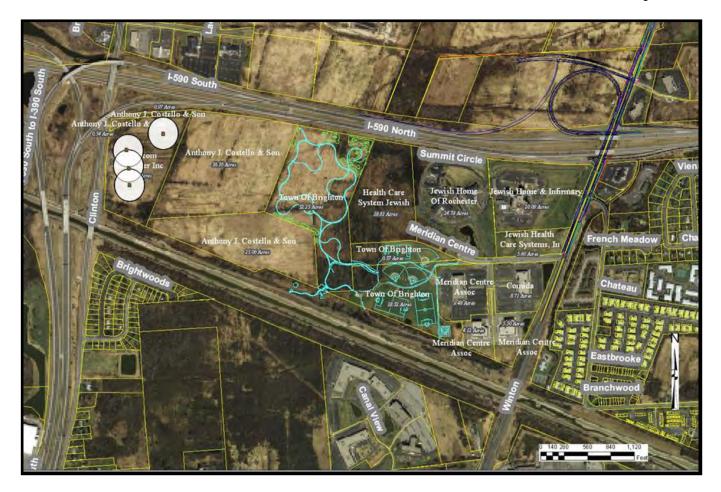
Meridian Centre Boulevard Extension Study



Prepared For The Town Of Brighton

Prepared By Stantec Consulting Services Inc

Sponsor By Genesee Transportation Council

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SUMMARY

The Town of Brighton's current and previous land use plans have all envisioned extending Meridian Centre Boulevard westward to connect Winton Road with South Clinton Avenue and serve developments within the area. Whether this extension is needed, however, was questioned in the Town's "Comprehensive Plan 2000". This plan recommended "determining the feasibility of, and need for, the extension of Meridian Centre Blvd. to S. Clinton Ave." This study was undertaken by the Town of Brighton to answer these questions, to assist the Town of Brighton in updating their Comprehensive Plan and to help property owners within the study area to plan their development accordingly.

Study Area and Current Access

The study area is bounded by I-590 to the north, the Barge Canal to the south, Winton Road to the east and South Clinton Avenue to the west. Thus, access into or out of the study area must occur either from South Clinton Avenue or Winton Road.

Current Developments

Currently, approximately 64% of the 236 acres of land within the study area has been developed. Most of this development has occurred in the eastern portion of the study area and is served by two (2) access points to Winton Road. One of these access points is the existing Meridian Centre Boulevard, which extends from Winton Road westward for approximately 1,200 feet and terminates at the eastern edge of the Town Park. The other is the driveway to the Jewish Home opposite French Road. Approximately 84% of the eastern portion of the study has been developed, which includes the Brighton Town Park that currently occupies part of the southern and middle portion of the study area.

In the western portion of the study area, only 25% of the 81 acres available has been developed. Current access to the western portion is provided by two driveways; a single driveway that serves the developed radio tower parcel and an approximately 1,100 foot driveway just south of I-590 that provides access to the un-developed land just west of the radio towers.

Findings

The study found that nearly two-thirds of the study area is developed and both existing and future developments in the eastern portion of the study area can be adequately served from the two (2) current access points to Winton Avenue, without extending Meridian Centre Boulevard to South Clinton Avenue. It also found that a full access intersection at South Clinton Avenue could be created to serve future developments in the western portion of the study area or as a terminus for an extended Meridian Centre Boulevard. Possible improvements were also identified that would improve travel safety and operations at this intersection with South Clinton Avenue. With these improvements, this intersection could provide reasonable levels of traffic operations to support future developments in the western portion of the study is not extended. All necessary utilities required to

support future development in the western portion of the study area are also available from South Clinton Avenue. Not extending Meridian Centre Boulevard to at least the western portion of the study area would impact emergency response services providers, particularly if the 1,100 foot access road from South Clinton Avenue to future developments in the western portion of the study area was blocked. While not ideal, two alternatives that could provide this secondary emergency access were identified, one using the paved Barge Canal Path with access to South Clinton Avenue: the other, from Winton Road and using the path and one or more of the trails in the Town Park. Improvements would be necessary to either of these alternatives in order to use them to provide a secondary emergency vehicle access to the western portion of the study area.

The study also found that the majority of travelers using an extended Meridian Centre Boulevard would be traffic just traveling between South Clinton Avenue and Winton Road and not stopping in the study area. This diverted traffic would have no notable impact (positive or negative) on the arterials serving the study area. It would only increase or decrease traffic on these arterials by less than one (1) vehicle per minute in each direction. It would, however, have a slightly negative impact on a number of the study area intersections, including the existing Meridian Centre Boulevard intersection with Winton Road and the future intersection with South Clinton Avenue. These negative impacts, however, would not occur if this roadway were designed to primarily serve traffic generated within the study area.

Given the low volume of traffic that would use an extended Meridian Centre Boulevard, only a single through travel lane in each direction would be required. This extension would require approximately 5,500 feet of roadway to be constructed at a cost of around \$1.5 million. All but 1,800 feet of this new road, however, would be constructed by future developments in the western portion of the study area.

Extending this road would impact environmental features within the study area, most of these impacts, however, would occur anyway, if not extended, by construction of a road to serve future development in the western portion of the study area. The extension would also have both a positive and negative impact on the Town Park. The positive impact would occur from improved access to various activities and trails within the park and possibly some additional parking for these activities. The negative impacts include having to cross at least one of the Park's trails within the passive portion of the Park. This crossing(s) would create a pedestrian/vehicle conflict point, which poses safety concerns. Travel on this roadway through the passive portion of the Park would also increase noise and add additional pollution.

Finally, discussions with the five land owners within the study found that: three of these owners thought extending Meridian Centre Boulevard would be detrimental to their current or planned future development; one indicated that they were not opposed to the extension, but did not see any benefit to their development by extending it; the final owner felt the extension would be beneficial to future development, however, the extension was not necessary to serve the development they envision, provided that full access to their properties was permitted from South Clinton Avenue and the identified improvements to South Clinton Avenue occurred.

Recommendations

Based on the above results, the following recommendations are made:

- 1. That Meridian Centre Boulevard <u>not</u> be extended. There is little need to extend Meridian Centre Boulevard to South Clinton Avenue other than it would provide a somewhat better access for emergency vehicle service providers and that it would provide some additional access to future developments in the western portion of the study area. Extending it the last 1,800 feet across the park would cost approximately \$0.5 million, while severing and affecting the passive portion of the Town Park. Future developments in the western portion of the study area are possible without the extension to Meridian Centre Boulevard. The level of development in the western portion of the study area can be supported by a single access to South Clinton Avenue, with some minor improvements to provide reasonable and safe access along with egress improvements to these future developments. There are two reasonable alternatives for the second emergency access without the extension.
- 2. If it is extended, the road should be designed in a manner that does not encourage nonstudy area generated traffic to use it. This additional traffic will have a slightly negative impact on a number of study area intersections.
- 3. Whether Meridian Centre Boulevard is or is not extended, the access to South Clinton Avenue should be constructed as far south as reasonable to improve vehicle sight distance and it should provide a separate left and right turn lane on the approach to South Clinton Avenue. South Clinton Avenue should also be re-striped from four (4) lanes to three (3) in this section to improve travel safety, improve access to the adjacent side streets and driveways and to assist in reducing travel speed in this section.

Concurrence With Recommendations

A Steering Committee consisting of Brighton Town Planning and Conservation Board members, Town officials, neighbourhood representatives, transportation officials (including Monroe County, GTC and NYSDOT), land owners within the study area and emergency response providers, was formed to oversee and direct this study. At the committee's final meeting, the committee reviewed and concurred with the recommendations presented above.

Further details on the study, the analysis conducted and findings from this analysis are contained in the in the remainder of this report.

INTRODUCTION

The Town of Brighton's current and previous land use plans envision extending Meridian Centre Boulevard westward to South Clinton Avenue, creating over a one-mile long public road between Winton Road and South Clinton Avenue to:

- Serve the remaining undeveloped lands in this area;
- Provide secondary access for emergency vehicles;
- Possibly reduce the need to make additional highway improvements to other east-west arterials that serve this area, such as Westfall Road and Brighton-Henrietta Town Line Road.

This connection has been assumed in recent transportation and land use studies, such as the Central Brighton Transportation Study, studies associated with extending Senator Keating Boulevard, and the New York State Department of Transportation (NYSDOT) "Southern Mobility Study". The benefits of making this connection, however, have never been analyzed to determine the need for making such a connection, as well as the benefits and impacts of a connection.

Over the time period of these various studies, many other changes have occurred or are planned to occur in the near future that could affect the need for, as well as the benefits and impacts of, making this extension. These include development of the Town Park (located in the middle of the study area that extends from the Barge Canal to I-590) and many highway improvements in the area have occurred over this time period, or are planned for implementation in the near future. These future transportation improvements include modifications to the I-590/Winton Road Interchange and the extension of Senator Keating Boulevard. These changes affect both the volume of traffic that might be attracted to the study area and/or how drivers may access this area.

Based on the above changes, the Town of Brighton, in association with transportation agencies and the landowners, requested a more in-depth transportation, land use, and environmental study of this possible extension to answer the question:

"Is there a need or a benefit to extending Meridian Centre Boulevard to South Clinton Avenue and if so, what are the associated impacts of this extension?"

The Town's "Comprehensive Plan 2000" also recommended an answer to this question.

The answer is needed to assist the Town of Brighton in updating the Town's Comprehensive Plan (which is slated to begin in 2008) and to allow existing landowners within the study area to know whether this road will be extended in order for them to plan future developments accordingly.

This report documents the study and process undertaken to answer this question, including the recommendation as to whether Meridian Centre Boulevard should be extended to South Clinton Avenue.

THE STUDY AREA

The following section identifies the study area location, current and possible future lands uses, where access might be obtained to South Clinton Avenue, the study areas environmental features and addresses emergency response service assess to serve the study area.

Location

The general location of the Meridian Centre study is shown in Figure 1. The primary study area is shown in Figure 2. The 236 acre study area is bounded by I-590 on the north, the Barge Canal on the south, South Clinton Avenue on the west and Winton Road on the east. The presents of I-590 to the north and the Barge Canal to the south restricts all access to present and future developments in the study area from either South Clinton Avenue or Winton Road. Figure 2, also shows current land ownership and development within the study area.

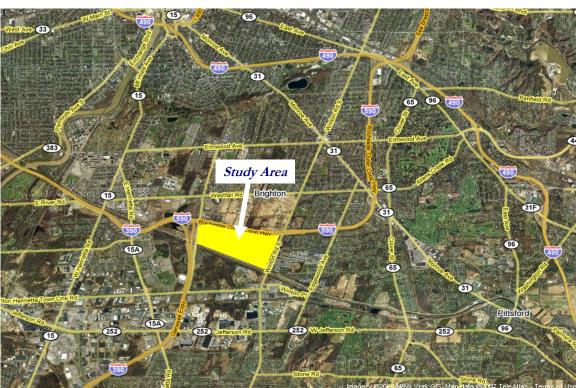


Figure 1 General Location



Figure 2 Meridian Centre Study Area

Current Land Uses and Transportation Access

The northeast portion of the study area consists of a series of developed and un-developed parcels, all related to senior type land uses and controlled by the Jewish Home of Rochester. Access to these parcels is from a private roadway system with a connection to the traffic signal controlled intersection with Winton Road opposite French Road and to the recent constructed portions of Meridian Centre Boulevard.

On the southeast side the fully developed 27.8 acre Meridian Centre Office development with its primary access from the traffic signal controlled intersection of Meridian Centre Boulevard and Winton Road. This access also serves the 57.3 acre Town of Brighton Park, which occupies the majority of the middle section of the study area. The southeastern portion of this Park (approximately 19 acres) provides active recreational activities, the western portion (approximately 38 acres), extends from the Barge Canal to I-590 and provides passive recreational activities using a series of interconnecting trails. Approximately 155 acres of land in the eastern and middle section of the study area, 84% is currently fully developed.

The western portion of the study area fronts on, and currently has access only to South Clinton Avenue. It consists of one fully developed 20.54 acre parcel, used to send radio signals (radio towers parcel) with a driveway to South Clinton Avenue and another four (4) undeveloped parcels to the north and east of the radio towers parcel, with a combined acreage of approximately 61 acres. Access to these undeveloped parcels is from an approximately 1,100 foot long driveway from South Clinton Avenue, just south of I-590 and north of the radio towers. Overall, only 25% of the western portion of the study area is currently developed.

Future Developments

There are six (6) un-developed parcels within the study area, as shown in Figure 3. Possible future developments that may occur on these parcels, follow:

- A 5.8 acre parcel on the northeast corner of the intersection of Winton Road and Meridian Centre Boulevard under the control of the Jewish Home of Rochester. This parcel is expected to be developed as 58,000 square foot medical office building(s);
- An 18.81 acre parcel, west of Summit Circle is controlled by the Jewish Home of Rochester. This parcel is expected to be developed as senior housing and served by an internal private road(s) connected to the current developed parcel in the northeast quadrant and to Meridian Centre Boulevard. Approximately 160 senior housing units could be supported on this size parcel;
- Four (4) parcels on the western portion of the study area are currently owned by Anthony J. Costello & Son. Combined they total 61 acres and are expected to be developed for residential use. As currently zoned, approximately 183 single-family residential units could be developed. For this study, it was conservatively assumed that a higher residential density might be developed which would generate higher volume of traffic than 183 single family units. This assumption was made to ensure that if a higher density was allowed, it would not impact the decision to extend Meridian Centre Boulevard or not. To be conservative again, it was assumed that the possible Town Waterfront Park, identified in the Town's "Comprehensive Plan 2000" would use part of these parcels and would be developed as mix use residential. The mixed use residential would possibly consist of single family residential, apartments and townhouses totaling 518 residential units.



Figure 3 Un-Developed Parcels

Access To Utilities To Serve Future Developments

Winton Avenue provides access to utilities (water, wastewater, power, etc.) to support existing and future development on the eastern portion of the study area. The study area was reviewed to determine whether these utilities would have to be extended to serve future developments in the western portion. What was found was that all utility services necessary to support this level of development on the western portion of the study area can be obtained from South Clinton Avenue and none would need to be obtained from Winton Road. The western property owner also confirmed this.

Access To South Clinton Avenue

South Clinton Avenue on the western portion of the study area provides two (2) travel lanes in each direction along the study area frontage. South Clinton Avenue, in this section, first travels over the Barge Canal, then under I-590 northbound and then over the I-590 connection to I-390. These highway bridges limit vehicle sight distance, thus limits where side street access can be obtained.

The following analyzes provides a possible access for an extension of Meridian Centre Boulevard to South Clinton Avenue.

Access To The South Side

To the south, near the Barge Canal, a roadway through the southern portion of Entercom Rochester (radio towers) property would have to be elevated to reach the South Clinton Avenue Bridge over the Barge Canal. Such a roadway would impact both existing wetlands and the canal path, as shown in Figure 4. Further, visibility of northbound vehicles on South Clinton Avenue to see or be seen by vehicles entering or exiting a roadway connection at this point would be severely limited as a result of vertical raise of South Clinton Avenue to pass over the Barge Canal. Thus, suitable and safe access at this location cannot be achieved.

Figure 4 Environmental Features Of An Access Point To South Clinton Avenue Along The Barge Canal Looking West



Access In The Middle

In the middle, there would appear to be numerous opportunities to construct a road between the existing radio towers, this is not the case. The portions of the towers that can be seen are only part of the antennas. Below the surface for a radius of approximately 200 feet around each tower, are buried wires that form the remainder of the antennas, as shown in Figure 5. Discussions with representatives of Entercom Rochester (owners and operator of the towers) indicated that these antennas couldn't be moved; the towers are required to send the signal(s) and must remain in their current alignment to operate properly. The representatives also indicated that they have no plans to remove the radio towers and redevelop the land for other uses. Construction of a road between the towers would be both expensive to construct (all the underground portions of these antennas would need to be replaced) and it would increase their expenses to maintain and operate these radio signals (a roadway would require that the antennas be tuned more frequently).

Thus, suitable and safe access in the middle, might be achieved, but at great expense. This would be further complicated since fill would be required through this property and over the hidden portions of these antennas to reach South Clinton Avenue except from the most northern portions.



Figure 5 Radio Tower Locations and Approximate Underground Portions

Access To The North

There is potential for access to South Clinton Avenue for an extended Meridian Centre Boulevard using the lands currently owned Anthony J. Costello & Son, located next to and parallel to northbound I-590, as shown in Figure 6. This is currently the only access point to the adjacent street system to service approximately 61 acres of developable land in the western portion of the study area, if Meridian Centre Boulevard is not extended.



Figure 6 Current Access to the Western Properties to South Clinton Avenue And Location Of An Extended Meridian Centre Boulevard

The northbound I-590 bridge abutment over South Clinton Avenue and the South Clinton Avenue bridge over I-590/ I-390 connection restricts vehicle sight distance for both southbound vehicles on South Clinton Avenue approaching this access point, as well as, vehicles that would turn left out of this access point to travel south on South Clinton Avenue.

Field measurements, of vehicle sight distance at this driveway found that a vehicle traveling up to 50 MPH, either northbound or southbound on South Clinton Avenue, will have adequate time to stop if a vehicle exiting this driveway was blocking their path or stopped, waiting to turn left into the driveway or turning right or left out of this driveway. This is considered adequate to provide a safe access to and

from a public road to an adjacent land development(s) since Stopping Sight Distance requirement would be met. However, it is the minimum for a driveway or public roadway to be allowed.

The preferred sight distance is "Intersection Sight Distance" (ISD) for a driveway and in particular for a public road. ISD allows an exiting vehicle to be able to see an appropriated gap in on-coming traffic to allow them to complete the turn and not cause on coming vehicles to have to significantly reduce their speed. With the posted speed along this section being 35 MPH, the preferred "Intersection Sight Distance" cannot be achieved at the current driveway location. Measurements of ISD for vehicles exiting and looking north from this location was only 430 feet. To achieve intersection sight distance at this location would require southbound South Clinton Avenue vehicles to be traveling at a speed of 33 MPH or less. The speed of traffic using this section of South Clinton Avenue was observed to be well in excess of the posted 35 MPH speed limit. The preferred Intersection Sight Distance cannot be met without further modifications at this location.

Based on this analysis, there is only one location where an intersection could be constructed to extend Meridian Centre Boulevard to South Clinton Avenue. That is at or near the current access to undeveloped lands in the western portion of the study area along the northern boundary of the study area. Vehicle sight distance at this location is not ideal, but acceptable to allow a driveway or access road. Other locations are either already developed (radio towers) or pose environmental and unacceptable vehicle sight distance to construct an intersection.

Possible improvements to enhance safety and traffic operations are explored in the section "Improving Access and Safety On South Clinton Avenue".

Access For Providing Emergency Response Services (ERS)

Current and possible future ERS access into the study area is shown in Figure 7, including a possible extension of Meridian Center Boulevard to serve the future developments in the western portion of the study area.

Figure 7 shows that in the eastern portion of the study area, there are two alternative access points from Winton Road to provide ERS provider access, if one is blocked. The internal roadway system within the eastern portion allows north/south travel from either of these access points to reach either the northern or southern portion of this area. ERS provider access to the Town Park is currently achieved from these access points from Winton Road and the constructed portion of Meridian Centre Boulevard. In the future, secondary ERS access to the Town Park can also be achieved from South Clinton Avenue with a connection(s) between future developments in the western portion of the study area and the Town Park trail system. The trail system within the Park has been designed to support both ambulance and police vehicles and as such, the trail system can also provide secondary ERS access to future developments in the western portion of the study area. However, these trails have not been designed to support fire vehicles.

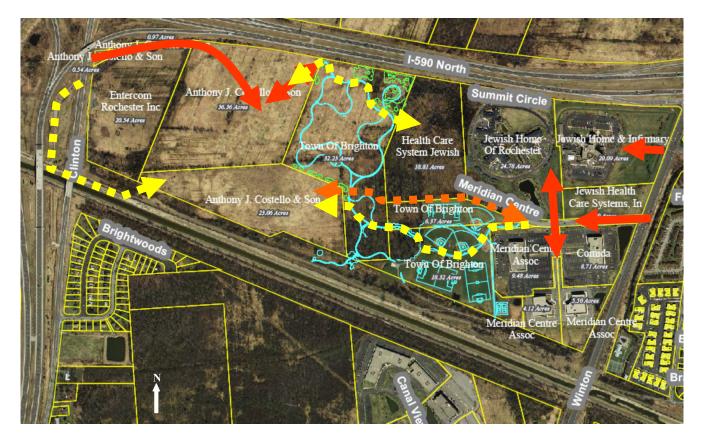


Figure 7 ERS Access To The Study Area

For future developments in the western portion of the study area, primary ERS access would be a 1,100 foot long roadway from South Clinton Avenue. A number of alternatives where explored to obtain secondary ERS access to future developments in the western portion of the study area, particularly to support fire services if the 1,100 foot long access road was blocked..

ERS Access By Extending Meridian Centre Boulevard

Extending Meridian Centre Boulevard next to and through the Town Park is one alternative to providing secondary, and possibly primary ERS access to future developments in the western portion of the study area. This would involve extending Meridian Centre Boulevard for an additional 1,800 feet, either as a full access road or as an emergency vehicle access road through the passive portion of the Town Park. Discussions with ERS providers indicated that extending Meridian Centre Boulevard as a full access road would be the preferred alternative for providing these services. For fire services, this would provide the most direct route to provide these services to future developments in the western portion of the study area.

Alternative ERS Access

The area was reviewed to identify whether there is or could be an alternative secondary fire truck access to serve future development in the western portion of the study area, if the 1,100 foot main access road from South Clinton Avenue that would serve these future developments if blocked. Two alternatives where identified, one using the existing paved Barge Canal access and path, the other, by upgrading one or more of the Town Park passive trails to support secondary fire services.

Figure 8 shows the alternative of using the Barge Canal. Secondary ERS access would be from South Clinton Avenue using the existing paved access road to the Barge Canal in this area. The existing driveway and path provides a minimum of a 10 foot wide paved access road capable of supporting a fire truck. A gated connection into future developments in the western portion of the study area would be required and would occur on the western end of these properties where the difference in elevation between the Canal path and the properties to the north is approximately 8 feet. A connection into these properties at this location could also avoid the environmental features just east and west of this possible access point.

Allowing access to the Barge Canal to provide ERS access was also discussed with the Canal owner (New York State Thruway Authority), who indicated that they would allow this type of access.



Figure 8 Secondary ERS Access Using The Barge Canal

Finally, Stantec investigated the vehicle clearance under the Clinton Avenue Bridge over the Barge Canal and found that it was more than adequate to allow a fire truck to pass under it (15 plus feet).

This alternative was presented and discussed with ERS providers in a meeting in March 2007. They raised a number of issues and concerns with using the Barge Canal to provide secondary ERS access, which included the narrowness of the Barge Canal path, the slopes on either side of the path, and their ability to make the left turn from the Canal access driveway onto the path itself. Finally, how snow would be removed in the winter to allow them use.

Based on this meeting, this alternative was further reviewed and it was found that with only minor widening and grading most of these concerns could be addressed. As to snow removal, the Town has indicated that access can be opened by Town crews when/if the primary access is blocked, against the remote possibility that there would be a second, emergency event deeper within the complex.

Based on this meeting, other alternative secondary accesses routes where developed that could provide a more direct route if the primary access from South Clinton Avenue was blocked. These alternatives are shown in Figure 9. One would use the current Meridian Centre Boulevard access from Winton Road to reach the existing access and trail system within the Town Park and connect to future developments in the western portion of this study area. This existing route contains paved and unpaved surfaces and to support a fire vehicle would require improvements to this trail system. These improvements include widening and strengthening of the eight (8) wide stone dust trails to fire vehicle standards, improvement to vehicle turning radii within this trail system to allow a fire vehicle to turn and possibly improvement to the existing paved access road leading to these trails.

This alternative, while providing a more direct secondary fire services access to the western portion of the study area, would also have some environmental impacts. Widening the trail would require the removal of a number of trees along the side of the trail where it passes through the Woodlot EPOD.

An additional alternative, again using parts of the Town Park trail system, would connect the western portion of the study area to the eastern portion through future developments on the Jewish Home site. This second alternative may also have some impact on environmental features within the park. It would also provide ERS access to future developments on the Jewish Home site from South Clinton Avenue.

Again, the Town has indicated that Town crews would remove snow when/if the primary access is blocked and a second emergency event deeper within the complex occurred.



Figure 9 Secondary ERS Access Using Town Park Trail(s)

Based on the meeting with the ERS providers, their preference to provide these services to future development in the western portion of the study area is by extending Meridian Centre Boulevard an additional 1,800 feet, either as a full access road (preferred) or as a direct and gated ERS access road. With improvements, utilizing the Barge Canal and/or using the pave and un-paved portion of the Town Park trails can provide the secondary ERS access sought to service future developments in the western portion. Improvements to the Barge Canal path, most likely will have little, if any, impact on the study area's environmental features. Improvement to make the Town Park trails suitable to provide fire services would, however, require the removal of additional trees within the EPOD in the southern connection and create some additional environmental impacts. There may also be some additional environmental impacts of a connection between the eastern and western portion of the study area using the northern portion of the Town Park.

Environmental Features

Figure 10 shows the various environmental features contain within the study area. Generally they consist of three (3) Woodlots – EPOD, a small Federal wetland and a floodplain in the northwest corner of the study area. In addition, the Town of Brighton has determined a number of very small wetlands on the western border of the Town Park and among the EPOD in the northeast corner of the Park, next to I-590. Figure 10 would indicate that extending Meridian Centre Boulevard to the west would have limited impact on the existing environment, except along South Clinton Avenue.



Figure 10 Study Area Environmental Features

To determine possible impacts along South Clinton Avenue, an Environmental Scientist from Stantec visited the western portion of the study area to review these environmental features. He found that the creek associated with the floodplain is designated as a "Class C" water body and that the corridor consists mostly of scrub shrub wetland with areas of shallow marsh and open canopy dominated by green ash (*Fraxinus pensylvanica*). This wetland corridor is approximately 15-20 yards wide along the existing access road, just south of I-590 and widening further to 50-60 yards to the southwest, adjacent to the communication tower. This wetland corridor is not shown on Brighton's Woodlot EPOD mapping.

In addition, a large shallow marsh dominated by cattails (*Typha sp.*) is located in the southwest corner of the site, just north of the canal and east of South Clinton Avenue. The Town of Brighton designates this area as an EPOD Woodlot; however, the area consists mostly of a shallow marsh with a few scattered willows on the edge.

It was concluded that the Army Corps of Engineers and the DEC would regulate a road crossing of the stream or wetland. The crossing would likely be consistent with an Army Corps of Engineers Nationwide Permit No. 14. A joint permit application would need to be submitted to the DEC and USACE to affirm compliance with Nationwide Permit No. 14, prior to widening or constructing a new road through either of these two areas. The identified environmental features, however, would not restrain the ability to extend Meridian Centre Boulevard to South Clinton Avenue or to improve access to the western portion of the study area.

IMPROVING ACCESS AND SAFETY ON SOUTH CLINTON AVENUE

The section of South Clinton Avenue was reviewed to determine if there are ways to improve vehicle sight distance, safety and traffic operations at the only possible access point to the study from South Clinton, the northern access point just south of I-590. Two (2) possible improvements were identified: one to move the access point as far south as possible to improve vehicle sight distance, the other was to modify the number of travel lanes on South Clinton (which would also provide some improvement to vehicle sight distance). The following reviews both of the possible improvements.

Moving The Access Road South

Review of the area and restrictions would indicate the possibility that this access point could be moved slightly to the south. Moving this access point approximately 100 feet south would provide both stopping and intersection sight distance even if vehicles on South Clinton Avenue were traveling at 50 MPH (Figure 11). As seen in Figure 11, there are a number of environmental and major access to underground utilities in this area, however, that could be impacted by moving this access point over 100 feet south.



Figure 11 Possible Alternative To Improve Vehicle Sight Distance

If Meridian Centre Boulevard is extended or this access point simply served future development on the western portion of the study area, further investigation of how far south this access point can be moved will need to have a more detailed investigation to determine if it is practical and reasonable to move this access to the south. If moved a few feet vehicle sight distance would be improved.

Possible Modifications To South Clinton Avenue

South Clinton Avenue, in this area, is composed of a series of different travel lane types. In the southern section between BHTL Road to just south of Woodsmeadow Lane, it is composed of one through travel lane in each direction. The middle section, just south of Woodsmeadow Lane to just south of Senator Keating Boulevard widens to provide two through travel lanes in each direction. The final section, just south of Senator Keating Boulevard through the Westfall Road intersections, again provides only a single through travel lane in each direction.

The unusual four lane middle section poses a number of traffic operation issues. It forces all traffic to merge into a single lane prior to reaching either the intersection of Senator Keating Boulevard (Figure 12) or the intersection with BHTL Road. The merging of traffic poses a traffic safety issue.



Figure 12 Travel Lanes On South Clinton Avenue South Of Senator Keating Boulevard

Additionally, within this widened 4-lane section, drivers tend to exceed the posted speed limit of 35 MPH, since they now have the ability of passing slower traffic. Finally, having two through travel lanes in this section provides no additional useable highway capacity. The sections north and south accommodates about 1,800 vehicles per hour in each direction, while the four lane section is capable of accommodating 3,600 vehicles per hour; this additional capacity cannot be used.

Given these operational and safety issues, consideration of re-striping the middle section of (Senator Keating Boulevard south to Woodsmeadow Lane intersections) to three (3) lanes will provide a single travel lane in each direction and a continuous two way left turn lane was analyzed. This possible new roadway layout is shown in Figure 13.



Figure 13 Possible Re-Striping Of South Clinton Avenue

By re-striping this section it would provide a number of advantages (noted below) over the current four (4) lane section.

- 1. Assist in reducing the travel speed in this section;
- 2. Eliminate through traffic from having to merge back into a single lane at either end;
- 3. Would provide a separate, safer, exclusive left turn lane for traffic turning left into Woodsmeadow Lane, the radio tower driveway, access to the canal path and any future traffic on to the road serving the study areas western properties or an extended Meridian Centre Boulevard;
- 4. Improve traffic operations;
- 5. Slightly improve vehicle sight distance if the driveway is extended slightly to the west and provide additional safety for future traffic exiting the western properties to South Clinton Avenue. Vehicles turning left out of the western properties access, would have to cross a single travel lane of traffic on South Clinton Avenue and if necessary can wait in the continuous two-way left turn lane for a safe gap in southbound travel to enter southbound South Clinton Avenue through traffic.

The traffic operational improvement for this proposed change to three (3) lanes for vehicles turning left out of western properties roadway or for an extended Meridian Centre Boulevard are analyzed in the next section of this report.

PRESENT AND FUTURE TRAFFIC OPERATIONS

The transportation study area is shown in Figure 14 and encompasses the primary study area. This area is just north of Westfall Road, just south of Brighton Henrietta Town Line Road (BHTL Road), just east of Winton Road and just west of South Clinton Avenues. A number of key future transportation improvements are also identified in Figure 14. These include the recently completed I-390 Southbound Off-Ramp to BHTL Road, extension of Senator Keating Boulevard to Winton Road, along with installation of a traffic signal at the Senator Keating Boulevard intersection with South Clinton Avenue.

The following section provides the results of the traffic analysis conducted for this study area.



Figure 14 Transportation Study Area

Current Traffic Operations (2006)

Updated traffic turning movement counts where taken at key intersections the second week of October 2006 during the weekday morning and evening peak travel periods in the area. These counts where taken after the opening of the new BHTL Road/I-590 southbound off-ramp and while MCC and other area colleges were in session. Generally, all intersections provide reasonable traffic operation (Level Of Service (LOS) C or better) during both the morning and evening peak travel periods, except for those intersections that have been documented in previous transportation studies of the area follow:

	AM	PM
Westfall Road and South Clinton Avenue	D	E
Westfall Road and Winton Road	D	D
South Winton Road and BHTL Road	D	С

Traffic signal controlled intersections along Winton Avenue at and around the I-590 interchange with Winton Road is also experiencing difficultly. This is the result of traffic waiting to turn left or in some cases right onto I-590 and backing up out of the vehicle turn lanes and blocking the ability of other traffic to travel through these intersections. If the backups were not occurring, all the intersections would operate at LOS "C" or better.

Finally, the "Stop" sign controlled intersections of Senator Keating Boulevard and South Clinton Avenue shows that vehicles attempting to exit to South Clinton Avenue are experiencing long delays (classified as failing operations) during both the morning and evening peak travel periods.

Planned Future Transportation System Improvements

There are a number of planned highway improvements that either impact or change the accessibility to the study area to be constructed over the next 10 years, beyond the recently constructed new I-390 Off-Ramp to BHTL Road and the extension of Clay Road to BHTL Road. These include:

- 1. South Clinton Avenue and Senator Keating Boulevard Installation of a traffic signal in 2007 will address the failing traffic operating conditions at this "Stop" sign controlled intersection;
- 2. **I-590 Interchange with Winton Road** The NYSDOT plans to reconstruct this interchange to improve traffic operations. The plans call for improvements to all the I-590 on and off ramps. These improvements will eliminate the backups of vehicle waiting to turn onto this interchange from interfering with other traffic traveling on Winton Road.
- 3. Extension of Senator Keating Boulevard With the new I-590 Interchange of Winton Road and future developments along this Boulevard, it is expected that a full connection of Senator Keating Boulevard to allow travel from South Clinton Avenue to Winton Road will occur within the next 10 years;
- 4. Westfall Road Between the Rochester City line and Lac De Ville Monroe County plans on undertaking improvements to this section of Westfall Road that will include an evaluation

of the poorest operating intersection within the transportation study area, the intersection of South Clinton Avenue and Westfall Road.

In addition, NYSDOT is progressing plans to make improvements to the I-390 Interchanges with East and West Henrietta Roads. These improvements are also expected to impact travel within the study area, since previous studies have shown that some traffic has been diverting from the expressway system and using the section of Westfall Road within the study area to avoid congestion at these interchanges.

Forecasted Future Growth In Traffic (2026)

With the significant number of planned highway improvements, general growth in traffic and continued development in both the Senator Keating and Meridian Centre Boulevards areas, a forecast of future travel was developed to determine traffic traveling in the study area in 2026. The Genesee Transportation Council Regional Travel Forecasting Model was used to assist in determining future travel on the existing and future adjacent highway network. The future model conditions were updated to reflect full development within the Senator Keating Boulevard area, according to the April 2003 "Traffic Assessment & Road Characteristics, Senator Keating Boulevard Update" prepared for the Town of Brighton by the Sear-Brown Group (now Stantec). Land use information was also updated within the Meridian Centre study area to reflect full development within this area. This included medical office development and senior housing to complete development on the eastern properties controlled by the Jewish Home and residential development on the undeveloped 61 acres on the western portion of the study area. The highway network was also updated to reflect the extension of Senator Keating Boulevard to Winton Road and planned improvements to the I-590 interchange with Winton Road. Finally, Meridian Centre Boulevard was added as a roadway to connect South Clinton Avenue to Winton Road through the study area. The model was also used to assist in determining how travel patterns would change, if Meridian Centre Boulevard was not extended.

Comparison of travel forecasts for current conditions to forecasted travel 20 years in the future indicated that on average, study area traffic would increase by approximately 13% over the next 20 years, with the increased development and changes to the highway system serving this area. Based on the information, the actual 2006 traffic volumes collected for this study were increased by 13% to reflect traffic operations in the design year of 2026. In addition, this model was used to assist in determining the redistribution of traffic that would occur with the proposed I-590/Winton Road interchange modification, with and without extending Meridian Centre Boulevard to South Clinton Avenue.

Finally, traffic volumes were refined at the present and future access points to the adjacent highway system that would serve present and future developments within the Senator Keating Boulevard area and within the Meridian Centre study area. Traffic turning movement volumes at intersections serving the Senator Keating Boulevard area were further refined to reflect the additional traffic forecasted to be generated at this area based on the "Traffic Assessment & Road Characteristics – Senator Keating Boulevard Update".

Refinement of future traffic entering and exiting the Meridian Centre study area were based on the Institute of Transportation Engineers, "Trip Generation" Manual, 7th Edition to reflect the most likely development and density that would occur from future development within the study area (a medical office building, senior housing on the eastern portion and mix use residential in the western portion). In addition, since the additional traffic generated by future developments, both in the Senator Keating and in the Meridian Centre areas, were accounted for in the GTC future travel forecasts, adjustments were made to other intersections to reflect that this future traffic was already accounted for in the forecasted 13% increase in travel.

Study Area Existing And Future Traffic Generation

Table 1 shows the existing and additional traffic forecasted to be generated by future development on the eastern and western portion of the study area.

	AM	AM	AM Tatal	PM	PM	PM Tatal
	Entering	Exiting	Total	Entering	Exiting	Total
2006 Jewish Home	90	25	115	32	83	115
		_	_	_		
2006 Meridian Centre	383	26	409	119	428	547
Total Existing (2006)	473	51	524	151	511	662
Future Eastern	120	36	156	69	164	233
Total Eastern	593	87	680	220	675	895
Future Western	70	230	300	224	135	359
Total New Trips	190	266	456	293	299	592
Total Existing and Future	663	317	980	444	810	1254

 Table 1

 Traffic Generated By Existing and Possible Future Developments Within The Study Area

In the eastern portion these estimates reflect development of 58,000 square feet of medical office development and 160 senior housing units as master planned and as zoned.

In the western portion of the study area, current zoning would allow approximately 183 single family housing units to be developed. The Town of Brighton "Master Plan" indicates the possibility that at least part of the 61 un-developed acres could be developed as a "Water Front" Park and "Waterfront District" which could generate additional traffic. Discussion with the Town of Brighton found the development of a "Water Front" Park at this location was a low priority, if it was offered, they would accept it. Discussions with the landowner indicated that to support the infrastructure improvements (road, sewer, water, stormwater, etc.), necessary to develop these 61 acres, they are looking to develop this land as a mixed use residential development. The mixed use would consist of single family

housing, apartments, townhouse and townhouse rental loft development. Based on this discussion, a conservative estimate of the number trips that would be generated by such a mix use development was forecasted.

The mixed residential use was assumed to consist of:

- 50 Single Family Homes
- 225 Apartments
- 137 Townhouses
- <u>106 Rental Townhouses</u> 518 Total Residential Units

In comparison to developing the western portion of the study area as all single family housing unit, this mixed use residential development, if approved, would generate over twice as many trips (2.19).

Distribution of Traffic at the Study Area Access Points

The distribution of traffic into and out of the study area would be expected to be very similar to existing travel patterns enter and exiting at the existing Meridian Centre Boulevard access to Winton Road. Review of these traffic volumes shows 80% of the traffic entering the study area arrives from the north during the AM peak travel hour with 68% departing to the north. During the weekday evening peak travel hour, 73% enters from the north and 80% departs to the north. Travel patterns associated with traffic generated by future developments in the eastern portion would be similar, if not the same. Once Senator Keating Boulevard is extended to Winton Road and with the planned modifications to the I-590/Winton Road Interchange, future traffic entering and exiting future developments on the western portion would also be expected to be the same.

These high percentages of traffic entering or exiting the study area from the north are also supported by the Genesee Transportation Council Regional Travel Forecasting Model for both existing and future travel, based on "Select Link" data showing the routes drivers are forecasted to take to reach developments within the study area.

Future Traffic Operations (2026)

Based on these future travel forecasts, study area intersections were again analyzed to determine traffic operating conditions. Again, generally, all intersections provide reasonable traffic operations (Level Of Service C or better) during both the morning and evening peak travel period, except for the following intersections:

	AM	PM
Westfall Road and South Clinton Avenue	Е	F
Westfall Road and Winton Road	E	F
South Winton Road and BHTL Road	D	D
South Clinton Avenue and BHTL Road	В	D

The following should be noted concerning future traffic operations at the four (4) intersections:

Westfall Road and South Clinton Avenue – The analysis of this intersection assumes no improvements at this intersection. Monroe County is, in the process of evaluating potential improvements to this intersection and as such, improved future traffic operation can be expected over those presented in this study.

Westfall Road and South Winton Road – Previous studies have found that the addition of an eastbound right turn lane on Westfall Road, along with modifications to traffic signal timings could improve traffic operations at this intersection to Level Of Service "C" or better. This intersection needs to be monitored over time to determine the actual traffic impacts of both continued development in the area and the effects improvements to I-390 Interchanges with East and West Henrietta Road will have on reducing travel demand at this intersection.

South Winton Road and BHTL Road – Future traffic operations changed little over those that are occurring today and other than improvement in traffic signal timings and possibly lane modifications, this intersection, now and in the future can be expected to operate at a "D"/"C" Level Of Service.

South Clinton Avenue and BHTL Road - The major issue at this intersection is the volume of eastbound vehicles on BHTL Road attempting to turn left to travel north on South Clinton Avenue and the limited amount of vehicle storage available in this left turn lane. This intersection should be monitored over time to adjust traffic signal timing and possibly at some point in the future, additional intersection improvements, may be required, including possibly revising the South Clinton Avenue approach to this intersection to allow double left turns onto BHTL Road.

Traffic Operations Without Extending Meridian Centre Boulevard

To determine the impact of not extending Meridian Centre Boulevard, future traffic operations were analyzed at the two (2) primary access points of the study area, Meridian Centre Boulevard and Winton Road and the access road to serve future developments in the western portion of the study area to South Clinton Avenue. This analysis showed the following results.

Winton Road and Existing Meridian Centre Boulevard

If Meridian Centre Boulevard is not extended, traffic generated by future developments in the eastern portion of the study area were assumed to enter and exit using the existing Meridian Centre Boulevard intersection with Winton Road. The additional developments consisted of 58,000 square feet of medical office development and 160 new units of senior housing. It was found that even with the growth in traffic over the next 20 years, this additional traffic would have no notable effect on traffic operations at the intersection. In the morning peak travel period this intersection would operate at LOS "A" and in the evening LOS "B". This assumes that improvements to the I-590/ Winton Road interchange have been completed and traffic waiting to reach this interchange no longer interferes with traffic operations at this intersection.

South Clinton Avenue and Access Road to serve future developments in the Western Portion

If Meridian Centre Boulevard was not extended, all traffic generated by future developments in the western portion would have to enter and exit from a single access point to South Clinton Avenue just south of I-590. To analyze this, it was assumed that the entire 61 acres that would be served by this access point would be developed with traffic generated by the mixed use residential development described earlier. It is also assumed that both the extensions of Senator Keating Boulevard to Winton Road and improvements to the I-590/Winton Road interchange would be completed. Given that the majority of future traffic generated within the study area would be turning right out, it was assumed that a separate left turn lane and right turn lane would be constructed on the roadway approach to South Clinton Avenue and this approach would be "Stop" sign controlled. "Stop" sign controlled was assumed, since it is unlikely that given this size and nature of the development (residential) that installation of a traffic signal would be "Warranted".

The analysis found that, if South Clinton Avenue was not re-striped from four (4) lanes to three (3) lanes, failing traffic operation would be received by vehicles attempting to turn left out of this access point to travel south on South Clinton Avenue both during the morning and evening peak travel periods. If this section of South Clinton Avenue was re-stripped to three (3) lanes (one through travel lane in each direction, plus a continuous left turn lane), all traffic entering and exiting this access point would operate under Level Of Service C or better, except during the evening peak travel period. During the evening peak travel period, left turn out of this access point would operate under Level Of Service "D" with an average of a 33 second delay waiting to make this movement. Overall, this delay is minor and acceptable for a side street controlled by a "Stop" sign.

Given South Clinton Avenue is re-stripped to three (3) lanes, reasonable and acceptable traffic operation can be achieved to support both present and future developments within the study area, without extending Meridian Centre Boulevard to South Clinton Avenue.

Traffic Operations with Meridian Centre Boulevard extended to South Clinton Avenue

Extending Meridian Centre Boulevard would be expected to result in a number of changes in traffic patterns within the area and volumes of traffic that would use this extension. Within the study area, traffic generated in the western portion would have access to the traffic signal controlled Winton Road intersection and some traffic generated in the eastern portion of the study area would find this extension a more convenient route to reach South Clinton Avenue. In addition, traffic not generated within the study area, may also find this a more convenient route to travel between South Clinton Avenue and Winton Road without stopping in the study area. To determine how both traffic patterns and traffic volumes might change with this extension, the GTC Travel Forecasting Model was again employed to determine who would use an extended Meridian Centre Boulevard.

The model was run both with and without Meridian Centre Boulevard extended to South Clinton Avenue for the year 2026, with other identified highway improvements, such as the extension of Senator Keating Boulevard. The "Select Link" feature of this model was also used to assist in determining how many drivers using the extended Boulevard where generated from developments within the study area and how many would use it to travel between South Clinton Avenue and Winton Road without stopping in the study area. Based on this analysis the following was determined:

- 1. During the weekday evening peak travel hour, approximately 400 to 500 vehicles might use an extended roadway in the years 2026;
- 2. That two-thirds of this traffic would travel between Winton Road and South Clinton Avenue without stopping within the study area;
- 3. Only 15% of the traffic generated by developments in the eastern portion of the study area would take advantage of the extended Meridian Centre Boulevard, who could enter or exit the study area from South Clinton Area. The majority of the eastern portion would continue to arrive and depart using Winton Road; and
- 4. Approximately 70% of traffic generated by future development at the western portion of the study area would use this extension to reach Winton Road, rather than having to enter and exit from South Clinton Avenue.

In summary, the extended section of Meridian Centre Boulevard would be lightly traveled (400 to 500 vehicles per hour in both directions). The majority of these vehicles would be "cut-through" traffic (not generated within the study area). It would only benefit a few of the existing and future users from developments on the eastern portion of the study area, since most would continue to use the Meridian Centre Boulevard access to Winton Road. It would, benefit future development in the western portion of the study area and allow them to obtain access to the traffic signal controlled intersections of Meridian Centre Boulevard with Winton Road.

Traffic Changes and Impact on the Highway Network

Figure 15 shows the route that the majority of traffic (70%) would use an extended Meridian Center Boulevard to travel between South Clinton Avenue and Winton Road.

Figure 15 Primary Travel Route Of Traffic Using An Extended Meridian Centre Boulevard To Travel Between South Clinton Avenue and Winton Road



To determine how this change in travel route might impact the adjacent highway system, a comparison of forecasted travel volumes for the year 2026 was made at four (4) critical intersections within the study, with and without Meridian Centre Boulevard extended (again using the GTC Regional Travel Forecasting Model). Three (3) of these intersections are currently providing the lowest levels of traffic operations in comparison to all other intersections within the study area. This comparison assumes again that both Senator Keating Boulevard is extended to Winton Road and that planned NYSDOT improvements to the I-590/Winton Road interchange have been constructed. These intersections along with the change in traffic volume (during the evening peak travel hour) by extending Meridian Centre Boulevard are:

- 1. Westfall Road and South Clinton Avenue
- 2. Westfall Road and Winton Road
- 3. BHTL Road and South Clinton Avenue
- 4. BHTL Road and Winton Road

Increase of 1.4 % (+ 89 vehicles); Decrease of 1.2 % (- 26 vehicles); Decrease of 3.1 % (-182 vehicles); Increase of 0.4 % (+ 26 vehicles).

The results of this comparison show that the extension of Meridian Centre Boulevard would slightly increase traffic using the intersection with the lowest level of traffic operations, Westfall Road and South Clinton Avenue, and at the another low performing intersection of BHTL Road and Winton Road. At the other two intersections, traffic would decrease. At the intersection of Westfall Road and Winton Road, this decrease would be very minor and unnoticeable to persons driving through this intersection. In addition, while decreasing overall traffic at intersection BHTL Road and South Clinton Avenue, a review of the select link data suggests that it would attract more drivers to turn left from eastbound BHTL Road to travel north on South Clinton Avenue and reach current and future development in the eastern portion of the study area. This movement provides the lowest level of operation and the least ability to store additional traffic waiting to make a left turn.

Overall, these changes in traffic volumes are minor and would generally have a slightly negative impact on two of the three lowest performing intersections of the area studied and at the third, the volume decrease would not be noticeable.

Impact on Arterials Serving the Area

Another transportation issue raised was whether extending Meridian Centre Boulevard would decrease the need to provide additional travel lanes on the arterials serving the study area. The GTC Travel Forecasting Model was again used to determine by comparing traffic volumes on these arterials in the year 2026, with and without extending Meridian Center Boulevard. These sections and the change in the number of vehicles using each of the arterial section, per minute by direction (+ increase, - decrease) during the peak travel hour are shown below.

	Change In
	Vehicles per Minute
East/West	By Direction
Westfall Road between South Clinton Avenue and Winton Road	-0.4
BHTL Road between South Clinton Avenue and Winton Road	-1.0

North/South

South Clinton Avenue between Meridian Centre Boulevard Extended and Westfall Road	+0.7
South Clinton Avenue between Meridian Centre Boulevard and BHTL Road	-0.7
Winton Road between Meridian Centre Boulevard and Westfall Road	-0.1
Winton Road between Meridian Centre Boulevard and BHTL Road	+1.0

Overall, extending Meridian Centre Boulevard would only increase or decrease travel on these arterials by less than one vehicle per minute during the peak travel hours. In the single lane section of Westfall Road, the decrease would be less than one vehicle every 2 minutes. These minor changes in traffic

volumes (either positive or negative) will have no impact on possible future decisions concerning the need to widen any of the study area arterials, including Westfall Road.

Impacts on Existing Intersection of Meridian Centre Boulevard and Winton Road

In 2006 the level of operations at the intersection of Meridian Centre Boulevard and Winton Road would have provided LOS "A" during the morning and "B" during the evening peak travel period; however, the backups of traffic from the I-590 interchange do not allow this level of traffic operation to be achieved. In 2026, with the interchange improved, these levels of traffic operations will be achieved, even with the additional traffic forecasted generated in the eastern portion of the study area. These futures development would be expected to increase traffic entering or exiting Meridian Centre Boulevard access to Winton Road by nearly 43% (from 547 vehicles to 780 vehicles per hour).

If Meridian Centre Boulevard were extended to South Clinton Avenue, some of the traffic generated in the eastern portion of the study area would use it to reach South Clinton Avenue, while the majority of traffic generated in the western portion of the study area would use it to reach Winton Road. This change in traffic would result in the volume of traffic using the Winton Road access to increase by 67%. Even with this increase, the overall level of traffic operations would remain the same during both the weekday morning and evening peak travel period and would have minimal impact. The reason is that traffic being generated by residential development in the western portion would generally be leaving through the Winton Road intersection while traffic attracted to development in the eastern portion would be arriving. The reverse would occur during the evening peak travel period. This assumes that the only traffic using the extension would be traffic generated within the study area and no outside traffic would find this to be a convenient route to travel between South Clinton Avenue and Winton Road.

If this extension was made attractive for drivers traveling through the study area (i.e. fairly direct route to travel between South Clinton Avenue and Winton Road), then an additional 330 vehicles might be attracted to use it. Based on the Select Link data, the majority of the cut through traffic during the evening peak travel period would be turning right out (65%) or left in (29%). This would reduce the overall level of traffic operations at the intersection of Meridian Centre Boulevard and Winton Road from "B" to "C" during the evening peak travel period. If this same volume and travel pattern also occurred during the morning peak travel, but in reverse (65% left in and 29% right out), traffic operations would be reduced at this intersection from "A" to "B", with vehicles attempting to turn left into Meridian Center Boulevard from Winton Road would drop from a "B" to a "D" operating conditions.

Based on the above, if Meridian Centre Boulevard is extended to South Clinton Avenue in a way that would only be attractive to traffic generated within the study area, it would have minimal impact on the intersection of Meridian Centre Boulevard and Winton Road. The intersection would continue to provide excellent levels of traffic operations of "B" and "A". Making this extension to primarily attract traffic generated in the western portion could be accomplished by making this extension through the western portion of the study area as indirect as possible.

If this extension were constructed as a direct route that would also attract additional traffic traveling between South Clinton Avenue and Winton Road, it would have some notable impact on traffic operations at the intersection of Meridian Centre Boulevard with Winton Road.

Impact on South Clinton Avenue and Extended Meridian Centre Boulevard

If the extension was only used by traffic within the study area, then the extension would have a positive impact by reducing traffic using this intersection by approximately one-third of the volume that would use it if it was not extended. If however, it is made as an attractive route for traffic not generated within the study area, it would have a negative impact by increasing traffic through this intersection to by nearly 60%.

Based on the analysis, extending Meridian Centre Boulevard both to support development within the study area and to provide an additional attractive route for traffic not generated within the study to use would have a slight negative impact on traffic operations at adjacent intersection and intersections used to access the study area. If extended in a way to discourage this additional cut-through traffic, it would have little, if any impact (positive or negative) on adjacent intersections, while having a positive impact on intersections used to access the study area.

EXTENDING MERIDIAN CENTRE BOULEVARD, RESULTING COST AND IMPACTS

Based on the travel forecast of extending Meridian Centre Boulevard to South Clinton Avenue, travel on this extended roadway, even during the peak weekday travel hour(s) would not be expected to exceed 400 to 500 vehicles per hour in both directions (including traffic not generated within the study area). To extend Meridian Centre Boulevard from its eastern terminus to South Clinton Avenue would only require construction of a two (2) lane public road providing one travel lane in each direction, with additional turn lanes at key intersections.

To extend this road, as a full public access road, would require construction of approximately 5,500 feet of road. The first 1,000 feet most likely would follow the property line between the north side of the Brighton Town Park and Health Care System Jewish and could provide additional public access to the active portion of the Town Park. The next 800 feet, would past through the passive portion of the Town Park to reach the western properties in the study area, through a lightly wooded area. It could be aligned in a manner that would be required to cross the Town Park's passive trail system once and most likely avoid any of the small wetlands that the Town has identified in this area. The next 2,600 feet would then travel through and serve future development in the western portion of the study area and reach the point at the northwest corner of this property adjacent to I-590. There are no environmental features that have been identified in this section that would be disturbed by construction of this road. The final section would connect to the existing driveway that currently serves the western properties and proceed for another 1,100 feet to reach South Clinton Avenue. While there are some minor environmental features adjacent to the last section, any disturbances to these features would

occur even if Meridian Centre Boulevard was not extended in order to provide a roadway that could serve future development in the western portion of the study area.

Overall, the cost to construct this road would be approximately \$1.5 million. Of this, approximately \$1.0 million would be spent to construct a public road to serve future development in the western portion of the study area and the associated environmental impacts in this section would be the same, even if Meridian Centre Boulevard was not extended. To extend this road from the western portion to connect with the existing Meridian Centre Boulevard would cost \$0.5 million and would have some additional environment impacts to the edge of the existing woodlot and possibly some minor disturbance to identified wetlands, however these are expected to be minor. The extension would have both a positive and negative impact on the Town Park, while the extended road would provide improved access to the trails and the active portion of the park. It would also sever at least one of these trails posing pedestrian/vehicle safety concern for person crossing this section of road. It would also add additional traffic noise and air pollutants in the passive portion of the Town Park.

This extension would provide improved access for emergency response providers that would serve developments, as well as an alternative emergency response access that would serve both the eastern and western portions of the study area. This extension would also provide an alternative and preferred access for the majority (70%) of traffic generated by future developments on the western portion of the study area. It allows them to enter or exit the adjacent highway system at the traffic signal controlled intersection with Winton Avenue, while providing some improved access to traffic generated in the eastern portion of the study area, of which 15% of the traffic would find this a more convenient travel route. While this extension would attract a minor amount of cut through traffic (traffic not beginning or ending in the study area), which would have some impacts on developments in the study area, these impacts could be mitigated. Since no public benefit was identified to making this extension a convenient route to assist travel between South Clinton Avenue and Winton Road, the roadway system in the western portion of the study area could be developed to discourage the use of this extension by cut through traffic. This can be done by increasing the travel length and time required to use this route, in comparison to other available alternative routes.

Given that this extension was constructed to minimize non-study area traffic using it, the additional traffic using the Meridian Centre Boulevard intersection with Winton Road if extended, will have a minor negative effect on traffic operations at this intersection. It would also improve traffic operations at the "Stop" sign controlled intersection with South Clinton Avenue as a result of reduce travel demand using this intersection. The intersection of Meridian Centre Boulevard intersection with Winton Road will continue to provide very good levels of traffic operations (A or B) even with the additional traffic generated by future development in both the western and eastern portions of the study area.

BENEFITS/IMPACTS OF THE EXTENSION

This section explores and summarizes the benefits and impacts of extending Meridian Centre Boulevard to South Clinton Avenue. The section first documents meetings and discussions with the existing landowners within the study area; regarding their view concerning extending the road, then reviews the benefits and possible impacts to the general public.

To Existing and Future Developments within the Study Area

To determine this, discussions or meetings where held with representatives of the five (5) land owners or organizations who control the various parcels which make up the Meridian Centre study area. The following summarizes their future plans and views on the need to extend this roadway to South Clinton Avenue.

The Jewish Home controls the lands in the northeastern portion of the study area. Their plans, for present and future development is to continue to develop all of these properties in a campus like fashion to serve senior needs and continuing their private internal road system and connections to meet travel demand within this campus. Based on the meeting, they feel that extending Meridian Centre Boulevard would not improve their access or accessibility; in fact, they felt that extending it would be a determent to their development due to the additional traffic that would use it.

Meridian Centre Office development occupies the southeastern portion of the study area and is fully developed. The landowner did not see a benefit to the office park development to extend the road. They are not opposed to the road being extended, provided there would be a full access intersection on South Clinton Avenue so that not all traffic generated by future development in the western portion of the study area would have to enter and exit through the intersection of Meridian Centre Boulevard and Winton Road.

In the middle section there is a Town Park with a passive trail system extending from I-590 to the Barge Canal in the western portion of the Park. Discussion with the Town Park Director indicated that having the road partially extended (but not all the way to South Clinton Avenue) would be a benefit by providing improved access to the active portion of the Park and improve access to the Town passive trail system. Extending this road through the passive portion of the Park on the west side, would mean a trail or trails would have to cross a public road and poses pedestrian/vehicle safety concerns. It would also introduce additional noise and air pollution in the passive portion of the Park and as such would be a determent.

The property owner controlling the majority of land frontage along South Clinton Avenue, which contains the radio towers, indicated this road extension would not benefit their property. In fact, they raise concerns that such a road may impact their radio signal and might be detrimental to their operations.

The representatives of remaining four (4) currently undeveloped parcels on the western side of the study area indicated that extending Meridian Centre Drive would be a benefit. It would provide access

to their future development from both South Clinton Avenue and Winton Road and that it would improve access and the marketability of their development. It would also provide improved emergency response service. They indicated, however, that if not extended, they could live without it, provided South Clinton Avenue was re-striped to provide one through travel lane in each direction and a center turn lane.

In summary, four (4) of the five (5) owners or representatives that have control over the land parcels that make up the study area have indicated there would be no benefit of extending Meridian Centre Boulevard to South Clinton Avenue, with three (3) of them indicating that an extension would be detrimental. The last owner indicated that there would be benefit to future development on the western portion of the study area; however, given that a full access driveway can be constructed to serve this development and that South Clinton Avenue is re-striped as described above, they can live without having it extended.

General Public

A benefit to the public, as defined in this study would be one of the following:

- 1. It would reduce the need to make highway improvements along another route by attracting traffic to this new route, and or;
- 2. It would provide significantly improved circulation or accessibility to an area.

With respect to reducing the need to make other highway improvements, the small volume of traffic attracted to this new route to travel between South Clinton Avenue and Winton Road would also add additional (very minor) traffic to two (2), of the poorest performing intersections in the area and actual may increase the need to make improvements at these intersections, while slightly decreasing traffic at the third. Thus, this would not be a benefit, in fact, possibly a negative benefit.

As to improving circulation and accessibility, the very small number of drivers that may simply use an extended Meridian Centre Boulevard to travel between South Clinton Avenue and Winton Road, already have two routes to choose and in the near future a third with the extension of Senator Keating Boulevard to Winton Road. Within the study area itself, most drivers in the eastern portion of the study area would continue to enter and exit using the Winton Road access point, and therefore the extension would not improve accessibility for most of these drivers. Approximately half of those that did find the extension more convenient would turn left from BHTL Road onto South Clinton Avenue. This is the traffic movement, at this intersection, with the little available storage to store additional waiting traffic.

The only real benefit identified by the analysis would be future traffic generated in the western portion of the study area. The analysis would indicate that the majority of drivers would prefer and use an extended Meridian Centre Boulevard to enter and exit the study area. They would also be able to do this through an intersection controlled by a traffic signal.

COMMUNITY INVOLVEMENT

A "Steering Committee" was form to oversee and provide input and comments concerning the overall study and its results, along with two (2) public informational meetings and additional meetings and/or discussions with key stakeholders.

The Steering Committee consisted of representatives from the following:

- Brighton Town Planning and Conservation Board Members
- Town Officials
- Neighborhood Representatives
- Transportation Officials (including Monroe County, GTC and NYSDOT)
- Land Owners within the Study Area
- Emergency Response Providers

Overall, the committee met three (3) times. The first meeting was held to provide this committee with an overview of the study and to provide input and insight from this committee as to the need to extend Meridian Centre Boulevard and possible issues that would need to be addressed by the study. At the second meeting information on both present and possible future land use and traffic operations was shared with the committee to obtain their comments and address any questions. The final meeting was held with the committee to present the study finding and recommendations. At this final meeting, concurrence of the committee on the recommendations was requested and received.

Individual meetings or discussions were held with each of the landowners within the study area to obtain information on possible future developments within the study area and to discuss their needs to extend the Boulevard. Separate meetings were also held with the Brighton Public Safety Committee that provides emergency response services within the Town to discuss primary and possible alternative ERS access to and within the study area. A walking tour of the canal path alternative was undertaking with two of these providers.

Finally, two (2) public information meetings were held. The first, after the second Steering Committee meeting to inform the public about the study, to provide information on what had been found to date and to obtain comments and address the public questions and concerns. The second, on May 23rd, after the 3rd Steering Committee was held to summarize the findings and results from the study and to present the recommendation as to whether Meridian Centre Boulevard needs to or should be extended to South Clinton Avenue and to obtain public comment on this recommendation.

CONCLUSIONS

This study was undertaken, as recommended in the Town of Brighton "Comprehensive Plan 2000", to determine the feasibility of, and need for the extension of Meridian Centre Boulevard to South Clinton Avenue. The study found that the extension is feasible, however, there is one and only one point where an extended Meridian Centre Boulevard could be extended to South Clinton Avenue, without creating major disruption to an existing development. While this access point does not have ideal vehicle sight distance, it is acceptable, and that improvements can be made at this access point to improve travel safety and traffic operations.

As to the second part, <u>the need for</u>, since all but approximately 1,800 feet of this road will be constructed to provide access to future developments in the western portion of the study area, the real question is whether the last 1,800 feet is needed to connect the western portion of the study area to the current terminus of the existing Meridian Centre Boulevard in the eastern portion of the study area. The cost to construct the last 1,800 feet is approximately \$0.5 million. Only 1,000 feet of this road would provide improved access within the study area and this would only be to provide a shorter walking distance to the active portion of the Town Park or to the passive trails within the Town Park. While the remaining 800 feet, would most likely have little, if any, impact on environmental features within the study area, it would sever the western passive portion of Town Park, introducing additional noise and air pollution and would create at least one intersection where pedestrians using the passive trail system within the Park would have to cross an active roadway.

The study found that the 1,800 foot connection would benefit future developments in the western portion of the study area, however, it is not required to allow this development to occur. Nor is this connection needed to support future developments in the eastern portion. While this connection would be a preferred route to provide primary or secondary emergency vehicle response access to future developments in the western portion study area, there are alternatives that can be developed to also provide this secondary emergency vehicle access without making this connection.

Finally, the study found that if this connection (between South Clinton Avenue and Winton Road) was made attractive so that other non-study area generated traffic would use it, it would slightly increase the need for highway improvements at other area intersections.

Thus to answer the question, yes it is feasible to extend Meridian Centre Boulevard to South Clinton Avenue, however, it is not needed, provided that acceptable secondary emergency vehicle access can be created to serve future developments in the western portion of the site.

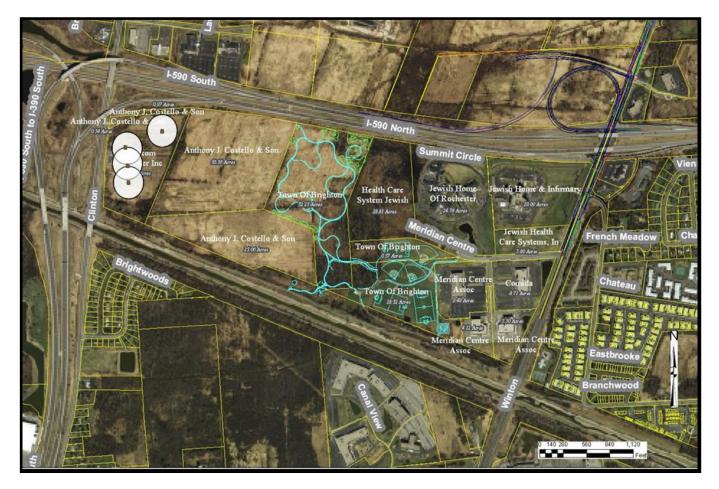
RECOMMENDATIONS

Based on the above results, the following recommendations are made:

- 4. That Meridian Centre Boulevard <u>not</u> be extended. There is little need to extend Meridian Centre Boulevard to South Clinton Avenue other than it would provide a somewhat better access for emergency vehicle service providers and that it would provide some additional access to future developments in the western portion of the study area. Extending the last 1,800 feet across the park would cost approximately \$0.5 million, while severing and affecting the passive portion of the Town Park. Future developments in the western portion of the study area are possible without the extension to Meridian Centre Boulevard. The level of development in the western portion of the study area can be supported by a single access to South Clinton Avenue, with some minor improvements to provide reasonable and safe access along with egress improvements to these future developments. There are also reasonable alternatives for the second emergency access without the extension.
- 5. If it is extended, the road should be designed in a manner that does not encourage nonstudy area generated traffic to use it. This additional traffic will have a slightly negative impact on a number of study area intersections;
- 6. Whether Meridian Centre Boulevard is or is not extended, the access to South Clinton Avenue should be constructed as far south as reasonable can occur to improve vehicle sight distance and it should provide a separate left and right turn lane on the approach to South Clinton Avenue. South Clinton Avenue should also be re-striped from four (4) lanes to three (3) in this section to improve travel safety, improve access to the adjacent side streets and driveways and to assist in reducing travel speed in this section.

At the final meeting, the Steering Committee reviewed and concurred with the recommendations presented above.

Appendix Meridian Centre Boulevard Extension Study



Prepared For The Town Of Brighton

Prepared By Stantec Consulting Services Inc

Sponsor By Genesee Transportation Council

July 2007

Appendix - Meridian Centre Boulevard Extension Town Of Brighton July 2007

Appendixes

Appendix A - Trip Generation Calculations Appendix B - GTC Regional Travel Forecasting Model and Results Appendix C – Synchro 7 - Traffic Analysis CD Files Appendix - Meridian Centre Boulevard Extension Town Of Brighton July 2007

Appendix A

Trip Generation Calculations

Summary of Multi-Use Trip Generation Average Weekday Driveway Volumes March 29, 2007

		24 Hour	AM Pk	Hour	PM Pk	Hour
Land Use	Size	Two-Way Volume	Enter	Exit	Enter	Exit
Elderly Housing - Attached 160 Occupied Dwelling Units						
	-	557	6	6	11	6
Medical-Dental Of	fice Building					
	58 Th.Gr.Sq.Ft.	2096	114	30	58	158
Total		2653	120	36	69	164

Note: A zero indicates no data available.

Summary of Multi-Use Trip Generation Saturday and Sunday Driveway Volumes March 29, 2007

		Saturday		Sunday			
		24 Hr 2-Way	Peak	Hour	24 Hr 2-Way	Peak	Hour
Land Use	Size	-	Enter	Exit	Vol.	Enter	Exit
Elderly Housing - Attac	ched Occupied Dwe	lling	Unite				
	L	402		0	432	0	0
Medical-Dental Office E 58	Building Th.Gr.Sq.Ft.	520	120	90	90	12	11
Total		922	120	90	522	12	11

Note: A zero indicates no data available.

Summary of Multi-Use Trip Generation Average Weekday Driveway Volumes February 09, 2007

		24 Hour Two-Way	AM Pk	Hour	PM Pk	Hour
Land Use	Size	Volume	Enter	Exit	Enter	Exit
Single Family Detached	Housing					
50	Dwelling Unit	ts 550	11	33	36	21
Low-Rise Apartment 225	Occupied Dwel	lling Units	3			
-		1540	22	84	90	48
Residential Condominiur	n / Townhouse					
70	Dwelling Unit	ts 474	7	32	30	15
Residential Condominiur	n / Townhouse					
67	Dwelling Unit	ts 457	6	31	29	14
Rental Townhouse 106	Dwelling Unit	ts O	24	50	39	37
Total		3021	70	230	224	135

Note: A zero indicates no data available.

Summary of Multi-Use Trip Generation Saturday and Sunday Driveway Volumes February 09, 2007

	S	Saturday		Sunday			
		Peak	Hour	24 Hr 2-Wav	Peak	Hour	
Land Use Size	-		Exit	7	Enter	Exit	
Single Family Detached Housing 50 Dwellin	a Unite						
JO DWEITIN	549	30	25	432	27	24	
Low-Rise Apartment 225 Occupie							
D (lettel Geolegiation / Bern	1585	69	59	1357	65	58	
Residential Condominium / Town 70 Dwellin							
	681	34	29	576	32	34	
Residential Condominium / Town							
67 Dwellin	2	2.4	0.0	F (7	20	2.2	
Rental Townhouse 106 Dwellin	670 a Units 0	34	29 0	567 0	32	33 0	
Rental Townhouse 106 Dwellin	y UNILS U		0				
Total	3485	167	142	2932	156	149	

Note: A zero indicates no data available.

Summary of Average Vehicle Trip Generation For 183 Dwelling Units of Single Family Detached Housing March 27, 2007

	24 Hour Two-Way Volume	7-9 AM P} Enter	k Hour Exit	4-6 PM Enter	Pk Hour Exit
Average Weekday	1751	35	102	117	68
		24 hour Two-Way Volume	Er	Peak Ho nter	our Exit
Saturday		1848		93	79
Sunday		1607		84	73

Note: A zero indicates no data available. Source: Institute of Transportation Engineers Trip Generation, 7th Edition, 2003.

Appendix - Meridian Centre Boulevard Extension Town Of Brighton July 2007

Appendix **B**

GTC Regional Travel Forecasting Model and Results

Meridian Centre Boulevard Extension Modeling (Requested by Stantec)

Relating to UPWP Project:

Meridian Centre Boulevard Extension Study (Task 6631)

Considerations/Variables for Modeling:

- Design (Scenario) Years
 - 2005
 - 2025
- Additional Proposed Improvements
 - Check Alignment of new I-390 Off-Ramp to B-HTL Rd. and include in 2005
 - Senator Keating Blvd. extended east to connect with S. Winton Rd.
 - I-590 / Winton Rd. Interchange Improvements
 - Meridian Centre Blvd. extension west to connect with S. Clinton Ave.
- Land Use Modifications (2005, 2025)
 - Incorporation of Existing and Planned/Proposed Land Use as provided by Stantec
- Select Link & TAZ Analysis
 - Identify Meridian Centre Blvd. Extension & TAZ 400 local traffic

Scenario Details:

2005_RevBASE_C (or 2006) – Existing, Revised Base Year, <u>Constrained</u>
 Includes new I-390 Ramp to Brighton-Henrietta Townline (B-HTL) Rd. (completed in 2006)

2005_RevBASE_U (or 2006) – Existing, Revised Base Year, <u>Un-constrained</u>

- Includes new I-390 Ramp to Brighton-Henrietta Townline (B-HTL) Rd. (completed in 2006)

2005_SelectLink_Meridian – Existing, Revised Base Year with Meridian Centre Blvd. extended for Select Link Analysis

- Includes new I-390 Ramp to Brighton-Henrietta Townline (B-HTL) Rd. (completed in 2006)
- Includes the extension of Meridian Centre Blvd. to S. Clinton Ave.

2005_ SelectLink_TAZ – Existing, Revised Base Year with Meridian Centre Blvd. extended for Select TAZ Analysis

- Includes new I-390 Ramp to Brighton-Henrietta Townline (B-HTL) Rd. (completed in 2006)
- Includes the extension of Meridian Centre Blvd. to S. Clinton Ave.

2025_RevBASE_C – Future, Revised Base Year, Constrained

- Includes new I-390 Ramp to Brighton-Henrietta Townline (B-HTL) Rd.
- Includes the extension of Sen. Keating Blvd. to S. Winton Rd.
- Includes the I-590 / Winton Rd. interchange improvements

2025_RevBASE_U – Future, Revised Base Year, Un-constrained

- Includes new I-390 Ramp to Brighton-Henrietta Townline (B-HTL) Rd.
- Includes the extension of Sen. Keating Blvd. to S. Winton Rd.
- Includes the I-590 / Winton Rd. interchange improvements
- **2025_Meridian_C** Future, Revised Base Year with Meridian Centre Blvd. extended, <u>Constrained</u>
 - Includes new I-390 Ramp to Brighton-Henrietta Townline (B-HTL) Rd.
 - Includes the extension of Sen. Keating Blvd. to S. Winton Rd.
 - Includes the I-590 / Winton Rd. interchange improvements
 - Includes the extension of Meridian Centre Blvd. to S. Clinton Ave.

2025_Meridian_U – Future, Revised Base Year with Meridian Centre Blvd. extended, <u>Un-constrained</u>

- Includes new I-390 Ramp to Brighton-Henrietta Townline (B-HTL) Rd.
- Includes the extension of Sen. Keating Blvd. to S. Winton Rd.
- Includes the I-590 / Winton Rd. interchange improvements
- Includes the extension of Meridian Centre Blvd. to S. Clinton Ave.
- *Note:* Constrained Model Scenarios are run with a normal number of iterations Un-constrained Model Scenarios are run with a single iteration
 - this methodology was agreed upon to attempt to isolate the traffic that is diverted as a result of congestion on Interstates, specifically I-390 at the East and West Henrietta Rd. exits

Land Use Modifications

2005 Model Land Use

TAZ 400 (Meridian Centre Blv	d. vicinity)	TAZ 199 (Keating/Lac de Ville vicinity)		
Retail Employment	16	Retail Employment	0	
Manufacturing Employment	91	Manufacturing Employment	4	
Other Employment	709	Other Employment	440	
Total Employment	816	Total Employment	444	
HH's with 0 Vehicles	101	HH's with 0 Vehicles	0	
HH's with 1 Vehicle	61	HH's with 1 Vehicle	0	
HH's with 2 Vehicles	0	HH's with 2 Vehicles	0	
HH's with 3 or more Vehicles	0	HH's with 3 or more Vehicles	0	
Total Households	162	Total Households	0	

2005 Land Use (per Stantec Calculations)

TAZ 400 (Meridian Centre Blvd. vicinity)		TAZ 199 (Keating/Lac de Ville vicinity)		
Retail Employment	32	Retail Employment	0	
Manufacturing Employment	180	Manufacturing Employment	13	
Other Employment	1,404	Other Employment	1,380	
Total Employment	1,616	Total Employment	1,393	
HH's with 0 Vehicles	0	HH's with 0 Vehicles	0	
HH's with 1 Vehicle	241	HH's with 1 Vehicle	0	
HH's with 2 Vehicles	0	HH's with 2 Vehicles	0	
HH's with 3 or more Vehicles	0	HH's with 3 or more Vehicles	0	
Total Households	241	Total Households	0	

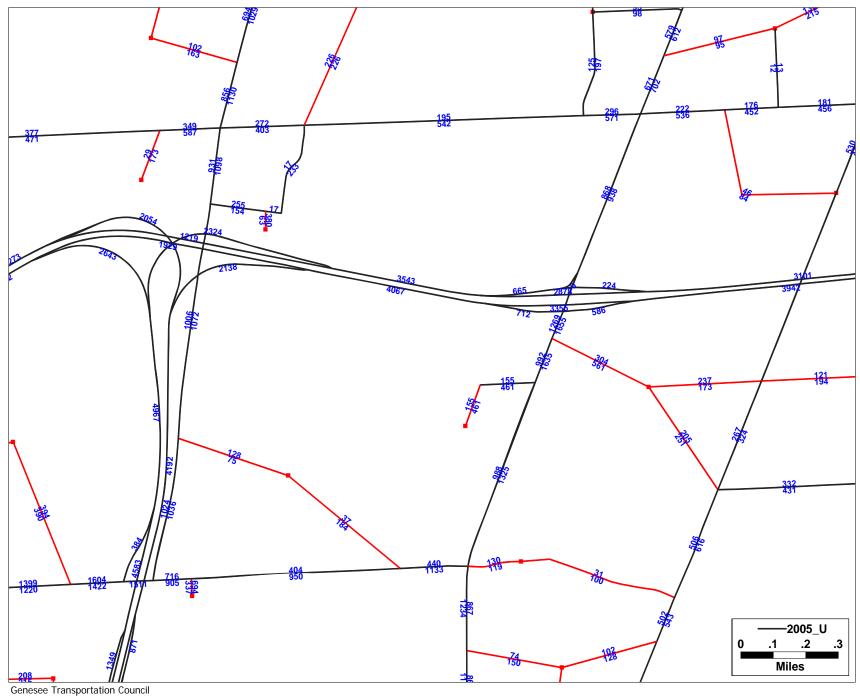
2025 Model Land Use

TAZ 400 (Meridian Centre Blv	d. vicinity)	TAZ 199 (Keating/Lac de Ville vicinity)		
Retail Employment	17	Retail Employment	0	
Manufacturing Employment	90	Manufacturing Employment	4	
Other Employment	750	Other Employment	466	
Total Employment	857	Total Employment	470	
HH's with 0 Vehicles	106	HH's with 0 Vehicles	0	
HH's with 1 Vehicle	63	HH's with 1 Vehicle	0	
HH's with 2 Vehicles	0	HH's with 2 Vehicles	0	
HH's with 3 or more Vehicles	0	HH's with 3 or more Vehicles	0	
Total Households	169	Total Households	0	

2025 Land Use (per Stantec Calculations)

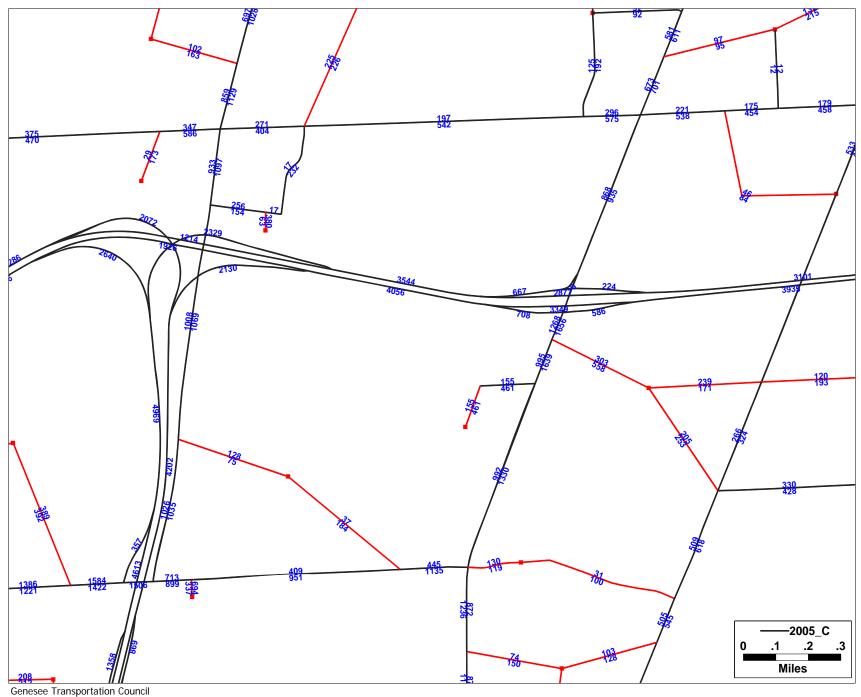
TAZ 400 (Meridian Centre Blv	d. vicinity)	TAZ 199 (Keating/Lac de Ville vicinity)		
Retail Employment	32	Retail Employment		
Manufacturing Employment	180	Manufacturing Employment	22	
Other Employment	1,404	Other Employment	2,521	
Total Employment	1,616	Total Employment	2,543	
HH's with 0 Vehicles	0	HH's with 0 Vehicles	0	
HH's with 1 Vehicle	319	HH's with 1 Vehicle	0	
HH's with 2 Vehicles	0	HH's with 2 Vehicles	447	
HH's with 3 or more Vehicles	0	HH's with 3 or more Vehicles	0	
Total Households	319	Total Households	447	

2005 (Unconstrained) (PM Peak Hour Volumes)



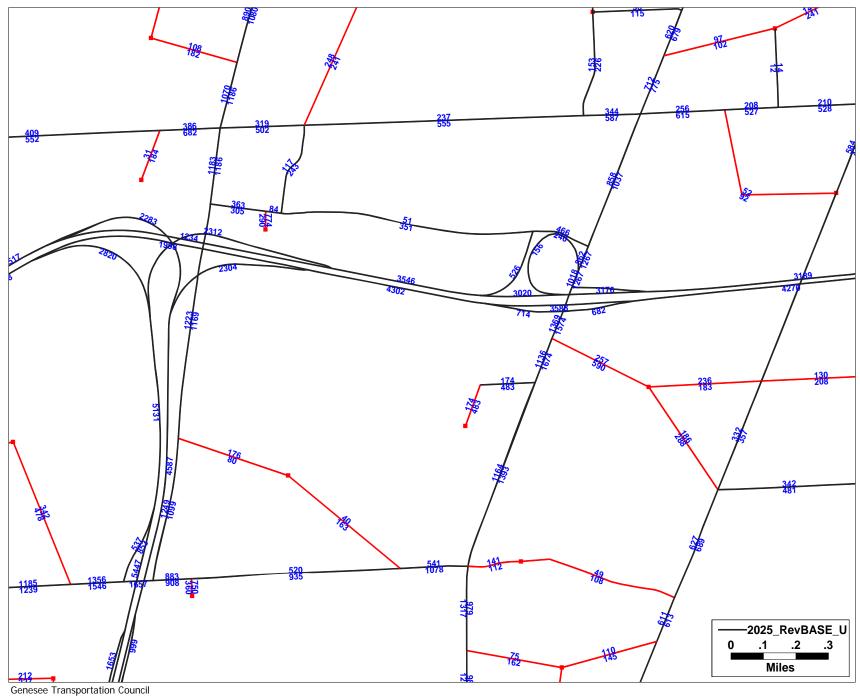


2005 (Constrained) (PM Peak Hour Volumes)



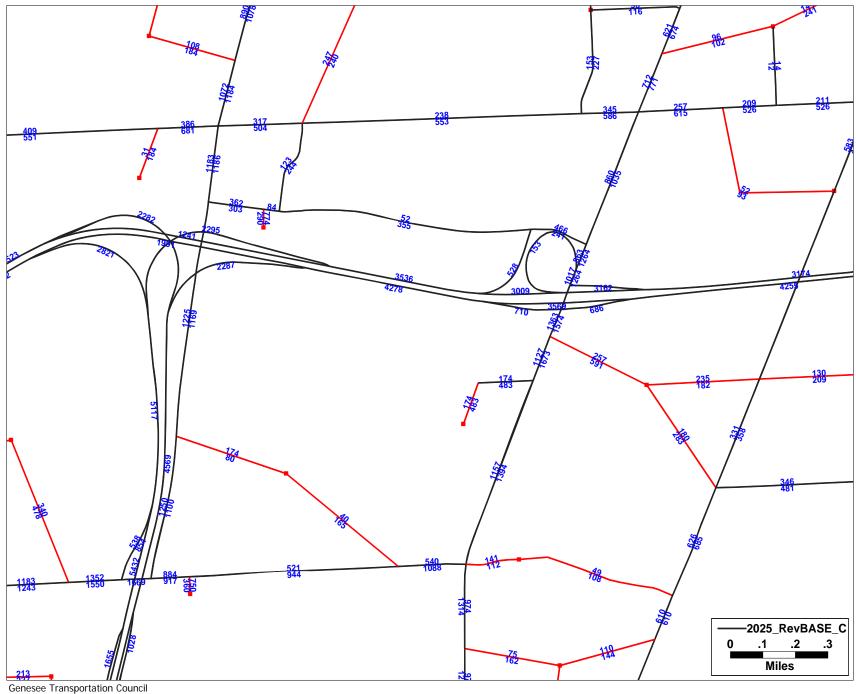


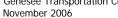
2025 (Unconstrained) (PM Peak Hour Volumes)

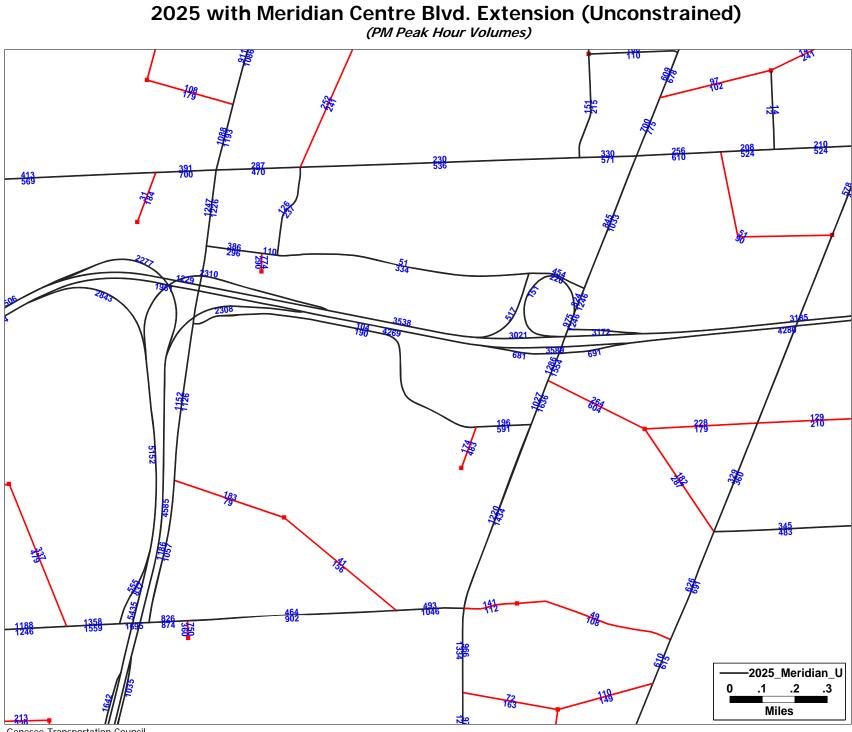




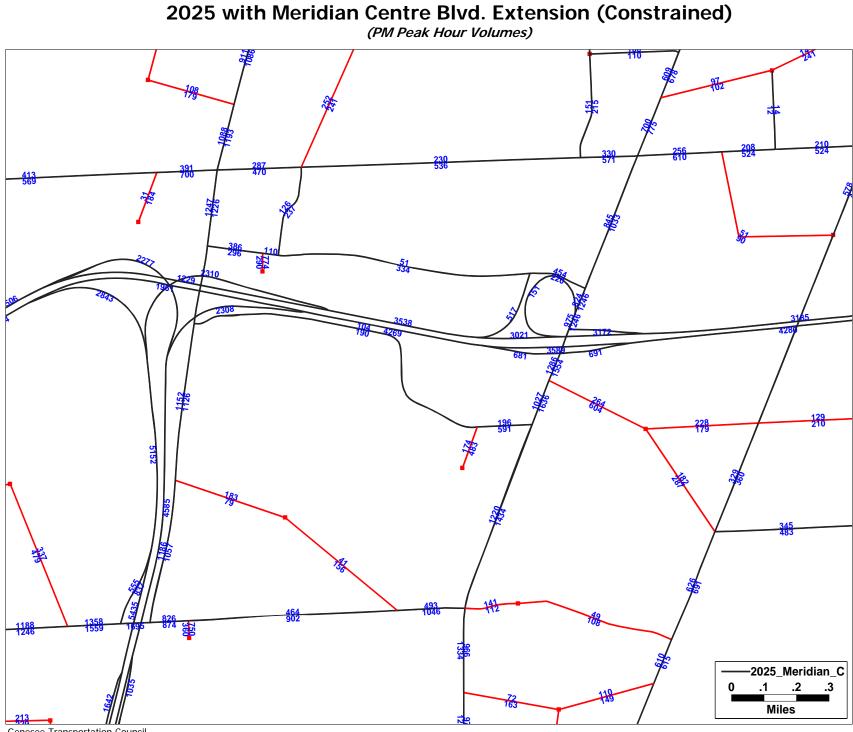
2025 (Constrained) (PM Peak Hour Volumes)



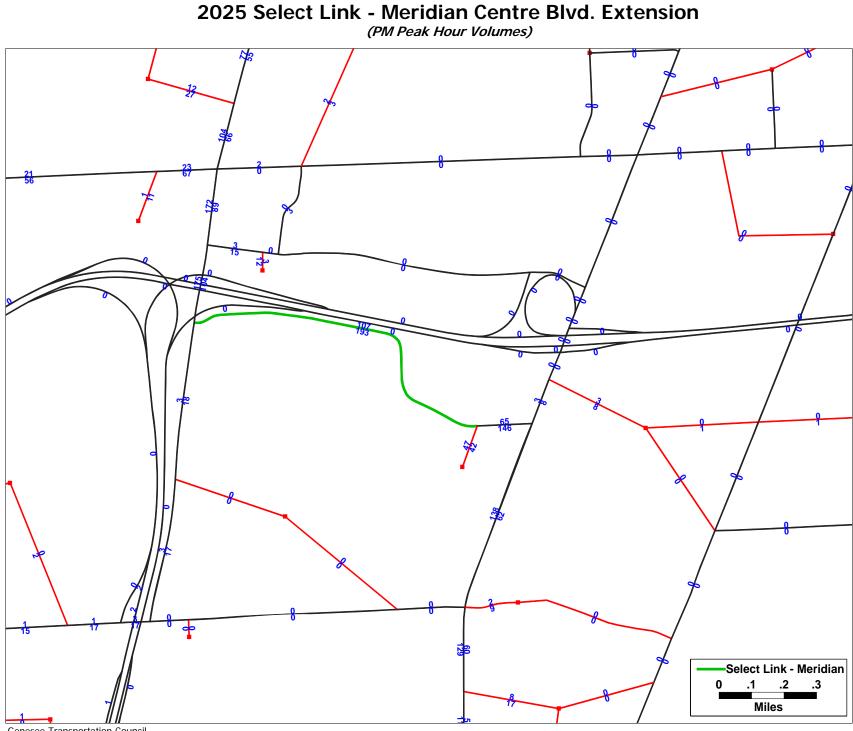




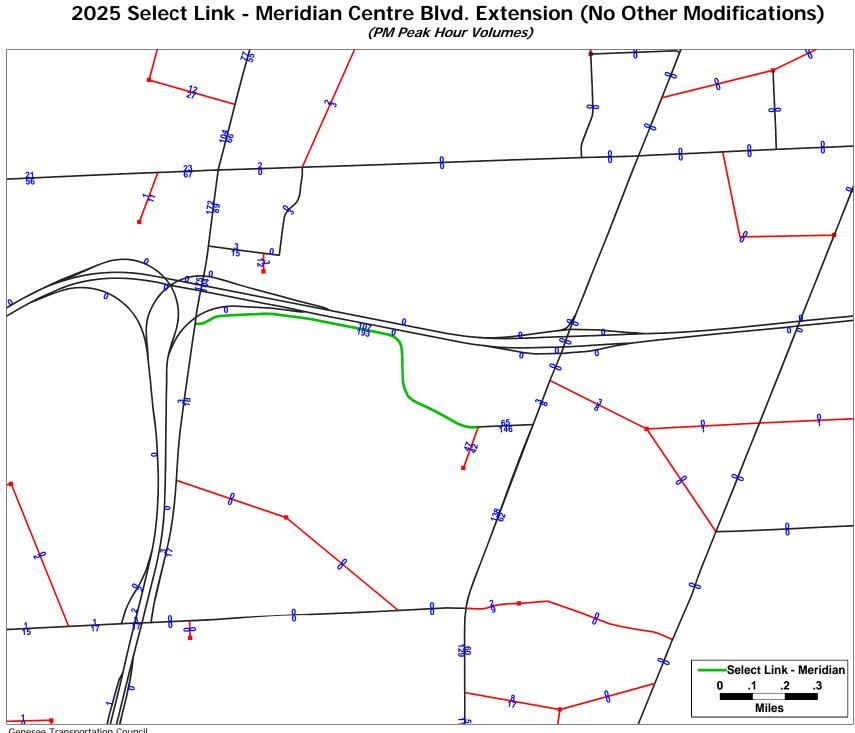
Genesee Transportation Council November 2006



Genesee Transportation Council November 2006

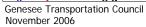


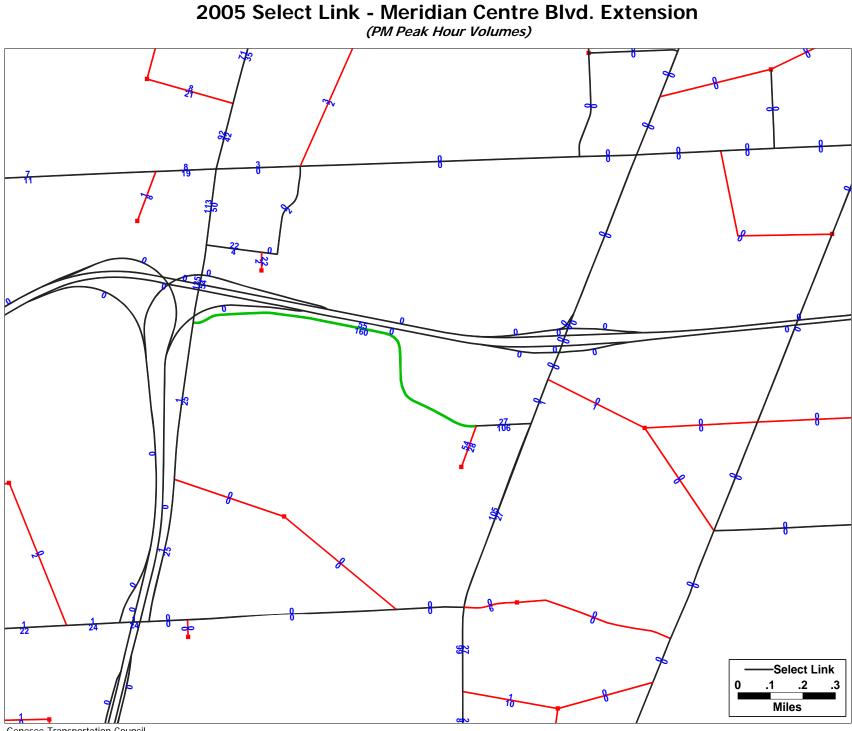




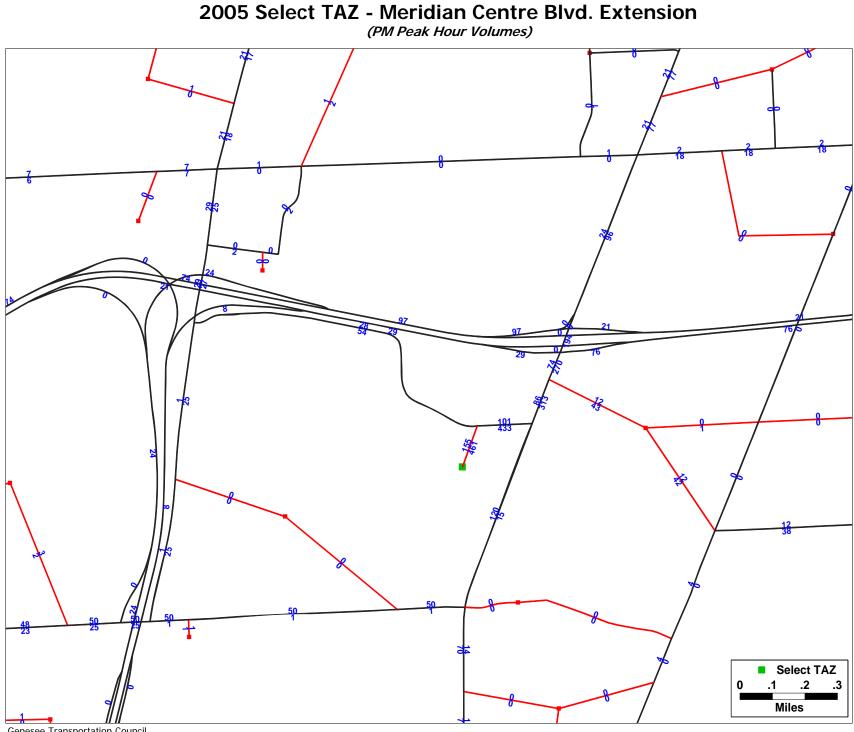


2025 Select Link - Sen. Keating Blvd. (PM Peak Hour Volumes) 315 26 --Select Link - Keating 0.1.2.3 Miles









Genesee Transportation Council November 2006 Appendix - Meridian Centre Boulevard Extension Town Of Brighton July 2007

Appendix C

Synchro 7 - Traffic Analysis CD Files

Available Upon Request