF POTENTIAL FUNDING SOURCES

This Chapter discusses potential funding opportunities and resources available for both further planning level analysis and for capital funds to assist the Village of Macedon with the implementation of recommended improvements.

The Village is encouraged to work with neighboring municipalities, Wayne County, the Genesee Transportation Council (GTC) and other State and Federal agencies to leverage funding and resources available to them.

The Village of Macedon is located within the jurisdiction of the Genesee Transportation Council (GTC, the Metropolitan Planning Organization for the greater Rochester area. The GTC s the designated agency charged with administering a continuous and comprehensive transportation planning process for the area and, as such, is responsible for the programming of all FHWA and Federal Transit Administration (FTA) for planning and capital funding.

The two key documents that the GTC develops which program the Federal funds are the Unified Planning Work Program (UPWP) and the Transportation Improvement Program (TIP).

Whether the Village of Macedon wishes to pursue Federal transportation funding assistance for planning studies or funding to implement capital projects; they will need to be pursued via the GTC process.

The first document, which is the avenue for securing Federal funding for planning activities, is the GTC's UPWP. The UPWP identifies the annual transportation/ comprehensive planning activities that are to be undertaken in support of the goals, objectives, and actions established in the Long-Range Transportation Plan. In essence, it is an outline of the actual transportation planning activities/studies that will be conducted by the GTC and its professional staff and consultants from year-to-year.

Eligible studies include, but are not limited to, addressing various aspects of transportation and land use topics such as highways, corridors, local streets, access management, bicycles and pedestrians, freight, transit, land use, congestion, air quality, environmental justice, as well as others.

The second document developed by the GTC that allocates Federal funds for the actual design and construction of a project is the Transportation Improvement Program (TIP). The TIP is a multi-year program list of specific projects for which Federal funds are anticipated. As required by Federal law, the TIP represents the transportation improvement priorities of the Rochester Metropolitan Area, which must be consistent with the goals and objectives of their adopted Long-Range Transportation Plan (LRTP) as well as other MPO adopted plans and policies. The list of projects is multi-modal and includes highway and public transit projects, as well as bicycle, pedestrian, and freight-related projects.

The TIP also represents the translation of recommendations from the GTC's LRTP and UPWP into tangible transportation improvements. The projects of the GTC TIP are aimed at increasing the efficiency and safety of the existing transportation system, rather than the construction of new facilities. In addition, all TIP projects must be in conformance with NYS air quality requirements.

The development of the TIP occurs every two years and takes approximately one year to complete.

The following is a summary of state and federal grant programs designed to assist local communities in the planning, design, and implementation of revitalization, infrastructure, or enhancement projects:

7.1 Transportation Enhancements Program (TEP)

Administered by the New York State Department of Transportation, with the oversight of the Federal Highway Administration (FHWA), this program is designed to help implement the federal program established within the Intermodal Surface Transportation and Efficiency Act (ISTEA); continued in the Transportation Efficiency Act of the 21st Century (TEA-21), and most recently in the Safe, Accountable, Flexible Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The federal government provides reimbursement funds for "non-traditional" projects that have a positive impact to transportation systems by incorporating provisions for pedestrians and unique environmental aspects.

The goal of the TEP is to provide communities funding to improve their surface transportation system through implementation of specific improvements to benefit the traveling public, increase transportation choices, enhance the natural and built environment, and provide a sense of place. Transportation enhancement programs offer communities funding opportunities to improve their pedestrian and bicycle facilities, designate scenic routes, beautify the community setting, and increase safety, accessibility, and recreation opportunities beyond traditional highway programs. Enhancement funds also provide communities means to contribute to the revitalization of local economies by restoring historic buildings, streetscape improvements, and developing transportation museums and visitors centers.

The New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) also provide administration for the **National Recreational Trails Program** (RTP), a federally matching grant program funded through the Transportation Enhancements Program. The program requires that motorized and non-motorized trail projects each receive 30% of the available funds, with a local minimum match of 20%. This grant is often secured for the aspects of snowmobile trail projects, including design, acquisition, and grooming equipment. The **Rails-to-Trails Conservancy** (RTC), a key advocate and protector of the Transportation Enhancements Program, has played a major role in the policy promotion of the program. At the local level, the RTC provides leadership, technical assistance, and training that local trail advocates will need to build a successful, safe trail system for their community.

For more information, visit the following website:

http://www.fhwa.dot.gov/safetealu/

7.2 NYS Main Streets Program

The New York State Main Streets Program is intended to stimulate downtown revitalization in communities across the State by providing funding for building renovations, streetscape enhancements, and downtown business or cultural anchors. Administered by the Housing Trust Fund Corporation and the Division of Housing and Community Renewal, this program provides grants to encourage reinvestment in properties located within mixed-use business districts located in urban, small town, and rural areas.

For more information, visit the following website:

http://www.nymainstreet.org/

7.3 NYS Brownfield Opportunity Areas (BOA)

The Brownfield Opportunity Areas (BOA) Program provides municipalities and promotional community-based organizations and agencies with financial assistance of up to 90% of eligible costs to develop plans and strategies focusing on redevelopment and revitalization of derelict and dormant industrial and intensive commercial parcels. The program includes three eligible phases; Pre-Nomination, Nomination, and

Implementation, that address defining and justifying study areas and eligible boundaries, economic and market trends and analyses, development recommendations, and implementation techniques and strategies. The BOA program is administered by a partnership between the New York Department of State (DOS) Division of Coastal Resources and the NYS Department of Environmental Conservation (DEC), to help communities identify and address issues related to brownfields, enfranchise the communities stakeholders, develop feasible revitalization strategies while restoring environmental quality.

For more information, visit the following website:

http://nyswaterfronts.com/grantopps_BOA/

7.4 NYS OPRHP Environmental Protection Fund (EPF)

Matching grant programs for the acquisition or development of parks and recreational facilities, and for projects to preserve, rehabilitates or restore lands, waters or structures for park, recreation or conservation purposes. Funds may be awarded to municipalities or not-for-profits with an ownership interest, for indoor or outdoor projects and must reflect the priorities established in the New York Statewide Comprehensive Outdoor Recreation Plan (SCORP).

For more information, visit the following website:

http://nysparks.state.ny.us/grants/

7.5 Land and Water Conservation Fund (LWCF)

The LWCF program provides matching grants to States and local governments for the acquisition and development of public outdoor recreation areas and facilities. The program is intended to create and maintain a nationwide legacy of high quality recreation areas and facilities and to stimulate non-federal investments in the protection and maintenance of recreation resources across the United States.

For more information, visit the following website:

http://www.nps.gov/lwcf/

7.6 Member Item Funding

Through the establishment and utilization of community groups organized to lead such projects as this Circulation, Access and Parking Study, or simply organized to coordinate the local Little League Baseball Club, such groups could be on the receiving end of member items–state budget items in which elected officials are allotted funds to distribute to community organizations in their districts. By establishing an open dialogue with elected officials could put the Village of Macedon in a position to be on the receiving end of these funding opportunities.

7.7 Private Funding Sources

Similar to the use of public transportation funding for projects such as bicycle and pedestrian networks, private sector funding has become a very viable option as well. Projects such as this Study that encourage physical and economic improvement within a community to help enhance growth, recreation and job creation have spawned a widespread movement of local non-profit organizations, many of whom have raised hundreds of thousands of dollars for the planning and construction or trails, parks, façade improvement programs, etc. In recent years, local corporations and businesses from particular industries have joined in financial support of local projects programs. The Village of Macedon is encouraged to identify any potential private funding sources in efforts to implement future planning and construction projects related to this CAP Study.