Victor Crossing

Draft Supplemental Environmental Impact Statement

March 2015

Lead Agency:

Town of Victor Planning Board
Town of Victor
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Victor, New York 14564
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Date of Acceptance of the
Supplemental Draft Environmental Impact Statement: _____

Deadline for Submission of Comments: _____

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Executive Summary

Victor Crossing ("Project") is an approximately 93.3 acre development located on the east side of New York State Route 96 (Pittsford-Victor Road). This site is located just to the north of the intersection of I-490, the NYS Thruway (I-90) and NYS Route 96 in the Town of Victor, New York (See Figure 1). The project was developed, and is owned and managed by Benderson Development Company, LLC ("Benderson").

The first tenants opened in 2010, additional tenants opened in 2011. Build-out of the Project continues with additional tenant buildouts anticipated to be completed in summer of 2015. The Project, at the completion of the on-going build-out, will contain no more than 323,287 square feet of retail and restaurant space.

The action under review is to modify the previous State Environmental Quality Review Act ("SEQRA") Findings Statement, adopted by the Town of Victor on September 26, 2006, which limits operational hours at the Site.

Specifically, Benderson is requesting the elimination of the 11pm to 7am operating hour restriction, thereby allowing Victor Crossing to operate 24-hours a day. As part of operating 24 hours, the only modification that Benderson would require to the previous approvals is for the after-hour lighting plan to be modified (See Figure 2) such that the existing light poles within the main parking field and along the entrance drive would remain on while the area behind the buildings would be maintained as shown on the current after-hours lighting plan. No other operational changes are being requested.

During the initial three years of operation, Benderson has identified several issues with the 11pm to 7am operation time restriction, including a difficulty attracting full service restaurants and changes in retailing which favor 24-hour operations at certain stores types, as well as 24 hour operations during peak shopping periods and for special events. In order to remain competitive with commercial developments in the area which do not have these operating hour restrictions, the Project needs to be able to offer tenants the same hours of operation.

An assessment of the visual (lighting), traffic, noise and odor impacts from the proposed changes were analyzed. The 24-hour operation scenario would have no significant adverse impact on traffic, noise, visual or odor impacts. It would allow Victor Crossing to be more marketable to full-service restaurants and operate like other commercial developments in the Town of Victor. This will have positive impacts on the competitiveness and viability of the shopping center. No adverse impacts were identified from the proposed change in operational hours.

1.0 Project Description

Victor Crossing is an approximately 93.3 acre development located on the east side of New York State Route 96 (Pittsford-Victor Road). This site is located just to the north of the intersection of I-490, the NYS Thruway (I-90) and NYS Route 96 in the Town of Victor, New York (See Figure 1). The project was developed, and is owned and managed by Benderson. There are several anchor tenants currently operating at the site including Walmart, Kohl's, and Homegoods; there are also a number of additional retail and small restaurant tenants.

The Project was reviewed and approved by the Planning Board of the Town of Victor. As prescribed by the SEQRA process, Draft and Final Environmental Impact Statements were completed and a Findings Statement was prepared and adopted by the Town of Victor on September 26, 2006.

1.1 Initial Development Review

As referenced in the 2006 Findings Statement, the entire site contains 93.3 acres, with 56.8 acres located on the Phase 1 Lands and 36.5 acres located on the Phase 2 Lands. The Project has been clustered on the Phase 1 Lands. The Phase 2 lands have been left vacant and Benderson has reserved the right, in the future, to subdivide and sell this portion of the site or develop it with office and hotel uses only.

The Project was reviewed and approved by the Planning Board of the Town of Victor. The Planning Board was designated as lead agency for the project on April 25, 2000 and determined that an Environmental Impact Statement ("EIS") must be prepared. On February 11, 2003, the Planning Board accepted the Draft EIS as complete; public hearings were held on March 25 and April 29, 2003, and the public comment period was held open until May 12, 2003. A Final EIS was filed on August 22, 2006 and a Findings Statement was adopted on September 26, 2006.

The Findings Statement identified potential impacts that would be mitigated by implementing restrictions to the operational hours. Specifically:

- An After Hours Lighting Plan. "The Project will employ an After Hours Lighting Plan to further reduce lighting impacts on adjacent properties after 11 pm. As part of the plan, over 30 light poles will be turned off one hour after closing, but in no event later than 11pm. As a result, the lighting levels will be substantially reduced during the nighttime hours, which are more sensitive times of the day for the adjacent neighbors. As requested by the Town's lighting consultant, the average light levels on the Site will be reduced to 0.6 footcandles after 11pm. This light level is the

minimum necessary to maintain adequate lighting for safety and security on the Project Site." Findings Statement, page 23.

- Buffering of Lighting "Visual impact of increased lighting and sky glow. This impact has been minimized by buffering; using a conservation easement; preserving mature trees along the Site's perimeter; using cut-off fixtures with house shields; reducing light levels by 40% over original proposal; implementing an after-hours lighting plan; limiting the Project's hours of operation to no later than 11pm; using 1-2 luminaries per pole (as opposed to 3-4 luminaries); eliminating light spillage beyond the parking lots; and using vegetation, topography, retaining walls and buildings as screening for light fixtures." Findings Statement, page 35.
- Noise. "Potential increase in noise levels due to construction activities and, upon completion of the Project, a slight increase due to the Project's operations. The potential increases in noise are mitigated by the combination of vegetative buffering, topography, setbacks, a noise barrier, source controls and limitations on the night time hours of operation within the Project." Findings Statement, page 34.
- Snow Plowing and Delivery Restrictions. "The noise generate by snow plowing (behind retail buildings adjacent to the residential property line), delivery and waste hauling vehicles during the night time hours (when background noise levels are typically reduced) can result in a significant impact on residents of the adjacent neighborhoods. Those impacts cannot be adequately mitigated by the stockade fence or other mitigation strategies referred to above. Accordingly, the hours of operation within the Project, including but not limited to snowplowing, (behind retail buildings adjacent to the residential property lines, except during snow emergencies) waste hauling and deliveries, shall be limited to the hours between 7:00 am and 11:00 pm." Findings Statement, page 26.
- Odor. "The restaurants will be required to use filters to remove odors from the cooking operations prior to venting to the outside air in order to comply with the Town of Victor Code provision that prohibits businesses from emitting odors that pass beyond the property line. All businesses operating within the Project Site will be individually subject to the requirements in the State air quality regulations that limit odor emissions. The newest residential receptor is over 400 feet away from the nearest restaurant, further reducing any potential odor impacts. As a result, no significant adverse odor impacts are expected from the Project." Findings Statement, Page 24.

The first tenants opened in 2010, additional tenants opened in 2011. Build-out of the Project continues with additional space anticipated to be completed in summer of 2015.

The Project, at the completion of the on-going build-out, will contain no more than 323,287 square feet of retail and restaurant space.

1.2 Requested Action

The action under review is to modify the SEQRA Findings Statement limits on operational hours at the Site.

Specifically, Benderson is requesting the elimination of the 11pm to 7 am operating hour restriction, thereby allowing Victor Crossing to operate 24-hours a day. As part of operating 24 hours, the only modification that Benderson would require to the previous approvals is for the after-hour lighting plan to be modified such that the existing light poles within the main parking field and along the entrance drive would remain on while the area behind the buildings would be maintained as shown on the current after-hours lighting plan. No other operational changes are being requested.

1.3 Project Purpose and Need

Benderson is requesting a change to the hours of operation to allow the Project to be consistent and competitive with the other commercial developments located in Victor, including within the immediate vicinity to Victor Crossing. During the initial three years of operation, Benderson has identified several issues with the 11pm to 7am operation time restriction, including a difficulty attracting full service restaurants and changes in retailing which favor 24-hour operations at certain stores types, as well as 24 hour operations during peak shopping periods and for special events.

In order to remain competitive with commercial developments in the area which do not have these operating hour restrictions, the Project needs to be able to offer tenants the same hours of operation.

1.4 SEQR Process and Chronology

This Draft Supplemental EIS ("DSEIS") is beings submitted to the Town of Victor Planning Board to evaluate whether there are significant environmental impacts related to the 24 hour operation of the site. Following a minimum 30 day public comment period, during which a public hearing will be held, a Final EIS will be prepared. The Town of Victor Planning Board will adopt a Findings Statement providing the conclusion of the environmental review, recommended site operation modifications (if any) and the rationale for their decision.

The scope of this DSEIS will focus on the potential impacts of a 24 hour operation of the Project. The 2006 Findings Statement identified visual and noise as potential impacts that would be mitigated by the operating

restrictions, noise is directly related to the volume of traffic. Therefore, this DSEIS will address the following topics:

- Visual
- Traffic
- Noise
- Odor
- Alternatives
- Unavoidable Adverse Impacts
- Cumulative Impacts
- Irreversible and Irretrievable Commitment of Resources
- Growth Inducing Aspects of the Proposed Action

2.0 Environmental, Setting, Impacts and Mitigation

2.1 Visual

To determine the impact of revising the lighting plan on the existing neighborhood the Project Sponsor retained Saratoga Associates ("Saratoga") to evaluate the impact from existing operational levels on adjacent residential properties and identify potential impact resulting from a change in the hours of operation and lighting plan. The report by Saratoga, included as Appendix A of the DSEIS, evaluated the existing nighttime visual setting of the Project focusing on the adjacent residential properties.

Current Status

Currently, the Project operates under the terms of a lighting plan which includes a prohibition on operation after 11 pm and an associated reduction in site lighting at that time.

Along Meadowlark Lane: six residential properties abut the Project site and seven properties along Sachem Trail abut the site (See Figure 1).

Meadowlark Lane is separated from the project site by an approximately 200 foot wide buffer, which contains electric and gas transmission lines and substations, a hiking trail and a stand of 25-35 foot tall pine trees. Victor Crossing is also surrounded by a screening fence and retaining wall. The residential properties are approximately 15 to 20 feet in elevation higher than the Project.

There are seven properties along Sachem Trail that abut the Project. These houses are separated from the screening fence of the Victor Crossing property, the closest portion of the property, by a woodland area measuring approximately 150 to 250 feet in depth. This woodland area is covered with a dense mixture of 20-40 foot tall deciduous and evergreen trees. The residential properties are approximately 30 – 40 feet in elevation higher than the project.

Impact

To assess the impacts of changing the lighting plan, Saratoga, prepared line-of-sight drawings to determine which residential properties may have a view of the Project lighting. Saratoga subsequently completed a sight visit at 7 to 8 pm on December 30, 2012 to observe and record site lighting. This time was selected because, winter, with leaves off trees and snow cover reflecting light, represents the most impactful condition. The Project's lights were also fully illuminated at 7pm.

Five line-of-sight profiles were prepared by Saratoga from the residences along Meadowlark Lane to the Project site to determine what locations would have a nighttime view. Each of the profiles showed that the

views from the upper-stories of the houses were screened by the pine trees; the remaining view, from the upper stories, was further screened by the fence. The elevation difference between the site and residencies results in most views from residences being above the height of the lighting fixtures.

Seven line-of-sight profiles were prepared for views from Sachem Trail to the project; all were prepared using the upper-story as the viewing elevation. In all cases, primary screening from the residences occurs from the woodland buffer with secondary screening provided by the fence or buildings.

No residences have a direct view to any of the building or parking lot lights. Additionally, as required by the Findings Statement, the light fixtures are "full cutoff", where no light is projected at or above 90 degrees from the illuminating face. This type of fixture is used to eliminate light glow from light fixtures.

Three nighttime photos were taken from the area, two from Meadowlark Lane and one from Sachem Trail. The photos, which are included in Appendix A, show that the lights visible during the nighttime are distant and from sources that are not located on the Project site, in particular, the Thruway interchange and developments on the west side of Pittsford Victor Road.

The line-of-sight profiles and nighttime photos show that during operational hours there is currently little to no impact to the surrounding residential structures from Project lighting; therefore, no impacts are anticipated from changing the lighting plan to allow additional hours of operation.

Mitigation

No adverse impacts were identified and therefore, no additional mitigations are required. However, Benderson proposes to maintain the afterhours lighting plan for the area, behind the buildings (See Figure 2).

2.2 Traffic

To determine potential impacts from a change in the operational hours of the plaza, specifically operating 24-hours, Benderson retained T.Y. Lin International Group ("Ty Lin") to determine the maximum overnight traffic volumes that would occur based on this operational change. A traffic assessment first establishes the current baseline traffic and then adds the expected increase from the change of land use or intensity of development to determine expected traffic volume. A Traffic Assessment Report is included as Appendix B.

Current Status

To determine the current baseline traffic volumes for extending operational hours, the Christmas Holiday season was selected because these overnight volumes would be higher than at any other point during the

year. To determine the current volumes of the traffic in the area, tube counts were taken from Thursday, November 21, 2012 to Sunday, November 25, 2012 on the on- and off- ramps of westbound 1-490. Counts were also obtained from the New York State Department of Transportation for NY Route 96, Pittsford Victor Road. This information was used to establish the baseline of traffic for the holiday season on roads leading to the site. Traffic counts are included in Appendix B – Traffic Assessment.

Impact

To determine the impact from a change in the operational hours the number of trips was calculated using the Institute of Transportation Engineers Trip Generation Manual, for Land Use Code 820 "Shopping Center – Christmas Season". Based on the maximum square footage of 323,287, peak hour vehicle trips to the Project for the Christmas Season, determined to be the highest traffic volumes, was estimated to be 1350; 675 cars enter and 675 exit for the at the highest volume hour of the day, PM Peak.

Based on this data as peak, Ty Lin determined the following peak season overnight trips assuming the entire center was operational overnight.

Table 1- Victor Crossing - Proposed Holiday Overnight Trips

	Weekday			Saturday			Sunday		
Average Hourly volume	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
11:00 PM – 1:00 AM	74	38	112	84	44	128	76	40	115
1:00 AM – 5:00 AM	74	38	112	95	49	144	57	30	87
5:00 AM – 7:00 AM	74	38	112	95	49	144	57	30	87

These traffic volumes were then added to the existing road network based on the distribution from the Traffic Impact Study completed for the previous EIS.

Table 2 - Combined (Existing and Projected) Overnight Holiday Traffic Volumes

	Friday									Saturday									Sunday								
	11 pm -1 am			1 am to 5 am			5am to 7 am			11 pm -1 am			1 am to 5 am			5am to 7 am			11 pm -1 am			1 am to 5 am			5am to 7 am		
	EB	WB	SB	EB	WB	SB	EB	WB	SB	EB	WB	SB	EB	WB	SB	EB	WB	SB	EB	WB	SB	EB	WB	SB	EB	WB	SB
Victor Crossing Main Entrance	110	217	38	120	154	38	215	216	38	161	101	44	73	25	49	133	50	49	154	106	40	52	25	30	74	34	30
1-490 on ramp	81	-	29	50	-	70	176	-	39	143	-	18	53	-	20	113	-	20	138	-	16	39	-	12	61	-	12
1-490 off-ramp	-	43	220	-	58	122	-	43	219	-	71	38	-	11	18	-	15	44	-	63	55	-	12	16	-	12	28

*No North bound traffic will occur so it was excluded

*Volumes were determined by adding the current traffic counts and anticipated Christmas Holiday traffic

During the Christmas Season, for a shopping center with 323,287 square feet, the maximum estimated traffic is 1350 vehicles at the entrance. The combined (existing plus projected) trips associated with overnight traffic estimated from Victor Crossing, shown in Table 2 are estimated to be low, even during the peak Christmas Season, and therefore, the existing traffic configuration and mitigations are sufficient to support the site. No additional impacts were identified.

Mitigation

No adverse impacts were identified and therefore, no mitigation is required.

2.3 Noise

The 2006 Findings Statement for Victor Crossing identified noise from both general operation and the specific activities of snow plowing behind retail buildings adjacent to the residential property line, delivery and waste hauling during the night time hours, as sources of noise. Specifically, noise related to plowing, delivery and waste hauling were identified as not being adequately mitigated by the fence or other mitigation measures; restrictions on hours of operation were put in place to ensure that the surrounding residents were not adversely impacted by site operations.

Current Status

To determine the nighttime noise impact of the change in operational hours, Angevine Acoustical Consultants, Inc (Angevine) was retained by Benderson to determine the current background noise and the impact from additional traffic during the overnight hours. The Angevine study is included as Appendix C.

Angevine measured the background noise levels at several locations along the site property boundaries. Background noise at the property lines to the north, east and southeast of the site, all locations adjacent to residences, typically ranged from 39 to 53 decibels (dBA) in the nighttime hours. These measurements were taken continuously from approximately 7:30 pm on Friday March 15 to 7:30 am on Tuesday March 19, 2013.

Additional noise readings were collected off-site adjacent to residences to the north and east, and adjacent to the Hampton Inn to the west. Measurements were collected during the morning, evening and overnight hours. These measurements were generally taken for sampling periods of five to fifteen minutes. Of the 55 additional measurements, only three were below 39 dBA at 37.4, 38.1 and 31.1 dBA. Based on the data from the on-site and off-cite locations, Angevine determined that the dominant noise source at all sites was traffic from Route 96 and I-490.

Impact

To determine the impact of a change in hours of operation, the assessment evaluated noise emissions from various sound sources on and around the Victor Crossing property, including vehicles on the plaza entrances and in parking lots, and mechanical equipment on the building rooftops. Background noise sources included vehicles on highways and were based on the field collected noise measurements. A noise model was developed using site contours, aerial photographs and architectural plans.

Sound levels were then modeled for the site with the existing conditions, and the proposed future conditions of allowing overnight operation, for Friday, Saturday and Sunday for the time periods, 12:00 am to 1:00 am, 2:00 am to 3:00 am and 5:00 am to 6:00 am. The weekends were selected because they would have the highest traffic and 2:00 am to 3:00 am has the lowest traffic volume on I-490 and Route 96.

Benderson will keep in place the operational restrictions associated with plowing, trash pickup, and deliveries behind the retail buildings during the overnight hours; therefore, these noise sources remain unchanged from current conditions.

The noise assessment concluded that noise at receiving points, specifically the Project property boundaries, nearby residences and the Hampton Inn, from the increased traffic would result in an increase of 1.6 dBA or less. Specifically, the noise increases would be 0.8 dBA or less from 12:00 am to 1:00 am, 1.6 dBA or less from 2:00 am to 3:00 am and 1.2 dBA or less from 5:00 to 6:00 am.

The New York State Department of Environmental Conservation ("NYSDEC") noise policy states "Increases ranging from 0-3 dB should have no appreciable effect on receptors.[1]" Therefore, a change in hours of operation at Victor Crossing would generate additional noise below the range the NYSDEC has determined would have an appreciable effect on receptors and no adverse impacts are anticipated from the change.

Mitigation

No adverse impacts were identified and therefore, no mitigation is required. However, as noted above, Benderson will keep in place the operational restrictions associated with plowing, trash pick-up, and deliveries behind the retail buildings during the overnight hours.

2.4 Odor

The 2006 SEQRA Findings Statement for Victor Crossing identified odor as an adverse impact from potential restaurants. The Statement concluded that the use of filters by the individual

[1] Assessing and Mitigating Noise Impacts, NYSDEC, February 2, 2001.

restaurant users, as well as the distance to the newest residential receptor, would result in the surrounding residents not being adversely impacted by Site operations.

Restaurants are a permitted use at the shopping center. Presently, the shopping center contains three restaurants: Five Guys Burgers and Fries, Subway and TCBY; all of which are located in buildings along the northern property line. A change in the operational hours of the plaza, specifically operating 24-hours, would allow restaurants, both existing tenants and future tenants, to operate between the hours of 11 pm and 7 am. A potential impact from additional hours of operation for restaurants is cooking odors drifting onto neighboring properties between the hours of 11 pm and 7 am.

Current Status

The current tenants at Victor Crossing Plaza include Subway, TCBY and Five Guys. Of the three facilities, Five Guys operates several grills and deep-fryers, an existing potential source of food odor in the plaza. These facilities are located on the plaza "ring" of the site, i.e. the buildings located on the plaza boundaries and operate under the current restricted hours approved by the Town of Victor, closing operations at 11 pm.

Currently, the Town of Victor Zoning Ordinance §211-22-7(a)[4][a] requires that for restaurants located on the Project Site: "the food preparation and service facilities must be designed and maintained so as not to produce smoke, dust, odors, excessive heat, or other deleterious by-products beyond the property, nor to litter the premises or those of adjoining properties." Further, the New York State air quality regulations at 6 NYCRR 211.2 provide "[N]o person shall allow emissions of air contaminants to the outdoor of such quantity … which unreasonably interfere with the comfortable enjoyment of life or property…this provision applies to, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor…".

Impact

As part of regular food preparation, restaurants ventilate kitchen fumes from hood vents that discharge to the outside of the building. If not properly filtered, the air emissions could potentially contain aerosol grease particles and therefore, produce a food odor.

The current operations in the plaza includes a restaurant that uses deep-frying equipment. The longer permitted operational hours will allow the existing restaurants and potential future standalone restaurants to operate after 11 pm. Additional restaurants that may lease space in the shopping center would likely be sited within the interior "out parcels" of the Site, as a result potential odor sources will be in excess of 700 feet from the closest residential property line. In the event that the bank, located towards the front of the site, is converted to a restaurant use, that building is more than 200 feet from the closest abutting residential property line. The significant distance between potential odor sources and the residential uses helps mitigate

the impact to adjacent properties. Regardless of location within the plaza, odors from additional restaurant(s) would add to the overall cumulative effect of cooking odors produced at the shopping center.

Mitigation

All restaurants located on the Project Site are subject to the requirements of the Town of Victor Zoning Ordinance §211-22-7(a)[4][a] and New York State air quality regulations. With the use of air filters, including but not limited to those that contain activated carbon, the amount of grease particles and other food odors exhausting from a possible restaurant at the Site would be minimized. To mitigate the potential added odor impacts from additional restaurants, any new restaurant on site will install and maintain grease-extracting air filters in the hood stacks venting food preparation areas. The filters should comply with ASHRAE 52.1-1992 and 52.2-1999 standards for filter efficiency. ASHRAE 52.1-1992 addresses a filter's ability to remove staining size (0.5 to 1.0 micron) particles. ASHRAE 52.2-1999 established values to specify a product minimum efficiency reporting value (MERV) and details procedures to determine a filter's ability to remove specific contaminates based on particle size. With the recommended mitigation which are consistent with those adopted by the Town of Victor in the 2006 SEQRA Findings Statement, no adverse odor impacts are anticipated from allowing 24 hour operation of the shopping center.

3.0 Alternatives

No Action

A consideration of reasonable alternatives is required for all EISs, including the No Action Alternative. The No Action Alternative would have the shopping center continue to operate as it is today with no change in operational hours.

A No Action Alternative would not cause the minor increase in traffic associated with the additional hours of operation. An analysis of impacts determined that the change in the lighting plan, the impact on noise, odors and traffic from 24-hour operation would be negligible and therefore, would be no different with a No Action Alternative.

However, Victor Crossing would still be less competitive than other commercial developments within Victor, would have difficulty attracting full service restaurants and would be unable to be consistent with trends in retailing allowing 24-hour operations, which could harm future viability of the center.

The No Action Alternative would not eliminate or reduce any adverse impacts but would continue to adversely impact the competiveness of the shopping center; therefore, it is not the preferred alternative.

Limited Operations

An alternative operation plan for Victor Crossing would be to allow the out parcels, those located within the center of the parking lot, to remain open until 2:00 am, and reopen at 6:00 am.

This Limited Operation Alternative would make the Project more attractive to a full service restaurant; however, it would still be at a competitive disadvantage to other commercial developments within the Town of Victor and would not allow 24-hour operation for retail stores at the site.

The Limited Operation Alternative as compared to the 24-hour operation alternative would create a minimal increase in traffic between the hours of 11 PM and 2 AM. The additional traffic would be less than what is generated during the proposed 24 hour operation thereby reducing the potential noise impacts, however, both traffic and noise impacts were determined to be minor and would not have an adverse impact on the surrounding community. Because no impacts were determined from the change in lighting and odor, no change in these impacts from 24-hour operation to a limited operations scenario is anticipated.

The Limited Operation Alternative would allow Victor Crossing to attract full service restaurants but would still impact its competiveness with other commercial developments. Because no adverse impacts to adjacent properties were determined it would not reduce impacts to residents. Therefore, because this

alternative is not more protective of the residents while also not allowing Benderson to meet their purpose and need this is not the preferred alternative.

24-hour Operation

The 24-hour operation scenario, which was evaluated in Section 3 of this document, would have no significant adverse impact on traffic, noise, visual or odor impacts. It would allow Victor Crossing to be more marketable to full-service restaurants and operate like other commercial developments in the Town of Victor. This will have positive impacts on the competitiveness and viability of the shopping center. Therefore, because the change in operation hours would have no adverse impacts and would increase the viability of the shopping center, this is selected as the preferred alternative.

4.0 Unavoidable Adverse Impacts

No adverse impacts were identified from changes in the visual environment, traffic volumes, noise or odor from the change in operational hours; therefore, allowing Victor Crossing to operate 24-hours a day would have no unavoidable adverse impacts.

5.0 Cumulative Impacts

No cumulative impacts are anticipated from changing the operational hours of the site.

6.0 Irreversible and Irretrievable Commitment of Resources

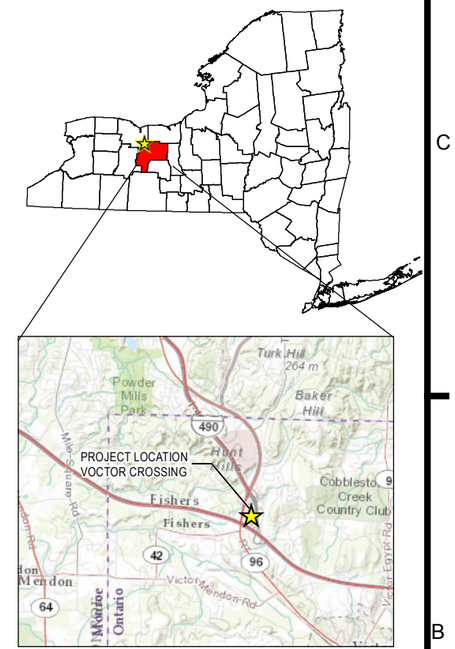
Changing the hours of operation for the Project would have a small increase in the amount on energy used for the operation of the site. Additional human effort will be required to support the extended hours of operations of the selected stores. No other non-renewable, natural or man-made resources would be committed to the Project based on the proposed change.

7.0 Growth Inducing Aspects of the Proposed Action

The project relates only to a change in operational hours for the existing shopping center. No growth is anticipated from this change.

FIGURES

Location Map



0 500 1,000 2,000 Feet

N

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GENERIC ENVIRONMENT IMPACT STATEMENT
VICTOR CROSSING
VICTOR, NEW YORK

MARK	DATE	DESCRIPTION

REVISIONS

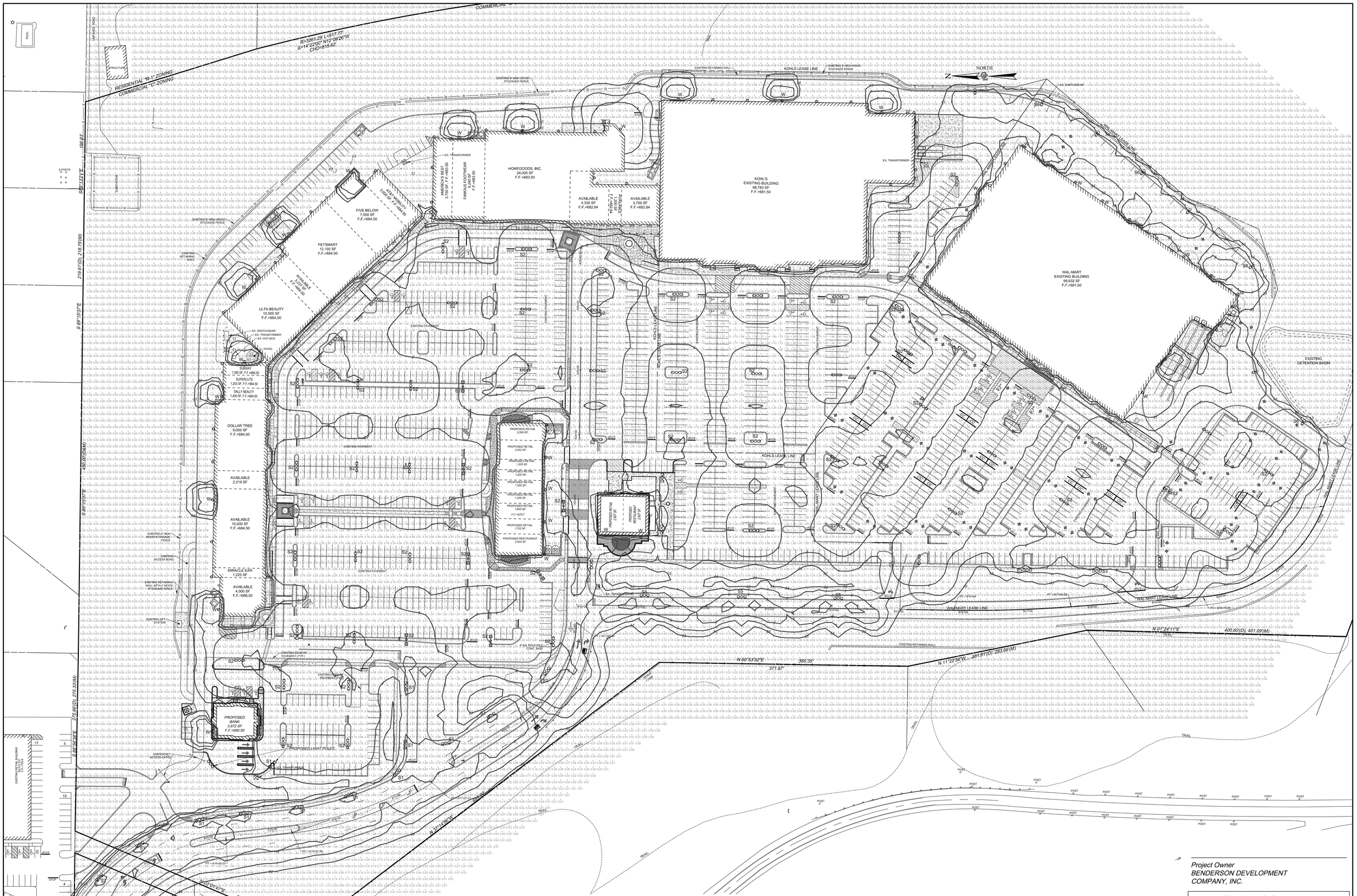
PROJECT NO:	J54.004.001
DATE:	MAY 28, 2014
DRAWN BY:	C. MARTIN
DESIGNED BY:	C. MARTIN
CHECKED BY:	N. MARRERO

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

PROJECT LOCATION

FIGURE 1

Path: F:\Project\J54 - Benderson Development Co\J54004001 - SDEIS Victor Crossing Plaza\Design\GIS\FIGURE_1_PROJECT_LOCATION.mxd



STATISTICS					
DESCRIPTION	AVG.	MAX.	MIN.	MAX./MIN.	AVG./MIN.
PARKING/DRIVING SURFACE	0.99 FC	8.56 FC	1.0 FC	N/A	N/A

SITE LIGHTING FIXTURE SCHEDULE - OPERATING HOURS

SYMBOL	LABEL	QUANTITY	MANUFACTURER	CATALOG NUMBER	LAMP	LUMENS	LLF	MOUNTING
	S1	14	LITHONIA LIGHTING	AS2-400M-SR4SC	400W METAL HALIDE	36,000	0.75	(2) LUMINAIRES PER POLE 3' CONCRETE BASE 22' POLE
	S2	62	LITHONIA LIGHTING	KVF2-400M-SYM-FL	400W METAL HALIDE	36,000	0.75	(2) LUMINAIRES PER POLE 3' CONCRETE BASE 22' POLE
	S3	4	LITHONIA LIGHTING	KVF2-400M-ASY-FL-EHS	400W METAL HALIDE	36,000	0.75	(2) LUMINAIRES PER POLE EXTERNAL HOUSE-SIDE SHIELD 3' CONCRETE BASE 22' POLE
	S5	4	LITHONIA LIGHTING	KVF2-400M-SR3FL-EHS	400W METAL HALIDE	36,000	0.75	(2) LUMINAIRES PER POLE EXTERNAL HOUSE-SIDE SHIELD 3' CONCRETE BASE 22' POLE
	S6	10	LITHONIA LIGHTING	KVF2-400M-SYM-FL	400W METAL HALIDE	36,000	0.75	1 LUMINAIRE PER POLE EXTERNAL HOUSE-SIDE SHIELD 3' CONCRETE BASE 22' POLE
	W	55	LITHONIA LIGHTING	ASW1-175M-SR4SC	175W METAL HALIDE	12,800	0.75	WALL MOUNT 15'AGL

SITE LIGHTING LEGEND

0.1 0.1 0.1 0.1
0.1 0.1 0.1 0.1
0.4 0.3 0.3 0.3
0.5 0.4 0.5 0.5

POINT-BY-POINT PHOTOMETRIC CALCULATIONS (FOOTCANDLE LEVEL AT GRADE)

PHOTOMETRIC CALCULATION CONTOURS LEVELS (FOOTCANDLE LEVEL AT GRADE)

Project Owner
BENDERSON DEVELOPMENT COMPANY, INC.

Site Plan & Subdivision

Town Engineer

Planning Board Chairman

FIGURE 2

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STATE OF NEW YORK · MARK R. COSTICH · No. 065971 · Licensed Professional Engineer

PROJECT ENGINEER	G.W.
DRAWN BY	D.E.L.
BOUNDARY	---
TOPO/BASE	---
DATE	07/25/2014
SCALE	1"=50'

COSTICH ENGINEERING

- CIVIL ENGINEERING
- LAND PLANNING
- SURVEYING

217 LAKE AVENUE
ROCHESTER, NEW YORK
14608
(585) 458-3020

TITLE OF PROJECT	VICTOR CROSSING N.Y.S. ROUTE 96 AND INTERSTATE 90
TITLE OF DRAWING	LIGHTING PHOTOMETRIC PLAN - AFTER HOURS SCENARIO
LOCATION OF PROJECT	TOWN OF VICTOR COUNTY OF MONROE, STATE OF NEW YORK
CLIENT	BENDERSON DEVELOPMENT CO., LLC 570 DELAWARE AVENUE BUFFALO, NEW YORK 14202
DWG #	0026.02
	EA100 SHEET 1 OF 1

APPENDICES

APPENDIX A
LIGHTING IMPACT ASSESSMENT

SARATOGA ASSOCIATES

LIGHTING IMPACT ASSESSMENT
EXTENDED OPERATING HOURS
VICTOR CROSSING SHOPPING CENTER
VICTOR, NY

Prepared for:
Benderson Development Company, LLC
540 Delaware Avenue
Buffalo, NY

June 6, 2014

Landscape Architects, Architects,
Engineers and Planners, P.C.

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#2012-041.10

Project Overview

Benderson Development Company, LLC. ("Benderson") proposes to extend the hours of retail operation at the Victor Crossing Shopping Center ("Victor Crossing" or "the Project"). Victor Crossing currently operates under a Lighting Plan approved in 2006 by the Town of Victor. The approved plan includes an After Hours Lighting Plan that requires a substantial number of lights be turned off by 11pm to minimize impact on adjacent residential properties. Benderson is seeking an amendment to the Lighting Plan that will permit extension of operational lighting levels past 11pm. The propose of this report is to evaluate existing operational lighting levels and identify potential impact on adjacent residential properties that may result from extended operational hours.

Site Description

Victor Crossing is located on the east side of NYS Route 96 (Pittsford-Victor Road), near the Exit 45 interchange of the New York State Thruway (I-90) in the Town of Victor, NY. Several anchor tenants currently operate on the site including Walmart, Kohls, Homegoods, PetSmart, Dollar Tree, and Famous Footware. Other tenants include Subway, Five Below, AT&T and Super Cuts. Additional retail space will be leased in unoccupied storefronts as leases with new tenants are reached.

Adjacent land uses along NYS Route 96 include a small retail plaza, Hampton Inn and Suites, TGI Friday's restaurant and McDonald's restaurant. Regional shopping centers, including East Gate Square and East View Mall are located on NYS Route 96 approximately 1/2 mile north of Victor Crossing. A number of franchise establishments and other businesses are located on NYS Route 96 South of the Project.

Victor Crossing borders single family residential neighborhoods to the north along Meadowlark Lane and to the east along Sachem Trail and High Street, and to the southeast along Trillium Trail, Wintergreen Grove and Willowbrook Road. Seven (7) residential properties on Sachem Trail directly abut the Victor Crossing site. A dense second growth woodland area approximately 150 to 250 feet in depth is located between the Project and Sachem Trail. This 20-40 foot tall mixed deciduous and evergreen buffer is healthy and continues to grow in height and density. The land contours rise approximately 30 to 40 feet in elevation from the Victor Crossing parking lots east to Sachem Trail.

High Street is a north/south local collector road immediately east of the Sachem Trail neighborhood. A solid row of mature pine trees along the west side of High Street fully screens the Victor Crossing site from passing vehicles.

Six (6) residential properties on Meadowlark Lane abut the Victor Crossing site. An underdeveloped buffer area separates the shopping center from the Meadowlark Lane residential neighborhood. This buffer is approximately 200 feet wide and contains electric and gas transmission lines, substations for Rochester Gas and Electric, and a hiking trail. A dense and healthy stand of 25-35 foot tall pine trees along the southern boundary of the Meadowlark Lane neighborhood provides a visual screen substantially blocking views of the Project from abutting residences. The land contours rise approximately 15 to 20 feet in elevation from the Victor Crossing parking lots north to Meadowlark Lane.

The Trillium Trail/Wintergreen Grove neighborhood and Willowbrook Road is separated from Victor Crossing by a minimum of 1,000 feet of deciduous woodland. No project views or nighttime lighting impact is currently experienced in this area.

Aerial photographs of the Project site and adjacent residential neighborhoods are provided in Appendix A.

Approved Lighting Plan

Victor Crossing operates under a Lighting Plan originally approved in 2006 by the Town of Victor and continues to be reapproved with each site plan modification. As part of the project approval process, the Planning Board considered lighting concerns related to the potential for increased sky glow, light spillage off-the-site and the visibility of Project lights from neighboring houses. The approved Lighting Plan assures best practice lighting conditions are maintained during both operational hours and after hour periods.

Approved Visual/Lighting Impact Mitigation – The Victor Crossing site plan underwent significant modification during the local approval process to minimize visual and lighting impact on adjacent residential properties. Key mitigation measures incorporated into the Project include:

- Existing vegetative buffers are maintained along the north and east boundary of the retail area for visual screening;
- Retail buildings are arranged into an "L" shape with the rear facades facing the Sachem Trail and Meadowlark Lane residences allowing buildings to screen views to the interior of the site (parking lots, roadways, storefronts and associated lighting);
- Retail buildings have a maximum height of 35 feet along the rear façade to block views to the interior of the site;
- An eight foot high wooden fence is provided along the rear service area to block views of rear facades, services areas and associated lighting. Landscape plantings are provided adjacent to fence areas;
- Parking lot and wall mounted fixtures are Illuminating Engineering Society of North America (IESNA) compliant full cut-off with flat lens and house shields. Point source of illumination is concealed within the housing fixture. Light fixtures are accredited by The International Dark Sky Association (IDA);
- No light poles are located next to residential areas;
- All parking lot luminaires are mounted a maximum of 25-feet above the ground (compliant with Town Zoning). Wall mounted luminaries are mounted a maximum of 15 feet above the ground;
- Parking areas are at a lower elevation that adjacent residential structures so that views to the project site remain above the elevation of parking lot and wall mounted fixtures;
- Parking lot and roadway lighting uses only single-head and double-head poles to minimize cumulative glare from any single source;

- Overall site lighting is limited to an average of approximately 2.7 foot-candles; the minimum necessary to maintain adequate lighting for safety and security during operational hours;
- Zero foot-candles of light spillage is projected onto adjacent properties; and
- The Project employs an After Hours Lighting Plan to further reduce lighting impact on adjacent properties. The After Hours Lighting Plan requires over 30 light poles be turned off one hour after closing, but in no event later than 11pm. Average light levels are reduced from 2.7 foot-candles permitted during operational hours to 0.6 foot-candles; the minimum necessary to maintain adequate lighting for safety and security during non-operational hours.

The Town approved Operational and After Hours Lighting Plans are provided in Appendix B.

Evaluation of Off-Site Views

Since the proposed action is an extension of operational hours beyond the current 11pm shut-off, this analysis seeks to confirm that the mitigation measures employed in the operational Lighting Plan sufficiently minimize impact on adjacent residential properties and that an extension of operational hours will not create a significant or adverse impact on these neighbors.

Line-of-sight Profiles - Line-of-sight profiles were prepared from each abutting residence to illustrate the degree of visibility to various light fixtures within Victor Square. This evaluation considers potential views from upper story windows to illustrate the worst-case condition from each residence. Views from first story windows and back yard vantage points will be less.

The line-of-sight profiles confirm that existing buffer vegetation provides a primary visual screen of Project structures and site lighting from most abutting residences. Existing retail buildings and perimeter fencing provide substantial secondary screening of parking lot and service area lighting. The lower elevation of Victor Crossing parking lots and service areas prevents direct views of full cut-off fixture light sources from adjacent residential properties.

Line-of-Sight profiles are provided as Appendix C.

Site Visit and Light Impact Observation - An experienced visual analyst visited the Victor Crossing Site between the hours of 7 to 8pm on December 30, 2012 to observe and record site lighting conditions during operational hours from both on-site and off-site locations. This field visit was conducted during the winter months when leaves were off the trees and snow cover heightened light reflectivity and luminance.

From Meadowlark Lane the only lighting visible was the luminaires from two light towers at the NYS Thruway interchange. Field observation found no Project parking lot or service area lighting visible from ground level vantage points along Meadowlark Lane.

From Sachem Trail the only lighting visible was from the Hampton Inn and Suites, TGI Friday's and other existing sources in the vicinity of NYS Route 96 and Commerce Drive. This lighting is visible above screening elements incorporated into the Project due to the higher elevation of Route 96 relative to Victor Crossing. Field observation found no Project parking lot or service area lighting visible from ground level vantage points along Sachem Trail.

Nighttime photographs from the Project site and Meadowlark Lane and Sachem Trail are provided in Appendix D.

No views of Victor Crossing lighting were found in the Trillium Trail/Wintergreen Grove neighborhood or from Willowbrook Road. Views from High Street are fully screened by existing mature roadside evergreen vegetation.

Analysis and Conclusion

In 2006 the Town of Victor issued a SEQRA Findings Statement concluding that the Project Lighting Plan successfully minimizes potential lighting impact on the adjacent properties.

> "The Project's lighting plan has been revised significantly through the SEQRA process to a point where the plan now contains mitigation measures requested by the Town's lighting consultant and significantly reduces the Projects lighting impacts. Based on the foregoing, the Project's lighting plan will not have any significant adverse environmental impacts".

The following analysis compares the pre-construction expectations of the 2006 Findings Statement with conditions illustrated in the line-of-sight profiles and observed post-construction conditions.

The lighting plans indicate minimal light beyond the parking lots.

- Field observation confirmed significant fall-off of light at parking lot edges. Light poles are located internal to the parking lot, and light levels designed so that light is focused on active use areas with minimal trespass beyond active parking or roadway areas.

The majority of light poles will be screened from neighboring residential properties by buildings and plantings.

- Existing vegetative screening between the Project and adjacent residences provides substantial visual screening. A healthy and well maintained planting of dense evergreen trees exists along the south property line of abutting residences on Meadowlark Lane. These 25-40 foot tall evergreen trees appear to have been planted many years prior to the development of Victor Crossing and provide an effective visual barrier for both day and nighttime views. An important component of the Victor Crossing mitigation plan was maintenance of a significant vegetative buffer along the east property line providing visual screening for Sachem Trail residences. This woodlot is largely second growth and is quickly infilling to provide increasing density of this 150 foot + wide buffer.

  Line-of-sight profiles and field observation confirm that existing perimeter vegetation substantially screens views of Victor Crossing from residences along Meadowlark Drive and Sachem Trail.

The illumination levels do not exceed those recommended by the illumination Engineering Society for this type of use and location. The lighting ratios indicate a well designed and even illumination.

- The Project was constructed using best lighting practices. Full cut-off light fixtures with flat lens and house shield comply with IESNA and IDA standards to minimize site lighting to the

minimum levels necessary for the safety and security and prevent unnecessary glare and upward dispersion of light.

The Site is lower than the surrounding neighbors, therefore the light sources should not be visible to the neighbors.

> Light poles are limited to 25 feet in height and wall mounted lights are limited to 15 feet in height. As illustrated in the line-of-sight profiles most views from adjacent properties are above the elevation of light fixtures and generally look downward toward the site.

The light poles on the eastern edge of the parking lot will have house side shields installed. House shields will significantly reduce light trespass beyond the parking areas.

> Light spillage on adjacent properties caused by Project illumination was undetectable to the field observer.

Conclusion

The proposed action is an extension of operational hours beyond the current 11pm curfew. Since the Victor Crossing Shopping Center is substantially constructed and operating, operational lighting conditions are readily observable. Analysis and field verification demonstrates the Lighting Plan approved by the Town of Victor in 2006 appropriately and adequately reduces light trespass, sky glow, and glare from parking lot, service area and storefront sources during operational hours to insignificant levels.

The extension of retail hours will maintain operational lighting levels past the current 11pm shut-off. Based upon field observations that have been previously discussed, the operation of site lighting past 11pm will not create a condition that does not already exist during darkness, prior to the 11pm shut-off. To date, no complaints from neighbors concerning lighting impacts have been received. Based on analysis of post construction conditions it is reasonable to conclude that extending operational lighting past 11pm will have little to no adverse impact on adjacent properties.

Appendix A

Aerial Photographs

Aerial View Looking East (Source: Bing Maps, 2012 Photo)

FIGURE A1

Aerial Views

Aerial View Looking North (Source: Bing Maps, 2012 Photo)

FIGURE A2

Aerial Views

Aerial View Looking West (Source: Bing Maps, 2012 Photo)

FIGURE A3

Aerial Views

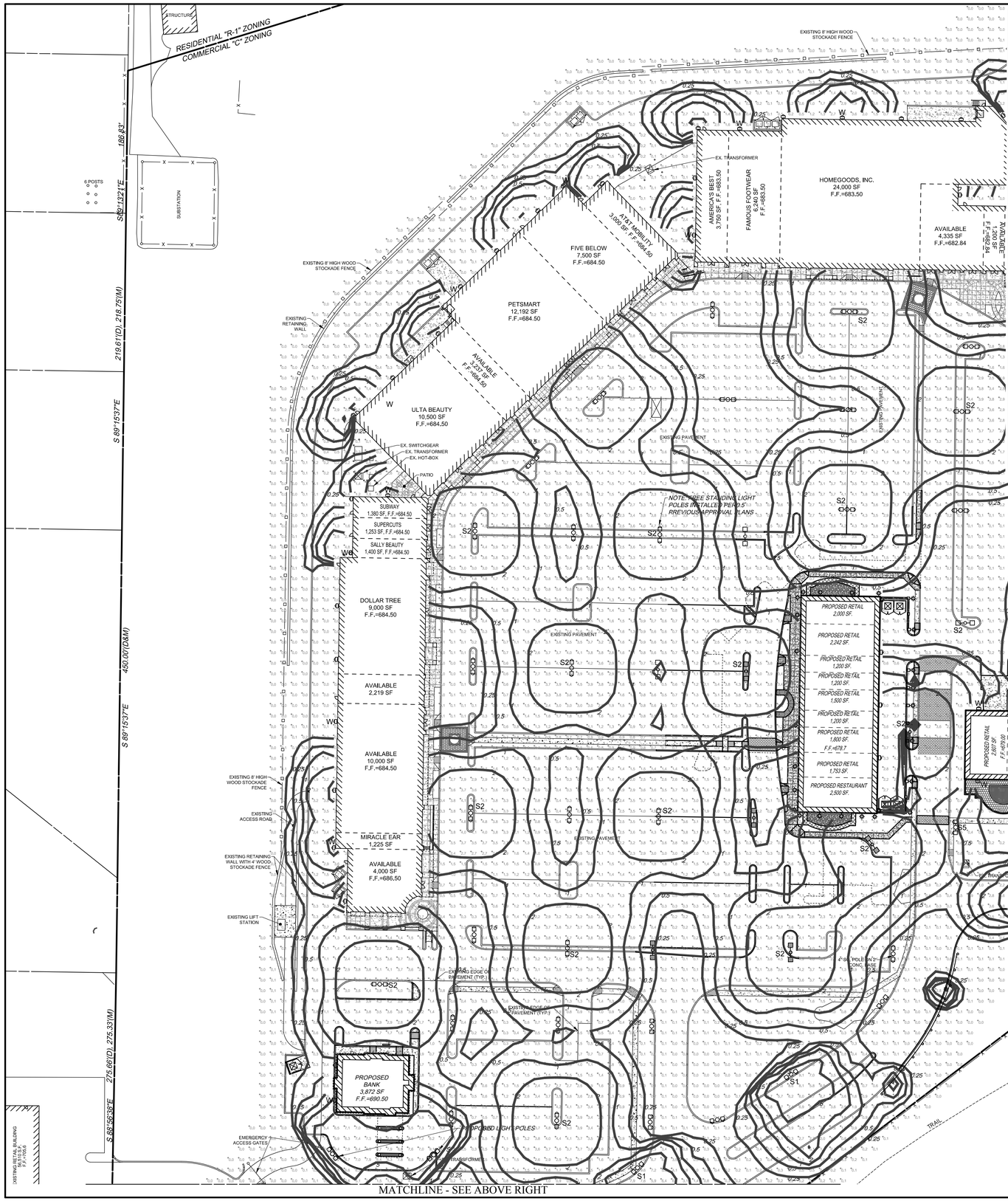
Aerial View Looking South (Source: Bing Maps, 2012 Photo)

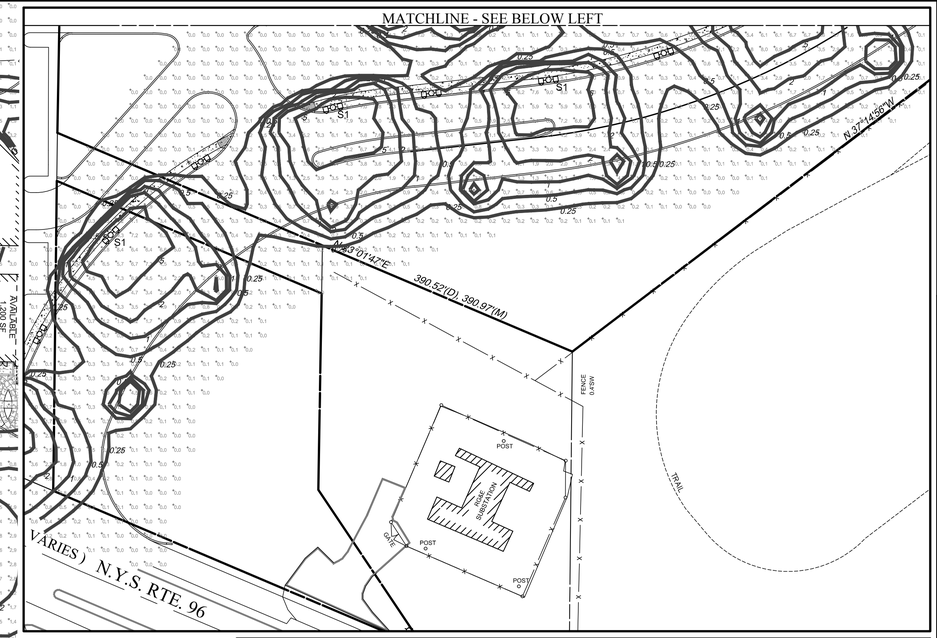
FIGURE A4

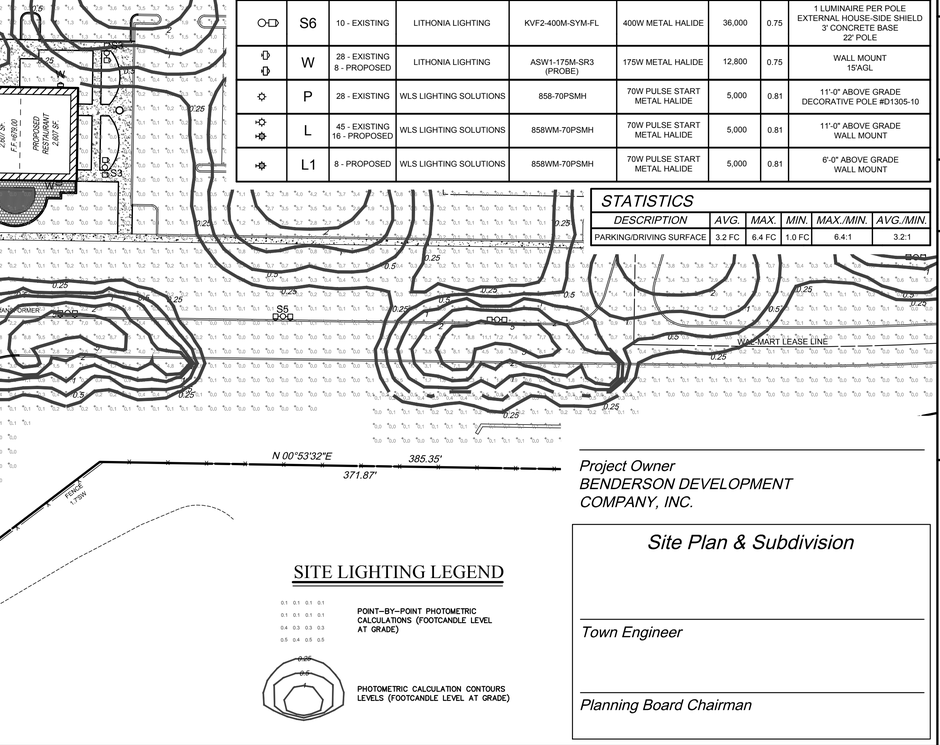
Aerial Views

Appendix B

Currently Approved Lighting Plans







SITE LIGHTING FIXTURE SCHEDULE - OPERATING HOURS

SYMBOL	LABEL	QUANTITY	MANUFACTURER	CATALOG NUMBER	LAMP	LUMENS	LLF	MOUNTING
	S1	16 - EXISTING	LITHONIA LIGHTING	AS2-400M-SR4SC (PULSE START)	400W METAL HALIDE	38,000	0.75	(2) LUMINAIRES PER POLE 3' CONCRETE BASE 22' POLE
	S2	62 - EXISTING 5 - PROPOSED	LITHONIA LIGHTING	KVF2-400M-SYM-FL (PULSE START)	400W METAL HALIDE	42,000	0.75	(2) LUMINAIRES PER POLE 3' CONCRETE BASE 22' POLE
	S3	4 - EXISTING	LITHONIA LIGHTING	KVF2-400M-ASY-FL-EHS	400W METAL HALIDE	36,000	0.75	(2) LUMINAIRES PER POLE EXTERNAL HOUSE-SIDE SHIELD 3' CONCRETE BASE 22' POLE
	S4	4 - EXISTING	LITHONIA LIGHTING	AST1-175M-SR5S	175W METAL HALIDE	12,800	0.75	1 LUMINAIRE PER POLE 30" DECORATIVE BASE 12' POLE
	S5	4 - EXISTING	LITHONIA LIGHTING	KVF2-400M-SR3FL-HS	400W METAL HALIDE	38,000	0.75	(2) LUMINAIRES PER POLE EXTERNAL HOUSE-SIDE SHIELD 3' CONCRETE BASE 22' POLE
	S6	10 - EXISTING	LITHONIA LIGHTING	KVF2-400M-SYM-FL	400W METAL HALIDE	36,000	0.75	1 LUMINAIRE PER POLE EXTERNAL HOUSE-SIDE SHIELD 3' CONCRETE BASE 22' POLE
	W	28 - EXISTING 8 - PROPOSED	LITHONIA LIGHTING	ASW1-175M-SR3 (PROBE)	175W METAL HALIDE	12,800	0.75	WALL MOUNT 15'AGL
	P	28 - EXISTING	WLS LIGHTING SOLUTIONS	858-70PSMH	70W PULSE START METAL HALIDE	5,000	0.81	11'-0" ABOVE GRADE DECORATIVE POLE #D1305-10
	L	45 - EXISTING 16 - PROPOSED	WLS LIGHTING SOLUTIONS	858WM-70PSMH	70W PULSE START METAL HALIDE	5,000	0.81	11'-0" ABOVE GRADE WALL MOUNT
	L1	8 - PROPOSED	WLS LIGHTING SOLUTIONS	858WM-70PSMH	70W PULSE START METAL HALIDE	5,000	0.81	6'-0" ABOVE GRADE WALL MOUNT

STATISTICS

DESCRIPTION	AVG.	MAX.	MIN.	MAX./MIN.	AVG./MIN.
PARKING/DRIVING SURFACE	3.2 FC	6.4 FC	1.0 FC	6.4:1	3.2:1

SITE LIGHTING LEGEND

0.1 0.1 0.1 0.1
0.1 0.1 0.1 0.1
0.4 0.3 0.3 0.3
0.5 0.4 0.5 0.5

POINT-BY-POINT PHOTOMETRIC CALCULATIONS (FOOTCANDLE LEVEL AT GRADE)

PHOTOMETRIC CALCULATION CONTOURS LEVELS (FOOTCANDLE LEVEL AT GRADE)

Project Owner
BENDERSON DEVELOPMENT COMPANY, INC.

Site Plan & Subdivision

Town Engineer

Planning Board Chairman

GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.

NO.	DATE	REVISION	BY	CHKD.	APV'D.
3	04/22/2013	ADDED RIGHT TURN LANE	D.E.L.	G.W.	
2	02/18/2013	REVISED PER TOWN'S COMMENTS	E.R.G.	G.W.	
1	01/07/2013	ADDED BUILDING MOUNTED LIGHTING PER TOWN ENGINEERS COMMENTS	D.E.L.	G.W.	

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STATE OF NEW YORK
MARK R. COSTICH
083937
Licensed Professional Engineer

PROJECT ENGINEER: G.W.
DRAWN BY: D.E.L.
DESIGNER: ---
TOPOGRAPHY: ---
DATE: 11/29/2012
SCALE: 1"=50'

• CIVIL ENGINEERING
• LAND PLANNING
• SURVEYING

2171 LAKE AVENUE
ROCHESTER, NEW YORK 14615
(585) 458-3020

COSTICH ENGINEERING

TITLE OF PROJECT: VICTOR CROSSING
N.Y.S. ROUTE 96 AND INTERSTATE 90

TITLE OF DRAWING: LIGHTING PHOTOMETRIC PLAN - AFTER HOURS SCENARIO

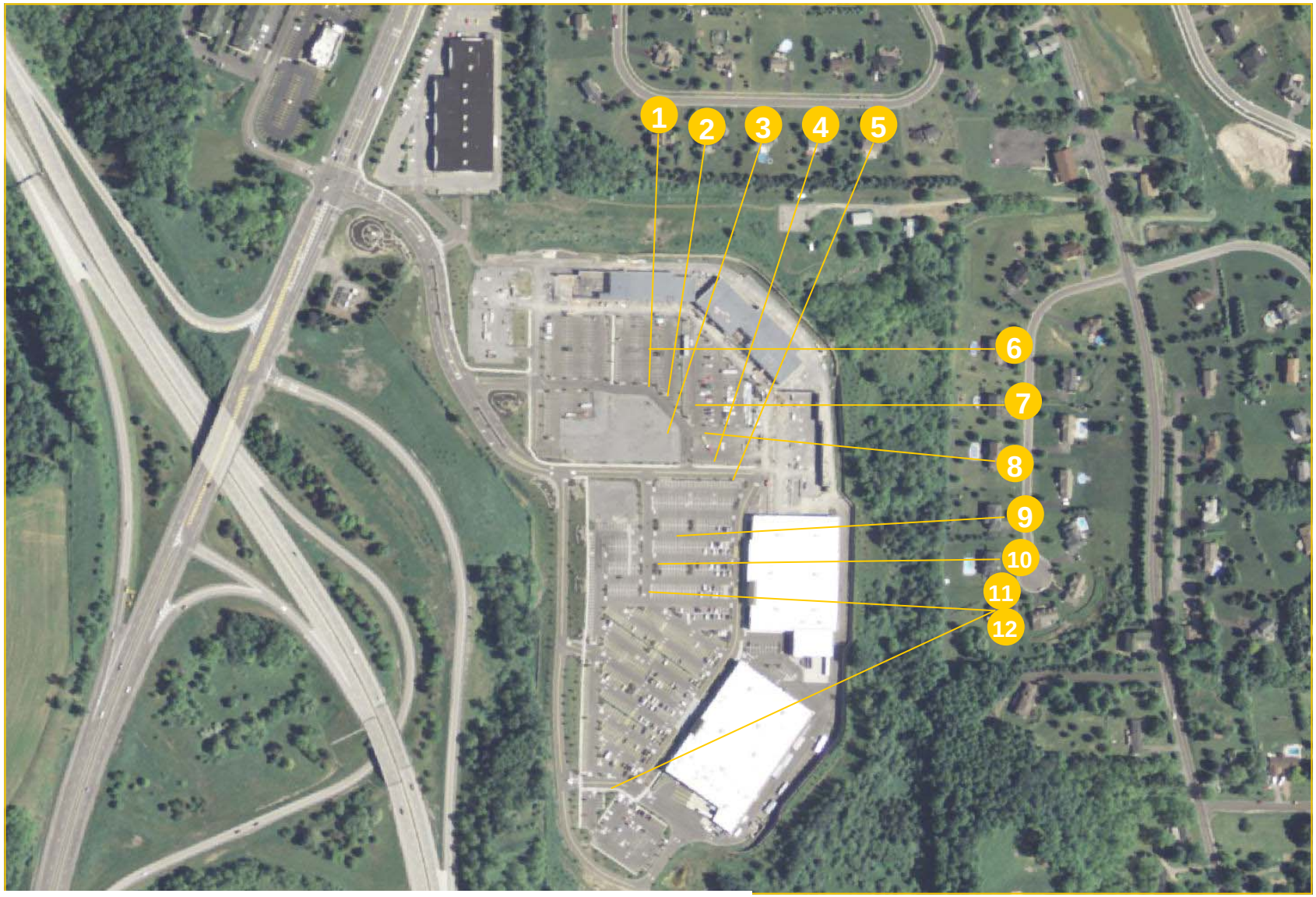
LOCATION OF PROJECT: TOWN OF VICTOR
COUNTY OF MONROE, STATE OF NEW YORK

CLIENT: BENDERSON DEVELOPMENT CO., LLC
5577 SHERIDAN DRIVE, SUITE 3
BUFFALO, NEW YORK 14221

DWG. # 4026.01
C9
SHEET 7 OF 10

Appendix C

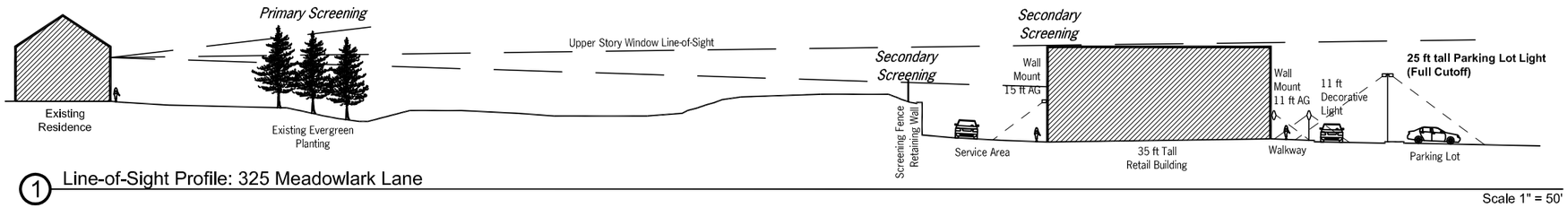
Line-of-Sight Profiles



Location Plan

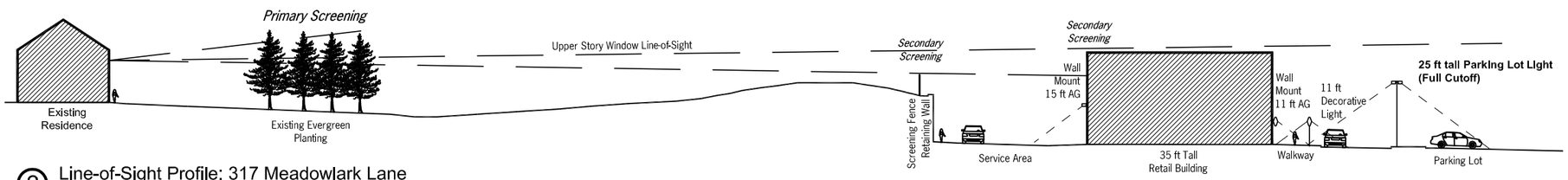
FIGURE C1

Line-of-Sight Profiles



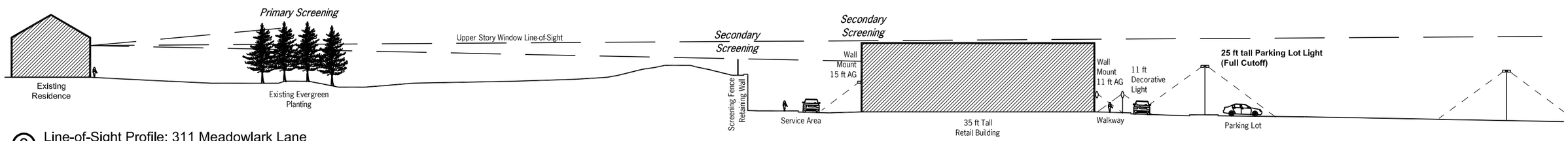
1 Line-of-Sight Profile: 325 Meadowlark Lane

Scale 1" = 50'



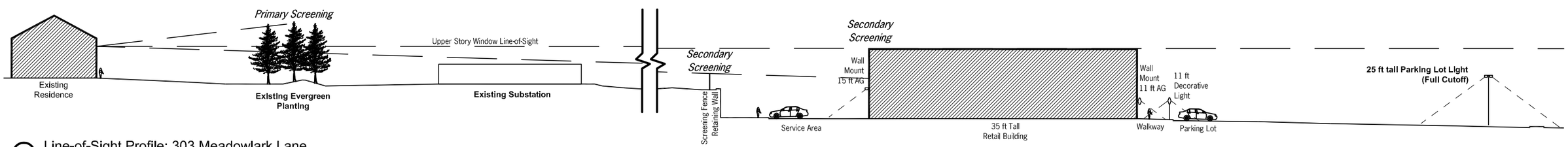
2 Line-of-Sight Profile: 317 Meadowlark Lane

Scale 1" = 50'



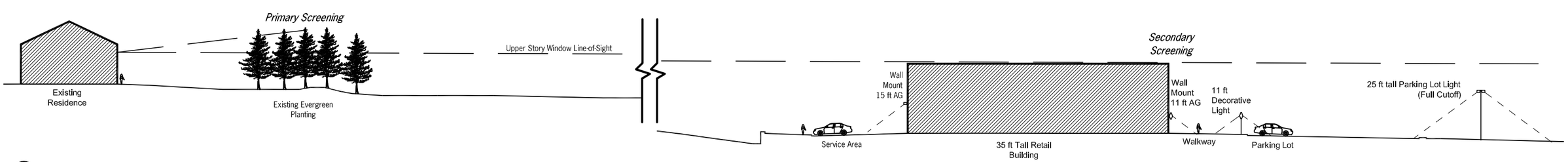
3 Line-of-Sight Profile: 311 Meadowlark Lane

Scale 1" = 50'



4 Line-of-Sight Profile: 303 Meadowlark Lane

Scale 1" = 50'



5

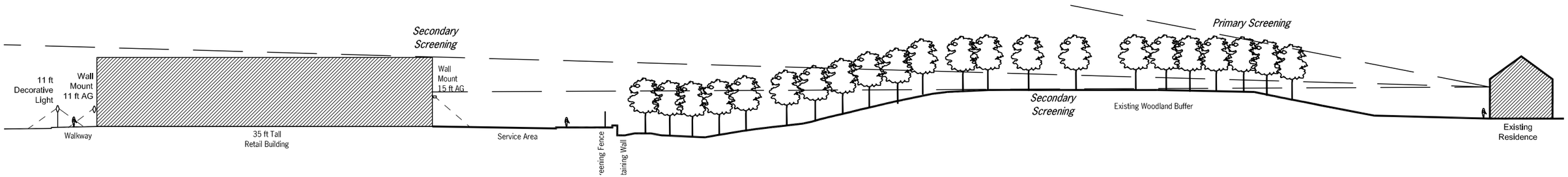
Scale 1" = 50'

FIGURE C1

Line-of-Sight Profiles

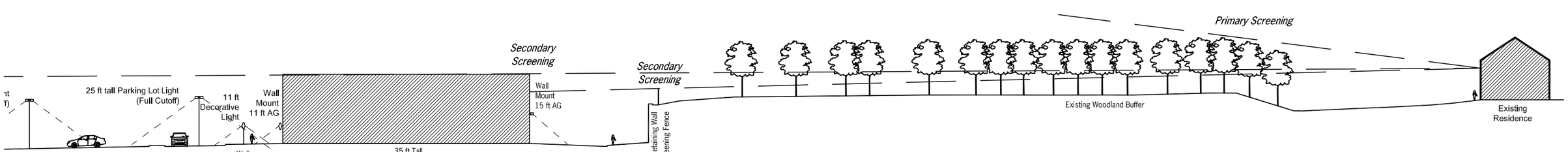
VICTOR CROSSING LIGHTING ANALYSIS

SARATOGA ASSOCIATES



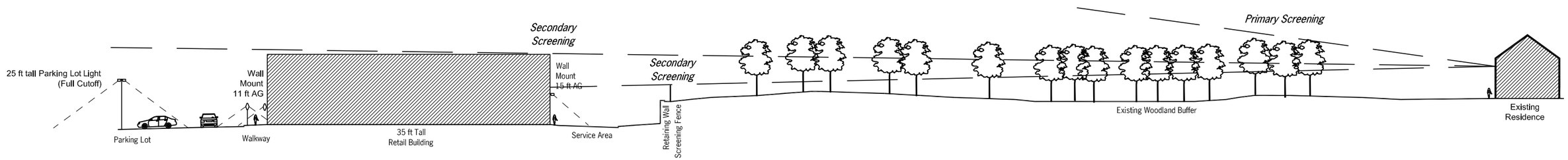
6 Line-of-Sight Profile: 7316 Sachem Trail

Scale 1" = 50'



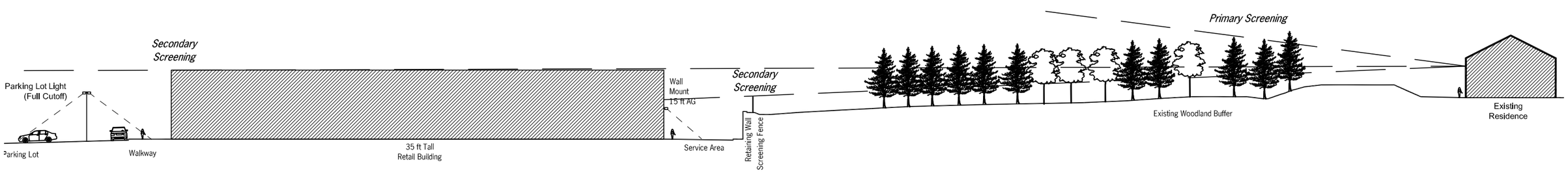
7 Line-of-Sight Profile: 7320 Sachem Trail

Scale 1" = 50'



8 Line-of-Sight Profile: 7330 Sachem Trail

Scale 1" = 50'



9 Line-of-Sight Profile: 7340 Sachem Trail

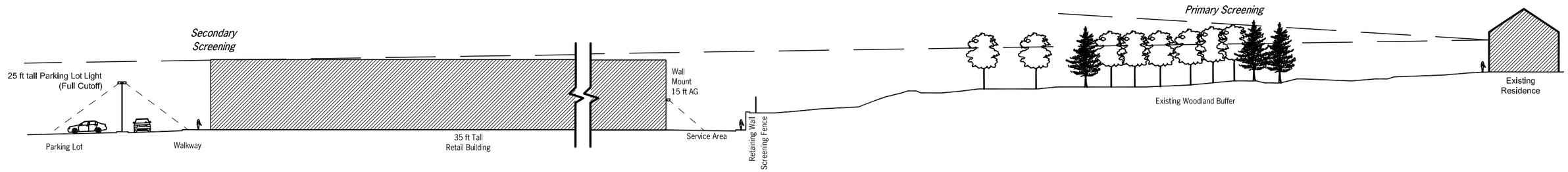
Scale 1" = 50'

FIGURE C2

Line-of-Sight Profiles

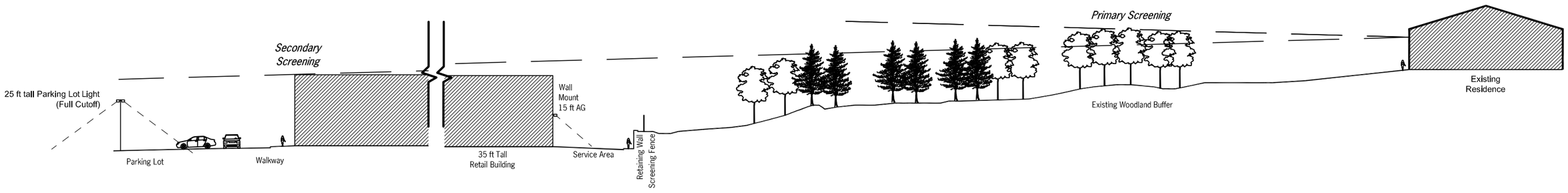
VICTOR CROSSING LIGHTING ANALYSIS

SARATOGA ASSOCIATES



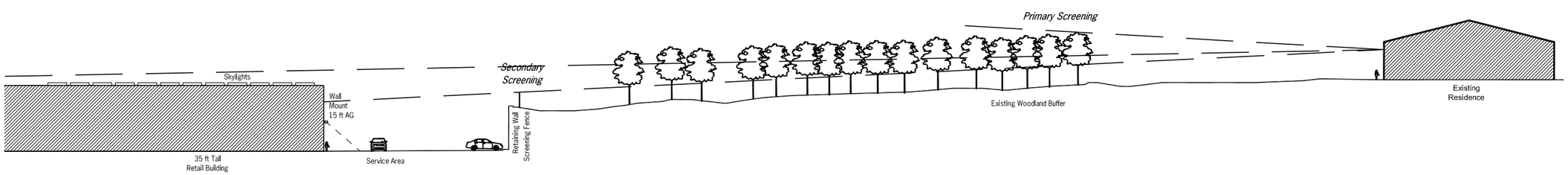
10 Line-of-Sight Profile: 7350 Sachem Trail

Scale 1" = 50'



11 Line-of-Sight Profile: 7360 Sachem Trail

Scale 1" = 50'



12 Line-of-Sight Profile: 7360 Sachem Trail

Scale 1" = 50'

FIGURE C3

Line-of-Sight Profiles

VICTOR CROSSING LIGHTING ANALYSIS

SARATOGA ASSOCIATES

Appendix D

Existing Condition Photos

Photo Location Plan

FIGURE D1

Existing Condition Photos

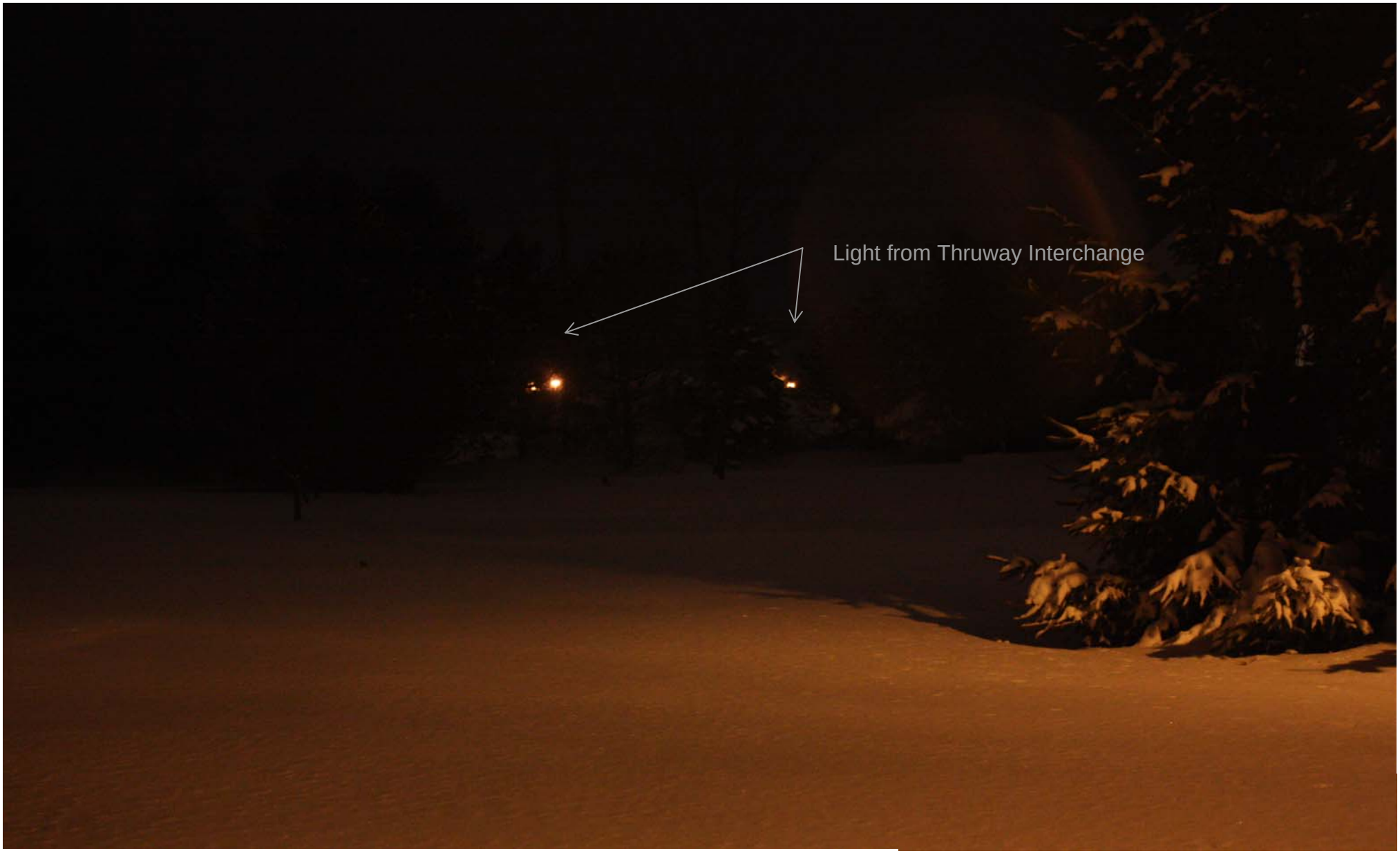


Photo 1—Meadowlark Lane Looking South (December 30, 2012)

FIGURE D2

Existing Condition Photos

Photo 2—Meadowlark Lane Looking South (December 30, 2012)

FIGURE D3

Existing Condition Photos

Photo 3—Sachem Trail Looking West (December 30, 2012)

FIGURE D4

Existing Condition Photos

APPENDIX B
TRAFFIC ASSESSMENT

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July 11, 2013

Supervisor Jack Marren and Members of the Town Board
Victor Town Hall
85 East Main Street
Victor, NY 14564

RE: Traffic Engineering Services
Victor Crossing – Traffic Volume Data Collection
Town of Victor, Monroe County, NY

Dear Supervisor Marren and Members of the Town Board:

This study was conducted to provide support for the noise analysis for the Victor Crossing Shopping Center located in the Town of Victor, New York. Based on the most recently approved site plan with a leasable area of 323,287 SF, the potential overnight traffic volume was generated for the Christmas Holiday period since this is expected to have the highest traffic volume. This volume was added to tube count data that was collected along the I-490 ramps during the first official Christmas shopping weekend in 2012 ('Black Friday weekend') and combined with New York State Department of Transportation's (NYSDOT) Traffic Count Hourly Reports from 2010 on NY Rt. 96. The area traffic volumes are reported for Friday, Saturday and Sunday between the hours of 11:00 p.m. and 7:00 a.m. The site plan for Victor Crossing is located in Attachment A.

Existing Traffic Volumes

Tube counts were conducted by T.Y. Lin International (TYLI) from Thursday, November 21, 2012 to Sunday, November 25, 2012 on the I-490 WB On-Ramp and Off-Ramp. These counts were then summarized for the specific days and times that were requested to support the noise analysis. The NYSDOT tube counts for NY Rt. 96 were summarized for the specific days and times that were needed. This was done to determine a baseline for the existing vehicles that enter/exit the project study area. The tube count data summary reports are included in Attachment B.

Future Traffic Volumes

To establish the off peak (overnight) trips that would be generated for the site with extended hours, trip rates were calculated using the Institute of Transportation Engineers' (ITE) Trip Generation, 8th Edition. The ITE Trip Generation Report contains vehicle trip data for many types of developments, including a related retail land use: Land Use Code 820, "Shopping Center – Christmas Season". The trip generation rates documented by the ITE are expressed as the number of vehicles generated per 1,000 square feet of gross square foot of the development. For the Christmas holiday season the average weekday PM peak hour rate was established based on the peak hour of the adjacent street traffic.

The peak hour vehicle trip projections for the Christmas Season are summarized below in **Table 1**.

Table 1: Trip Generation Summary – Christmas Season

Land Use	Size (SF)	PM Peak Hour		
		Enter	Exit	Total
Land Use Code (820) Shopping Center	323,287	**675**	**675**	**1350**

This is consistent with the Holiday Traffic summary presented in the Traffic and Transportation section of the SEQR findings Statement for Victor Crossing (previously known as Victor Commerce Park). Additionally, ITE's shopping center rates/percentages were used to establish the traffic volume for specific days of the week and operation times during the Christmas Season period. The calculations are located in Attachment 3.

Three time periods were studied for each of the following late night periods:

- Thursday 11:00pm - Friday 7:00am
- Friday 11:00pm - Saturday 7:00am
- Saturday 7:00am - Sunday 7:00am

Table 2 provides a summary of the average hourly trips for the periods analyzed during the Christmas Season.

Table 2 -Victor Crossing - Proposed Holiday Overnight Trips

	Weekday			Saturday			Sunday		
Average hourly volume	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
11:00 PM -1:00 AM	74	38	112	84	44	128	76	40	115
1:00 AM -5:00 AM	74	38	112	95	49	144	57	30	87
5:00 AM -7:00 AM	74	38	112	95	49	144	57	30	87

The trips identified in the table above are based on the development's total approved square footage and represents the worst case scenario if the entire plaza was open overnight.

Table 3 provides a summary of the anticipated approach volumes for the requested locations along NY Rt. 96 and within the Victor Crossing Shopping Center for each of the time periods analyzed. Hourly traffic volume on the I-490 WB On-Ramp and Off-Ramp was collected on Friday, Saturday and Sunday after Thanksgiving. As such, the baseline traffic volume is unusually high during the overnight period and provides a conservative view of the area's traffic during the Christmas Holiday period. The proposed overnight trips identified in Table 2 were added to the existing traffic volumes. The new trip distribution on Rt. 96 and I-490 was based on the trip distribution percentages that were utilized in the Traffic Impact Study.

Table 3 -Victor Crossing - Proposed Holiday Traffic Volumes

		Friday												Saturday												Sunday											
		1				2				3				1				2				3				1				2				3			
		11pm - 1am				1am - 5am				5am - 7am				11pm - 1am				1am - 5am				5am - 7am				11pm - 1am				1am - 5am				5am - 7am			
		EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB
A	Victor Crossing Main Entrance[1]	110	217	-	38	120	154	-	38	215	216	-	38	161	101	-	44	73	25	-	49	133	50	-	49	154	106	-	40	52	25	-	30	74	34	-	30
B	Driveway #1[4]	-	-	7	4	-	-	7	4	-	-	4	2	-	-	8	4	-	-	9	5	-	-	5	2	-	-	8	4	-	-	6	3	-	-	3	1
C	Driveway #2[4]	-	-	22	12	-	-	7	4	-	-	4	2	-	-	25	13	-	-	9	5	-	-	5	2	-	-	23	12	-	-	6	3	-	-	3	1
D	Driveway #3[4]	-	-	30	15	-	-	35	18	-	-	40	21	-	-	34	18	-	-	45	24	-	-	51	27	-	-	30	16	-	-	27	14	-	-	31	16
E	Driveway #4[4]	-	-	15	8	-	-	24	12	-	-	27	14	-	-	17	9	-	-	30	16	-	-	34	18	-	-	15	8	-	-	18	10	-	-	21	11
F	I490 on ramp[2,3]	81	-	-	29	50	-	-	70	176	-	-	39	143	-	-	18	53	-	-	20	113	-	-	20	138	-	-	16	39	-	-	12	61	-	-	12
G	I490 off ramp (approach)[2,3]	-	43	-	220	-	58	-	122	-	43	-	219	-	71	-	38	-	11	-	18	-	15	-	44	-	63	-	55	-	12	-	16	-	12	-	28

[1]The EB/WB volume at the Victor Crossing/Rte 96 intersection is calculated using 2012 hourly volume collected on I490 on/off ramps (during Black Friday weekend) by TYLI, 2010 NYSDOT traffic count hourly reports and ITE's trip generation rates for the existing site during the Christmas Holiday Period.

[2] Traffic volume on the I490 ramps are a combination of volumes collected the weekend of Black Friday (worst case scenario) and ITE's trip generation rates for the existing site during the Christmas Holiday Period.

[3]The EB/WB volumes on Rte 96 at the I490 on/off ramps are calculated using 2012 hourly volume collected by TYLI (during Black Friday weekend), 2010 NYSDOT traffic count hourly reports and ITE's trip generation rates for the existing site during the Christmas Holiday Period.

[4]For the interior driveway locations, NB represents entering vehicles and SB represents exiting vehicles. Trips are calculated using ITE's trip generation rates for the existing site during the Christmas Holiday Period.

As identified on the previous tables, new trips associated with the overnight traffic volumes projected during the Christmas Season are anticipated to be low. As such, the traffic related mitigation measures recommended in the 2006 SEQR Findings Statement are sufficient to support the additional traffic associated with extended hours in the shopping plaza. No additional traffic related mitigation measures are recommended for Victor Crossing.

Please call me if you have any questions or concerns you would like to discuss. I can be reached at (585) 512-2000.

Sincerely,
T. Y. Lin International Engineering, Architecture and Land Surveying, PC.

Christine A. Bianchi

Christine A. Bianchi
Project Engineer

CAB/sw

Attachments

T:\rochester\projects\2012\43.5300.01 - victor crossings - traffic volume data\technical & other\benderson071113.doc

ATTACHMENT 'A'

Site Plan

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THIS DOCUMENT HAS BEEN PREPARED FROM SURVEY DATA PROVIDED BY TVGA

THE SOLE PURPOSE OF THIS DRAWING IS TO ILLUSTRATE THE APPROXIMATE DIMENSIONS AND LAYOUT OF THE DEMISED PREMISES. NO OTHER WARRANTY OR REPRESENTATION, EXPRESSED OR IMPLIED, IS MADE WITH RESPECT TO THE ILLUSTRATION.

VICTOR CROSSING

ROUTE 96 & INTERSTATE 90
TOWN OF VICTOR, NEW YORK

PROPERTY 2253-JR63

APRIL 20, 2004

BENDERSON DEVELOPMENT COMPANY, LLC.
570 Delaware Ave. Buffalo, N.Y. 14202
(716) 886-0211

CONCEPT SITE PLAN

0 80 160 240
1" = 80.00'

M:\BENDERSON\2253- VICTOR COM PARK\SITE\PROPOSED\2253-JR63.dwg, Site Plan, 7/17/2008 11:46:30 AM, Previous paper size (24.00 x 36.00 inches), 1:1

ATTACHMENT 'B'

Tube Count Data

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	I-490 WB Off-Ramp Average Hourly Volume	I-490 WB On-Ramp Average Hourly Volume
Thursday 11/22 @ 11pm - Friday 11/23 @ 1am	216	21
Friday 11/23 @ 1am - Friday 11/23 @ 5am	118	62
Friday 11/23 @ 5am - Friday 11/23 @ 7am	215	31
Friday 11/23 @ 11pm - Saturday 11/24 @ 1am	34	20
Saturday 11/24 @ 1am - Saturday 11/24 @ 5am	13	3
Saturday 11/24 @ 5am - Saturday 11/24 @ 7am	39	6
Saturday 11/24 @ 11pm - Sunday 11/25 @1am	51	20
Sunday 11/25 @ 1am - Sunday 11/25 @ 5am	13	2
Sunday 11/25 @ 5am - Sunday 11/25 @ 7am	25	4

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB OFF
Station ID:

Latitude: 0' 0.000 South

Start Time	21-Nov-12 Wed	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		*	74		
12:15		*	73		
12:30		*	62		
12:45		*	84	0	293
01:00		*	94		
01:15		*	65		
01:30		*	77		
01:45		*	84	0	320
02:00		*	93		
02:15		*	90		
02:30		*	99		
02:45		*	93	0	375
03:00		*	86		
03:15		*	106		
03:30		*	77		
03:45		*	100	0	369
04:00		*	105		
04:15		*	95		
04:30		*	105		
04:45		*	95	0	400
05:00		*	90		
05:15		*	107		
05:30		*	95		
05:45		*	96	0	388
06:00		*	95		
06:15		*	104		
06:30		*	96		
06:45		*	86	0	381
07:00		*	79		
07:15		*	64		
07:30		*	71		
07:45		*	50	0	264
08:00		*	44		
08:15		*	43		
08:30		*	42		
08:45		*	32	0	161
09:00		*	48		
09:15		*	32		
09:30		*	37		
09:45		*	53	0	170
10:00		64	43		
10:15		60	41		
10:30		72	33		
10:45		67	27	263	144
11:00		78	26		
11:15		68	18		
11:30		74	26		
11:45		88	17	308	87
Total		571	3352		
Percent		14.6%	85.4%		

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB OFF
Station ID:

Latitude: 0' 0.000 South

Start Time	22-Nov-12 Thu	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		12	73		
12:15		19	76		
12:30		10	95		
12:45		14	87	55	331
01:00		7	83		
01:15		5	86		
01:30		6	68		
01:45		2	62	20	299
02:00		2	75		
02:15		1	53		
02:30		2	42		
02:45		2	59	7	229
03:00		5	48		
03:15		3	41		
03:30		1	53		
03:45		3	33	12	175
04:00		4	33		
04:15		4	44		
04:30		11	44		
04:45		8	31	27	152
05:00		6	28		
05:15		10	41		
05:30		14	39		
05:45		19	42	49	150
06:00		11	47		
06:15		9	46		
06:30		9	59		
06:45		7	51	36	203
07:00		8	51		
07:15		10	69		
07:30		8	82		
07:45		9	75	35	277
08:00		10	73		
08:15		13	67		
08:30		10	81		
08:45		12	79	45	300
09:00		16	60		
09:15		26	68		
09:30		20	75		
09:45		26	71	88	274
10:00		24	62		
10:15		34	64		
10:30		33	47		
10:45		41	58	132	231
11:00		54	63		
11:15		54	61		
11:30		55	63		
11:45		72	74	235	261
Total		741	2882		
Percent		20.5%	79.5%		

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB OFF
Station ID:

Latitude: 0' 0.000 South

Start Time	23-Nov-12 Fri	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		60	107		
12:15		44	89		
12:30		33	95		
12:45		34	107	171	398
01:00		21	85		
01:15		33	92		
01:30		26	95		
01:45		16	72	96	344
02:00		23	77		
02:15		31	97		
02:30		24	95		
02:45		33	92	111	361
03:00		20	87		
03:15		28	87		
03:30		28	92		
03:45		31	89	107	355
04:00		32	88		
04:15		41	91		
04:30		45	98		
04:45		41	94	159	371
05:00		40	82		
05:15		45	92		
05:30		52	90		
05:45		71	76	208	340
06:00		63	80		
06:15		50	68		
06:30		52	85		
06:45		57	68	222	301
07:00		52	64		
07:15		51	54		
07:30		73	59		
07:45		65	34	241	211
08:00		67	54		
08:15		81	41		
08:30		69	43		
08:45		85	27	302	165
09:00		81	26		
09:15		71	37		
09:30		80	35		
09:45		85	24	317	122
10:00		89	39		
10:15		101	19		
10:30		89	21		
10:45		112	15	391	94
11:00		116	12		
11:15		96	11		
11:30		101	5		
11:45		85	13	398	41
Total		2723	3103		
Percent		46.7%	53.3%		

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB OFF
Station ID:

Latitude: 0' 0.000 South

Start Time	24-Nov-12 Sat	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		9	87		
12:15		5	113		
12:30		9	98		
12:45		4	99	27	397
01:00		1	98		
01:15		6	92		
01:30		5	94		
01:45		3	94	15	378
02:00		2	106		
02:15		2	100		
02:30		3	103		
02:45		5	95	12	404
03:00		3	103		
03:15		0	97		
03:30		1	109		
03:45		3	99	7	408
04:00		1	107		
04:15		3	98		
04:30		4	89		
04:45		9	111	17	405
05:00		2	83		
05:15		2	87		
05:30		17	100		
05:45		14	81	35	351
06:00		7	82		
06:15		9	86		
06:30		7	85		
06:45		20	70	43	323
07:00		19	41		
07:15		16	52		
07:30		18	61		
07:45		32	47	85	201
08:00		29	52		
08:15		33	37		
08:30		32	37		
08:45		50	31	144	157
09:00		38	33		
09:15		46	30		
09:30		61	27		
09:45		74	37	219	127
10:00		72	26		
10:15		76	19		
10:30		56	26		
10:45		92	23	296	94
11:00		71	19		
11:15		78	23		
11:30		100	13		
11:45		105	9	354	64
Total		1254	3309		
Percent		27.5%	72.5%		

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB OFF
Station ID:

Latitude: 0' 0.000 South

Start Time	25-Nov-12 Sun	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		12	79		
12:15		10	81		
12:30		11	88		
12:45		5	81	38	329
01:00		4	88		
01:15		3	74		
01:30		5	109		
01:45		2	75	14	346
02:00		3	99		
02:15		3	89		
02:30		2	78		
02:45		3	86	11	352
03:00		3	91		
03:15		3	79		
03:30		5	67		
03:45		3	69	14	306
04:00		4	77		
04:15		5	80		
04:30		3	97		
04:45		2	80	14	334
05:00		2	69		
05:15		0	74		
05:30		8	70		
05:45		7	67	17	280
06:00		6	67		
06:15		7	60		
06:30		6	67		
06:45		14	51	33	245
07:00		3	54		
07:15		5	46		
07:30		9	43		
07:45		15	43	32	186
08:00		15	37		
08:15		20	38		
08:30		21	33		
08:45		18	32	74	140
09:00		21	20		
09:15		27	25		
09:30		42	33		
09:45		42	28	132	106
10:00		42	17		
10:15		68	20		
10:30		57	16		
10:45		69	19	236	72
11:00		52	10		
11:15		61	7		
11:30		88	7		
11:45		81	13	282	37
Total		897	2733		
Percent		24.7%	75.3%		

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB OFF
Station ID:

Latitude: 0' 0.000 South

Start Time	26-Nov-12 Mon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		5	*		
12:15		3	*		
12:30		4	*		
12:45		2	*	14	0
01:00		4	*		
01:15		2	*		
01:30		3	*		
01:45		3	*	12	0
02:00		3	*		
02:15		3	*		
02:30		2	*		
02:45		3	*	11	0
03:00		1	*		
03:15		0	*		
03:30		4	*		
03:45		3	*	8	0
04:00		6	*		
04:15		7	*		
04:30		3	*		
04:45		6	*	22	0
05:00		9	*		
05:15		8	*		
05:30		13	*		
05:45		28	*	58	0
06:00		18	*		
06:15		29	*		
06:30		35	*		
06:45		50	*	132	0
07:00		48	*		
07:15		58	*		
07:30		79	*		
07:45		85	*	270	0
08:00		65	*		
08:15		73	*		
08:30		62	*		
08:45		51	*	251	0
09:00		59	*		
09:15		57	*		
09:30		57	*		
09:45		64	*	237	0
10:00		51	*		
10:15		53	*		
10:30		40	*		
10:45		*	*	*	*
11:00		*	*	*	*
11:15		*	*	*	*
11:30		*	*	*	*
11:45		*	*	*	*
Total		1159	0		
Percent		100.0%	0.0%		
Grand Total		7345	15379		
Percent		32.3%	67.7%		
ADT		ADT 4,410			AADT 4,410

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB ON
Station ID:

Latitude: 0' 0.000 South

Start Time	21-Nov-12 Wed	Westbounb Morning	Westbounb Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		*	33		
12:15		*	23		
12:30		*	28		
12:45		*	29	0	113
01:00		*	27		
01:15		*	22		
01:30		*	34		
01:45		*	30	0	113
02:00		*	17		
02:15		*	24		
02:30		*	36		
02:45		*	30	0	107
03:00		*	39		
03:15		*	45		
03:30		*	36		
03:45		*	37	0	157
04:00		*	31		
04:15		*	39		
04:30		*	37		
04:45		*	24	0	131
05:00		*	28		
05:15		*	28		
05:30		*	27		
05:45		*	33	0	116
06:00		*	25		
06:15		*	38		
06:30		*	27		
06:45		*	19	0	109
07:00		*	27		
07:15		*	15		
07:30		*	9		
07:45		*	19	0	70
08:00		*	21		
08:15		*	18		
08:30		*	15		
08:45		*	20	0	74
09:00		*	19		
09:15		*	15		
09:30		*	19		
09:45		*	19	0	72
10:00		*	16		
10:15		*	7		
10:30		*	6		
10:45		*	5	0	34
11:00		21	4		
11:15		22	3		
11:30		19	2		
11:45		21	5	83	14
Total		83	1110		
Percent		7.0%	93.0%		

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB ON
Station ID:

Latitude: 0' 0.000 South

Start Time	22-Nov-12 Thu	Westbounb Morning	Westbounb Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		1	10		
12:15		2	8		
12:30		4	6		
12:45		3	9	10	33
01:00		2	4		
01:15		2	6		
01:30		2	12		
01:45		3	11	9	33
02:00		0	9		
02:15		1	9		
02:30		1	11		
02:45		0	13	2	42
03:00		0	6		
03:15		0	3		
03:30		0	6		
03:45		1	3	1	18
04:00		0	5		
04:15		0	5		
04:30		1	1		
04:45		0	3	1	14
05:00		0	4		
05:15		0	7		
05:30		0	5		
05:45		0	4	0	20
06:00		3	4		
06:15		1	5		
06:30		1	2		
06:45		2	4	7	15
07:00		2	1		
07:15		6	4		
07:30		4	5		
07:45		5	3	17	13
08:00		3	10		
08:15		5	6		
08:30		2	12		
08:45		7	7	17	35
09:00		2	12		
09:15		2	11		
09:30		7	13		
09:45		3	6	14	42
10:00		4	12		
10:15		7	9		
10:30		7	4		
10:45		10	6	28	31
11:00		2	5		
11:15		5	2		
11:30		9	7		
11:45		8	8	24	22
Total		130	318		
Percent		29.0%	71.0%		

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB ON
Station ID:

Latitude: 0' 0.000 South

Start Time	23-Nov-12 Fri	Westbounb Morning	Westbounb Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		2	39		
12:15		6	45		
12:30		5	45		
12:45		7	48	20	177
01:00		9	41		
01:15		12	41		
01:30		8	57		
01:45		9	49	38	188
02:00		7	59		
02:15		9	62		
02:30		13	55		
02:45		5	56	34	232
03:00		9	66		
03:15		6	65		
03:30		6	60		
03:45		5	58	26	249
04:00		7	40		
04:15		9	57		
04:30		3	52		
04:45		7	36	26	185
05:00		5	59		
05:15		0	41		
05:30		9	32		
05:45		15	29	29	161
06:00		7	44		
06:15		8	44		
06:30		12	36		
06:45		6	25	33	149
07:00		20	16		
07:15		24	29		
07:30		21	19		
07:45		16	24	81	88
08:00		16	21		
08:15		17	22		
08:30		14	22		
08:45		14	22	61	87
09:00		15	31		
09:15		19	18		
09:30		36	28		
09:45		30	19	100	96
10:00		29	25		
10:15		26	10		
10:30		25	16		
10:45		30	6	110	57
11:00		32	11		
11:15		36	4		
11:30		38	5		
11:45		49	6	155	26
Total		713	1695		
Percent		29.6%	70.4%		

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB ON
Station ID:

Latitude: 0' 0.000 South

Start Time	24-Nov-12 Sat	Westbounb Morning	Westbounb Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	26		
12:15		3	28		
12:30		3	24		
12:45		2	32	14	110
01:00		3	23		
01:15		1	25		
01:30		1	30		
01:45		1	21	6	99
02:00		0	34		
02:15		0	34		
02:30		2	44		
02:45		0	43	2	155
03:00		2	47		
03:15		0	43		
03:30		0	41		
03:45		0	42	2	173
04:00		0	38		
04:15		1	47		
04:30		0	35		
04:45		1	36	2	156
05:00		1	45		
05:15		1	28		
05:30		0	42		
05:45		1	41	3	156
06:00		0	38		
06:15		3	59		
06:30		4	33		
06:45		2	36	9	166
07:00		2	43		
07:15		6	23		
07:30		5	16		
07:45		6	25	19	107
08:00		4	10		
08:15		8	32		
08:30		10	31		
08:45		11	23	33	96
09:00		9	29		
09:15		10	12		
09:30		13	17		
09:45		14	28	46	86
10:00		12	22		
10:15		17	11		
10:30		23	11		
10:45		19	13	71	57
11:00		15	8		
11:15		19	7		
11:30		34	4		
11:45		26	9	94	28
Total		301	1389		
Percent		17.8%	82.2%		

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB ON
Station ID:

Latitude: 0' 0.000 South

Start Time	25-Nov-12 Sun	Westbounb Morning	Westbounb Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		3	28		
12:15		3	20		
12:30		1	27		
12:45		4	29	11	104
01:00		1	24		
01:15		2	36		
01:30		0	26		
01:45		1	27	4	113
02:00		0	36		
02:15		0	31		
02:30		0	28		
02:45		0	37	0	132
03:00		0	25		
03:15		0	32		
03:30		0	27		
03:45		0	30	0	114
04:00		0	46		
04:15		0	38		
04:30		2	33		
04:45		2	18	4	135
05:00		0	25		
05:15		1	33		
05:30		0	21		
05:45		0	32	1	111
06:00		3	29		
06:15		2	26		
06:30		2	25		
06:45		0	18	7	98
07:00		4	14		
07:15		4	9		
07:30		3	10		
07:45		6	7	17	40
08:00		4	10		
08:15		7	7		
08:30		9	10		
08:45		9	7	29	34
09:00		7	5		
09:15		9	6		
09:30		18	6		
09:45		6	2	40	19
10:00		14	3		
10:15		16	5		
10:30		19	0		
10:45		8	4	57	12
11:00		10	0		
11:15		20	3		
11:30		13	2		
11:45		28	1	71	6
Total		241	918		
Percent		20.8%	79.2%		

T.Y. Lin International

255 East Avenue
Rochester, NY 14604

Site Code: 490 WB ON
Station ID:

Latitude: 0' 0.000 South

Start Time	26-Nov-12 Mon	Westbounb Morning	Westbounb Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		4	*		
12:15		1	*		
12:30		0	*		
12:45		1	*	6	0
01:00		0	*		
01:15		2	*		
01:30		0	*		
01:45		0	*	2	0
02:00		0	*		
02:15		0	*		
02:30		0	*		
02:45		1	*	1	0
03:00		0	*		
03:15		0	*		
03:30		0	*		
03:45		1	*	1	0
04:00		1	*		
04:15		2	*		
04:30		3	*		
04:45		4	*	10	0
05:00		1	*		
05:15		2	*		
05:30		4	*		
05:45		3	*	10	0
06:00		9	*		
06:15		7	*		
06:30		8	*		
06:45		19	*	43	0
07:00		16	*		
07:15		29	*		
07:30		32	*		
07:45		35	*	112	0
08:00		28	*		
08:15		19	*		
08:30		21	*		
08:45		23	*	91	0
09:00		19	*		
09:15		17	*		
09:30		20	*		
09:45		13	*	69	0
10:00		19	*		
10:15		7	*		
10:30		24	*		
10:45		18	*	68	0
11:00		2	*		
11:15		*	*	*	*
11:30		*	*	*	*
11:45		*	*	*	*
Total		415	0		
Percent		100.0%	0.0%		
Grand Total		1883	5430		
Percent		25.7%	74.3%		
ADT		ADT 1,426			AADT 1,426

ATTACHMENT 'C'

Trip Generation Calculations

T·Y·LIN INTERNATIONAL

engineers | planners | scientists

Trip Generation Calculations

323,287 S.F.

Shopping Center (LUC 820) - Christmas Season

Weekday AM

Weekday PM

(T) =	2.76	*	X	+	457.28
(T) =	2.76	*	323.29	+	457.28
T=	1350	Trips			**CHECK**
		entering =	50%	675.00	675
		exiting =	50%	675.00	675
				1350	**OK**

Saturday Midday

Summary

	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Shopping Center (820)	0	0	0	675	675	1350	0	0	0

APPENDIX C
NOISE IMPACT ASSESSMENT

ANGEVINE ACOUSTICAL CONSULTANTS, Inc.

Mailing: P.O. Box 725 • East Aurora, New York 14052-0725
Shipping: 1021 Maple Street • Elma, New York 14059-9530
TEL: (716) 652-0282 • FAX: (716) 652-3442
email: AngevineAc@verizon.net

Member: National Council of Acoustical Consultants

Noise Impact Assessment of Extended Nighttime Shopping Hours

Victor Crossing

Shopping Center
Victor, New York

Prepared for

Benderson Development Company, LLC
570 Delaware Avenue
Buffalo, NY 14202

Prepared by: Daniel P. Prusinowski

May 20, 2013

Noise Impact Assessment of Extended Nighttime Shopping Hours

Victor Crossing
Shopping Center
Victor, New York

Project overview

Plans are being proposed to extend the hours of operation of the Victor Crossing Shopping Center. Angevine Acoustical Consultants, Inc. was engaged to assess potential noise impacts that may occur in the adjoining community due to traffic and operation of the shopping center in the extended nighttime hours.

The shopping center is located on the east sides of Pittsford-Victor Road (NYS Route 96) and Route 490 next to the Route 90 Thruway toll interchange. The shopping center is adjacent to a small shopping facility on the east side of Route 96, and is across from the Hampton Inn and Suites, MacDonald's Restaurant, and Friday's Restaurant that are located on the west side of Route 96.

The shopping center borders residential properties to the north along Meadowlark Lane, to the east along Sachem Trail and High Street, and to the southeast along Trillium Trail, Wintergreen Grove, and Willowbrook Road. An expanse of wooded land is located between the shopping center and the eastern and southeastern residential areas. The woods range in depth from 150 to 250 feet behind Kohls, and from 250 to 450 feet behind Wal-Mart. The land contours increase in height from the plaza parking lots east to High Street. Between the shopping center and the properties to the north is an undeveloped buffer area extending about 200 feet in width, which contains electric and gas transmission lines, substations for Rochester Gas and Electric, and a hiking trail. A row of mature pine trees borders along the transmission lines behind the Meadowlark Lane housing development.

Traffic in the shopping center parking lot and on site roadways is screened from the neighboring residences by the semi-circle arrangement of the buildings having heights of approximately twenty feet along the rears. Additional screening is provided along the rear building service area by the combination of an eight foot high board fence and a retaining wall having a height that ranges up to approximately thirty feet.

The background noise environment in the community around the shopping center is dominated by sounds of traffic on the adjoining State highways. Other contributors to the background noise include traffic on High Street and other local streets. Traffic data from the New York State Department of Transportation's online Traffic Data Viewer (http://gis.dot.ny.gov/tdv/) and data obtained by direct request to the New York State Thruway Authority show that the volume of traffic on each roadway is considerable, in particular during daytime hours. As example, the volumes of traffic in both directions at the peak traffic hour of 4:00 p.m. on a weekday are approximately 2600 vehicles per hour on the Thruway and 2600 vph on Route 490, based on traffic studies performed in 2012, and approximately 2200 vph on Route 96 based on traffic studies performed in 2010. The volume of traffic on High Street (40 mph) is approximately 700 vph in the peak afternoon hour, based on a traffic study performed in 2005. In evening and nighttime hours, even with reduced volumes of traffic on each highway segment the highway traffic determines the overall background noise levels. In the hour with lowest traffic volumes, the respective hourly traffic counts are approximately 200 vph on the Thruway, 130 vph on Route 490, and 34 vph on Route 96 in the 2:00 a.m. to 3:00 a.m. hour on a weekday. The minium traffic hour and traffic counts are similar on weekend days.

Current shopping hours for the shopping center are 7:00 a.m. to 11:00 p.m. daily, as limited by the SEQRA findings adopted by the Town of Victor Planing Board on September 26, 2006. These limitations were set to address potential noise impacts to adjacent residential neighbors as a result of the development. The applicant is requesting that the shopping period extend into the nighttime hours past 11:00 p.m. During the nighttime shopping period there would be a limited amount of added traffic on Route 96 in the eastbound and westbound directions and traffic on the plaza property. The shopping center traffic is predicted to range from 87 to 144 vehicles per hour in the nighttime period, depending on the day of the week, in accordance with a traffic study and report prepared by T.Y. Lin International.

Noise assessments were performed to determine the acceptability of nighttime traffic and operations of the shopping center. The acceptability of equipment operations and plaza activities was initially determined by referencing the Town of Victor noise ordinance. The acceptability of noise was additionally evaluated using New York State noise assessment guidelines to rank the projected levels of noise increase at the boundaries of the shopping center property and at residential and hotel receiving locations. The assessment determined that the volume of traffic at the shopping center is relatively minor in comparison to the combined volume of traffic on the adjoining roadway segments and therefore provides minimal influence in regards to added noise generation. In addition, screening effects of plaza buildings, retaining wall and fencing, wooded areas, and land contours limit the levels of traffic and other noise propagated from the shopping center.

The noise assessments characterized the level of noise from existing and future background traffic volumes at locations around the shopping center for comparison. The assessments consisted of both measurements and modeling of noise emissions from shopping center traffic, background traffic, and other sources. The existing background noise levels were sampled in the surrounding community and on the facility boundaries on several occasions. The surveys described the existing received background noise levels in daytime, evening, and nighttime hours on weekdays and on weekends, for comparison. Noise levels were additionally measured and recorded using noise loggers that were installed at representative locations on the eastern and northern boundaries of the shopping center. The loggers continuously recorded the ranges of background traffic noise levels for a period of several days including nighttime hours on weekdays and a weekend.

The community background noise levels around the shopping center were assessed in detail using computerized modeling. The computer model was used to examine the noise contributions from the various shopping center access road and parking lot segments, from adjoining public highways and roadways, and from rooftop mechanical equipment. The model incorporated the plaza buildings, surrounding terrain elevations, retaining walls, fencing, and vegetation as screening elements. The model further incorporated the effects of spreading loss attenuation due to sound propagation over distance. The model calculated the total noise levels received at each receptor from the complex sources and propagation factors, representing the current nighttime noise conditions as well the proposed shopping center operations. The resulting sound levels are compared to the measured background noise levels.

The Code of the Town of Victor describes certain general restrictions on noise producing activities and allowable exemptions to noise. The code exempts from restrictions the operation of properly maintained mechanical equipment, emergency operations, and snow removal activities. The code does not describe means to evaluate the acceptability of traffic generated noise, such as with numerical limits on noise levels produced by facilities or activities. A reasonable approach to determining the potential acceptability of received noise levels from nighttime operations of the shopping center is to compare the existing background noise levels in the community to the levels that include the effects of shopping center traffic. Acoustical studies have determined that limited increases in noise levels that are not highly perceptible to individuals do not cause significant community reaction or noise annoyance. A number of objective reference criteria exist to base noise level acceptability, including criteria used in New York State.

The New York State Department of Environmental Conservation describes human reactions to threshold sound level increases and sets appropriate limits on noise increases in its current noise assessment policy (DEP-00-1, October 2001). The Policy states that minor noise level increases ranging from 0 to 3 dBA

should have no appreciable effect on receptors, and that increases from 3 to 6 dBA may affect only the most sensitive of receptors. The Policy recommends that in non-industrial settings the addition of a noise source should probably not exceed background noise levels by more than 6 dBA. Background noise levels in a community next to highways can vary by time. Therefore, the noise assessments examined various nighttime traffic periods. The most critical times might be the period when traffic volumes on each road segment are simultaneously at a minium. Hourly counts of local roadway traffic and shopping center traffic for the nighttime period were obtained by T.Y. Lin International, the traffic engineers for the shopping plaza project, during the peak shopping period from the night of Thursday November 21 through the morning of Sunday November 25, 2012, on each day from 11:00 p.m. to 1:00 a.m., 1:00 a.m. to 5:00 a.m., and 5:00 a.m. to 7:00 a.m. The noise assessment determined, based on the local traffic counts combined with New York State highway count data, the three minimum traffic volume hours in each of those periods are 12:00 midnight to 1:00 a.m., 2:00 a.m. to 3:00 a.m., and 5:00 a.m. to 6:00 a.m. The noise assessments evaluated the noise levels separately for each hour on each of the three days by means of modeling. Noise levels predicted by the assessment model using measured and published traffic count data were verified in comparison to background noise levels obtained through logging measurements and sampling measurements, which were performed during the normal daytime and nighttime traffic period extending from the night of Friday March 15 to the morning of Tuesday March 19, 2013.

The acceptability of noise generated by shopping center traffic during the extended shopping hours was specifically determined by comparing modeled levels of existing background traffic noise without shopping center traffic to modeled background traffic noise levels that include nighttime shopping traffic at the shopping center and on local roadways, based on published highway traffic counts and predicted plaza nighttime traffic. The existing background noise environment is dominated by sounds of traffic on Route 490 and the Route 90 Thruway. To a lesser extent, noise from Route 96, High Street, and other local roadways contributes to the received community noise. Model inputs for both scenarios included traffic count data provided by the New York State Thruway Authority and the New York State Department of Transportation for the Thruway, Route 490, Route 96, High Street, and other road segments. Model inputs also included projections of nighttime traffic prepared by T.Y. Lin International for hourly traffic volumes on the shopping center site drive, on plaza parking lots, and on Route 96. Rooftop mechanical sources were included as part of the background noise environment, and were assumed to be in full operation for assessments of both the existing and future noise environments. This was done to provide a conservative analysis of the projected impacts.

The noise assessment determined that shopping in extended hours will not generate significant noise level increases in comparison to existing background traffic noise. Furthermore, the noise increases will not have an appreciable effect on receptors. Specifically, traffic noise levels are predicted to increase by 0.8 dBA or less in the nighttime hour from 12:00 midnight to 1:00 a.m. on each day during the nighttime shopping period. Traffic noise levels are projected to increase by 1.6 dBA or less at each receiver location in the minimum traffic hour from 2:00 a.m. to 3:00 a.m. Traffic noise levels are predicted to increase by less than 0.9 dBA or less in the hour from 5:00 a.m. to 6:00 a.m. at each receiver location. Because the expected noise level increases generated during the nighttime shopping period will be less than 3 dBA, which is a commonly recognized threshold of perceptible difference, it is concluded there will be no appreciable effect on surrounding receptors from the increased local traffic nor with the extended use of mechanical equipment.

Community noise criteria

Town of Victor, NY

The Code of the Town of Victor contains regulations on local noise. Code Chapter 143 *Noise* (12/27/2011) describes excessive noise in Section 143-4 as follows:

> Any excessive or unusually loud sound which either annoys, disturbs, injures or endangers the comfort, repose, health, peace, safety or welfare of a reasonable person of reasonable sensitivities or which causes injury to animal life or damage to a property or business. Standards to be considered in determining whether excessive noise exists in a given situation include, but are not limited to, the following:
>
> A. The volume or intensity of the noise;
> B. Whether the nature of the noise is unusual or rare;
> C. Whether the origin of the noise is created by man or is natural;
> D. The volume or intensity of the ambient or background noise;
> E. The proximity of the noise to sleeping facilities;
> F. The nature of the area and the zoning district where the noise emanates from and into;
> G. The time of the day or night the noise occurs;
> H. The duration of the noise;
> I. Whether the noise is continuous

Specific acts that are deemed excessive noise are listed in Section 143-6 as follows:

> A. The following shall constitute Excessive Noise at all times:
>
> (1) The sound of a horn, except as an emergency signal or warning, including novelty horns, audible at 25 feet from the vehicle.
> (2) The unnecessary creation of sound from a motor vehicle, including the squealing of tires, racing of engines, and playing of electronic equipment, including radios, audible at 25 feet from the vehicle.
> (3) The operation of equipment, including motor vehicles, generators, engines, compressors,

and HVAC units, that are in such disrepair as to create noise beyond the design specifications for the equipment, such that the sound is audible beyond the property line of the premises upon which the sound is created. Disrepair includes the reduction in effectiveness of or elimination of any required muffling devices.

(4) Barking of a dog which violates Chapter 90 of the Victor Town Code.

(5) Noise in a Town of Victor park which violates Chapter 148 of the Victor Town Code.

(6) Any noise which is intentionally caused to annoy, disturb, harass, or injury any other person or business.

B. The following shall constitute Excessive Noise from the hours of 7:00 a.m. until 11:00 p.m.:

(1) The playing of any radio, television, musical instrument, or other machine or device for producing, reproducing, or amplification of sound, such that, the sound is audible at 25 feet beyond the property line of the premises upon which it is being used.

C. The following shall constitute excessive noise from the hours of 11:00 p.m. until 7:00 a.m.:

(1) The playing of any radio, television, musical instrument, or other machine or device for producing, reproducing, or amplification of sound, such that, the sound is beyond the property line of the premises upon which it is being used.

(2) Parades.

(3) The deliberate creation or allowance of sounds that disturb the ambient quiet beyond the property line of the premises upon which the sound is created.

None of these sources or activities are expected to occur during normal nighttime shopping. Mechanical equipment is not currently operated in a state of disrepair and would be maintained in the future to prevent generation of excessive noise.

Specific acts that are exempted by the Code are listed in Section 143-7:

The following shall not constitute excessive noise. Rather, the following is permitted by this chapter:

A. Audible alarm and alerting devices designed to identify, alert the owner to and/or deter crime and emergencies, given that said alarm or device is working properly and is not malfunctioning and is in compliance with Chapter 61 of the Victor Town Code.

B. Lawfully permitted fireworks displays.

C. Ringing of bells or chimes in conjunction with normal church or religious activities.

D. Sounds created by emergency vehicles, equipment and operations while lawfully operating.

E. Sounds created by the normal operation of properly functioning aircraft.

F. Sounds created by the normal operation of a railroad.

G. Sounds created by the normal operation of a properly functioning heating or cooling unit.

H. Reasonable production of sound or noise in connection with any reasonable military, civic or authorized parade, funeral procession, religious ceremony, or wedding conducted at a reasonable time and with reasonable frequency.

I Reasonable use of properly maintained and operated lawnmowers, hedge trimmers, leafblowers, snowblowers, recreational vehicles and other domestic power tools and devices utilized for the

care and maintenance of one's property between the hours of 7:00 a.m. and 9:00 p.m.

J. A mass gathering permitted by Chapter 135 of the Victor Town Code as long as said mass gathering is operating within the permit granted by the Town.
K. Lawful discharge of firearms.
L. Agricultural activities as defined in Chapter 108 of the Victor Town Code.
M. Snow removal and for normal and routine golf course maintenance conducted by a governmental agency, private contractor, owner or owner's agent.
N. Victor Central School activities held on school grounds, including, but not limited to, athletic activities, music activities, and parades.

Items that would be applicable to the planned extended operations of the shopping center in nighttime hours and that are included in the list of exemptions are noise emissions from normal operations of heating and cooling equipment, snow removal activities, and possible operation of emergency equipment.

New York State Department of Environmental Conservation

The current noise guidelines of NYSDEC are contained in the department's program policy DEP-00-1 *Assessing and Mitigating Noise Impacts* (October 2000, revised February 2001). The policy is accessible online at: http://www.dec.ny.gov/docs/permits_ej_operations_pdf/noise2000.pdf.

The policy describes means to identify and characterize noise levels and sound attenuation factors, describes criteria to evaluate the potential effects of sound on receivers, and describes means for avoiding or mitigating effects of sound as needed. The policy describes criteria for assessing noise in terms of increases in noise levels above current background noise levels, and additionally or alternately in terms of overall sound level limits in non-industrial or commercial settings.

The sound descriptor that is primarily referenced in the policy is the Equivalent Sound Level, or L_{eq}. The L_{eq} is a steady-state average of time-varying sound levels representing a sampling period. A common time interval used to evaluate environmental sounds is one hour. The L_{eq} sound level metric is stated to provide an appropriate indication of the level of background noise at a receiver as well as the relative effects of a sound source on people. The L_{eq} descriptor is most commonly applied to the overall A-weighted sound level measured in decibels (dBA). The A-weighted L_{eq} noise level descriptor was therefore employed in the description of community background traffic noise levels. The measured and computed overall A-weighted L_{eq} noise levels are displayed in the computed assessment results.

The NYSDEC policy provides discussion of sound propagation characteristics, including sound attenuation due to distance spreading. Point sources such as stationary machines typically exhibit a rate of decay of 6

dB for each doubling of distance from a measurement location.

The policy discusses the additive effects of multiple sound sources, which is a logarithmic summation, not mathematical addition. For example, assuming two sources (L_1, L_2) individually produce the same sound level at the same receiving point, then the combined sound level is only 3 dB more than either individual level. For two sound sources producing unequal sound levels, the combined sound level would be the higher level plus a factor less than 3 dB. A calculation formula is $L_{total} = 10\log(10^{L_1/10}+10^{L_2/10})$.

The NYSDEC policy describes the various environmental sound attenuation factors that apply to an assessment due to the sound absorption of the atmosphere, porous soil, and vegetation. Sound can further be affected by temperature, humidity, and wind. Over relatively small propagation distances these factors are relatively minor. Propagated sound can further experience sound attenuation by barriers between a source and a receiver, including building faces, hotel screen walls, and property line fences.

The NYSDEC policy states that noise assessments typically evaluate the characteristics of the existing ambient noise environment around a facility, the characteristics of the future noise environment, and the associated relative increase in sound levels. In addition, the presence of any noises that may perceived as unusual based on fluctuating temporal or frequency characteristics are to be evaluated. The noise assessment follows these guidelines.

The NYSDEC policy describes appropriate locations for noise assessments may be either at the property line of the facility or the location of actual inhabitance on an adjacent parcel, and assumes the most conservative approach is to employ the boundary. Noise assessments evaluated the sound levels at representative locations on the boundary of the facility with residential neighbors and adjacent to representative residences in the surrounding community.

The stated goal of the noise policy is to minimize increases in sound level above ambient levels at the selected points of sound reception. The noise policy describes human reactions to changes in sound levels and based on these recommends an acceptable threshold for sound level increase from a facility. The policy recommendations are mainly intended as guidelines for the operations of facilities under regulation by the NYSDEC and projects undergoing SEQRA review, but are finding increasing applications in community assessments of noise of various commercial facilities in New York State.

The NYSDEC policy states: "Increases ranging from 0-3 dB should have no appreciable effect on receptors. Increases from 3-6 dB may have potential for adverse noise impact only in cases where the most sensitive of receptors are present. Sound pressure increases of more than 6 dB may require a closer analysis of impact potential depending on existing SPLs and the character of surrounding land use and receptors. SPL increases approaching 10 dB result in a perceived doubling of SPL. The perceived doubling of the SPL results from the fact that SPLs are measured on a logarithmic scale. An increase of 10 dB(A) deserves consideration of avoidance and mitigation measures in most cases. The above thresholds as indicators of impact potential should be viewed as guidelines subject to adjustment as appropriate for the specific circumstances one encounters."

The policy specifically states: "In non-industrial settings the SPL should probably not exceed ambient noise by more than 6 dB(A) at the receptor." It also states: "The addition of any noise source, in a non-industrial setting, should not raise the ambient noise level above a maximum of 65 dB(A). This would be considered the 'upper end' limit since 65 dB(A) allows for undisturbed speech at a distance of approximately three feet."

For this noise assessment, the following criteria are followed in accord with the Policy:

- noise level increases of 3 dBA or less should have no appreciable effect on receptors and would be considered acceptable because the differences would not be perceived,
- noise level increases of 3-6 dBA would be largely be acceptable and may only affect the most sensitive of receptors,
- noise level increases should probably be limited to 6 dBA or less,
- noise level increases of 6 dBA or more would require further analyses to determine acceptability in specific cases.

Background noise surveys

Background noise levels were measured at several locations on the shopping center property boundaries, adjacent to the nearest residences, and adjacent to the Hampton Inn. Sound level measurements were made with a Larson Davis model 831 sound level analyzer. The meter was calibrated before and after each series of measurements with a CEL Instruments model CEL-284/2 acoustic calibrator. All of the data were measured with A-weighting, which is a frequency filtering that corresponds to properties of human hearing, slow response, and with L_{eq} averaging, as described in the NYSDEC Program Policy. The analyzer was programmed with a one second averaging period. The typical sampling period ranged from five to fifteen minutes, as sufficient to obtain a steady sound level average. Figure 1 describes the locations of the background sound level measurements. Table 1 summarizes the sampled L_{eq} sound level measurements.

Community background noise levels were continuously logged at three locations on the east and north boundaries of the shopping center, designated Locations 7, 8, and 9. The loggers comprised Metrosonics model db3100 sound level analyzers. The meters were calibrated before and after each sampling record with a Metrosonics model cl-304acoustic calibrator. The loggers were programmed to record sound level averages in consecutive ten minute periods.

The logging records for the survey locations are shown in Figures 2 to 4. The logging recorded the average sound levels using consecutive ten minute time periods from approximately 7:30 p.m. on Friday March 15 through approximately 7:30 a.m. on Tuesday March 19, 2013.

Figure 2 summarizes ambient traffic noise levels measured on the east boundary near the community walking trail, at a point in line with the southeast corner of Wal-Mart. The location is in direct line of sight to a house built near the top of the hill on a flag lot off High Street. The sound levels are largely due to exposure of the location to traffic on Route 490, the Thruway, and Route 96.

Figure 3 summarizes ambient traffic noise levels measured on the east boundary near the community walking trail, at a point in line with the center of Kohl's. The location is opposite a number of residences on Sachem Trail. The boundary location is lower in elevation than Location 7 and is partly shielded from the roadways by the shopping center buildings, retaining wall, and fence.

Figure 4 summarizes ambient traffic noise levels measured north of the shopping center along the RG&E right of way at a point in line with Dollar General. The location is opposite a number of residences on Meadowlark Lane. The location is partly shielded from segments of Route 490 and the Thruway by the shopping center buildings, retaining wall, fence, and a berm. The location is relatively exposed to traffic on Route 96 and is relatively close to the edge of the later roadway.

The logging records of Figures 2 to 4 show that the background noise levels typically ranged from 39 to 53 dBA in the nighttime hours at each logging location excluding periods of wind. The hour of lowest noise levels occurring in the period from approximately 1:00 a.m. to 5:00 a.m., depending on the logging location. The nighttime sampled measurements obtained in the nighttime hours and reported in Table 1 are similar. The logging graphs also show a period of elevated winds (15-20 mph) during Friday evening at the start of sampling and during the daytime and evening on Sunday from 8:00 a.m. to midnight, which created certain noise artifacts. The higher noise levels generated by wind are not considered as part of the background noise criteria.

Figure 1 Background Sound Survey and Modeling Locations

Table 1 Summary of Sampled Background Noise Levels

Location	Description	Dominant noise sources	Day, Date	Time	Leq, dBA
1	Meadowlark Lane	Rt 96 traffic	Thursday October 18, 2012	6:55-7:01 pm	51.2
		Rt 490/I90 ambient traffic	Saturday February 16, 2013	8:35-8:46 am	41.8
			Saturday February 16, 2013	4:33-4:44 pm	48.7
			Fri-Sat March 8-9, 2013	11:50pm-12:05am	52.4
			Friday March 15, 2013	9:11-9:21 pm	54.3
			Saturday March 16, 2013	1:16-1:21 am	46.7
			Saturday March 16, 2013	3:58-4:03 am	37.4
			Tuesday March 19, 2013	6:16-6:23 pm	52.8
			Saturday April 5, 2013	11:40-11:55 pm	43.3
			Saturday April 6, 2013	12:02 -12:12 am	39.8
2	Sachem Trail	Rt 96 traffic	Thursday October 18, 2012	7:04-7:10 pm	44.5
		Rt 490/I90 ambient traffic	Saturday February 16, 2013	8:50-9:01 am	43.8
			Saturday February 16, 2013	4:06-4:10 pm	41.9
			Saturday March 9, 2013	12:10-12:25 am	47.0
			Friday March 15, 2013	9:25-9:35 pm	52.2
			Saturday March 16, 2013	1:27-1:32 am	41.0
			Saturday March 16, 2013	4:10-4:15 am	38.1
			Tuesday March 19, 2013	6:27-6:32 pm	54.4
			Saturday April 5, 2013	12:18-12:30 am	40.3
			Saturday April 6, 2013	2:38-2:48 am	39.6
3	Wintergreen Grove	Rt 490/I90/96 ambient traffic	Thursday October 18, 2012	7:14-7:18 pm	50.4
			Saturday February 16, 2013	9:06-9:18 am	45.1
			Saturday February 16, 2013	4:13-4:23 pm	46.7
			Saturday March 9, 2013	12:28-12:43 am	43.9
			Friday March 15, 2013	9:39-9:50 pm	51.3
			Saturday March 16, 2013	1:39-1:44 am	41.5
			Saturday March 16, 2013	4:20-4:25 am	31.1
			Tuesday March 19, 2013	6:35-6:41 pm	53.2
			Friday April 5, 2013	12:35-12:45 am	44.4
			Saturday April 6, 2013	2:52-3:02 am	44.4
4	Hampton Inn	Rt 96 stop & go traffic	Saturday February 16, 2013	9:28-9:41 am	52.7
		Rt 490/I90 ambient	Saturday February 16, 2013	4:51-5:02 pm	59.8
			Saturday March 9, 2013	11:30-11:45 pm	54.0
			Friday March 15, 2013	9:57-10:07 pm	57.1
			Saturday March 16, 2013	1:01-1:11 am	47.5
			Saturday March 16, 2013	3:32-3:42 am	46.1
			Tuesday March 19, 2013	6:49-6:59 pm	60.7
			Friday April 5, 2013	11:40-11:55 pm	54.3
			Saturday April 6, 2013	12:53 -1:08 am	48.6
			Saturday April 6, 2013	2:04-2:19 am	48.0
5	Near east property line	Rt 490/I90/96 ambient traffic	Saturday February 16, 2013	5:22-5:27 pm	45.6
6	Near east property line	Rt 490/I90/96 ambient traffic	Saturday February 16, 2013	5:38-5:43 pm	54.4
7	East property line between Wal-Mart and residences	Rt 490/I90/96 ambient traffic	Saturday February 16, 2013	5:52-5:58 pm	49.1
			Saturday March 9, 2013	1:50-2:05 am	52.5
			Friday March 15, 2013	6:47-6:53 pm	60.5
			Friday March 15, 2013	7:05-7:24 pm	59.8
			Tuesday March 19, 2013	7:36-7:51 pm	58.5
8	East property line between Kohls and residences	Rt 490/I90/96 ambient traffic partly shielded by building	Saturday February 16, 2013	6:07-6:14 pm	41.4
			Saturday March 9, 2013	1:27-1:42 am	49.7
			Friday March 15, 2013	7:41-7:56 pm	54.8
			Tuesday March 19, 2013	8:11-8:26 pm	54.6
9	North property line between Dollar General and residences	Rt 96 traffic	Saturday February 16, 2013	6:25-6:30 pm	44.2
		Rt 490/I90 ambient traffic	Saturday March 9, 2013	12:59-1:14 am	52.6
			Friday March 15, 2013	8:23-8:40 pm	54.1
			Tuesday March 19, 2013	8:53-9:13 pm	55.7

Figure 2 Logged Background Noise Levels - Location 7 East Residential Boundary

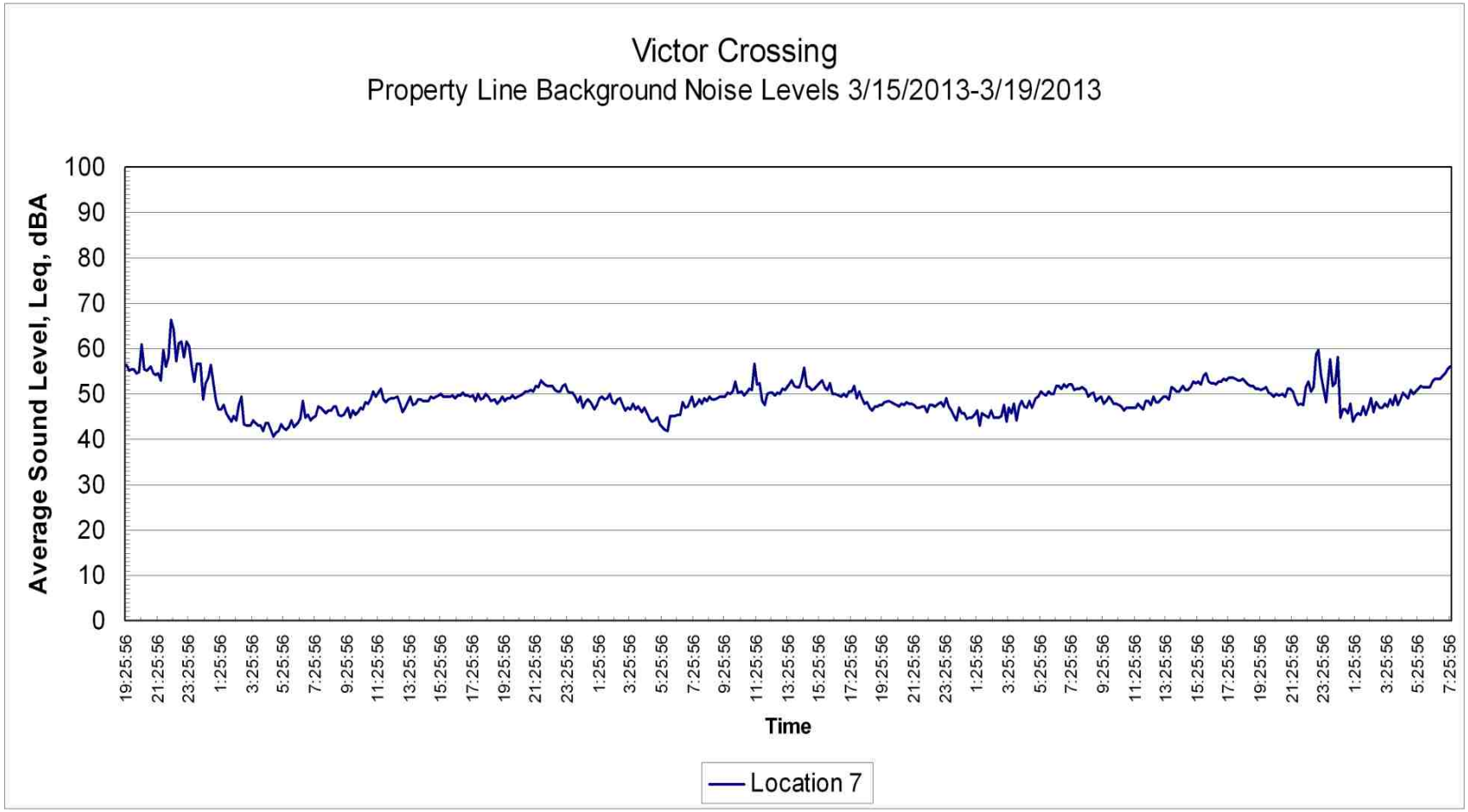


Figure 3 Logged Background Noise Levels - Location 8 East Residential Boundary

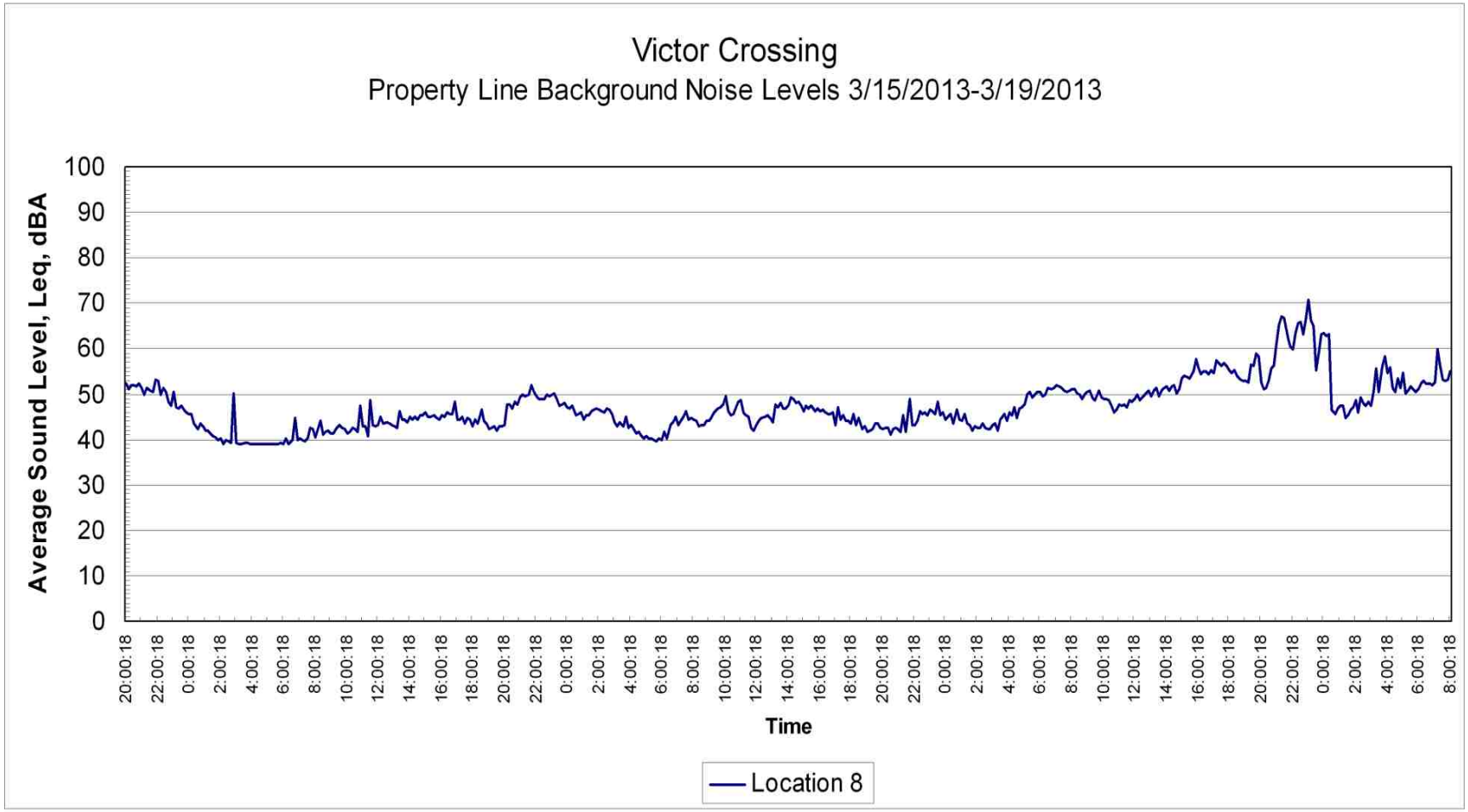
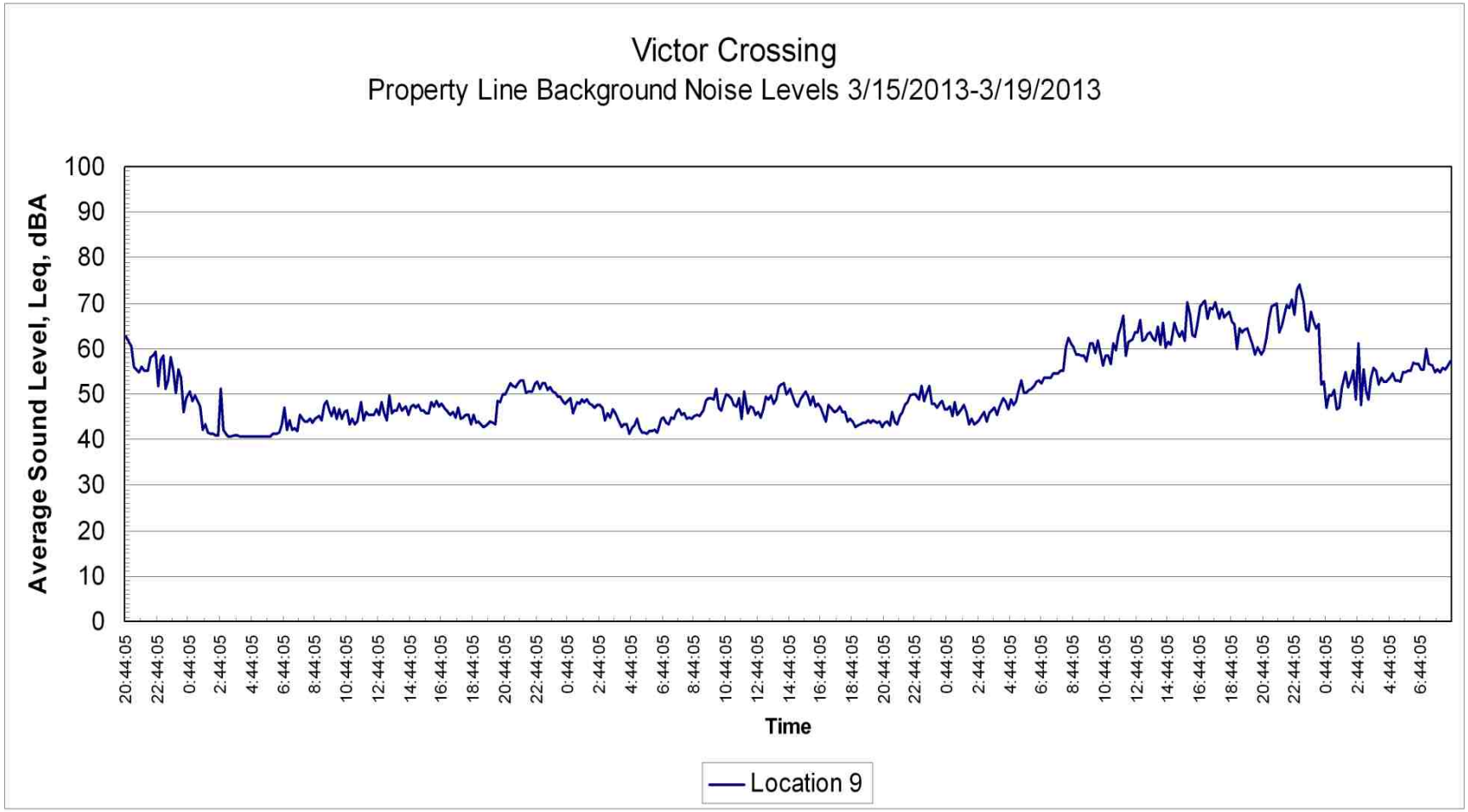


Figure 4 Logged Background Noise Levels - Location 9 North Residential Boundary



Community noise assessment model

The noise assessment evaluated noise emissions from various sound sources on and around the shopping center property. Plaza noise sources included vehicles on shopping plaza entrance road segments, vehicles on shopping center parking lots, and mechanical equipment on shopping center building rooftops. Background community noise sources included vehicles operating on highways surrounding the shopping plaza and electric transformer substations adjacent to the plaza. Computerized noise models were generated to represent the shopping center with various noise sources, the surrounding terrain, and the residential community. The employed noise assessment model was CADNA/A v4.3 by Datakustik, GmbH, a nationally and internationally well-accepted software program for assessing environmental noise levels from combinations of sound sources based on ISO 9613-2 and other acoustical standards pertaining to industrial and traffic sources.

The noise assessment model was developed using shopping center architectural plans to locate the buildings, site roads, and site parking lots. The model was further developed using recent USGS site contours and aerial photograph of the site and surrounding area that were used to locate roadways and land contour features. The plan data were used to locate rising land features, local roadways with residences, the nearby hotel and commercial buildings, highways and toll booth, parking lots, and other community features. Heights of buildings, retaining walls, fences, and other features were developed from on-site investigations by Angevine Acoustical Consultants, Inc. Locations of rooftop equipment were developed from aerial photographs. Source levels associated with the rooftop equipment were developed from published manufacturer equipment noise ratings and measurements of mechanical equipment performed by Angevine Acoustical Consultants, Inc. at comparable Wal-Mart stores and other retail complexes. The assessment determined that, in comparison to highway traffic, the mechanical equipment are not highly significant noise contributing sources.

Highway traffic data for Route 490 at the Thruway toll plaza and for the mainline Thruway were obtained from the New York State Thruway Authority. Local traffic data for Route 96, High Street, and other roadways were obtained from the New York State Department of Transportation. Site traffic data for the shopping center roadways, parking lot intersections, and Route 96 were obtained from studies prepared by T.Y. Lin International, the traffic engineers for the shopping center project. The T.Y. Lin study provided predictions of hourly nighttime traffic for the peak shopping period from the night of Thursday November 21 through the morning of Sunday November 25, 2012. Table 2 summarizes the expected traffic counts within the shopping center and on Route 96 during the extended nighttime shopping periods. Table 3 summarizes the traffic counts for the minimum traffic volume hours represented in the noise assessment.

Table 2

Roadway	Shopping Traffic Hourly Counts per T.Y. Lin (11/21-25/2012)								
	Thursday-Friday			Friday-Saturday			Saturday-Sunday		
	11pm-1am	1am-5am	5am-7am	11pm-1am	1am-5am	5am-7am	11pm-1am	1am-5am	5am-7am
Plaza roads	112	112	112	128	144	144	115	87	87
Rt. 96	327	274	431	262	98	183	260	77	108

Table 3

Roadway	Hourly AADT Counts per NYSDOT and NYTA								
	Friday			Saturday			Sunday		
	12am-1am	2am-3am	5am-6am	12am-1am	2am-3am	5am-6am	12am-1am	2am-3am	5am-6am
Thruway	314	200	530	362	184	322	251	193	170
Rt. 490	304	129	548	423	161	303	435	164	131
High St.	15	3	44	15	3	44	15	3	44

The current opening time of the shopping center is 7:00 a.m. daily and the closing time is 11:00 p.m. daily. The T.Y. Lin International study provided detailed summaries of predicted hourly traffic counts for the nighttime period from 11:00 p.m. to 7:00 a.m. that would comprise extended shopping hours. The nighttime period was segmented into the hours of 11:00 p.m. to 1:00 a.m., 1:00 a.m. to 5:00 a.m., and 5:00 a.m. to 7:00 a.m. The NYSTA and NYSDOT data were processed to determine the hours of minimum highway traffic corresponding to each of these periods. The hours with minimum highway traffic were 12:00 a.m. to 1:00 a.m., 2:00 a.m. to 3:00 a.m., and 5:00 a.m. to 6:00 a.m. The hour of overall minimum traffic for each highway based on the State reports is 2:00 a.m. to 3:00 a.m. for each nighttime period from Friday through Sunday.

Sound level contours produced by emissions from traffic, mechanical, and other background sources were calculated for two scenarios. The first scenario describes current noise emissions from background nighttime traffic on highways and roadways without shopping center traffic on roadways, site roads, or parking lots. The second scenario describes noise emissions from background nighttime traffic on highways and roadways including shopping center traffic. For each scenario, the calculations were performed for the three nighttime hours for each of the three represented days. For both scenarios, the highway traffic counts given in Table 3 were used to characterize the highway noise emissions. For the first calculation scenario describing the current nighttime background noise environment, the traffic on the shopping center roads and parking lots were excluded and the corresponding counts were removed from the Route 96 counts. For the second calculation scenario describing the nighttime shopping period, the shopping center roads and parking lots were included as sources and the Route 96 counts as shown in Table 2 were used in calculations. The labeled key plan for the assessment is shown in Figure 5. The subsequent figures show the calculated noise level contours for the existing and future scenarios for the three nighttime hourly periods corresponding to local traffic determined from counts during the peak weekend shopping period from November 21 to 25, 2013.

Calculation boxes are shown on each graphical contours at representative locations along the boundaries of the shopping center, and at other locations including sites in the community opposite the nearest adjoining residences and the exterior of the Hampton Inn. The level boxes correspond to locations where background sound levels were measured, which were summarized in Table 1. Table 4 compares the background noise levels of the first assessment scenario representing the current nighttime noise environment without shopping center traffic, to the background noise levels of the second assessment scenario representing the nighttime shopping period with added nighttime traffic at the shopping center and on Route 96, for the evaluated minimum nighttime hours on each day of the shopping period. The table additionally shows the sound level differences expected from the added shopping center traffic.

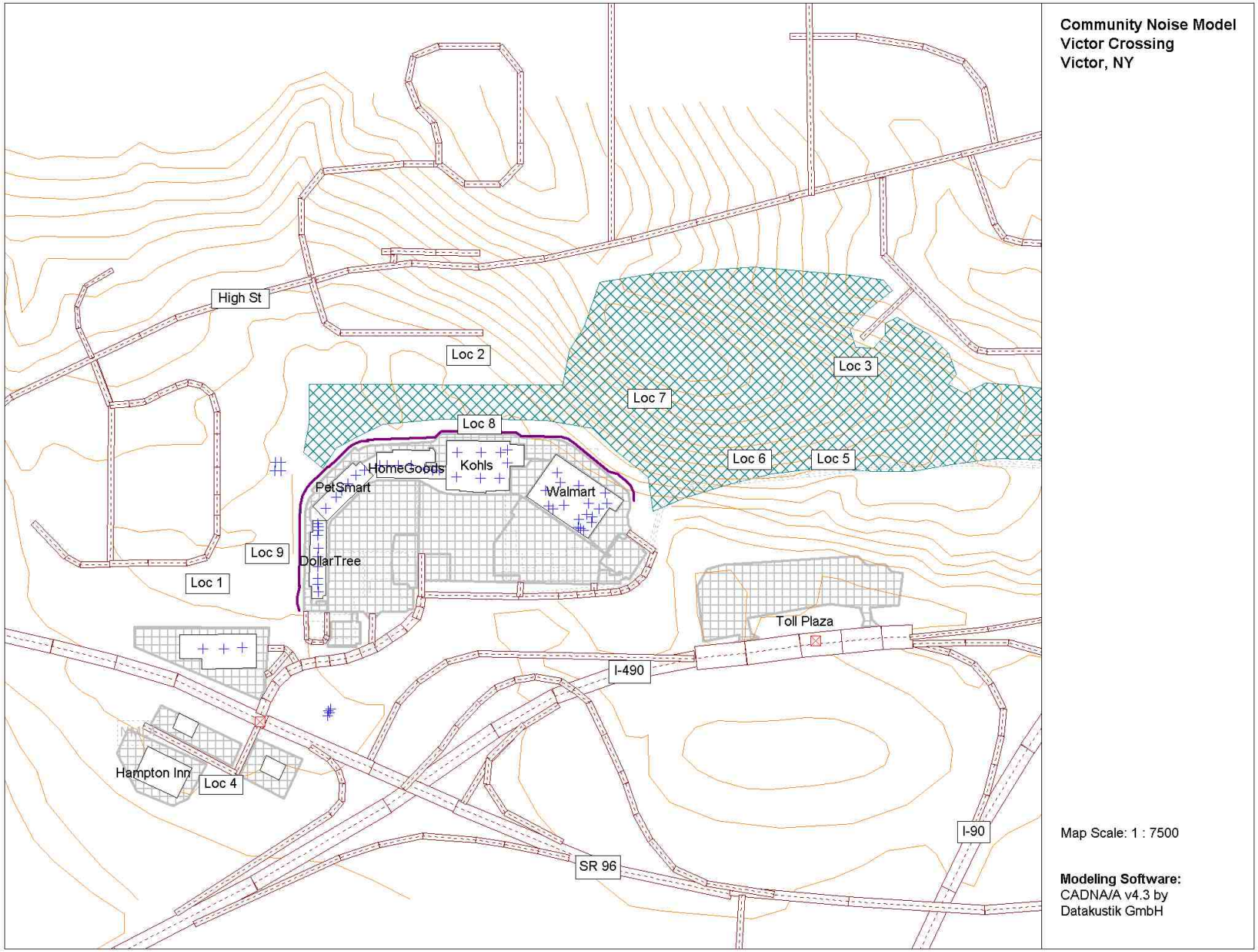
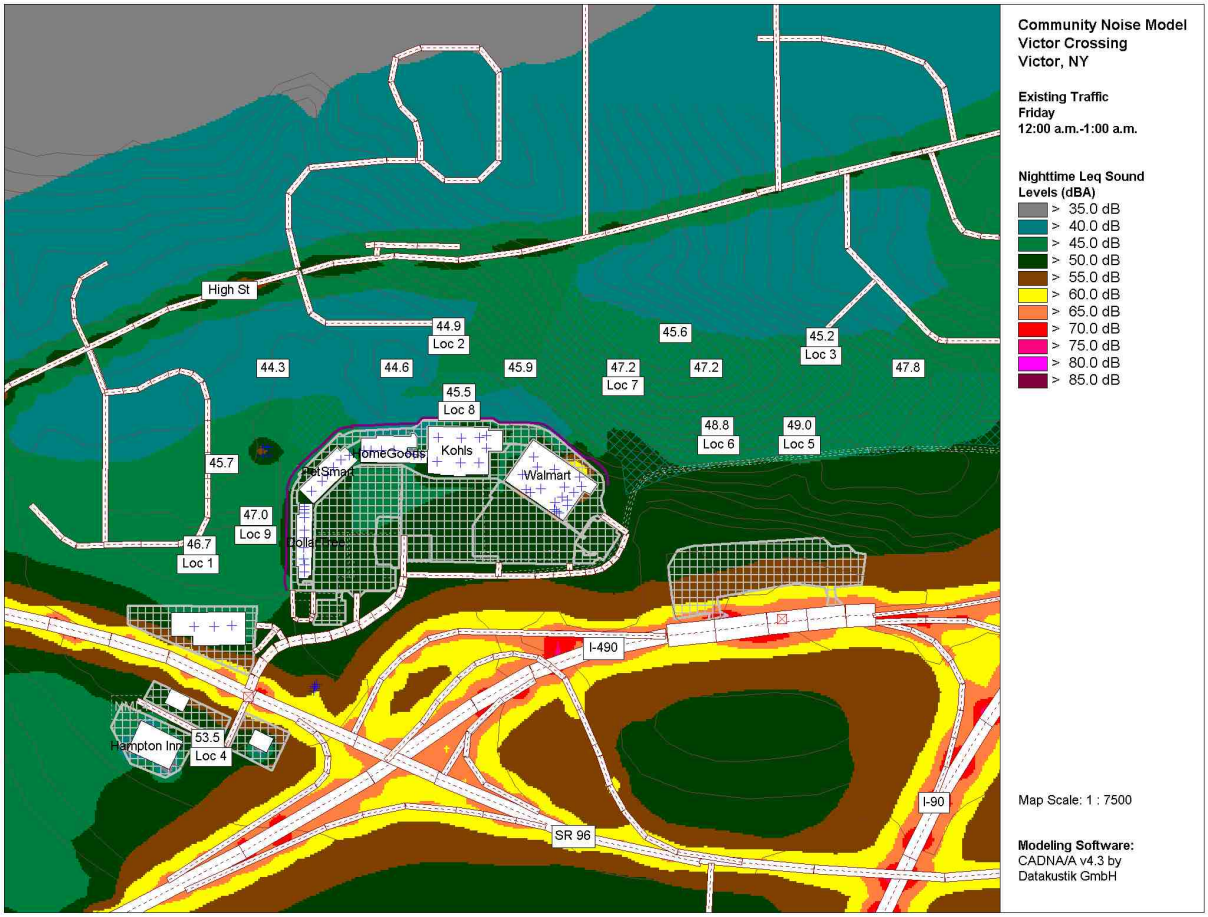
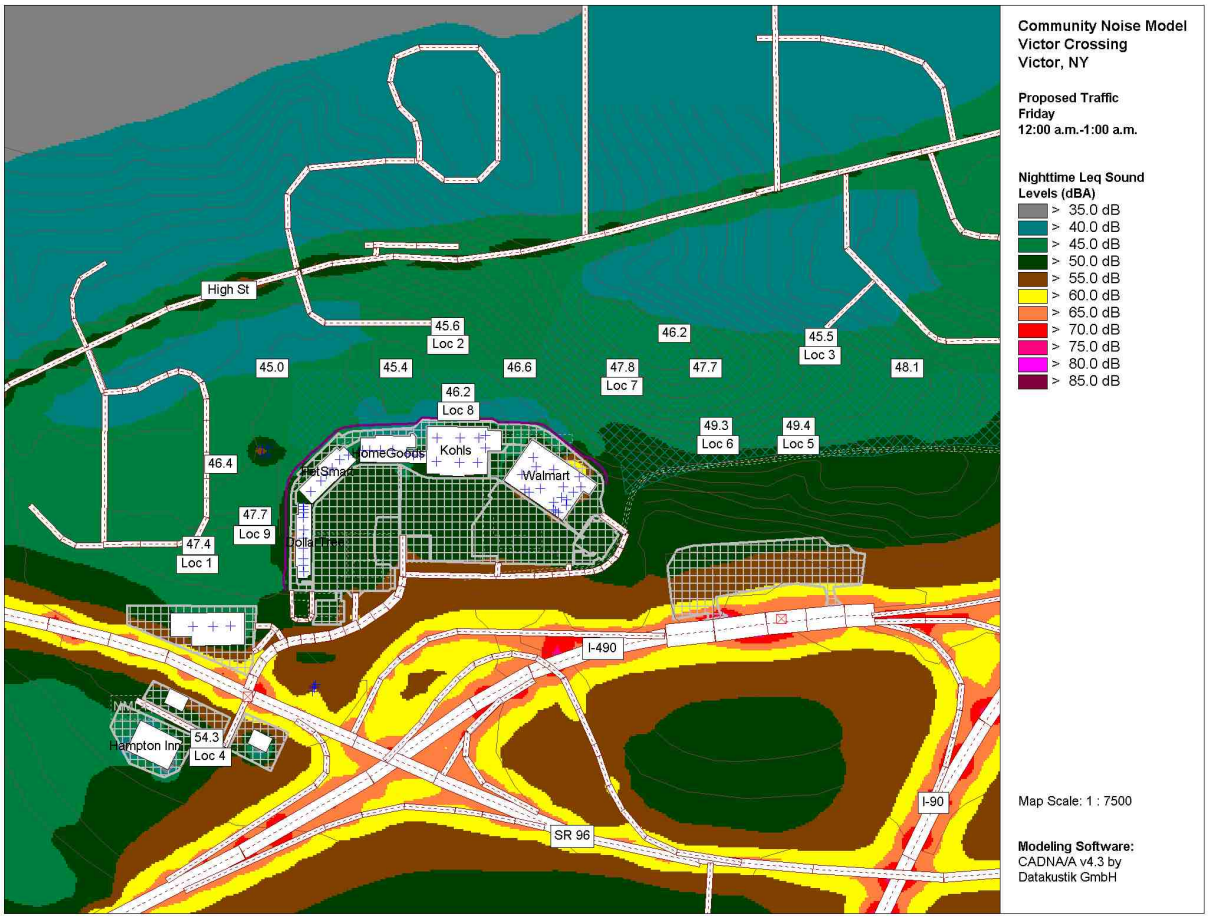
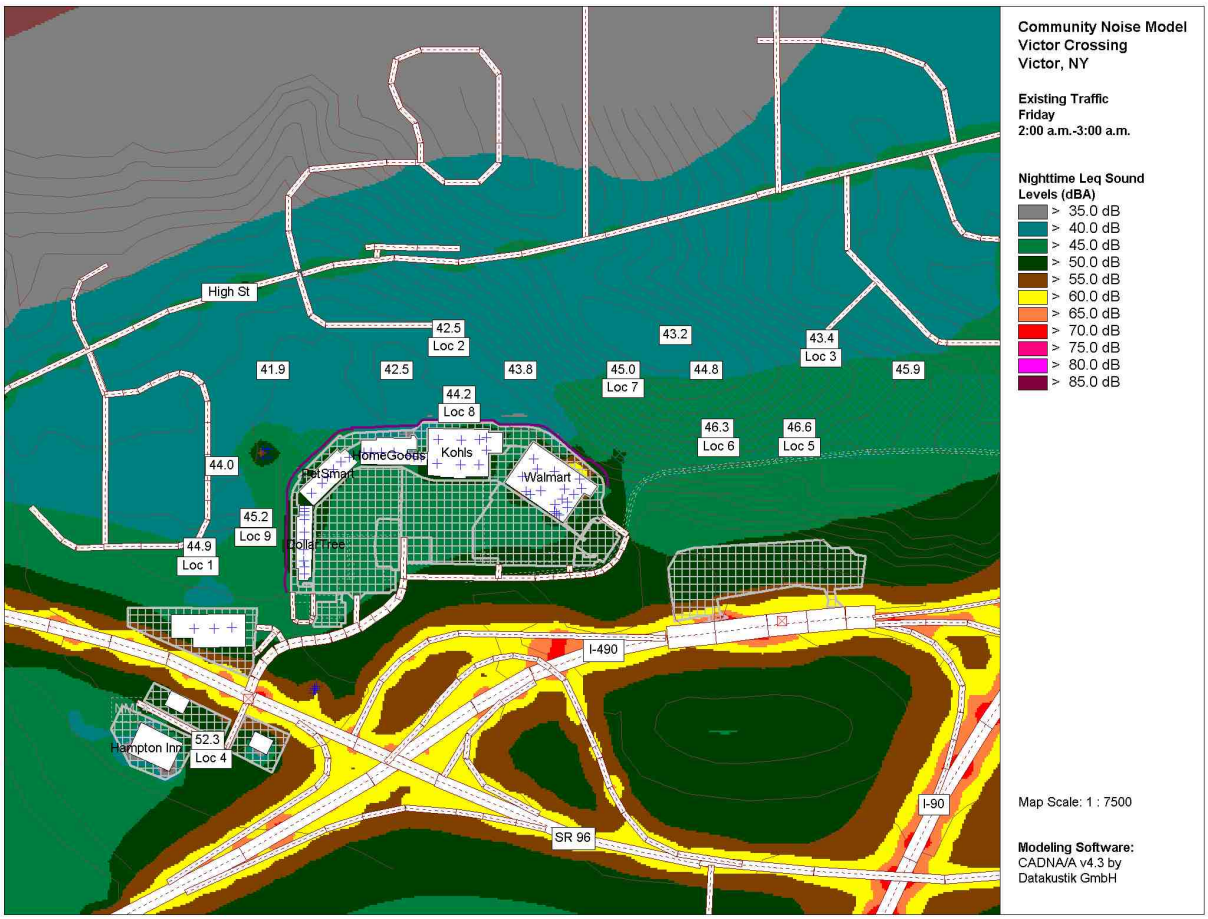


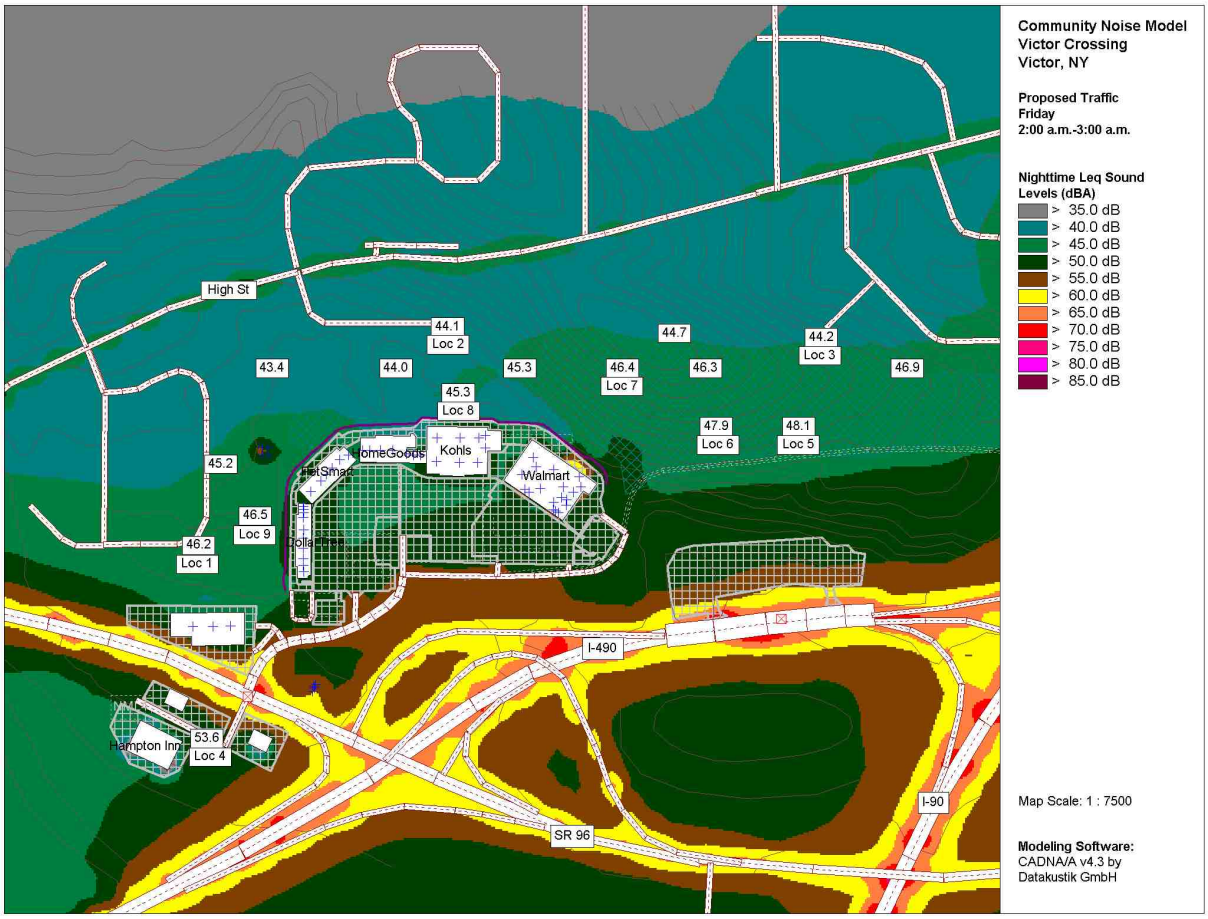
Figure 5 Model layout key plan



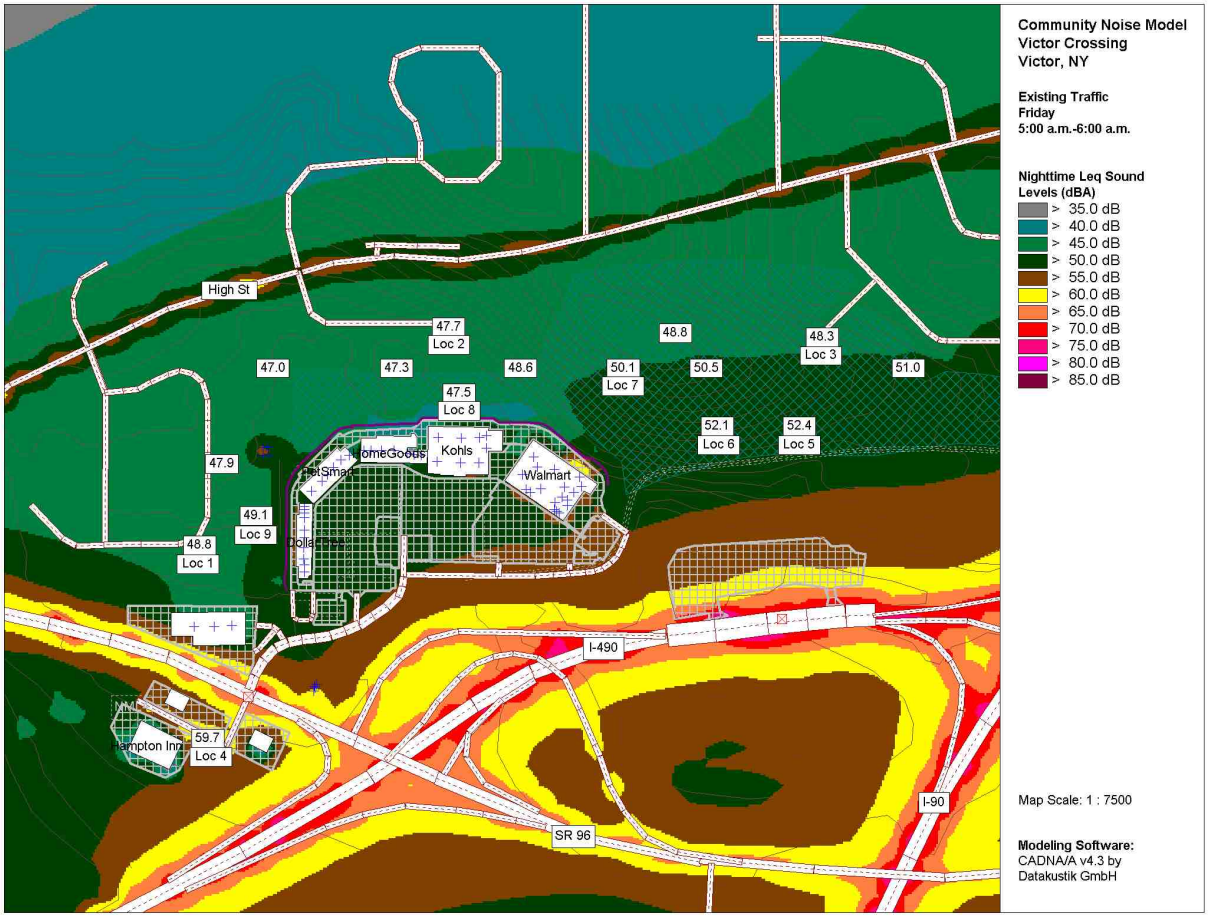


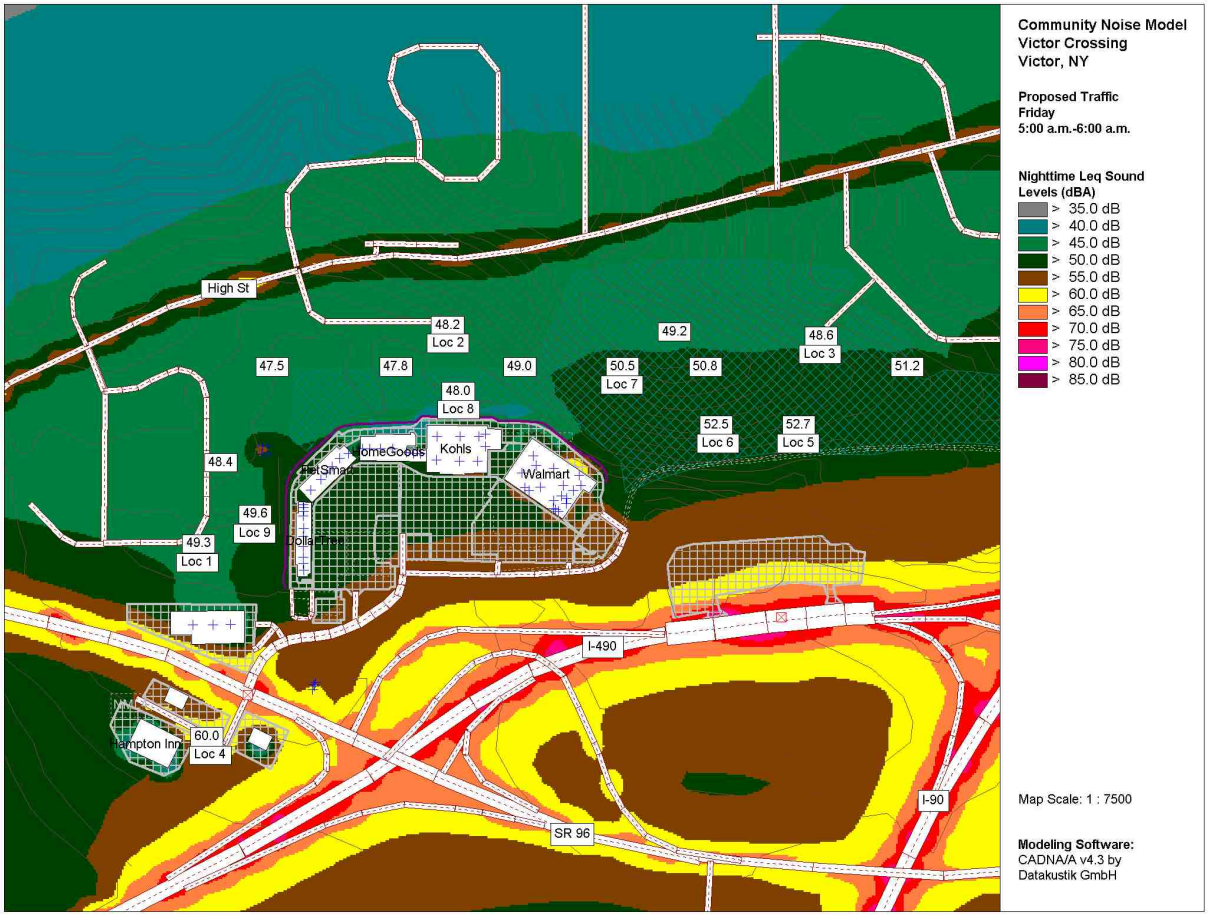
Figures 6A & 6B. Existing and future noise levels on Friday night 12:00 a.m.-1:00 a.m.



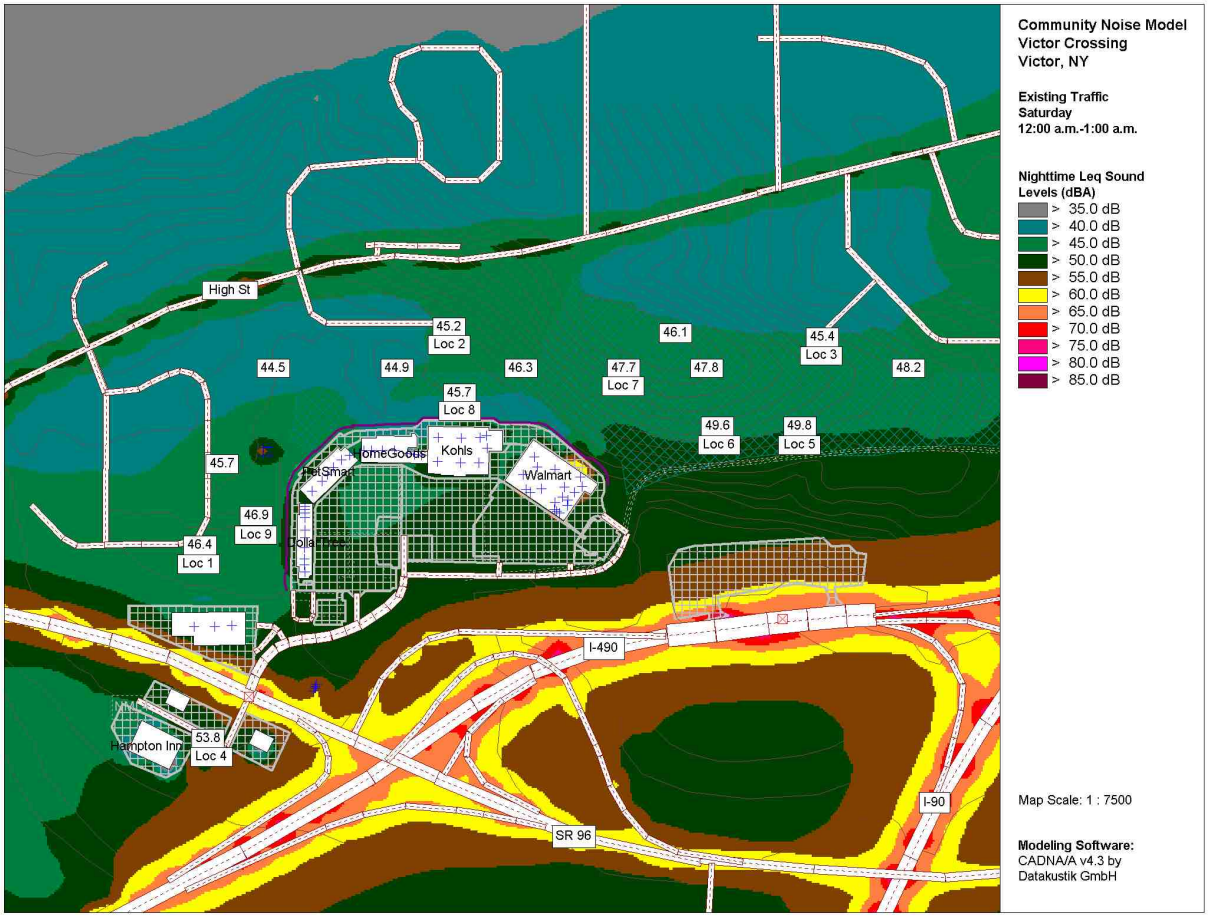


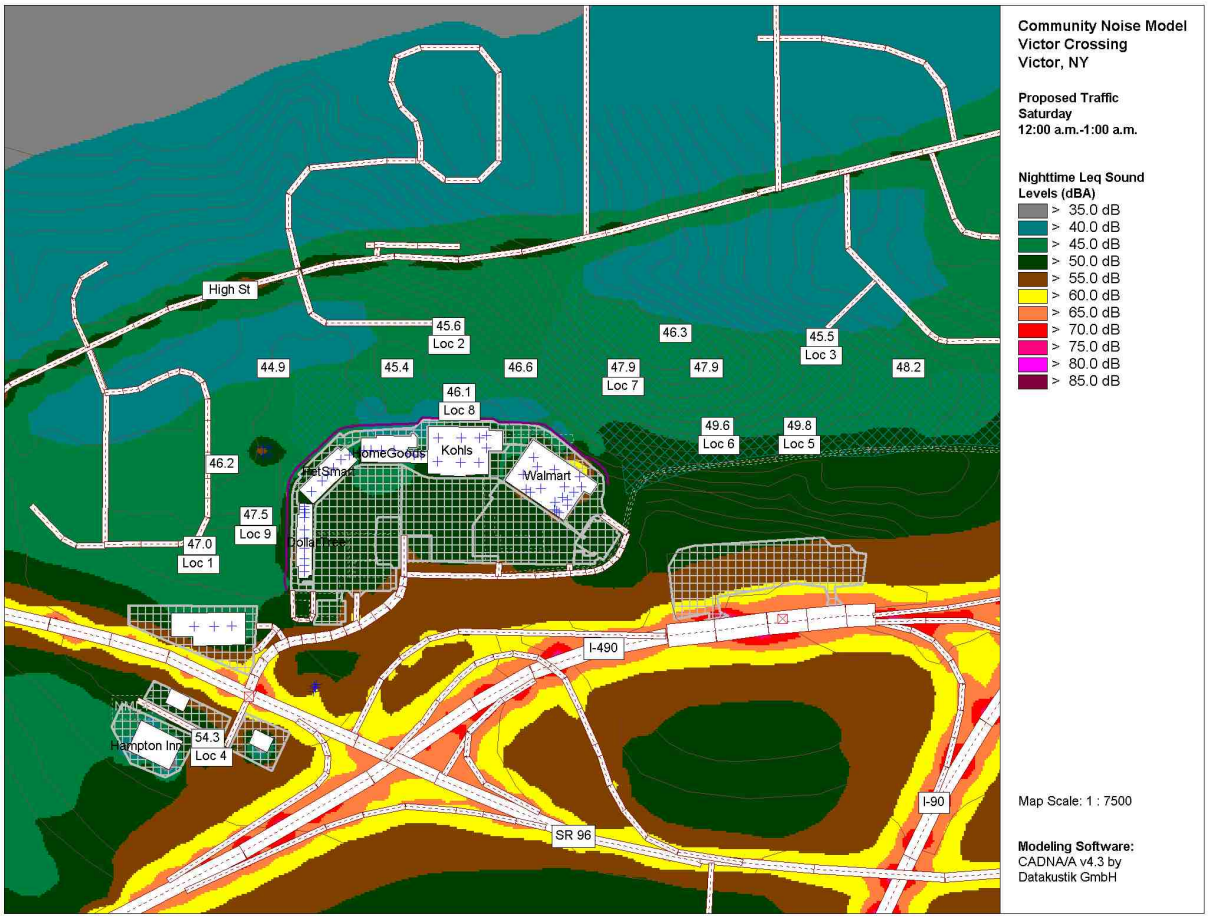
Figures 7A & B. Existing and future noise levels on Friday night 2:00 a.m.-3:00 a.m.



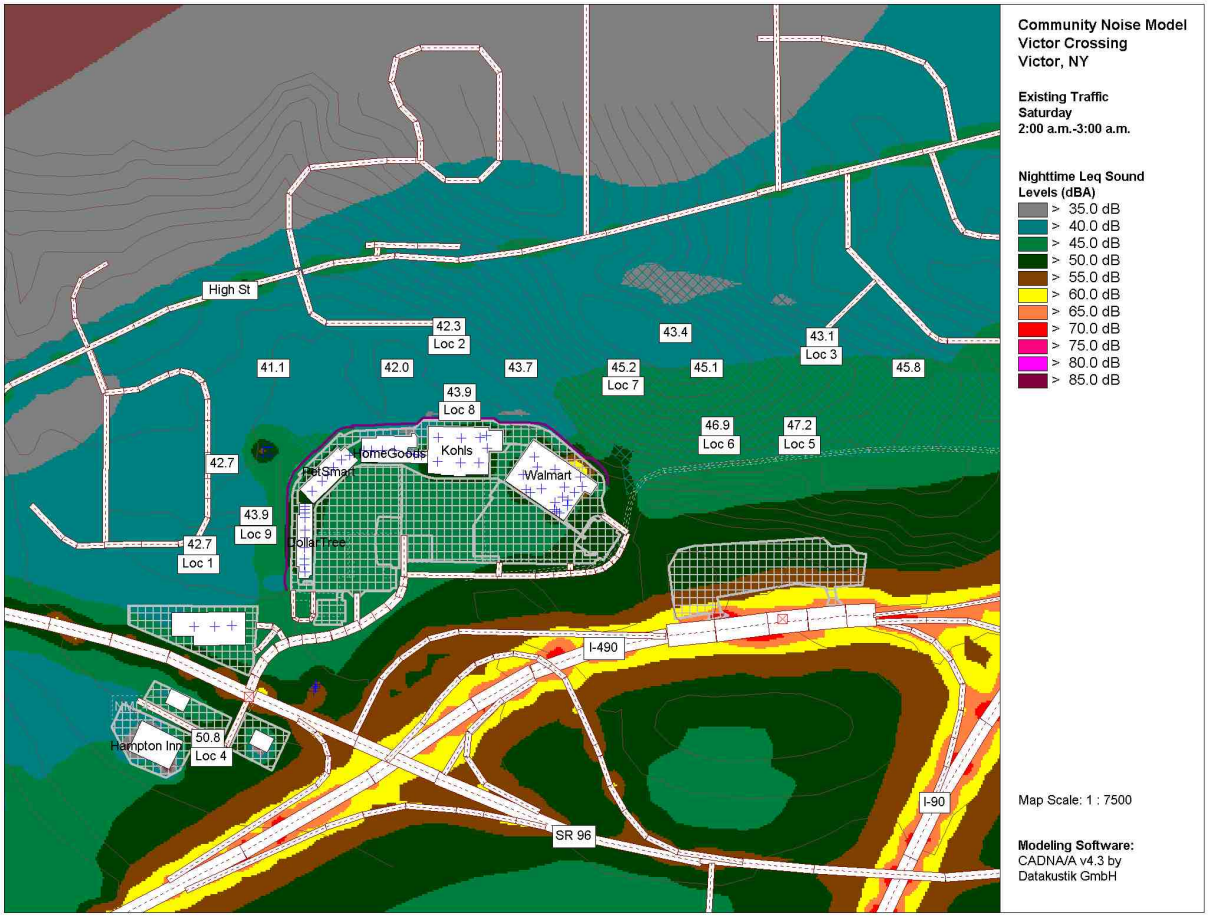


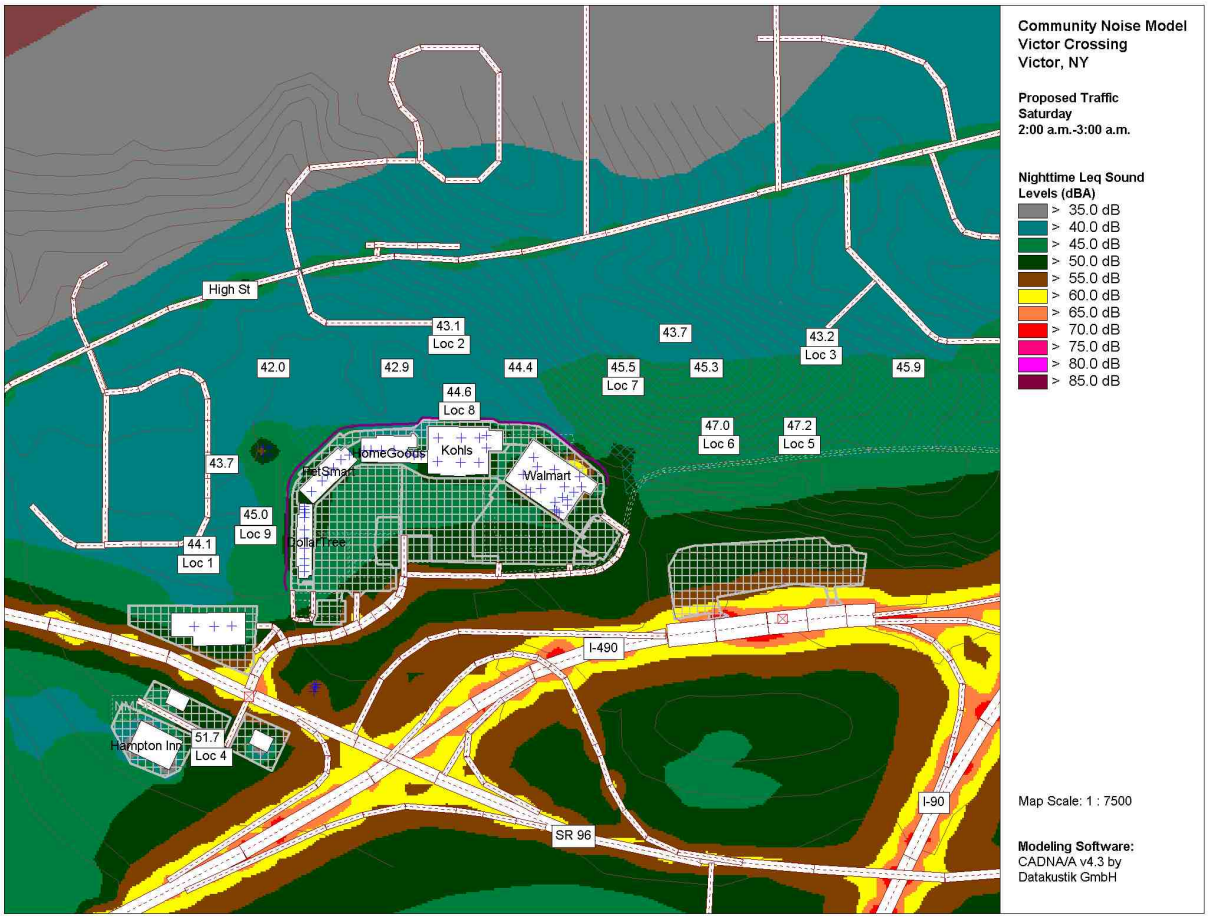
Figures 8A & B. Existing and future noise levels on Friday night 5:00 a.m.-6:00 a.m.



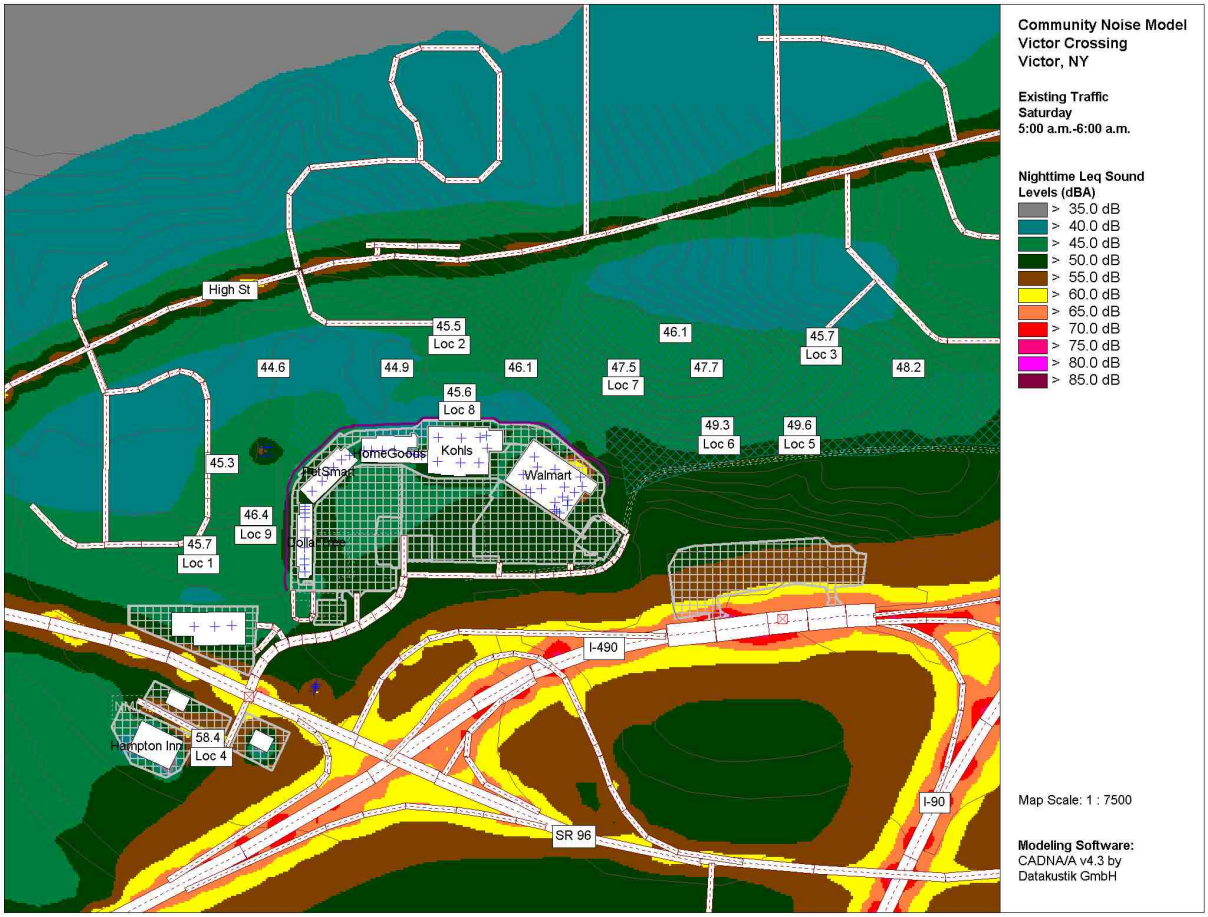


Figures 9A & B. Existing and future noise levels on Saturday night 12:00 a.m.-1:00 a.m.





Figures 10A & B. Existing and future noise levels on Saturday night 2:00 a.m.-3:00 a.m.



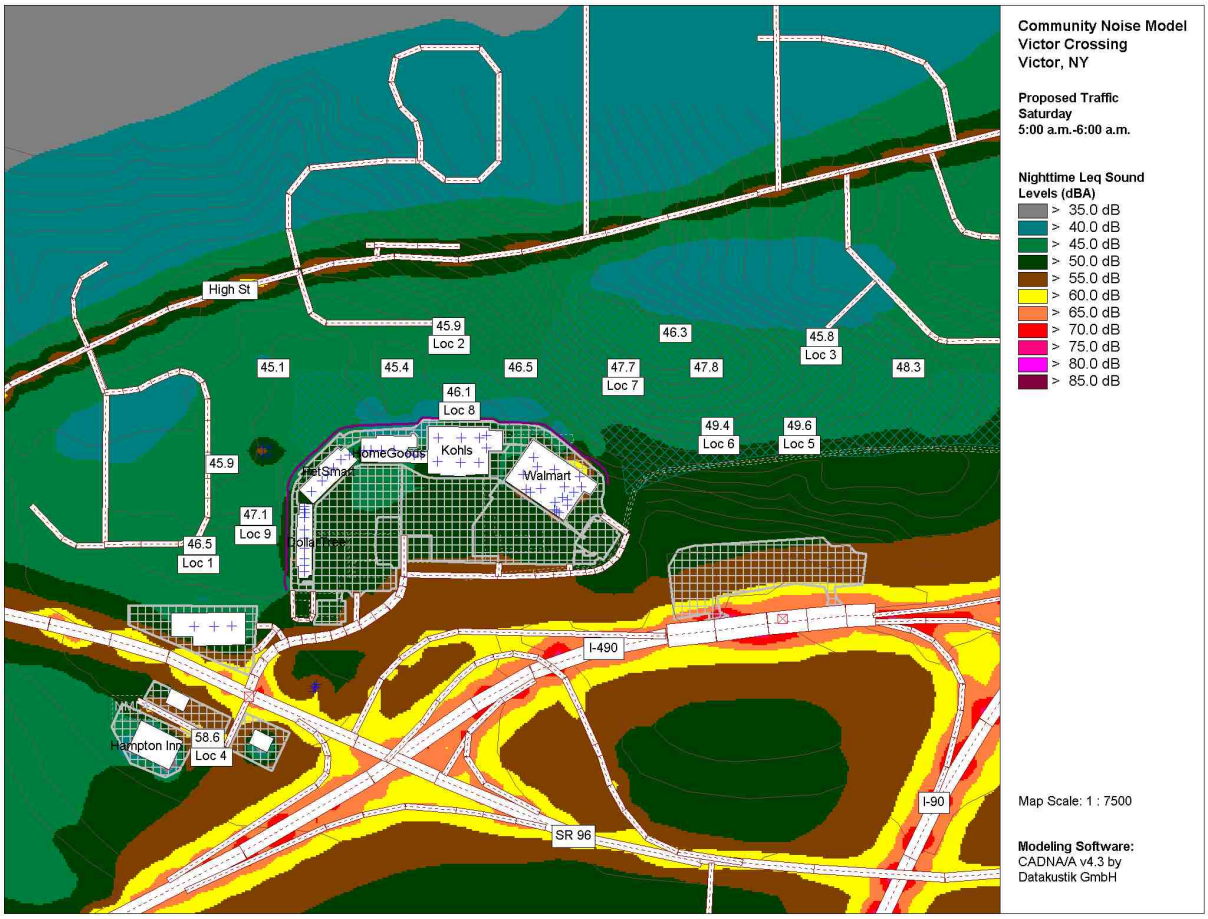
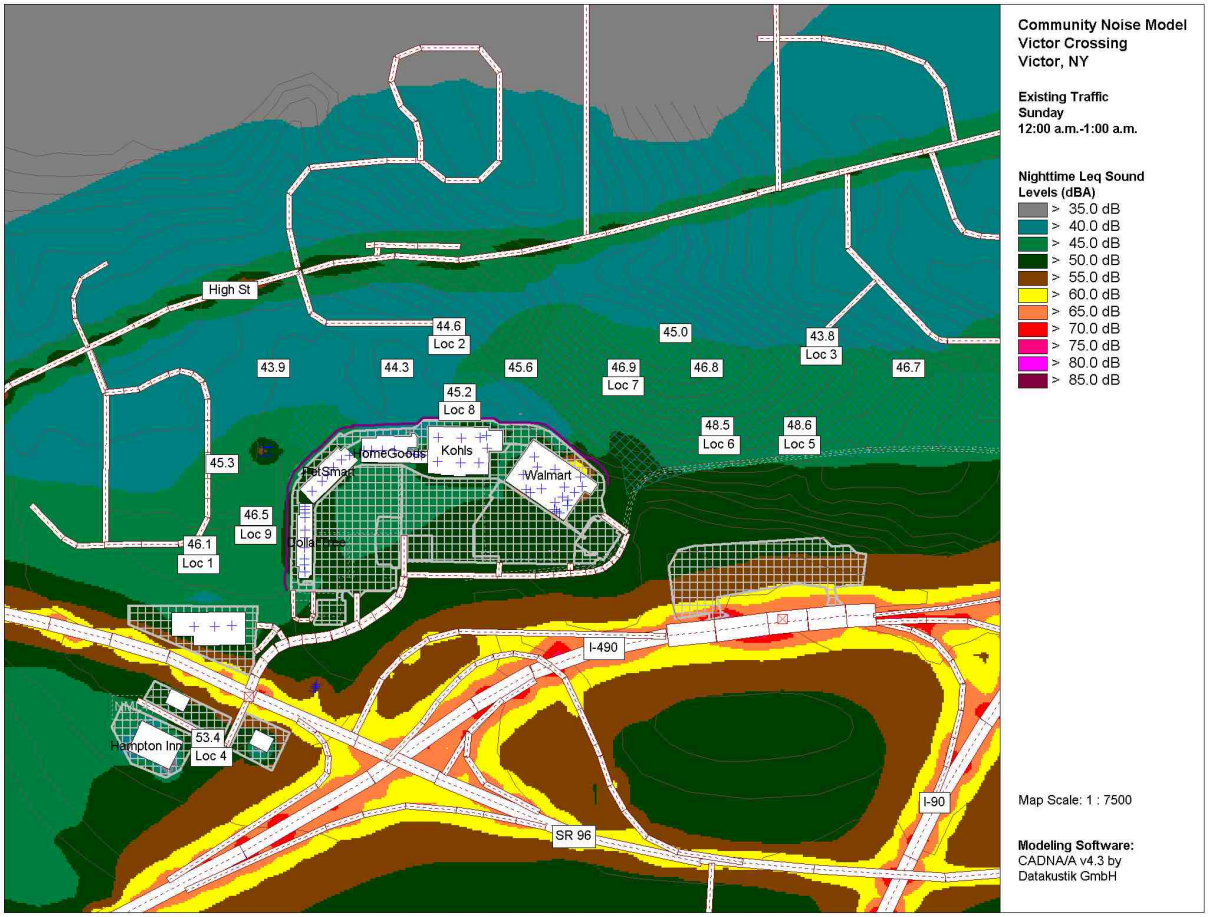


Figure 11A & B. Existing and future noise levels on Saturday night 5:00 a.m.-6:00 a.m.



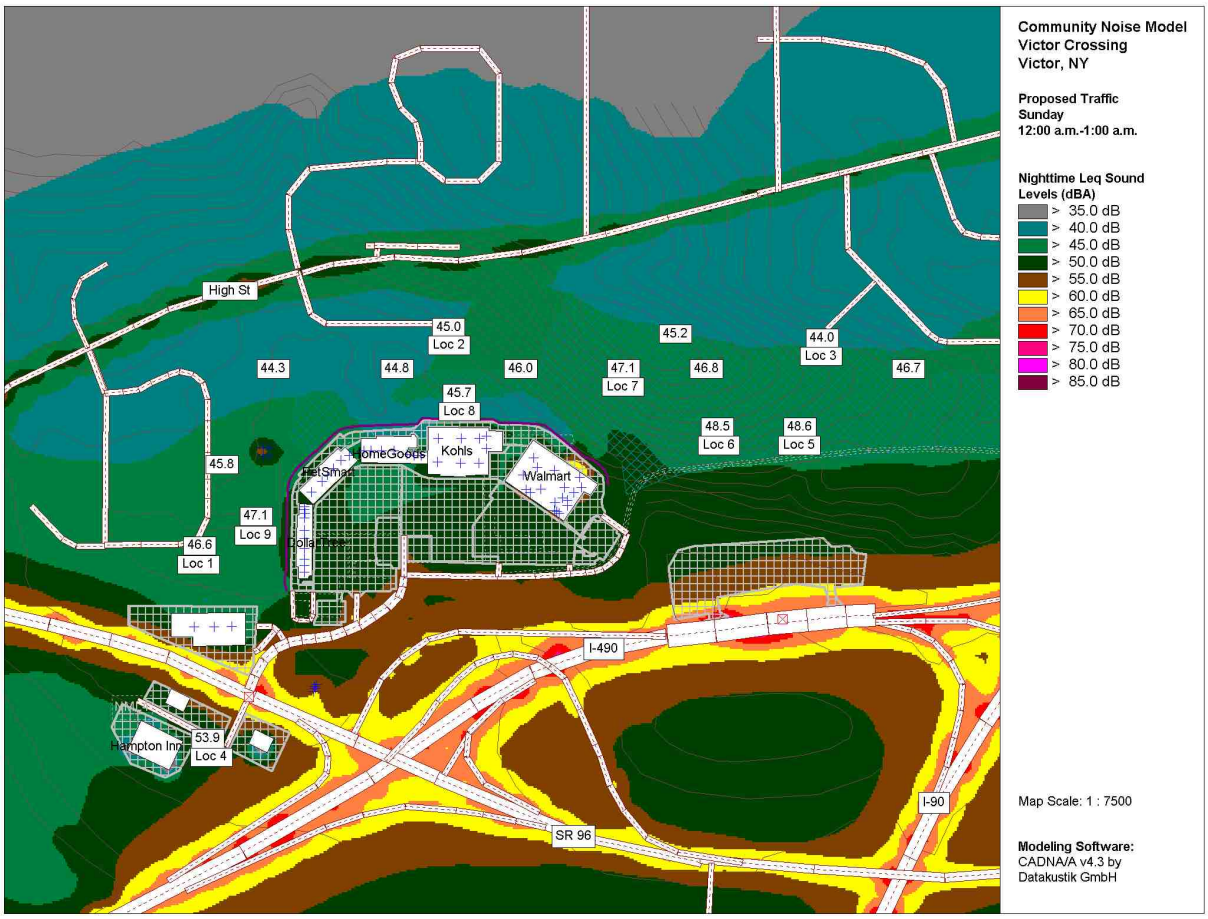
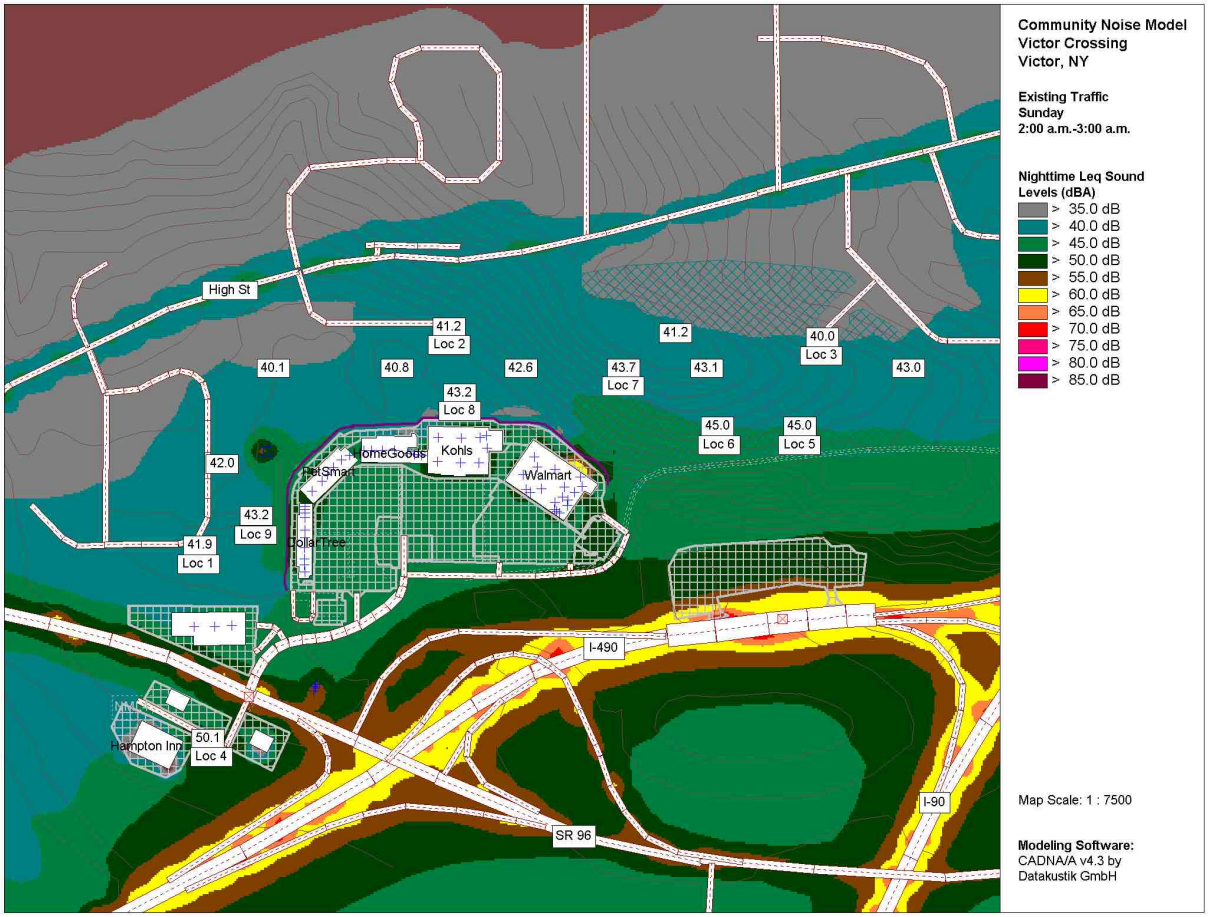


Figure 12A & B. Existing and future noise levels on Sunday night 12:00 a.m.-1:00 a.m.



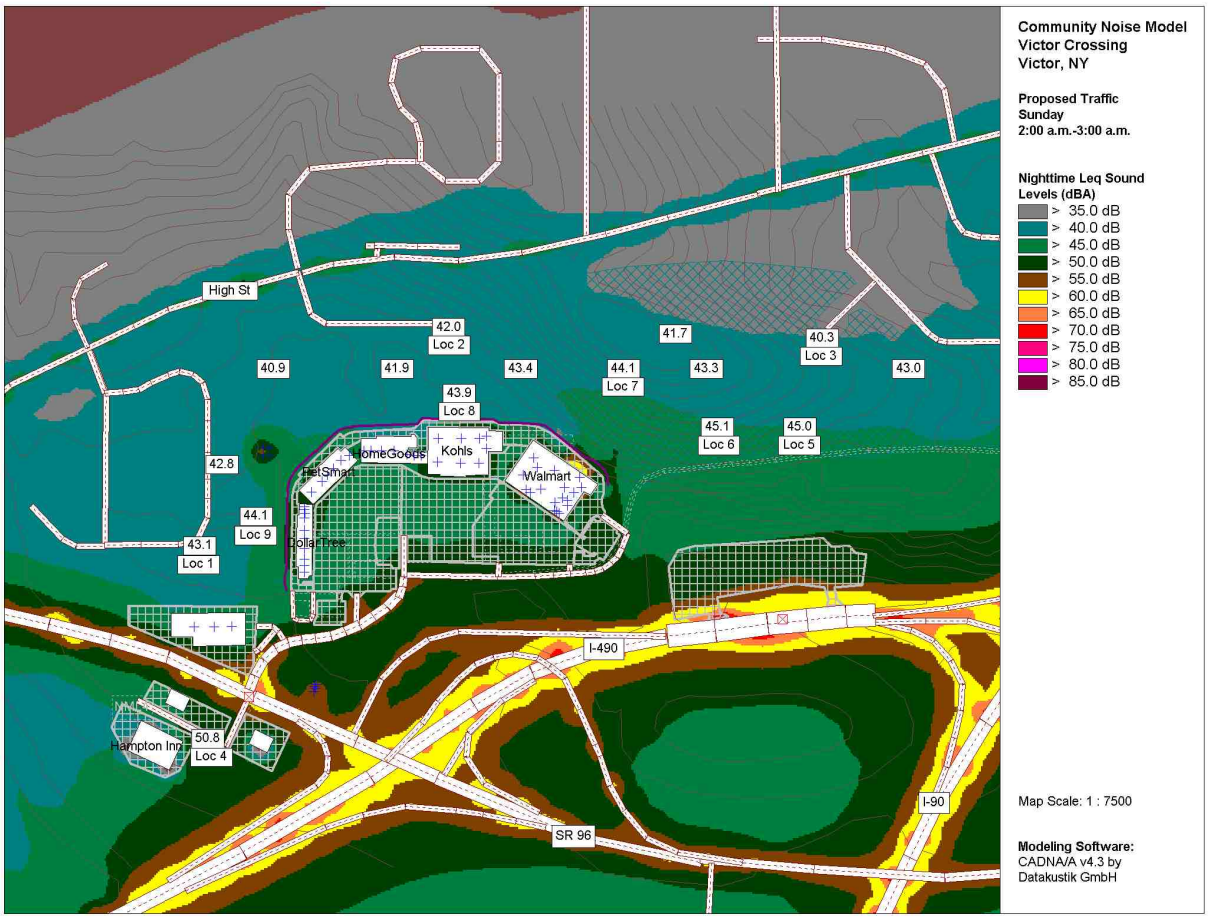
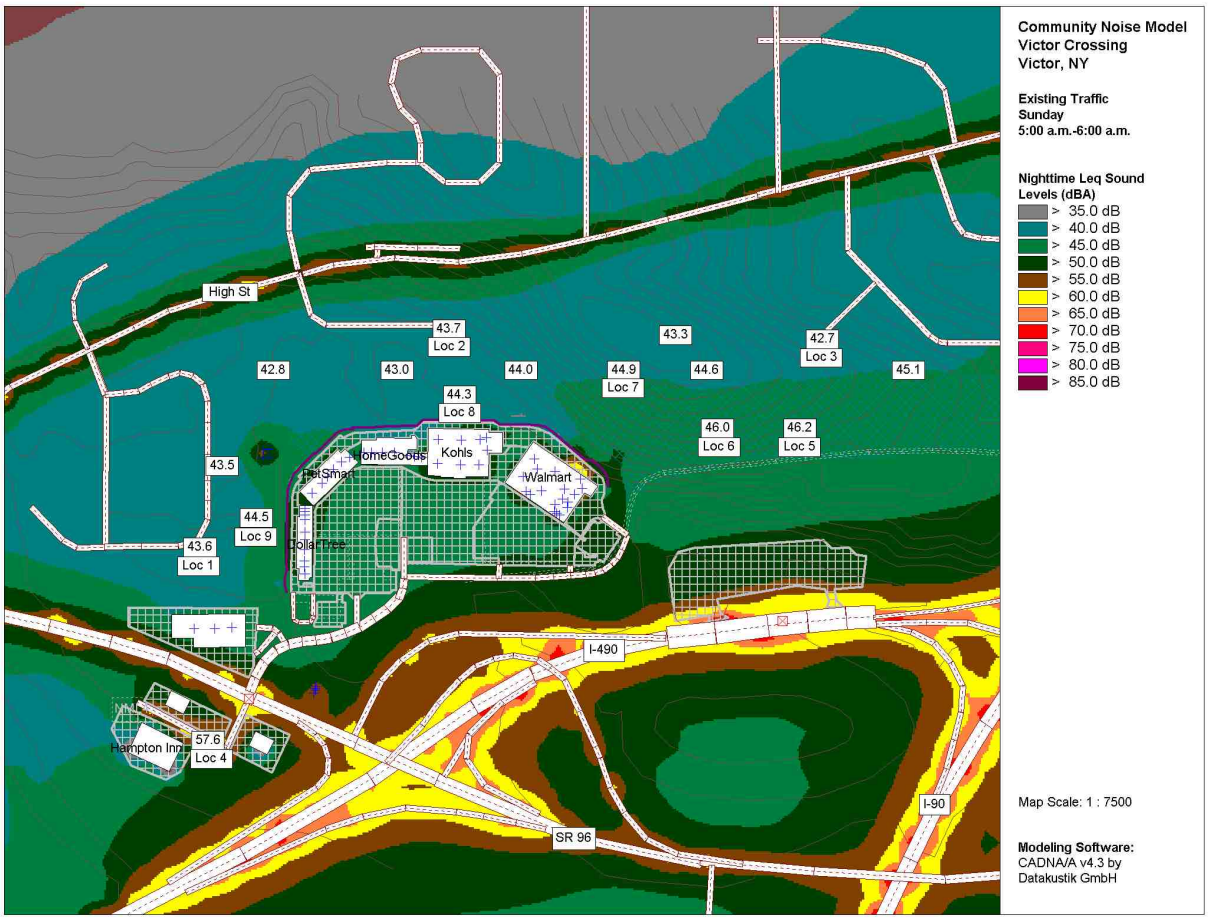


Figure 13A & B. Existing and future noise levels on Sunday night 2:00 a.m.-3:00 a.m.



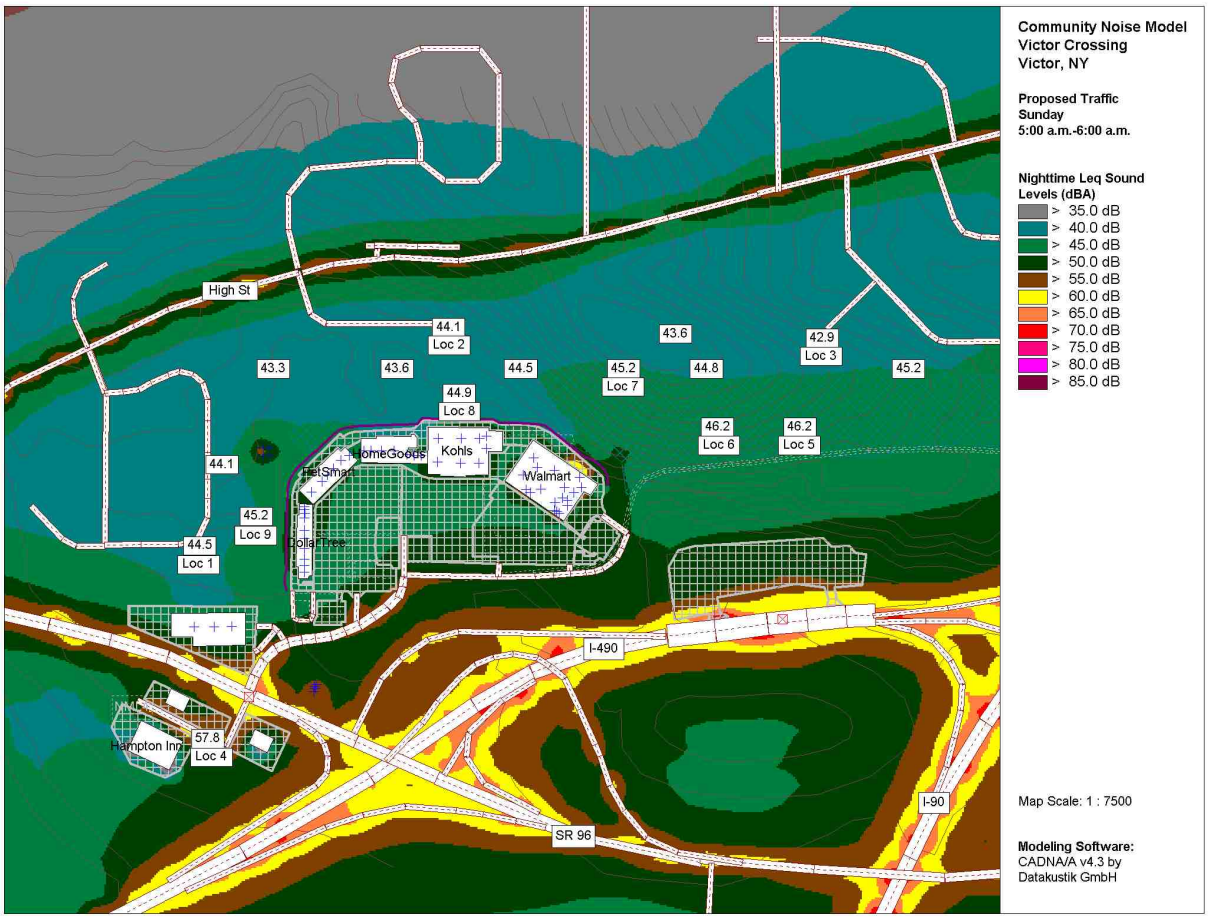


Figure 14A & B. Existing and future noise levels on Sunday night 5:00 a.m.-6:00 a.m.

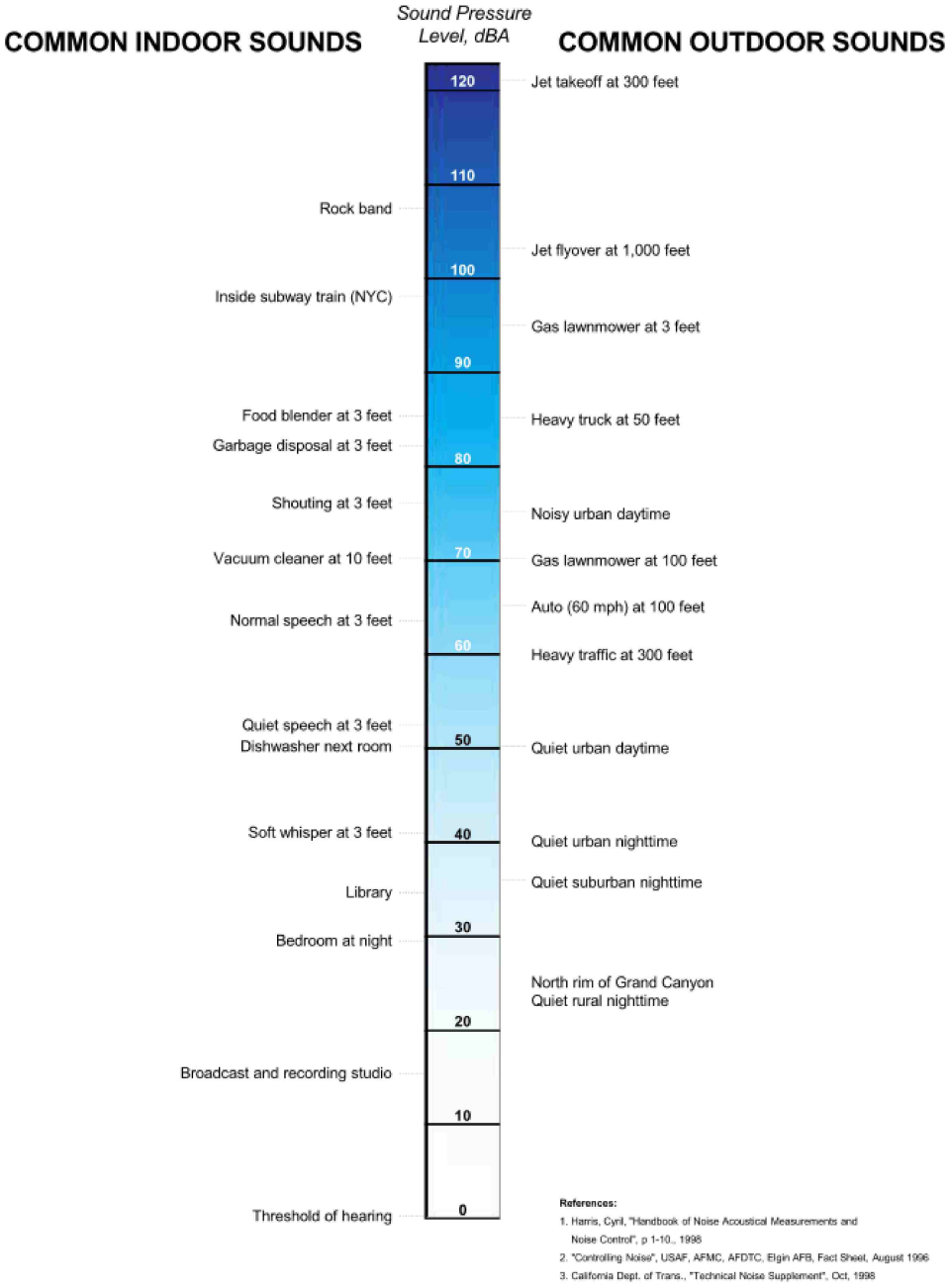
Table 4 Predicted Existing and Future Background Traffic Noise Levels with Sound Level Differences

Loc	Condition	Friday			Saturday			Sunday		
		12:00 am - 1:00 am	2:00 am -3:00 am	5:00 am -6:00 am	12:00 am - 1:00 am	2:00 am -3:00 am	5:00 am -6:00 am	12:00 am - 1:00 am	2:00 am -3:00 am	5:00 am -6:00 am
1	Modeled Sc. 1	46.7	44.9	48.8	46.4	42.7	45.7	46.1	41.9	43.6
	Modeled Sc. 2	47.4	46.2	49.3	47.0	44.1	46.5	46.6	43.1	44.5
	Difference	0.7	1.3	0.5	0.6	**1.4**	0.8	0.5	1.2	0.9
2	Modeled Sc. 1	44.9	42.5	47.7	45.2	42.3	45.5	44.6	41.2	43.7
	Modeled Sc. 2	45.6	44.1	48.2	45.6	43.1	45.9	45.0	42.0	44.9
	Difference	0.7	**1.6**	0.5	0.6	0.8	0.4	0.4	0.8	1.2
3	Modeled Sc. 1	45.2	43.4	48.3	45.4	43.1	45.7	43.8	40.0	42.7
	Modeled Sc. 2	45.5	44.2	48.6	45.5	43.2	45.8	44.0	40.3	42.9
	Difference	0.3	**1.2**	0.3	0.1	0.1	0.1	0.2	0.3	0.2
4	Modeled Sc. 1	53.5	52.3	59.7	53.8	50.8	58.4	53.4	50.1	57.6
	Modeled Sc. 2	54.3	53.6	60.0	54.3	51.7	58.6	53.9	50.8	57.8
	Difference	0.8	**1.3**	0.3	0.5	0.9	0.2	0.5	0.7	0.2
5	Modeled Sc. 1	49.0	46.6	52.4	49.8	47.2	49.6	48.6	45.0	46.2
	Modeled Sc. 2	49.4	48.1	52.7	49.8	47.2	49.6	48.6	45.0	46.2
	Difference	0.4	**1.5**	0.3	0	0	0	0	0	0
6	Modeled Sc. 1	48.8	46.3	52.1	49.6	46.9	49.3	48.5	45.0	46.0
	Modeled Sc. 2	49.3	47.9	52.5	49.6	47.0	49.4	48.5	45.1	46.2
	Difference	0.5	**1.6**	0.4	0	0.1	0.1	0	0.1	0.2
7	Modeled Sc. 1	47.2	45.0	50.1	47.7	45.2	47.5	46.9	43.7	44.9
	Modeled Sc. 2	47.8	46.4	50.5	47.9	45.5	47.7	47.1	44.1	45.2
	Difference	0.6	**1.4**	0.4	0.2	0.3	0.2	0.2	0.4	0.3
8	Modeled Sc. 1	45.5	44.2	47.5	45.7	43.9	45.6	45.2	43.2	44.3
	Modeled Sc. 2	46.2	45.3	48.0	46.1	44.6	46.1	45.7	43.9	44.9
	Difference	0.3	**1.1**	0.5	0.4	0.7	0.5	0.5	0.7	0.6
9	Modeled Sc. 1	47.0	45.2	49.1	46.9	43.9	46.4	46.5	43.2	44.5
	Modeled Sc. 2	47.7	46.5	49.6	47.5	45.0	47.1	47.1	44.1	45.2
	Difference	0.7	**1.3**	0.5	0.6	1.1	0.7	0.6	0.9	0.7

Bold = maximum predicted difference between existing and future noise levels at each receptor location

The predicted sound levels received along the boundaries of the shopping center and at other receiving locations can be compared to range of typical sound levels described in the following Figure 15.

Figure 15 Typical Indoor and Outdoor Sound Levels



Conclusions

A. Assessments were performed to evaluate the acceptability of noise of nighttime shopping activities during extended nighttime operational hours at the Victor Crossing shopping center. The assessments included reviews and reference of sections of the Code of the Town of Victor Chapter 143 *Noise* regarding noise from plaza traffic and other sources. Specific acts deemed to produce excessive noise under the code are not applicable to normal shopping activities. Exemptions described in the code to not constitute excessive noise would be applicable, including operations of properly functioning mechanical heating and cooling units and snow removal during extended hours of nighttime shopping activities. The code does not restrict nighttime traffic. Based on the findings of this noise assessment, nighttime shopping nighttime shopping will not produce noise in excess of that allowed by the Town code.

B. The Town code does not provide object sound level criteria to determine the acceptability of explicit noise levels or noise level increases. As a further means to evaluate the acceptability of nighttime shopping activities in extended hours, the current noise assessment guidelines of New York State Department of Environmental Conservation, Program Policy DEP-00-1 *Assessing and Mitigating Noise Impacts,* were applied. The noise program policy describes human reactions to progressive noise level increases. Noise level increases ranging from 0 to 3 dBA are defined in the Policy to have no appreciable effect on receptors. Noise level increases ranging from 3 to 6 dBA have potential to affect only the most sensitive of receptors. The Policy states that sound pressure level increases from activities should probably not exceed 6 dBA in non-industrial settings. These thresholds were used as basis for determining the acceptability of shopping activities in extended nighttime hours at the Victor Crossing shopping center. The maximum expected nighttime noise level increase is 1.6 dBA, which according to NYSDEC noise assessment policy will have no appreciable effect on receptors.

C. Assessments of background noise levels and relative noise level increases were performed by means of a sophisticated environmental noise modeling program, CADNA/A v4.3. The computer model was developed using site development plans, USGS geographic contour plans, and aerial photographs to locate residences, roadways, and vegetative features. Inputs to the model included traffic counts for adjoining highway and roadway segments obtained from the New York State Department of Transportation, the New York State Thruway Authority, and T.Y. Lin, Inc. Other inputs to the model included manufacturer source levels for common rooftop mechanical equipment and transformer substations referenced from noise studies of Wal-Mart stores and other retail facilities performed by Angevine Acoustical Consultants, Inc.

D. The noise assessments conclude that noise level increases generated at receiving points by added nighttime shopping traffic on the Victor Crossing shopping center access roads and parking lots and on local roadways will be 1.6 dBA or less in nighttime hours on each day. The receiving points include the shopping center boundaries, nearby residences, and the nearby hotel. The specific noise level increases are predicted to be 0.8 dBA or less in the nighttime hour from 12:00 midnight to 1:00 a.m. on each day during the nighttime shopping period, 1.6 dBA or less from 2:00 a.m. to 3:00 a.m., and 0.9 dBA or less in the hour from 5:00 a.m. to 6:00 a.m. The noise level increases will be less than the 3 dBA perception threshold described in the NYSDEC Policy. It is concluded therefore that potential noise level increases from nighttime shopping will be minor and imperceptible and have no appreciable effect on the receptors adjoining the Victor Crossing shopping center.

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