

c r o s s r o a d s v e n t u r e s l l c

DRAFT
Environmental Impact Statement

Appendix 25

Traffic Impact Study

The Belleayre Resort at Catskill Park

Traffic Impact Study
Belleayre Resort at Catskill Park
Towns of Shandaken and Middletown, NY

CME Project #99-057

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CHAPTER I

INTRODUCTION

This report summarizes the results of a Traffic Impact Study conducted for a proposed resort facility, called Belleayre Resort at Catskill Park, located adjacent to Belleayre Mountain in the Towns of Shandaken and Middletown, Ulster County and Delaware County, New York. Refer to Figure 1.1 for a Project Location Map. The project site is divided into two separate locations; the first, referred to as Big Indian Plateau, is located on the south side of Route 28 adjacent to the Hamlet of Pine Hill. The second, referred to as the Wildacres Resort, is located on the west side of County Road 49A (CR 49A) directly across from the existing Belleayre Mountain Ski Center.

Big Indian Plateau, will be developed with an 18-hole championship golf course with a driving range, clubhouse, pro shop, restaurant, and snack bar, 183 club membership units with 88 two bedroom units located in 22-quadplex buildings with amenities including a game room, snack bar, pool, and tennis courts, 60 three bedroom units located in 20-triplex buildings, and 35 four bedroom units. In addition Big Indian Plateau will include a 150-room luxury hotel with two restaurants, a lounge, meeting rooms, a 200-seat ballroom, and a pool and spa.

Access to Big Indian Plateau will be provided via one access road adjacent to Belleayre Beach at Pine Hill Lake (day use area) located on Friendship Road off of Route 28. In addition, a primary emergency access will be provided off of Woodchuck Hollow Road and a secondary emergency access will be provided on the lower portion of Winding Mountain Road.

Wildacres Resort will be developed with an 18-hole golf course with a driving range, clubhouse, pro shop, and snack bar. Wildacres Resort will include a 250-room hotel located across from the Belleayre Mountain Ski Center and will include ten resort retail shops, two restaurants, a lounge, a pool and spa, tennis courts, a chapel, a 500-seat conference center, a 200-seat ballroom, and meeting rooms. An additional building, Marlowe Mansion, will be a third restaurant and will also accommodate offices. The Wildacres Resort will include 168 two bedroom-lodging units in 21-octoplex buildings with a clubhouse. A Children's Center will be included on the Wildacres Resort.

Access to Wildacres Resort will be provided via three site driveways off of CR 49A; the first access will be located on the existing Gunnison Road, the second access servicing hotel traffic will be located across from the Belleayre Mountain Ski Center (Main) Upper Driveway, and the third access will be located approximately 1,300 feet south of the Belleayre Mountain Upper Driveway. Approximately 1,500 feet south of the third (most southern) Wildacres Resort access the Wilderness Activity Center will be developed on the east side of CR 49A. In addition, a 21-lot subdivision of single family homes is proposed on CR 49A approximately three quarters of a mile south of the Wildacres Resort.

It is anticipated that the proposed project will open during the year 2006 and continue with construction through the year 2008. The 2008 full buildout conditions will result in the highest traffic volumes; therefore, the full build out conditions were analyzed in the Traffic Impact Study to facilitate worst case traffic volumes. The traffic conditions during the year of opening, with the facilities partially built, the background and build traffic volumes would be less.

A. Study Area Intersections

The study area is shown on Figure 1.1 and the analysis intersections as required by the Final Scoping Document are listed below:

- NYS Route 28/County Road 47
- NYS Route 28/ Main Street
- NYS Route 28/County Road 49A
- County Road 49A/ Belleayre Upper Driveway
- Pine Hill Road/ Main Street/Bonnieview Avenue/Academy Street

Two additional intersections along Route 28 were added to the study at the request of NYSDOT Region 8 after their review of the initial project scope. These intersections include:

- NYS Route 28/ NYS Route 214
- NYS Route 28/ NYS Route 42

Additional intersections were considered for analysis which included roadways to the south of the project area on CR 49A and west of the project area on Route 28. These intersections included roadways such as Dry Brook Road, Todd Mountain Road, Mill Brook

Road, and Fleischmanns Heights. A review of the study area traffic volumes indicated that a maximum of 2 to 3 percent of the site traffic would be generated towards these roadways indicating that they do not represent worst case intersections and were not considered for additional analysis. Additional details on the distribution of site generated traffic is included in Chapter III.

B. Study Methodology

The potential traffic impact of the proposed development was determined by documenting the existing traffic conditions in the area, projecting future traffic volumes, including the peak hour trip generation of the development, and comparing the operating condition of the study area intersections before and after full development of the proposed project.

Due to existing seasonal variations in the traffic experienced in the project area, two seasonal traffic conditions were evaluated to select the peak period for the year. A winter period in January to consider the conditions during the peak ski season and a fall period in October to consider traffic conditions when the proposed golf courses would be open. For the winter period, peak AM and PM peak hour weekend (Saturday) traffic conditions were analyzed. The AM peak hour captures the traffic on the study area roadways entering the existing Belleayre Mountain Ski Center, while the PM peak hour captures vehicles exiting the ski area at the end of the day. These two peak periods studied for the winter condition represent the worst-case background conditions on the study area roadways. The fall period was evaluated for a Friday PM peak and a Sunday PM peak. These two peaks were used to evaluate the traffic conditions during the peak fall leaf viewing weekend travel.

Existing traffic volumes on Route 28 are significantly lower during the summer as compared to the winter. The seasonal peaks were verified by comparing traffic data collected by NYSDOT on Route 28 in June 2000 to traffic data collected by CME in January and October of 2000. A comparison of traffic volumes on Route 28 indicated that the daily traffic volumes in January were approximately 1.8 to 2.5 times higher than the June traffic volumes and the October traffic volumes were approximately 1.8 times higher than the June traffic volumes.

Therefore, because the traffic volumes in the study area are considerably lower during the summer, a detailed analysis of summer traffic conditions was not conducted as part of this study.

The analysis presented in the traffic study represents worst-case traffic conditions since the background traffic volumes were obtained during holiday weekends during the peak seasons. The winter volumes were collected during the Martin Luther King Junior holiday weekend in January 2000. The administration of the Belleayre Mountain Ski Center has indicated that this particular holiday weekend was the highest on record for any day at their facility. Similarly, the fall base traffic volumes were collected during the Columbus Day holiday weekend during peak leaf peeping season and concurrent with a fall craft festival at the Belleayre Mountain Ski Center. Traffic volumes on Route 28 and the other highways in the study area are significantly lower during the summer months.

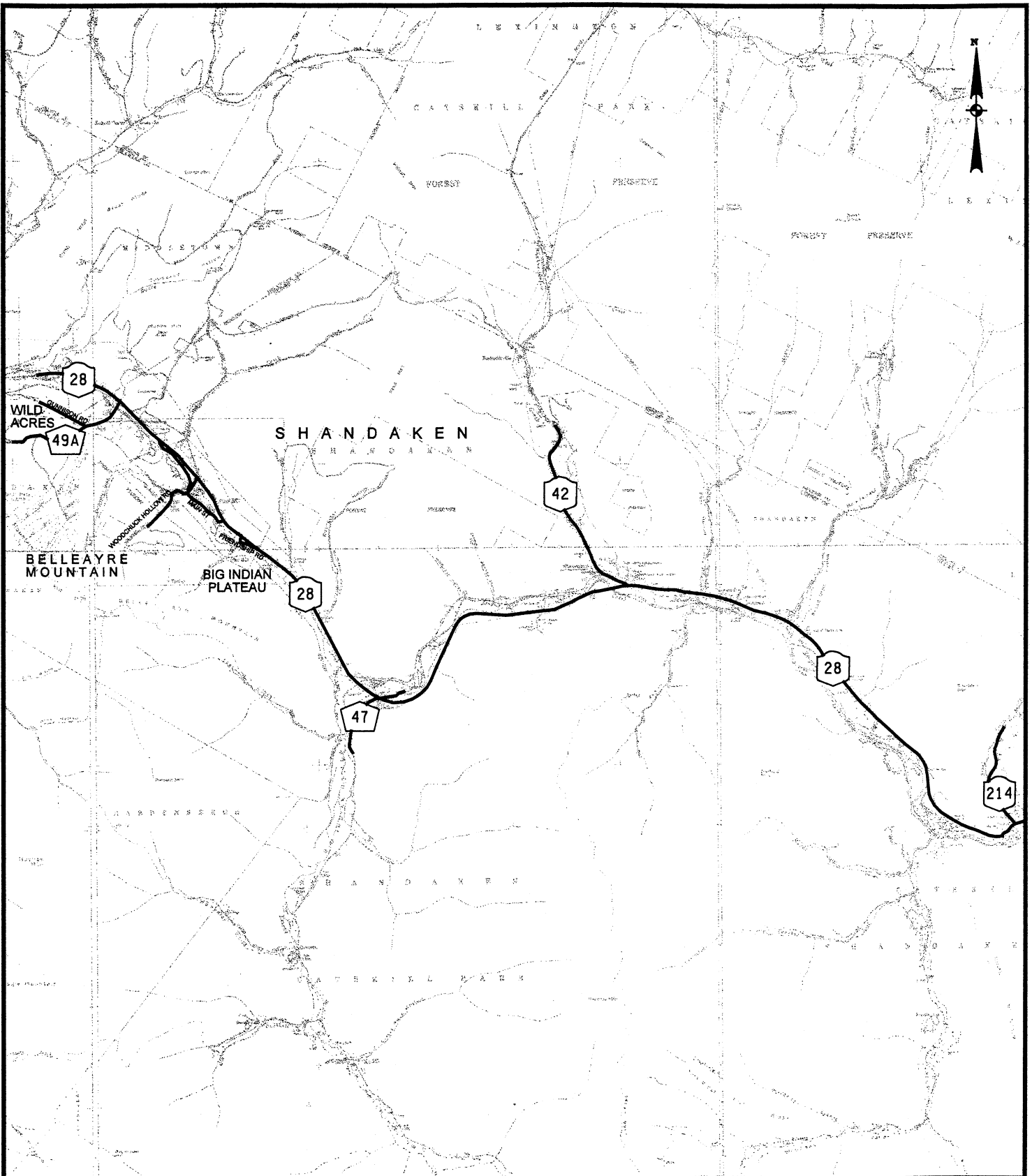


FIGURE 11
SITE LOCATION MAP

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

CME
CREIGHTON MANNING ENGINEERING, LLP
 4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057

SCALE: N.T.S.

DATE: 08/01

CHAPTER II

EXISTING CONDITIONS

A. Roadways Serving the Site

- Route 28 – Route 28 will serve as the primary means of access to the project area. Route 28 is a state-maintained roadway classified as a rural minor arterial. Route 28 extends from Kingston to the east and Oneonta to the west of the project. In the project area, Route 28 extends in an east-west direction with one twelve-foot wide travel lane in each direction and approximately six-foot wide shoulders. The statutory speed limit in the vicinity of the project site is 55 mph.
- Route 214 – Route 214 is a state-maintained roadway classified as a rural major collector. Route 214 begins at its intersection with Route 28 and extends northeast to Route 23A in Greene County. In the project area, Route 214 provides one twelve-foot wide travel lane in each direction with approximately eight-foot wide shoulders. The posted speed limit in the vicinity of the project is 30 mph.
- Route 42 – Route 42 is a state-maintained roadway classified as a rural major collector. Route 42 begins south of the project area at its intersection with Route 6 and Route 209 in Orange County and extends generally in a northeast direction and ends at the junction of Route 23A in Greene County. In the project area, Route 42 provides one ten-foot wide travel lane in each direction with approximately four-foot wide shoulders. The posted speed limit in the vicinity of the project is 45 mph.
- County Road 47 (CR 47) – County Road 47 is located southeast of the project site and is a two lane road extending in a north-south direction. At its intersection with Route 28, County Road 47 consists of approximately 10-foot travel lanes with approximately 3-foot shoulders. The speed limit in the vicinity of the project site is not posted and therefore assumed to be a statutory 55-mph.
- County Road 49A (CR 49A) – County Road 49A is a two lane road extending in a north-south direction between County Road 49 and Route 28. County Road 49A is used primarily to provide access to Belleayre Mountain Ski Center and rural residential properties to the south. In the project area, County Road 49A consists of one nine-foot travel lane in each direction with three-foot shoulders. The speed limit in the vicinity of the project site is not posted and therefore assumed to be a statutory 55-mph.

- Main Street— Main Street is a local road that intersects Route 28 at a T-intersection. Main Street is a two-lane road extending in a north-south direction with 10.5-foot travel lanes and three-foot gravel shoulders. The posted speed limit on Main Street is 30-mph.
- Friendship Road—Friendship Road is a local road that intersects Route 28 in two locations at T-intersections. Friendship Road is a two-lane road with a total pavement width varying between 18 and 20-feet. There is no posted speed limit on this roadway; however, it is assumed that a 30-mph town road speed limit would apply.

The roadway classifications used to describe the study area roadways is a method of grouping highways by the character of service (i.e. volumes, density, roadway networks, etc.) they provide. The functional classifications for the State roadways were obtained from information provided in NYSDOT's *1999 Highway Sufficiency Manual*.

B. Study Area Intersections

The geometry and traffic control of the study area intersections is as follows:

- Route 28/Route 214 – This intersection is a four-way intersection operating under stop sign control on the northbound South Street approach and the southbound Route 214 approach. All approaches to this intersection consist of a single lane with the exception of the Route 28 westbound approach which provides an approximately 140 foot long right-turn lane for vehicles entering Route 214 northbound.
- Route 28/Route 42 – This intersection is a three-leg intersection operating under stop sign control on the southbound Route 42 approach. The southbound approach to this intersection forms a 'Y' to separate left and right turn movements to and from Route 42. The Route 28 approaches to this intersection consist of single lanes and the southbound Route 42 approach consists of two lanes in each direction; however, quickly tapers to one lane in each direction at the base of the 'Y'.
- Route 28/County Road 47 – This intersection is a four-way intersection operating under stop sign control on the northbound and southbound County Road 47 approaches. Each approach of this intersection consists of a single lane.
- Route 28/Main Street – This intersection is a three-leg intersection operating under stop-sign control on the northbound Main Street approach. Each approach of this intersection consists of a single lane.

- Route 28/County Road 49A – This is a four-way intersection controlled by stop signs on the northbound Route 49A approach and the southbound Owl Nest Road approach. The Route 28 eastbound approach consists of a left/through lane and a right-turn lane. The remaining three intersection approaches each consist of a single lane.
- County Road 49A/Belleayre Upper Driveway – This is a three-leg intersection controlled by a stop sign on the westbound driveway approach. Each approach to this intersection consists of one travel lane.
- Main Street/Bonnieview Avenue/Academy Street – This is a four-way intersection controlled by stop signs on the Bonnieview Avenue and Academy Street approaches. Each approach to this intersection consists of one travel lane. This intersection is located southwest of the intersection of Route 28 and Main Street.

C. Existing Traffic

As mentioned previously, due to seasonal variations in area traffic, both winter and fall traffic conditions were considered in the traffic impact analysis of this project. Traffic data for the winter conditions analysis was collected at the study area intersections during the Martin Luther King Junior holiday weekend on Saturday, January 15, 2000 from 8:00 AM to 10:00 AM, 11:00 AM to 1:00 PM, and from 3:30 PM to 5:30 PM. Based on discussions with administration of the Belleayre Mountain Ski Center, during a holiday weekend the number of daily skiers is approximately the same on each day indicating that the Saturday counts obtained in the field represent typical worst-case holiday weekend traffic during the winter. Turning movement counts at the Route 28/Route 214 and Route 28/Route 42 intersections were conducted during the Martin Luther King Junior holiday weekend on Saturday January 13, 2001 between 8:00 AM and 10:00 AM and 3:30 PM and 5:30 PM. Although these volumes were collected in the year 2001, they were representative of 2000 existing conditions. Based on an analysis of the 2000 traffic counts, it was determined that the traffic volumes during the midday period from 11:00 AM to 1:00 PM were not critical to the analysis because the volumes were lower than the early and late peak hours; therefore, midday traffic counts were not collected in 2001 at the Route 28/Route 214 and Route 28/Route 42 intersections. Because the existing traffic volumes are

lower during the midday hours, traffic operations during this period were not carried through the detailed analysis.

Traffic data for the fall season was collected during the Columbus Day holiday weekend on Friday, October 13, 2000 from 5:00 PM to 8:00 PM and on Sunday, October 15, 2000 from 4:00 PM to 7:00 PM. Due to travel in the project corridor to and from the Fall Festival and Craft Fair at the Belleayre Mountain Ski Center on this weekend, the data obtained in the field represents worst-case weekend traffic conditions when the proposed golf courses would be operational. Turning movement counts at the additional study area intersections at Route 28/Route 214 and Route 28/Route 42 were not conducted for the fall condition. Since the winter condition traffic volumes on the study area roadways are higher than in the fall condition, these two intersections offset from the project area are not considered critical in the fall condition.

The raw turning movement traffic count data is included in Appendix A. These volumes provide base year 2000 conditions and form the basis for all traffic forecasts. These volumes are summarized on peak hour traffic flow diagrams as Figures 2.1 through 2.5. The referenced figures illustrate the traffic flow for each movement at an intersection with directional arrows. For example, Figure 2.1 summarizes the peak hour traffic volumes during the morning on a Saturday during the winter. For reference, the graphic on Figure 2.1 for the Route 28/CR 47 intersection indicates that 0 vehicles are turning left from Route 28 eastbound to CR 47 northbound, 62 vehicles are travelling on Route 28 eastbound straight through the intersection continuing on Route 28, and 9 vehicles are turning right from Route 28 eastbound onto CR 47 southbound.

To verify the seasonal variations experienced in the traffic volumes in the project area, NYSDOT automatic traffic recorder data from June of 2000 was compared to traffic volume data collected in January and October by CME. In the AM peak hour, the NYSDOT June 2000 counts showed 190 vehicles on Route 28 while the January 2000 counts showed 354 vehicles. In the PM peak hour, the NYSDOT June 2000 counts showed 235 vehicles while the January 2000 counts showed 591 vehicles and the October 2000 counts showed 416 vehicles. These volume differences on Route 28 indicate that the January traffic volumes are between 1.8 and 2.5 times higher than the June traffic volumes and the October traffic volumes are approximately 1.8 times higher. The results of this seasonal comparison confirm that a winter and fall holiday weekend

background traffic is appropriate in the project area to simulate worst-case background traffic volumes on the study area roadways. The NYSDOT June traffic count data is included in Appendix A.

The Onteora Central School District Transportation Department has indicated that one high school bus and one elementary school bus currently have runs through the project area. Each of the busses has approximately ten stops along Route 28. The high school bus travels in the project area at approximately 6:45 AM and 3:00 PM and the elementary school bus travels in the project area at approximately 7:45 AM and 4:00 PM. Three special education busses also travel along Route 28 with no stops in the project area. An additional bus from the high school makes late runs in the afternoon at approximately 4:45 PM and 5:45 PM. It is not expected that school bus traffic will be affected by the proposed project since the school bus runs will typically occur earlier in the day than any peak travel to/from the proposed project sites. Also, the analysis presented in the report indicates that the peak travel at the proposed resort will generally occur during the weekends when school bus travel is not applicable.

The following conclusions are evident from this field data:

- The Saturday counts conducted in January indicated that the peak hours of adjacent street traffic generally occur between 8:45 AM and 9:45 AM during the morning peak, between 11:45 AM and 12:45 PM during the mid-day peak, and between 4:00 PM and 5:00 PM during the afternoon peak. The counts conducted in October indicated that the peak hours of adjacent street traffic generally occur between 5:00 PM and 6:00 PM on Friday afternoon and between 4:00 PM and 5:00 PM on Sunday afternoon.
- The collected data indicates that the Saturday afternoon peak hour in January yields the highest traffic volumes on the study area roadways with approximately 690 vehicles per hour on Route 28 and approximately 495 vehicles per hour on CR 49A.
- There is very little truck traffic on any of the study area roadways during the peak periods studied for this project.
- There was no pedestrian activity observed on Route 28 and CR 49A at the study area intersections during the peak periods studied.
- An assessment of the three studied peak hours of the winter Saturday conditions indicated that the mid-day peak hour traffic is not as high as the AM and PM peaks. Therefore, the Saturday AM and PM peak hour conditions will be carried

through the traffic study and analyzed for the winter traffic conditions of the proposed development.

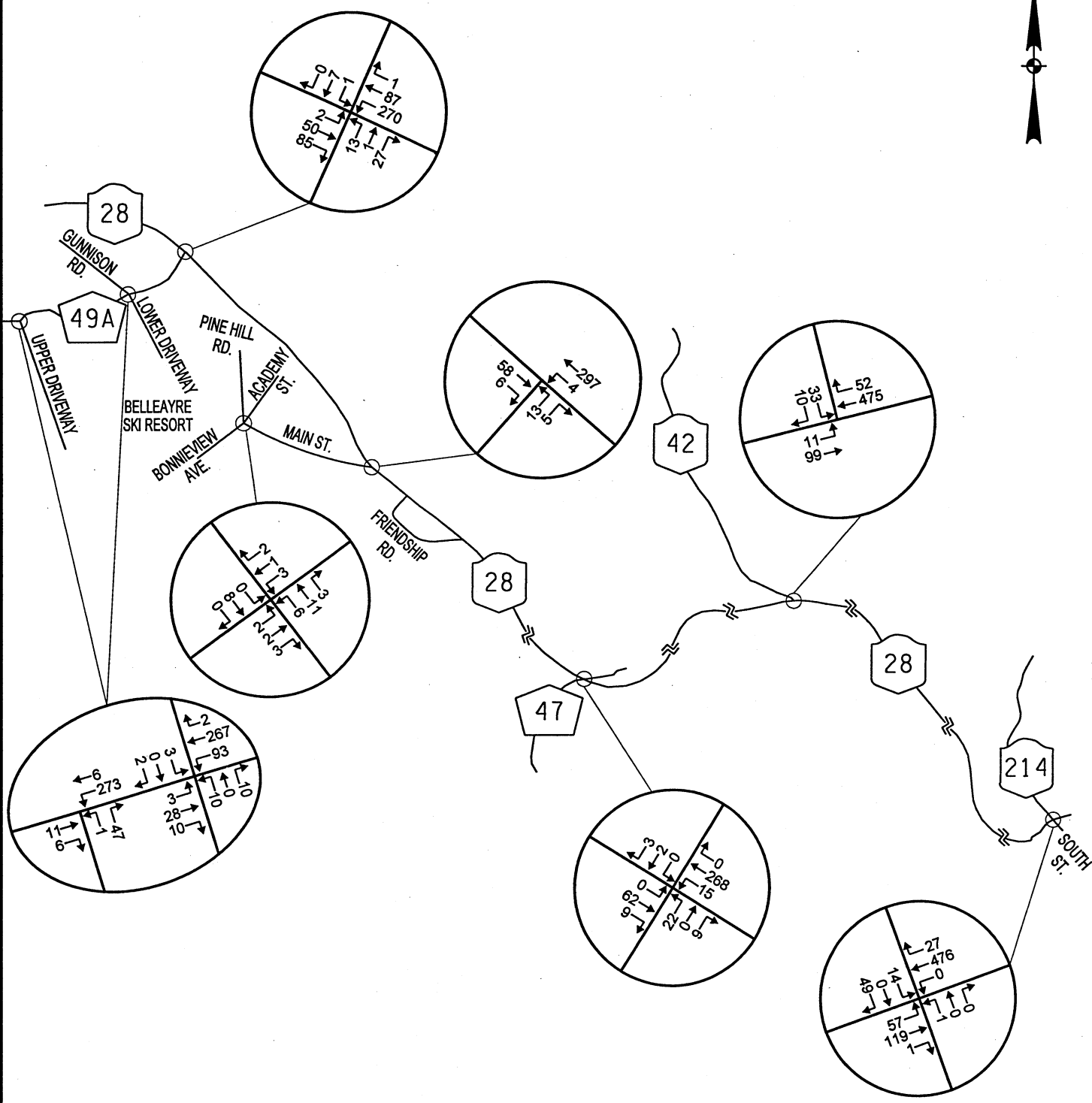


FIGURE 2.1
2000 EXISTING TRAFFIC VOLUMES
WINTER, SATURDAY AM PEAK HOUR

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

CME
CREIGHTON MANNING ENGINEERING, LLP
 4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

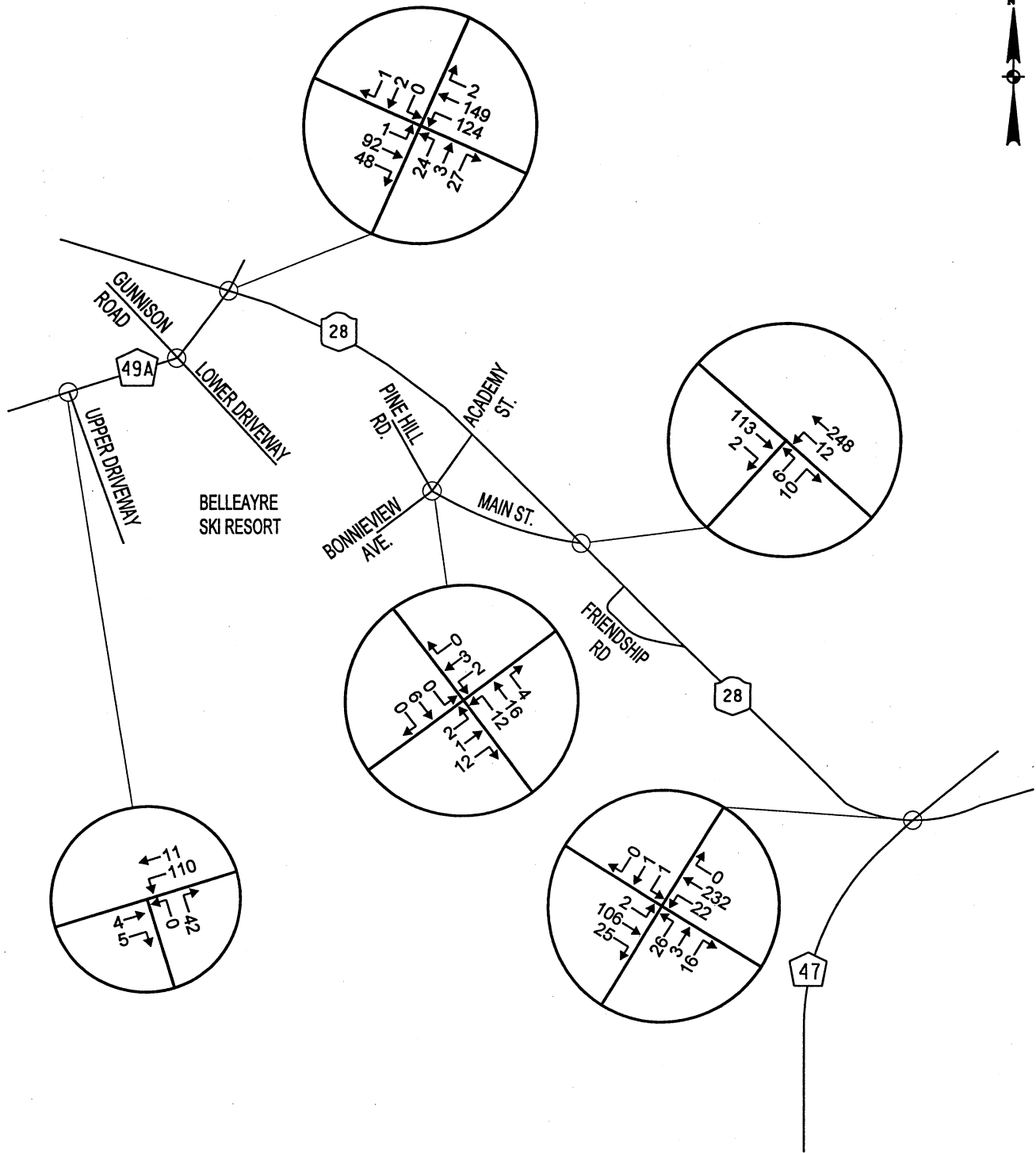


FIGURE 2.2
2000 EXISTING TRAFFIC VOLUMES
WINTER, SATURDAY MIDDAY PEAK HOUR

BELLEAYRE RESORT AT CATSKILL PARK
TOWN OF SHANDAKEN AND
MIDDLETOWN, NEW YORK



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DATE: 1/2002

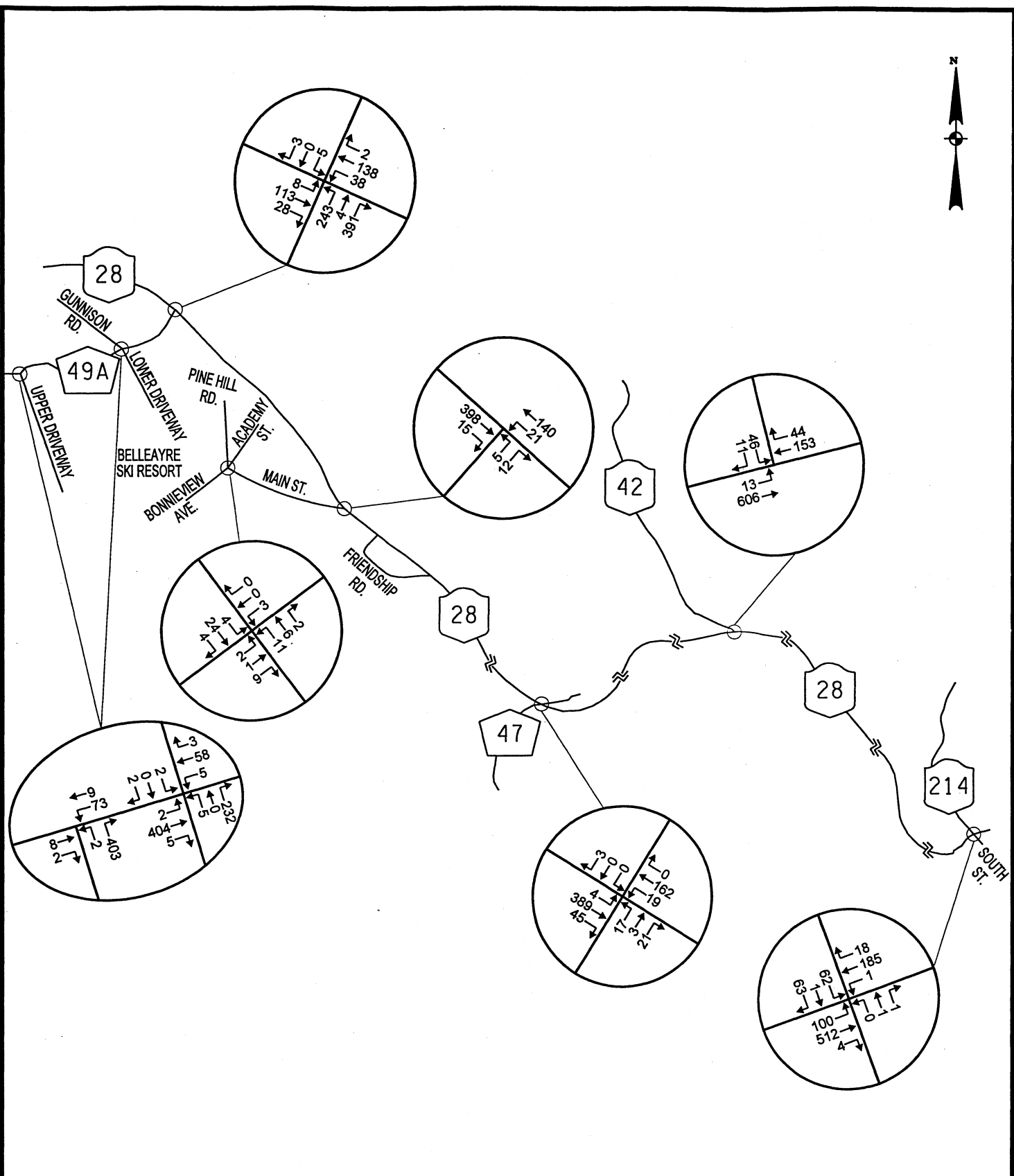


FIGURE 2.3
2000 EXISTING TRAFFIC VOLUMES
WINTER, SATURDAY PM PEAK HOUR

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK



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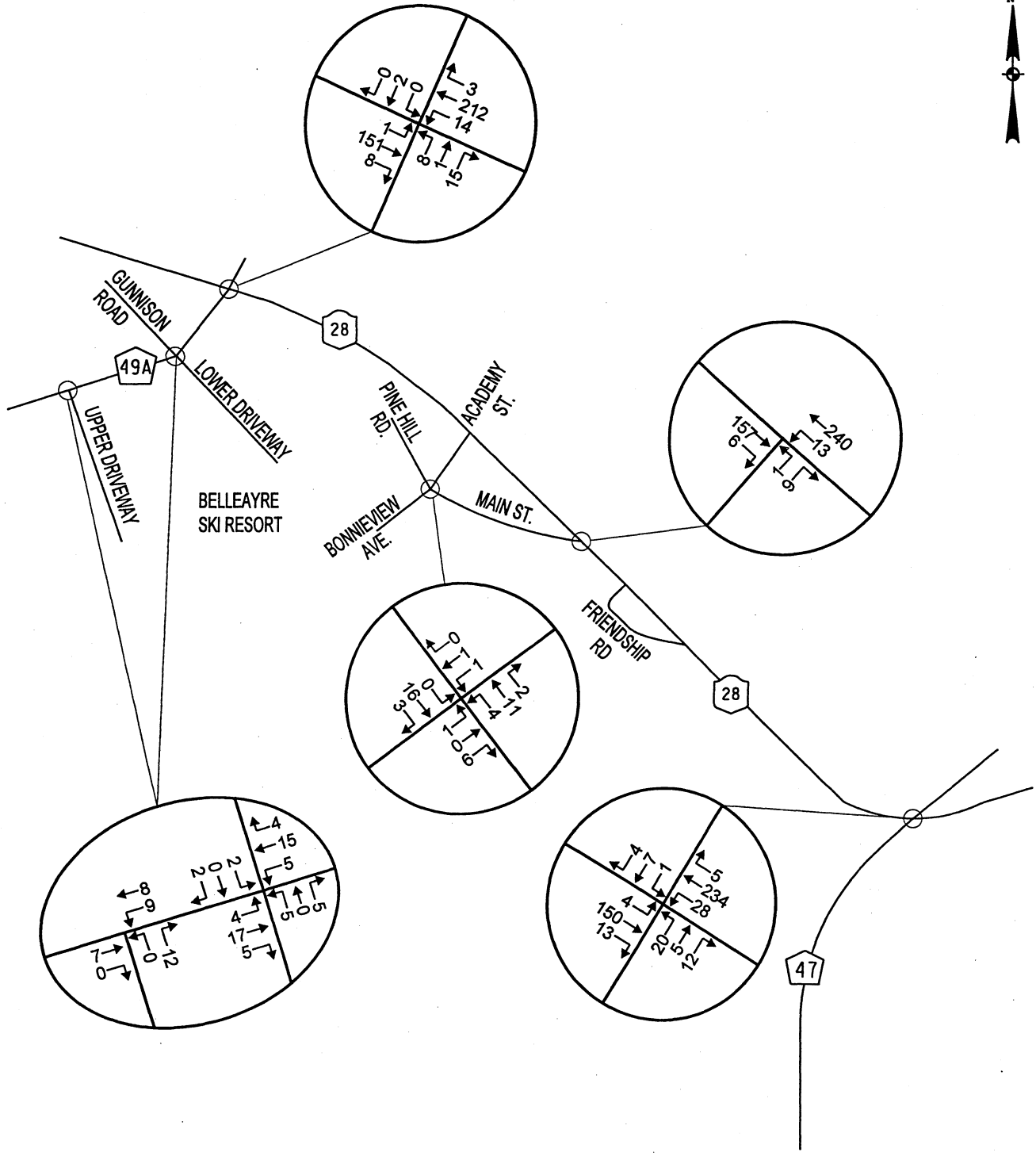


FIGURE 2.4
2000 EXISTING TRAFFIC VOLUMES
FALL, FRIDAY PM PEAK HOUR

BELLEAYRE RESORT AT CATSKILL PARK
TOWN OF SHANDAKEN AND
MIDDLETOWN, NEW YORK



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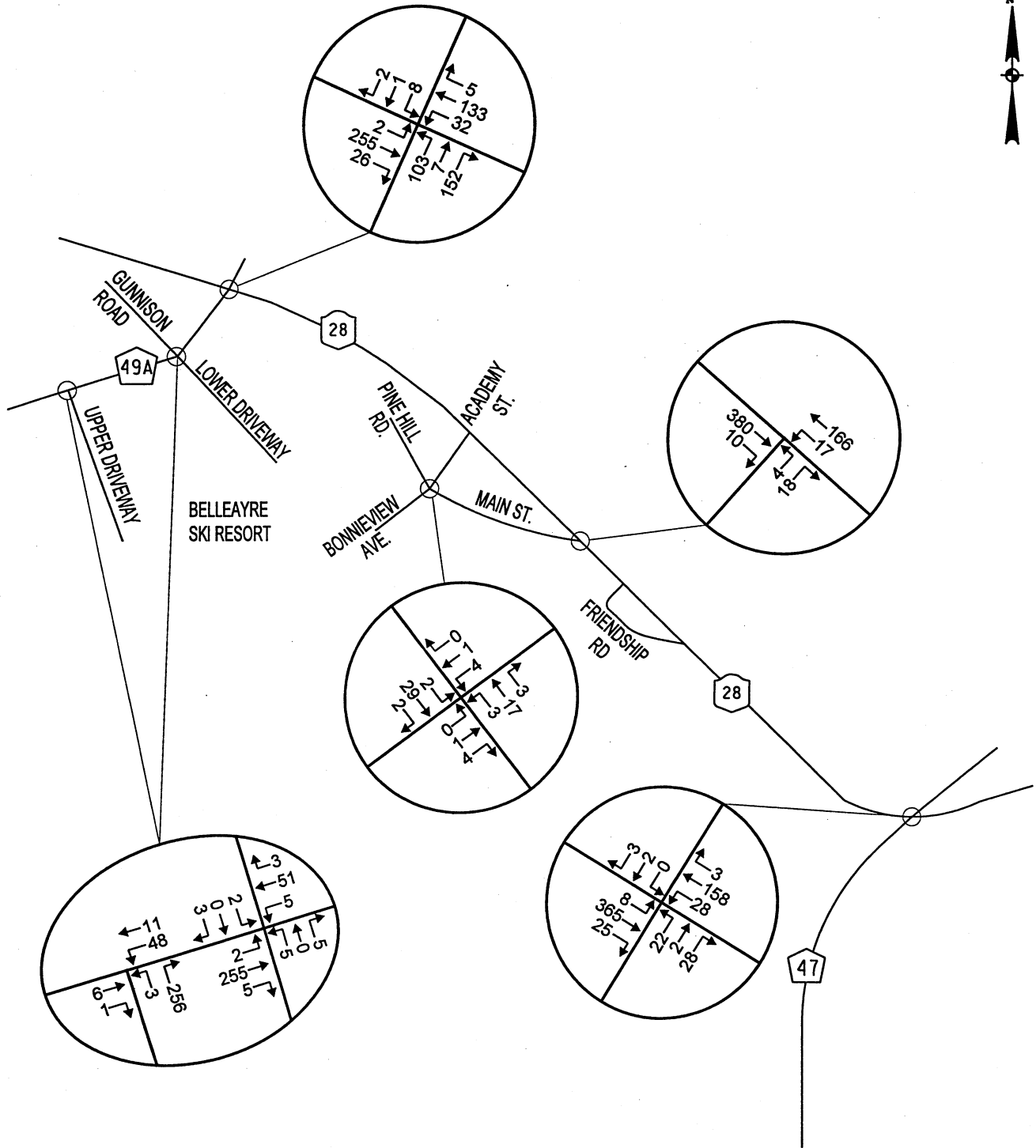


FIGURE 2.5
2000 EXISTING TRAFFIC VOLUMES
FALL, SUNDAY PM PEAK HOUR

BELLEAYRE RESORT AT CATSKILL PARK
TOWN OF SHANDAKEN AND
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PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

CHAPTER III

TRAFFIC FORECASTS

It is anticipated that the proposed resort facilities will be opened in 2006 and fully developed by the year 2008. To evaluate the impact of the proposed development, a comparison was made between the future traffic volumes in 2008 with and without the traffic generated by the proposed resort for worst case fall and winter traffic conditions. Roadway improvements needed in the 2006 year of opening were evaluated as well. Table 3.1 describes the various traffic forecasts contained at the end of this chapter and in Appendix B.

Table 3.1 - Summary of Traffic Projections

Description	Figure
2008 Background Traffic Volumes- Winter Saturday AM peak hour	3.1
2008 Background Traffic Volumes- Winter Saturday PM peak hour	3.2
2008 Background Traffic Volumes- Fall Friday PM peak hour	3.3
2008 Background Traffic Volumes- Fall Sunday PM peak hour	3.4
Distribution of Weekend Traffic	3.5
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Trip Distribution Percentages- Big Indian Plateau	3.7
Trip Distribution Percentages- Highmount Estates	3.8
Trip Assignment- Saturday AM peak hour- Wildacres	B.1
Trip Assignment- Saturday PM peak hour- Wildacres	B.2
Trip Assignment- Friday PM peak hour- Wildacres	B.3
Trip Assignment- Sunday PM peak hour- Wildacres	B.4
Trip Assignment Saturday AM peak hour- Big Indian Plateau	B.5
Trip Assignment Saturday PM peak hour- Big Indian Plateau	B.6
Trip Assignment Friday PM peak hour- Big Indian Plateau	B.7
Trip Assignment Sunday PM peak hour- Big Indian Plateau	B.8
Trip Assignment Saturday AM peak hour- Highmount Estates	B.9
Trip Assignment Saturday PM peak hour- Highmount Estates	B.10
Trip Assignment Friday PM peak hour- Highmount Estates	B.11
Trip Assignment Sunday PM peak hour- Highmount Estates	B.12
2008 Build Traffic Volumes- Winter Saturday AM peak hour	3.9
2008 Build Traffic Volumes- Winter Saturday PM peak hour	3.10
2008 Build Traffic Volumes- Fall Friday PM peak hour	3.11
2008 Build Traffic Volumes- Fall Sunday PM peak hour	3.12

A. Background Traffic Volumes (2008)

Information provided in the *1999 Traffic Volume Report*, published by the New York State Department of Transportation, indicates that annual traffic volumes on Route 28 have been increasing by approximately two percent per year. It was assumed that this trend would continue for the next 8 years regardless of the development of the proposed resorts. In addition, as part of the Unit Management Plan for Belleayre growth of skier visits is expected as well. Therefore, the existing peak hour seasonal traffic volumes were increased by a 3 percent growth rate compounded for eight years to estimate 2008 No-Build traffic volumes. No-Build traffic volumes represent traffic conditions that would exist without the proposed resort.

The existing traffic volumes at the study area intersections were increased by twenty-seven percent to estimate the 2008 Background volumes. The 2008 Background traffic volumes are shown on Figures 3.1 through 3.4. It should be noted that these Background traffic volumes are conservative since they account for some additional growth that is expected at the Belleayre Ski Resort. Any specific developments, proposed for the project area would typically require the completion of a traffic impact analysis specific to the project. The additional one percent added to the background growth rate is not meant to replace the SEQR requirements of an additional development; however, it provides for more conservative background traffic volumes for this study.

B. Trip Generation

Trip generation determines the quantity of traffic expected to travel to/from a given site. Two sources of trip generation were used -- The Institute of Transportation Engineers (ITE) *Trip Generation*, 6th edition, and counts of similar resort facilities. ITE provides trip generation data for the proposed development based on studies of similar types of existing developments located across the country. A comparison of the rates from the different sources is discussed below:

- Lodging and Club Membership Units: The closest ITE vehicle trip generation for the lodging units and club membership units was the land use code for recreational homes which is defined as homes, often second homes, usually located in a resort, used by the owner periodically or rented seasonally. This land use code best represents the time-share type lodging units proposed as part of this project. The ITE rate for the generator peak hour was 0.35 trips per unit. This rate is similar to the rate measured at a 216 unit project located at Mt. Snow where

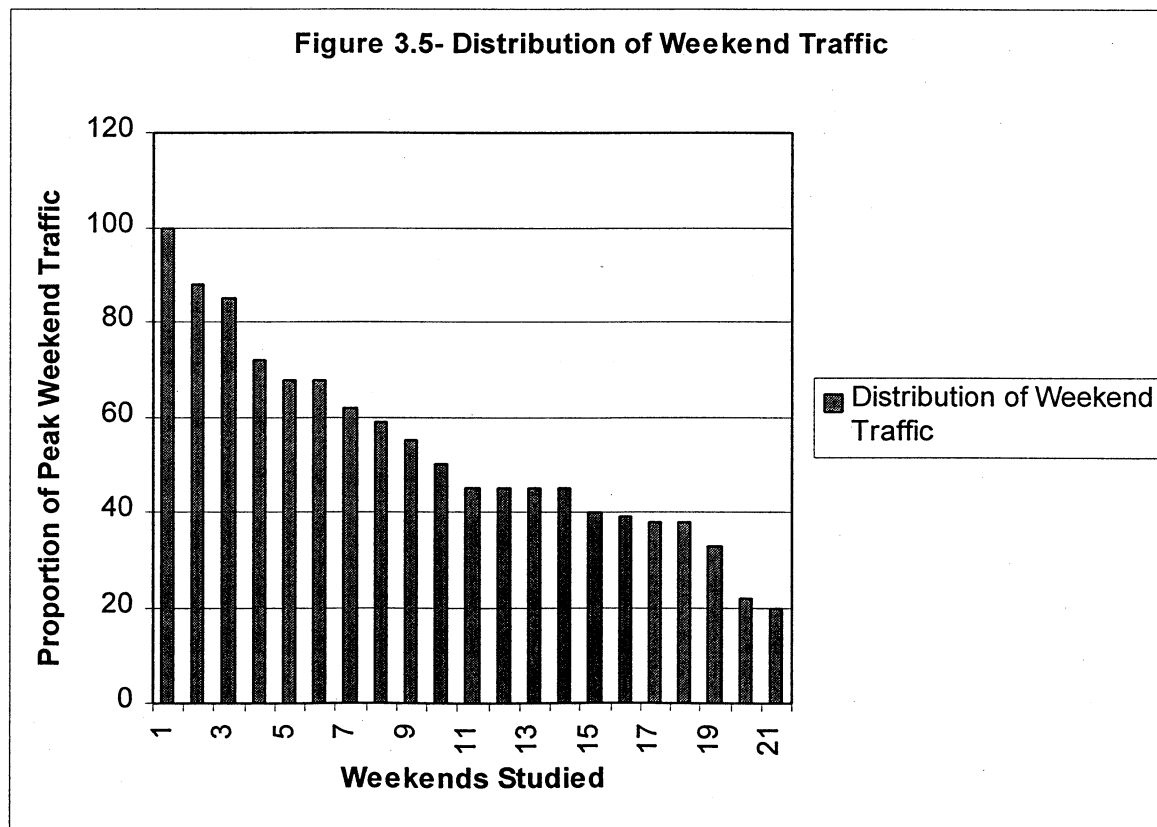
0.31 trips per unit were measured. For analysis purposes, the slightly higher ITE rate will be used.

- **Hotel:** ITE's trip generation rate for a hotel reflects uses such as meeting rooms, banquet facilities, and conference centers. Convention center trips and hotel ballroom trips are reflected in these rates as well. Therefore, no separate trip estimates were included for the convention center, the ballroom, or any of the meeting facilities. In addition, the restaurants, club houses, coffee shops, retail, and recreational facilities included in the proposed development are typical amenities characteristic of golf courses, hotels, and recreational homes and are included in the ITE land use code descriptions for the above land uses. The ITE trip generation rates include all trips expected to travel to and from a facility including employees, patrons, etc. The ITE hotel peak hour of generator rate is 0.72 trips per room. This rate is not supported by measurements taken at a resort hotel and convention facility at the Sunday River Resort in Maine. The Sunday River Hotel is similar to those proposed for this development. When the hotel was fully booked, a rate of 0.326 trips per room was measured for the peak hour. This rate is less than half of the ITE rate and more closely approximates the type of hotel facility proposed. However, to insure that adequate traffic mitigation measures are taken the higher ITE rate was used for the design analysis of traffic conditions. The above estimated design trips simulate a worst case peak hour design condition at full buildout of the proposed project assuming 100% occupancy of all residential and club membership units.
- **Golf Course:** The golf course will be primarily for resort guests but the general public will be allowed to use the course on a space available basis. The ITE rate for golf courses was used to estimate peak hour trips. It should be noted that the golf course trips were only added to the fall condition analysis (Friday PM peak hour and Sunday PM peak hour). Golf course trips were not included in the wintertime condition analysis (Saturday AM and PM peak hours) since this represents a time of year when the golf courses will not be operational.

The ITE trip generation manual provides one peak hour trip rate for the peak hour of the generator for Saturday and Sunday conditions of the proposed resort-types of land uses. For the design analysis it was assumed that the peak hour of the generator would occur during the peak hours of adjacent street traffic. That is, the same higher number of trips were used for both the AM and PM Saturday peak hours for the wintertime analysis. Again this a conservative approach by adding the highest trip generation of the proposed uses to the highest seasonal background traffic conditions.

Shuttle buses will play a significant role in reducing the trips from the development. In the winter they will shuttle skiers to and from Belleayre Mountain Ski Center and in the summer they will shuttle between Wildacres, Big Indian, and the Wilderness Activity Center. There will be no patron parking located on the Wilderness Activity Center site so, no additional trips were added to the trip generation estimates for this facility. The shuttle buses will also serve the golf courses. As a conservative estimate it has been assumed that 40 percent of the trips to and from the golf courses on peak days will be made on the shuttle buses. In the winter the main activity will be skiing and it has been assumed that 50 percent of the trips generated by the resort will be to and from Belleayre Mountain Ski Center. Of these trips it has been assumed that 80 percent of them will be on the shuttle buses.

Another characteristic of this type of resort is the significant variation in trip making between different days of the season. Data on this variation is shown in Figure 3.5. As can be seen weekend attendance during the ski season drops to as low as 22% of the maximum weekend. For the period measured the median trips generated was 45% of the maximum.



A summary of the estimated trip generation for the resort during for different peak periods is shown in Tables 3.2, 3.3 and 3.4. The tables show the design volumes used for the traffic analysis based on ITE rates and the estimated maximum volumes based on other traffic counts at similar facilities for the peak hour of the peak day. More typical volumes that would occur at on-peak times of the year are shown as well. A more detailed trip generation analysis is shown in the Appendix B.

Table 3.2 - Wildacres Resort Trip Generation

Wildacres Resort	Saturday Peak Trips			Friday PM Peak			Sunday PM Peak		
	Design	Estimated Maximum	Typical	Design	Estimated Maximum	Typical	Design	Estimated Maximum	Typical
168 Lodging Units	49	42	19	44	38	17	60	52	23
250-Room Hotel	152	126	57	138	114	51	140	116	52
18-Hole Golf Course	-	-	-	32	32	14	52	52	23
Total Wildacres Resort	201	168	76	214	184	82	252	220	98

Design = Based on ITE rates used for traffic analysis
 Estimated Maximum = Based on measured volumes at similar resorts
 Typical = Based on median day of operation

Table 3.3 - Big Indian Plateau Trip Generation

Big Indian Plateau	Saturday Peak Trips			Friday PM Peak			Sunday PM Peak		
	Design	Estimated Maximum	Typical	Design	Estimated Maximum	Typical	Design	Estimated Maximum	Typical
183 Club Memberships	55	47	21	48	41	18	67	58	26
150-Room Hotel	91	76	34	74	61	27	84	70	32
18-Hole Golf Course	-	-	-	32	32	14	52	52	23
Total Big Indian Plateau	146	123	55	154	134	59	203	180	81

Design = Based on ITE rates used for traffic analysis
 Estimated Maximum = Based on measured volumes at similar resorts
 Typical = Based on median day of operation

Table 3.4 – Highmount Estates Trip Generation

Highmount Estates	Saturday Peak Trips			Friday PM Peak			Sunday PM Peak		
	Design	Estimated Maximum	Typical	Design	Estimated Maximum	Typical	Design	Estimated Maximum	Typical
21 Single Family Homes	17	17	8	25	25	11	17	17	8

Design = Based on ITE rates used for traffic analysis

Estimated Maximum = Based on measured volumes at similar resorts

Typical = Based on median day of operation

B. Trip Distribution

Trip distribution describes where traffic originates or where traffic is destined. The trip distribution patterns were based on the existing traffic patterns observed in the area during the two holiday weekends studied, as well as an assessment of the market area for the proposed resort. Based on the assessment, it was determined that the majority of the traffic traveling to and from the resorts will be coming from or destined to the greater metropolitan New York area. Travel to and from metropolitan New York is likely to be on Interstate 87. Therefore, the highest percentage of travel will be to and from Interstate 87, Exit 19 where Route 28 provides access to the project area and from Interstate 87, Exit 16 where Route 17 and CR 47 provide access to the project area. The trip distribution patterns for the Wildacres Resort and Big Indian Plateau are shown on Figures 3.6 and 3.7. Two trip distribution patterns are shown at the Wildacres Resort driveways. One distribution pattern is shown for the hotel traffic at the middle and southern driveways where parking lots/garages to service the hotel will be located. A second distribution pattern is shown at the first and third driveways for the golf and lodging traffic.

A 170-vehicle employee parking lot is proposed on Lasher Road located on the south side of Route 28 east of the Big Indian Plateau. Employees using this lot would be shuttled to Big Indian Plateau or Wildacres. It is likely that this remote employee parking lot will be utilized during peak occupancy times at the two resort facilities. It is also expected that traffic volume peaks at the employee parking lot would occur before and after shift changes, which are likely to occur during off peaks (peaks different than the peak periods analyzed in the traffic impact

study). In order to maintain maximum worst-case traffic volumes at the site driveways, the employee trips were included in the analysis of the site driveways.

The trip distribution patterns for Highmount Estates were developed based on the local trip distribution patterns. The trip generation pattern is shown on Figure 3.8.

C. Traffic Assignment

Traffic assignment combines the results of the trip generation and trip distribution and determines the specific path and roadway that will be used between various origin/destination pairs. One access road is proposed off of Friendship Road for Big Indian Plateau. Since the traffic volumes on Friendship Road are very low, the intersection of Friendship Road and Route 28 was analyzed to determine any impacts from the project traffic. To provide a worst-case condition, it was assumed that all of the traffic to/from Big Indian Plateau would utilize the eastern leg of Friendship Road since this leg is closest to the proposed access road location on Friendship Road. Three driveways will provide access to Wildacres; one on the existing Gunnison Road, a second directly opposite the Belleayre Mountain Ski Center Upper Driveway, and the third south of the Upper Driveway intersection. The traffic assignment for each of the Wildacres driveways was determined based on an assessment of the internal site layout and the trips associated with each component of Wildacres. The resulting peak hour traffic assignments for the Saturday AM and PM peak hour winter conditions and the Friday PM and Sunday PM peak hour fall conditions are shown on Figures B.1 through B.12 in Appendix B.

D. 2008 Build Traffic

The results of the traffic assignment were added to the 2008 Background traffic volumes to develop the 2008 Build traffic volumes. An analysis of the total traffic at each intersection during the peak hour indicates that the Saturday PM Peak is the highest peak hour at the study area intersections. Therefore, this peak hour will be analyzed to determine the impact of the development on future traffic conditions in the following sections of the study. The Saturday AM Peak hour will be analyzed as well to determine the impact during a morning peak period.

The Build traffic volumes for the peak hour design conditions are shown Figures 3.9 through 3.12. These traffic volumes represent the future condition that would exist assuming a

twenty-seven percent increase in existing traffic in addition to the full build-out of all components of the proposed development.

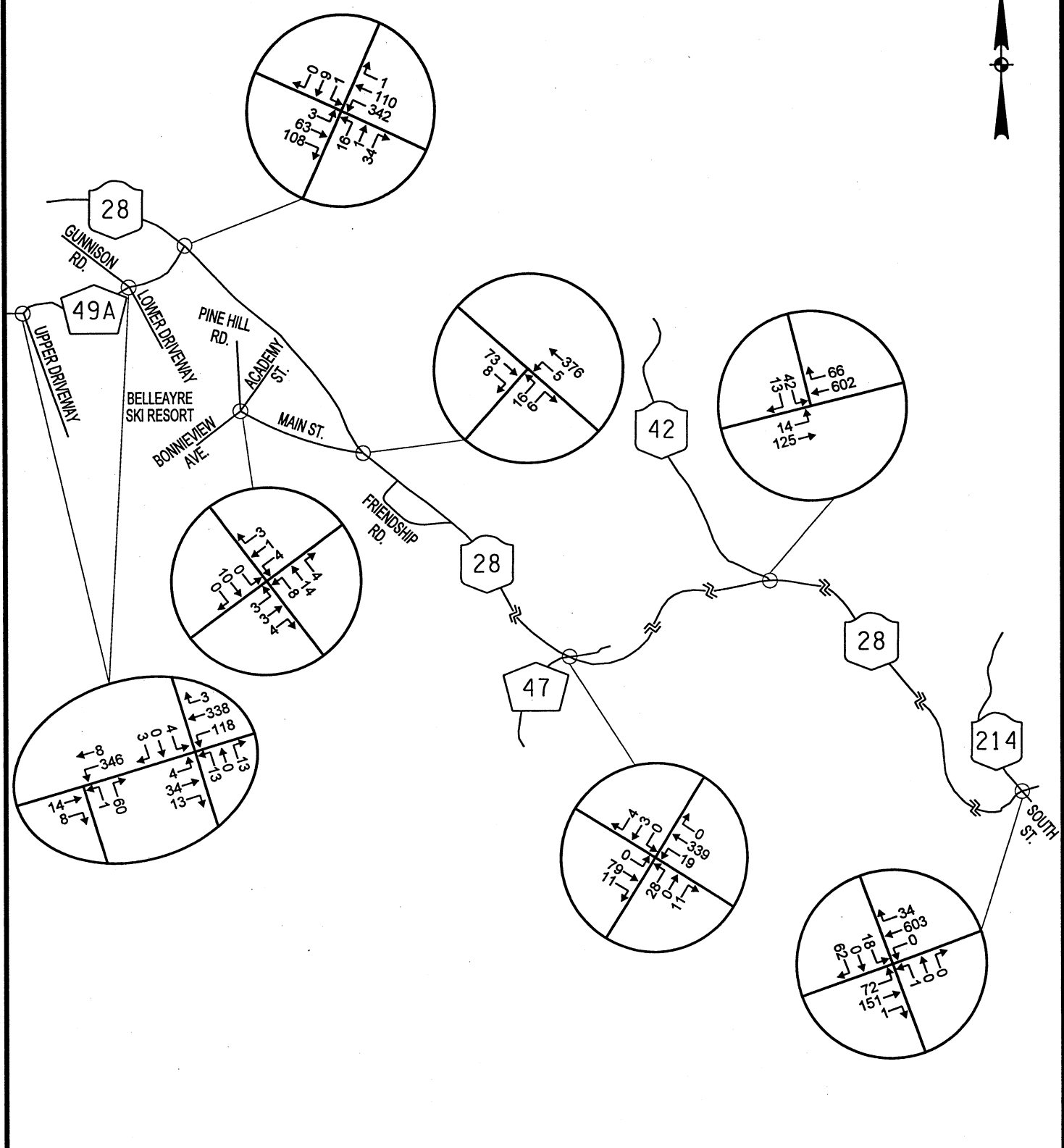


FIGURE 3.1
2008 BACKGROUND TRAFFIC VOLUMES
WINTER, SATURDAY AM PEAK HOUR

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

CME
CREIGHTON MANNING ENGINEERING, LLP
 4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

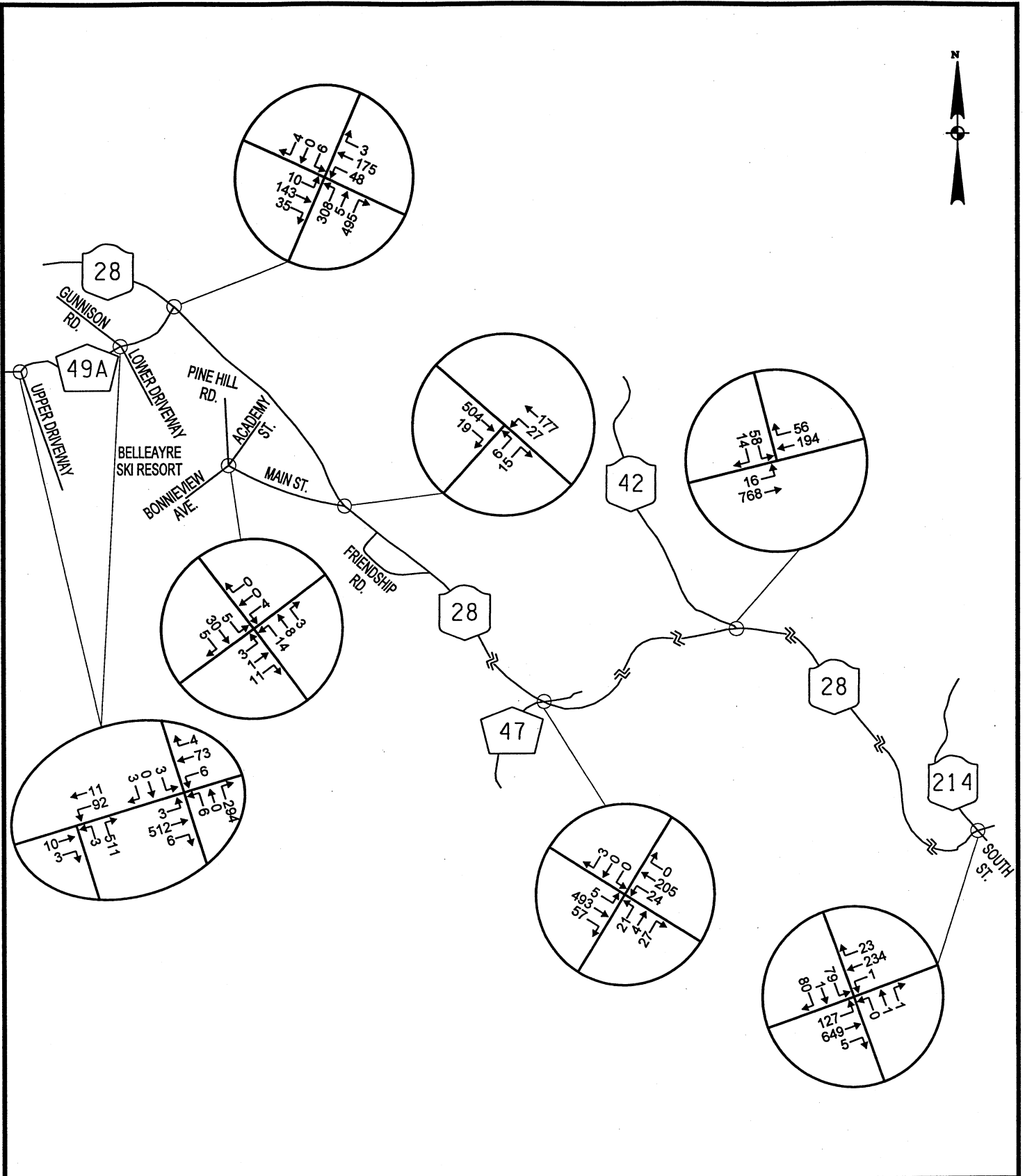


FIGURE 3.2
2008 BACKGROUND TRAFFIC VOLUMES
WINTER, SATURDAY PM PEAK HOUR

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

CME
CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057

SCALE: N. T. S.

DATE: 1/2002

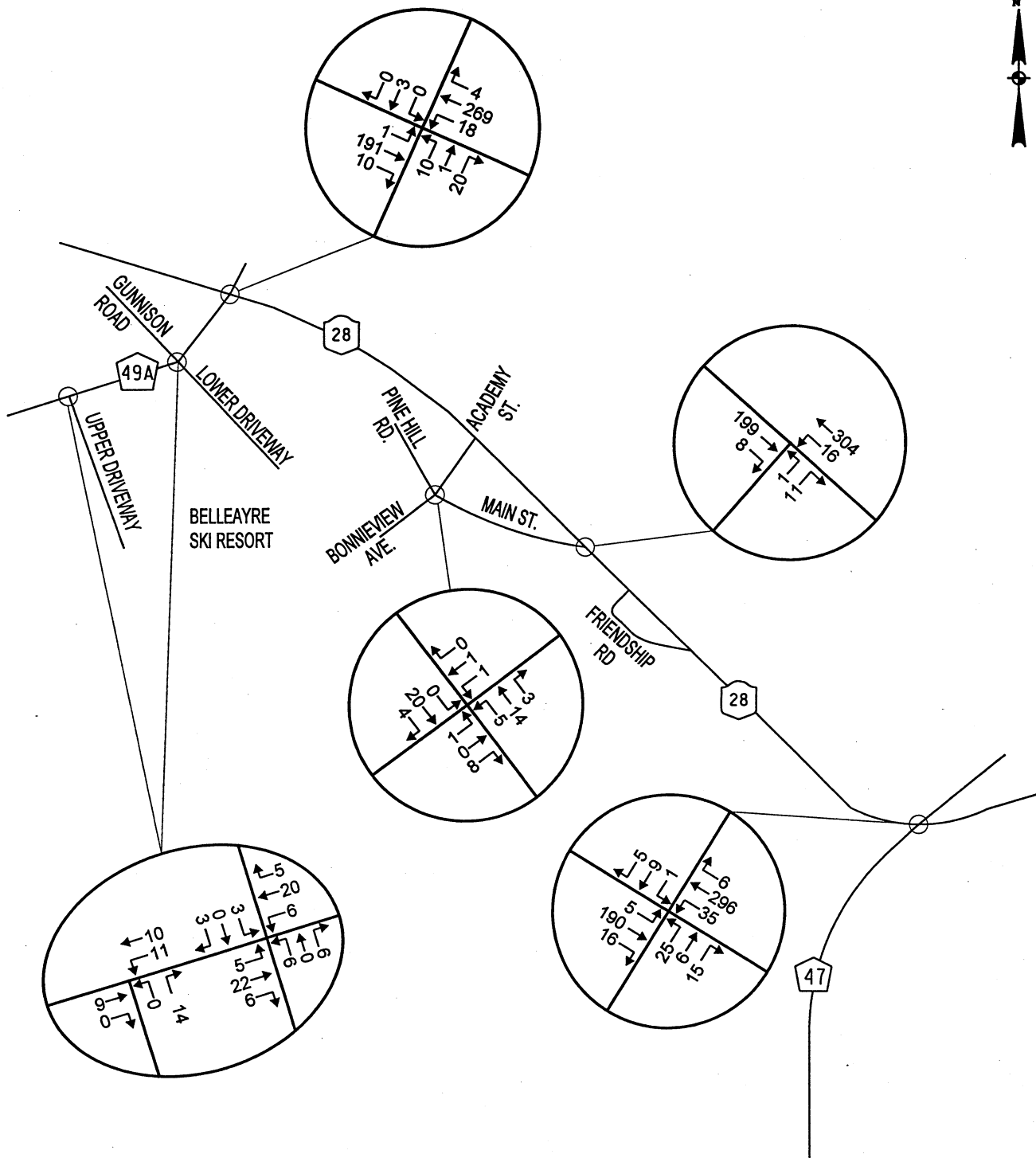


FIGURE 3.3
2008 BACKGROUND TRAFFIC VOLUMES
FALL, FRIDAY PM PEAK HOUR

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

CME
CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057

SCALE: N.T.S.

DATE: 1/2002

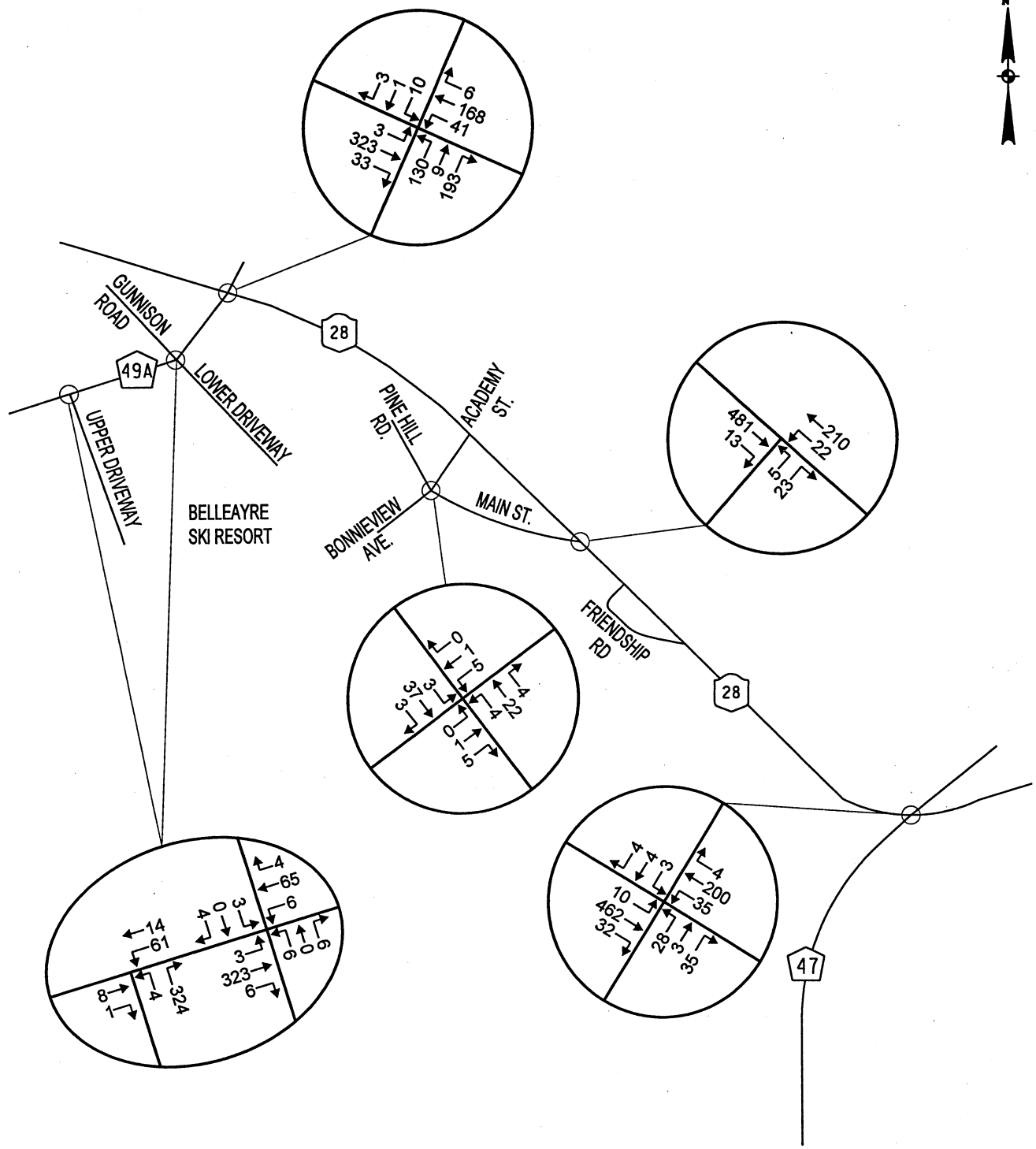


FIGURE 3.4
2008 BACKGROUND TRAFFIC VOLUMES
FALL, SUNDAY PM PEAK HOUR

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK



PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

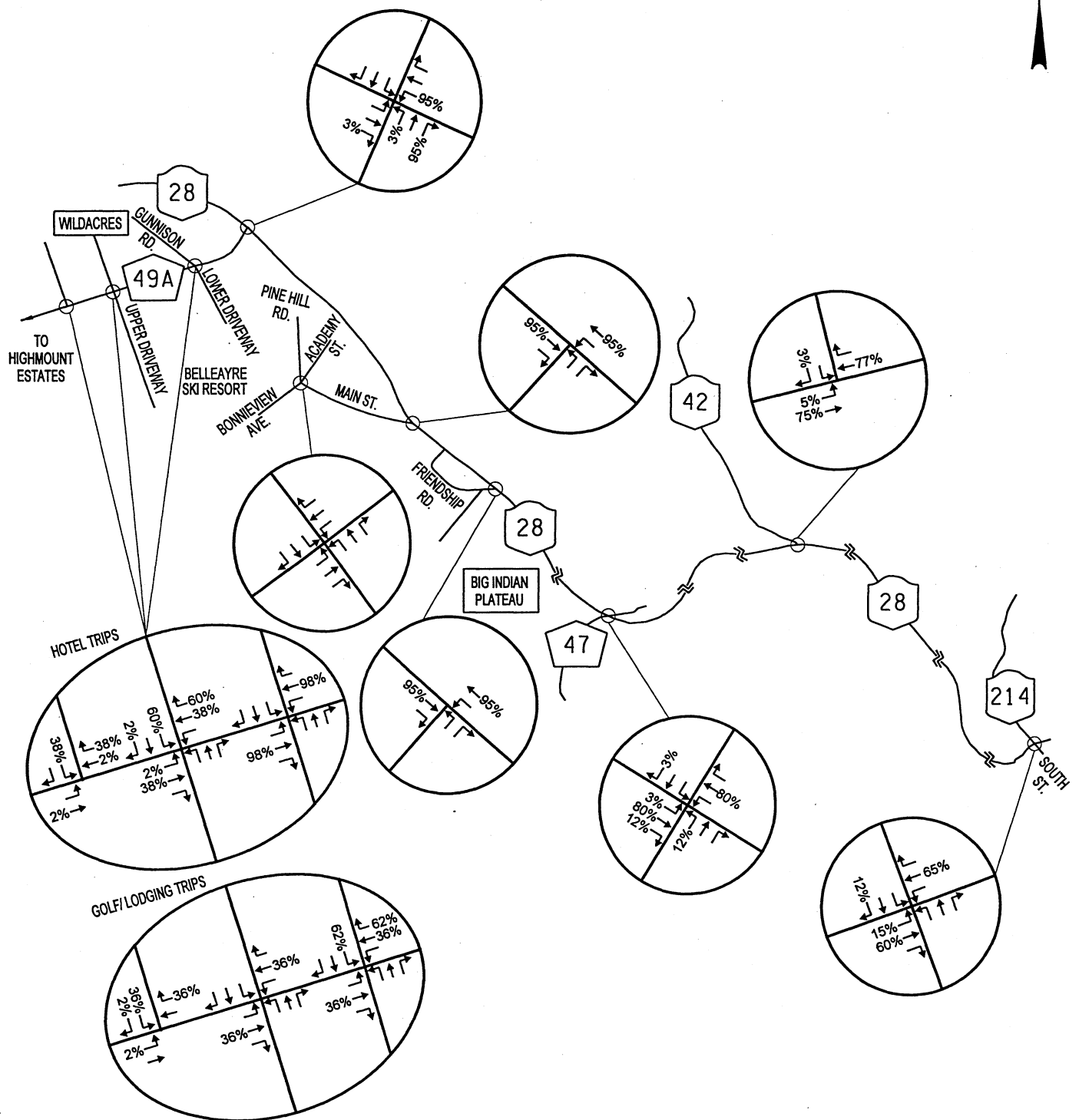


FIGURE 3.6
TRIP DISTRIBUTION PERCENTAGES
WILDACRES

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK



CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

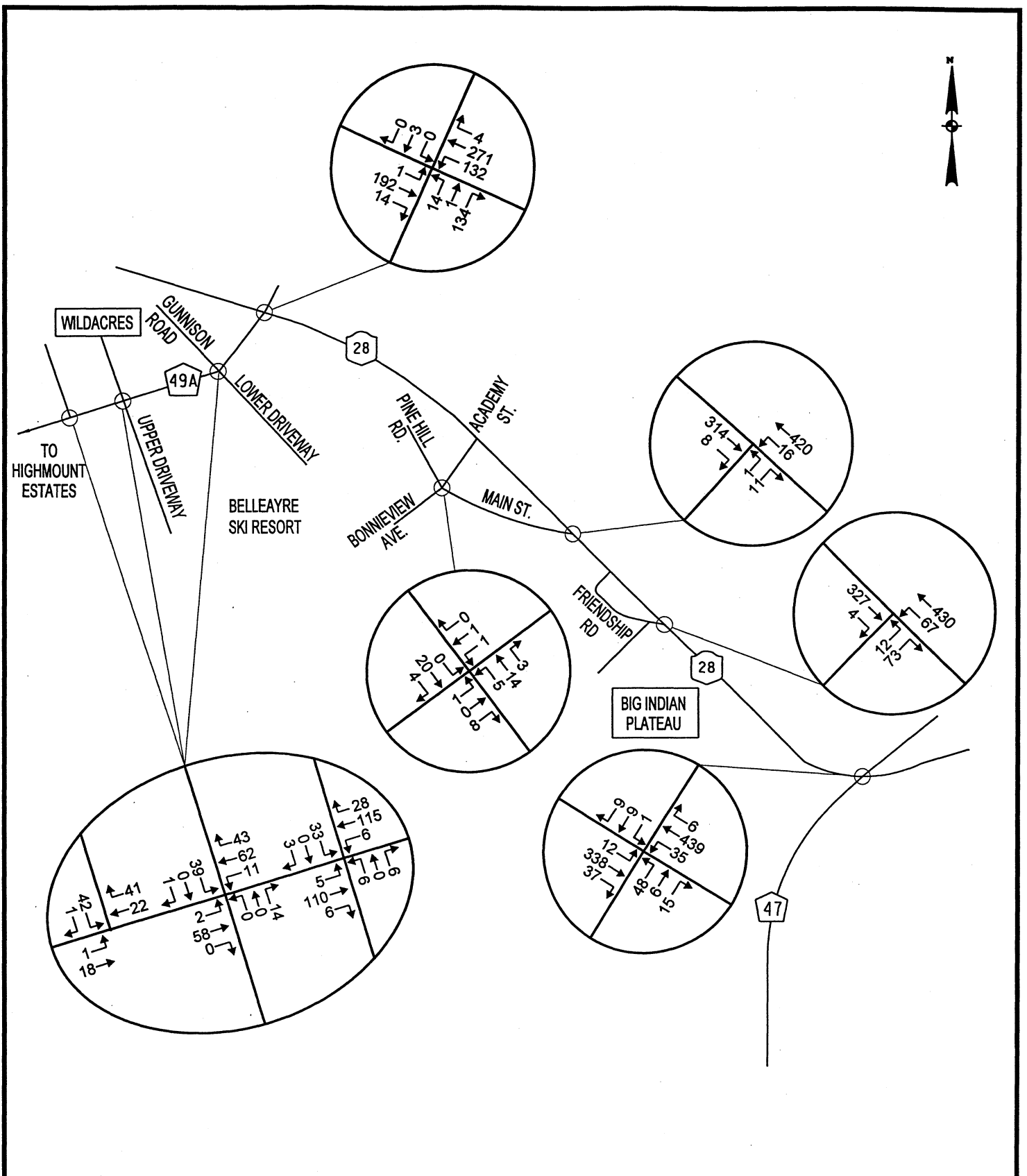


FIGURE 3.11
2008 BUILD TRAFFIC VOLUMES
FALL, FRIDAY PM PEAK HOUR

BELLEAYRE RESORT AT CATSKILL PARK
TOWN OF SHANDAKEN AND
MIDDLETOWN, NEW YORK



CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057

SCALE: N.T.S.

DATE: 1/2002

CHAPTER IV ANALYSIS

A. Accident Analysis

An accident analysis was conducted for the portion of Route 28, included in the project scoping document, between CR 47 to CR 49A documenting the accident history in the study area during the past three years. Accident case abstracts were obtained from the New York State Department of Transportation Accident Records Bureau for all reportable accidents that occurred in the study area during the period from January 1997 through December 1999, reflective of the latest data available.

The accident history for the Route 28 study area corridor was analyzed by summarizing the frequency of accidents and calculating accident rates. A comparison was then made between the calculated rate and the applicable statewide mean accident rate for state-maintained highways, as provided by NYSDOT. Table 4.1 summarizes the intersection accident analysis.

Table 4.1 –Intersection Accident Analysis Summary

Intersection	Accidents During Study Period	Statewide Mean Rate (ACC/MEV)	Calculated Rate (ACC/MEV)
Route 28/CR 47	1	.44	.42
Route 28/Friendship Rd.	0	.19	0
Route 28/Main Street	0	.19	0
Route 28/CR 49A	1	.44	.48

ACC/MEV= accidents per million entry vehicles at an intersection

Table 4.1 indicates that no intersection accidents were reported at the Route 28/Main Street and Route 28/Friendship Road intersections over the three-year study period. At the other two studied intersections one intersection accident occurred at each location during the three-year study period. The calculated rate for the Route 28/CR 47 intersection is lower than the statewide mean rate for a four-way stop sign controlled rural intersection. Although only one accident was reported at the Route 28/CR 49A intersection, the calculated rate is a fraction higher than the statewide mean rate for a four-way stop sign controlled rural intersection. A more detailed look at the information provided for the accident at the Route 28/CR 49A intersection indicated the apparent factor of the accident was failure to yield to the right-of-way by a vehicle travelling

west on Route 28 turning left onto CR 49A. The accident involved property damage and minor personal injury. Since only one accident occurred at this intersection there is no prevalent type of accident that needs to be investigated further. Recommendations to this intersection to provide turn lanes on the westbound Route 28 approach and northbound CR 49A approach presented later in this section, will improve the operation of this intersection by providing a separate storage area for vehicles turning at this intersection. The installation of a traffic signal to be used during peak wintertime travel in the project area will also help to improve the operation of this intersection. Although no accidents were recorded at the Route 28/Friendship Road intersection during the study period, recommendations at this intersection to provide a left-turn lane on Route 28 will improve the safety at this location by providing a separate storage area for vehicles turning into Friendship Road.

An accident rate for the Route 28 corridor from CR 47 to CR 49A was calculated to be 2.85 accidents per million vehicle miles (acc/mvm) which is comparable to the applicable statewide mean accident rate for a rural, two-lane, undivided highway of 2.67 acc/mvm. There were a total of 29 accidents on the corridor from 1997 to 1999, approximately 45% were property damage and 55% were personal injury accidents. There were no accidents involving fatalities during the study period. There was one vehicle/pedestrian accident that occurred during the study period. The vehicle pedestrian accident occurred on Route 28 approximately a half-mile east of CR 49A. The collision involving personal injury occurred during the daylight with cloudy weather conditions. The apparent contributing factor to the accident was alcohol. Of the 29 accidents on the corridor, 20 accidents involved only one vehicle. In addition to the pedestrian accident described above, there was one additional accident involving alcohol, six accidents due to slippery roadway conditions, and six accidents involving animals, three accidents caused by drivers falling asleep, one accident caused by unsafe speed, one caused by vehicle tire failure, and one accident with unknown conditions. Only nine of the 29 accidents involved two or more vehicles. Of these accidents most were caused by driver inattention or failure to yield to the right-of-way resulting in left-turn (right angle), overtaking (sideswiping)

and rear end accidents. Based on the above assessment of the accidents occurring on the Route 28 corridor from CR 47 to CR 49A, it appears that most of the accidents involved a single vehicle collision with an animal or vehicle collisions with guiderail or embankment due to slippery roadway conditions.

B. Sight Distance Analysis

An evaluation of the available sight distance at the proposed site driveway locations was conducted as part of the field visits to the project area. The intersection sight distance, measured from the perspective of a driver exiting the site looking in both directions along the mainline roadway, was compared to the distance recommended in the NYSDOT *Policy and Standards for Entrances to State Highways*, February 1998. Table 4.2 summarizes the results of the sight distance evaluation.

Table 4.2 – Sight Distance Evaluation

Location	Intersection Sight Distance (feet)			
	DL	NYSDOT Recommended	DR	NYSDOT Recommended
Big Indian Plateau Access- Route 28/Friendship Road (east)	900	845 (55 mph)	>900	875 (55 mph)
Wildacres Resort Access- CR 49A/Gunnison Road	>1000	845 (55 mph)	805	875 (55 mph)
Wildacres Resort Access- CR 49A/Middle Driveway	405	530 (40 mph)	500	440 (40 mph)
Wildacres Resort Access- CR 49A/Southern Driveway	187	360 (30 mph)	302	260 (30 mph)
Highmount Estates Access- CR49A/Proposed Road	250	360 (30 mph)	250	260 (30 mph)

Key: DL = Distance measured looking to the left. DR = Distance measured looking to the right.

Table 4.2 indicates that the NYSDOT recommended sight distance for a 55-mph speed is met at the intersection of Route 28 and Friendship Road. The existing speed limit on CR 49A is 55-mph; however, the NYSDOT recommended sight distance is not met at most of the site access points on CR 49A. In order to improve the sight distance at these locations the following is recommended:

- The intersection sight distance looking right at the CR 49A/Gunnison Road intersection falls 70 feet short of the recommended distance for 55 mph. The sight distance is limited by a vertical curve on CR 49A. In order to mitigate this condition, it is recommended that a driveway ahead warning sign be placed on CR 49A south of Gunnison Road.
- The intersection sight distance at the Middle Driveway (across from Belleayre Upper Driveway) is limited by both vertical and horizontal curvature on CR 49A. The current project site plans indicate that CR 49A will be realigned in the vicinity of the Middle Driveway with the construction of this project. This realignment is expected

to improve the sight distance at the Middle Driveway and the Belleayre Mountain Driveway approaches. Based on the vertical and horizontal curvature of this roadway it is still expected that the 55-mph sight distance will not be met at this driveway. Therefore, it is expected that clearing of trees and shrubs within the CR 49A right-of-way will be required to maximize the sight distance. After reconstruction of the roadway and the project site, it is further recommended that the sight distance be measured in the field to determine if advisory speed signs are required. Based on the roadway characteristics, it is expected that a maximum advisory speed limit of 40-mph would be required. In addition, driveway ahead warning signs should be placed on CR 49A on both approaches to the intersection.

- The intersection at the proposed southern driveway is limited by vertical and horizontal curves looking to the left and vertical grades looking to the right. Some clearing on the west-side of CR 49A would improve the sight distance looking to the left. However, to further mitigate the sight distance due to the vertical profile, it is recommended that 30-mph advisory speed signs as well as driveway ahead warning signs be installed on the northbound and southbound CR 49A approaches to this intersection.
- The intersection of CR 49A and the proposed Highmount Estates access is limited by both vertical and horizontal curvature of CR 49A. It is recommended that the side slopes be cleared and graded to provide for 30-mph sight distance. In addition, 30-mph advisory speed signs and intersection ahead warning signs be installed on the CR 49A approaches to this intersection.

C. Capacity/Level of Service Analysis

Intersection Level of Service (LOS) and capacity analysis relate traffic volumes to the physical characteristics of an intersection. Intersection evaluations were made using the latest highway capacity software (HCS version 4.1a) which automates the procedures contained in the 2000 *Highway Capacity Manual*. Appendix C contains detailed descriptions of LOS criteria for unsignalized and signalized intersections. The results of the analysis provide a level of service rating from LOS A to LOS F based on the average delay per vehicle. In general, a LOS A represents the best operating conditions with drivers experiencing very little delay. A LOS F represents the worst operating conditions with typical vehicle delays in excess of one minute.

The relative impact of the Big Indian Plateau and Wildacres Resorts can be determined by comparing the Levels of Service during the 2008 design year for the Background and Build traffic volume conditions for the design peak hour. Table 4.3 shows the results of the level of service calculations for the study area intersections during the Winter Saturday AM and PM peak hours.

Table 4.3 –Level of Service Summary- Winter Condition Analysis

Intersection	Saturday AM Peak			Saturday PM Peak		
	2000 Existing	2008 Background	2008 Build	2000 Existing	2008 Background	2008 Build
Route 28/CR 49A						
Route 28 EB approach	A (7.4)	A (7.5)	B (15.5)*	A (7.6)	A (7.7)	C (23.5)*
Route 28 WB approach	A (8.2)	A (8.6)	B (12.8)	A (7.6)	A (7.7)	B (13.4)
CR 49A NB approach	B (13.0)	C (16.3)	B (13.2)	F (>120.0)	F (>120)	B (16.4)
Owl Nest Road SB approach	C (21.6)	D (30.5)	C (20.3)	C (19.2)	D (31.7)	B (13.6)
Overall (build with signal only)			B (13.5)			B (16.7)
Route 28/Main Street						
Route 28 WB approach	A (7.4)	A (7.4)	A (7.5)	A (8.4)	A (8.8)	A (9.2)
Main Street NB approach	B (11.0)	B (12.0)	B (13.4)	B (12.1)	B (13.8)	C (15.8)
Route 28/ CR 47						
Route 28 EB approach	A (7.9)	A (8.1)	A (8.6)	A (7.6)	A (7.7)	A (7.9)
Route 28 WB approach	A (7.4)	A (7.5)	A (7.6)	A (8.7)	A (9.2)	A (9.5)
CR 47 NB approach	B (11.4)	B (12.9)	C (19.7)	C (15.6)	C (20.5)	D (29.8)
CR 47 SB approach	B (10.7)	B (11.8)	B (13.2)	A (9.2)	A (9.4)	B (10.1)
Route 28/Route 42						
Route 28 EB approach	A (8.7)	A (9.3)	B (10.2)	A (7.7)	A (7.9)	A (8.2)
Route 42 SB approach	B (14.7)	C (18.5)	D (26.9)	C (17.7)	D (26.1)	E (45.6)
Route 28/Route 214						
Route 28 EB approach	A (9.0)	A (9.7)	B (10.8)	A (7.9)	A (8.1)	A (8.5)
Route 28 WB approach	A (7.5)	A (7.6)	A (7.7)	A (8.6)	A (9.1)	A (9.6)
South Street NB approach	C (21.8)	D (32.7)	F (64.0)	C (17.1)	C (22.9)	D (32.9)
Route 214 SB approach	C (15.7)	C (22.0)	E (40.7)	D (25.1)	F (100.9)	F (>120)
Main Street/Bonnieview/Academy St						
Main Street NB approach	A (7.2)	A (7.2)	A (7.2)	A (7.2)	A (7.2)	A (7.2)
Main Street SB approach	A (7.2)	A (7.2)	A (7.2)	A (7.3)	A (7.3)	A (7.3)
Bonnieview WB approach	A (8.7)	A (8.8)	A (8.8)	A (8.6)	A (8.7)	A (8.7)
Academy St EB approach	A (8.7)	A (8.7)	A (8.7)	A (9.0)	A (9.2)	A (9.2)
CR 49A/Gunnison Road						
CR 49A NB approach	A (7.8)	A (8.0)	A (8.5)	A (7.3)	A (7.4)	A (7.5)
CR 49A SB approach	A (7.4)	A (7.5)	A (7.6)	A (8.2)	A (8.6)	A (9.0)
Belleayre Driveway WB approach	B (11.2)	B (12.6)	C (15.4)	C (15.4)	C (23.9)	E (36.2)
Gunnison Rd EB approach	B (12.2)	B (13.8)	C (19.1)	C (15.1)	C (24.0)	F (98.4)
CR 49A/Belleayre Upper Driveway						
CR 49A NB approach	---	---	A (7.5)	---	---	A (7.3)
CR 49A SB approach	A (7.9)	A (8.2)	A (8.1)	A (7.4)	A (7.4)	A (7.5)
Belleayre Driveway WB approach	A (8.8)	A (8.9)	A (9.1)	B (11.1)	B (13.0)	B (14.8)
Wildacres Driveway EB approach	---	---	D (30.9)	---	---	E (38.9)
CR 49A/Wildacres South Driveway						
CR 49A NB approach	NA	NA	A (7.3)	NA	NA	A (7.3)
Wildacres Driveway EB approach			A (9.0)			A (9.0)
Route 28/Friendship Road						
Route 28 WB approach	NA ¹	NA ¹	A (7.7)	NA ¹	NA ¹	A (9.4)
Driveway NB approach			B (11.9)			C (16.6)

Key: X (X.X)= Level of Service (average delay per vehicle in seconds)
 NB= northbound, SB= southbound, EB= eastbound, WB= westbound
 NA= intersection does not exist in the subject condition, NA¹= traffic volumes negligible on side street in the subject condition
 *Build condition analysis with westbound left-turn lane, northbound right-turn lane and traffic signal. Intersection would operate at a level of service F without these improvements

The following conclusions are evident from this analysis

- Route 28/CR 49A– If no improvements are made, this intersection will continue to experience a LOS F on the northbound approach of CR 49A during the Saturday PM peak hour. The intersection southbound approach will also operate at a level of service F during both peak hours in the build conditions. Due to the high turning movement volumes at this intersection it was determined that a westbound left-turn lane on Route 28 and a northbound right-turn lane on CR 49A is warranted for the background condition. These turn lanes will provide a storage area for vehicles traveling from Route 28 westbound turning left onto CR 49A southbound and for vehicles traveling north on CR 49A turning right onto Route 28 eastbound. In addition, a review of the NYSDOT traffic signal warrants indicated that the peak hour signal warrants would be met for the winter conditions. It is recommended that in addition to the construction of left and right turn lanes a three-phase traffic signal is installed at this intersection. It is anticipated that the traffic signal would be fully operational during the winter months and on flash during the other months. With a traffic signal this intersection will operate at an overall level of service B in the AM and PM peak hours under the 2008 Build conditions. The above improvements are recommended for the Background condition before the development of the proposed project. They should therefore be completed before the project opening date of 2006. Since this project will add vehicles to the critical approaches to this intersection, it is recommended that a fair share contribution to these improvements be made as part of this project.
- Route 28/Main Street– Under the 2008 Build conditions, this intersection will operate at LOS C or better for all approaches and all design conditions. Stop-sign control on the northbound Main Street approach will continue to be the appropriate traffic control.
- Route 28/CR 47– Under the 2008 Build conditions, this intersection will operate at a LOS D or better on all approaches during the AM and PM peak hours. No improvements are considered necessary and stop-sign control will continue to be the appropriate traffic control.
- Route 28/Route 42- Under the Build conditions the Route 28 approaches to this intersection will operate at a LOS B or better during the AM and PM peak hours. The Route 42 southbound approach will operate with a LOS D during the AM peak hour and a LOS E during the PM peak hour. The volumes on the southbound Route 42 approach are expected to be low, with less than 100 vehicles during the peak periods. During the PM peak hour the average vehicle delay on the southbound approach will be less than 46 seconds per vehicle. Since this location does not meet the peak hour warrant criteria for the installation of a

traffic signal, no mitigation is recommended and stop sign control on the southbound approach will continue to be the appropriate traffic control for this intersection.

- Route 28/Route 214- In the 2008 background traffic conditions without the development of the proposed project, the level of service during the Saturday morning peak is approaching a level of service E on the northbound intersection approach and during the afternoon peak operates at a level of service F on the southbound intersection approach. In 2008, during the design peak hour, this intersection's northbound and southbound approaches would operate at a level of service F and E during the AM peak hour and a level of service D and F during the PM peak hour, respectively. There are only a few vehicles on the South Street northbound intersection approach during both peak hours; therefore, no mitigation is recommended for this approach. The Route 214 southbound approach also has a relatively low volume that is delayed by the higher Route 28 through volumes. The peak hour volumes meet the peak hour warrants for a traffic signal, however; it is not expected that the traffic conditions will meet the other seven warrants presented in NYSDOT's *Manual of Uniform Traffic Control Devices*. Due to both daily peaking of traffic and seasonal variations in traffic in the project area, a traffic signal does not appear to be warranted at this location. However, it is recommended that DOT monitor this location for a possible signal in the future. A stop sign on the northbound and southbound approaches will continue to be the appropriate traffic control.
- Main Street/Bonnieview/Academy Street- Under the 2008 Build conditions, this intersection will continue to operate at a LOS A for all approaches. It is not expected that patrons will utilize this intersection to access either of the proposed resort developments; therefore, little or no site traffic is expected to be added to this intersection. The existing stop sign traffic control on the Bonnieview and Academy Street approaches will continue to be the appropriate traffic control for this intersection.
- Route 49A/Gunnison Road- Under the 2008 Build conditions, this intersection will operate with a level of service C or better on all approaches during the AM peak hour. During the PM peak hour, the eastbound Gunnison Road approach will experience a level of service F and the westbound Belleayre Lower Driveway will experience a level of service E. It should be noted that the traffic volumes at the Belleayre Lower Driveway are considerably higher than expected since it was assumed that that 100% of the traffic at the lower driveway use this access (another main access exists approximately 700 feet south of the subject driveway). Peak hour traffic signal warrant criteria was reviewed and the warrants are not met for a traffic signal at this location since the Gunnison Road volume is low and the Belleayre Lower Driveway volumes are approximately 95% right-turn movements. It is expected that this drop in level of service will be short-term and

would only occur if the proposed resort is at full occupancy and the Belleayre Mountain Ski Center is highly utilized. To mitigate any potential for this delay to occur, it is recommended that signs be placed within the Wildacres Resort to divert the exiting traffic to the southern resort driveway. This diversion would allow for vehicles to enter CR 49A south of the congested Belleayre Mountain Ski Center where a large amount of reserve capacity exists.

- Route 49A/Belleayre Upper Driveway- With the additional traffic from the proposed development in 2008 this intersection will operate at a level of service B or better during the AM and PM peak hours on the northbound, southbound, and westbound intersection approaches. The Wildacres Resort eastbound driveway approach is expected to operate at a level of service D during the AM peak hour and at a level of service E during the PM peak hour. Peak hour traffic signal warrant criteria was reviewed and a traffic signal would not be warranted at this intersection since the mainline Route 49A traffic volume is low and the Belleayre driveway traffic opposing the Wildacres Resort driveway volumes consists of 95% right-turn vehicle movements. As with the Gunnison Road intersection, it is expected that this drop in level of service during the winter weekend conditions would be short-term. A traffic signal would not be warranted at this intersection; therefore, it is recommended that the intersection be controlled with stop signs on the Wildacres eastbound driveway and the Belleayre Upper Driveway westbound approaches.
- Route 49A/Wildacres South Driveway- In 2008 with the proposed development, this intersection will operate at a level service A on all approaches for all peak conditions analyzed. It is recommended that this intersection be controlled with a stop sign on the Wildacres South Driveway eastbound approach.
- Route 28/Friendship Road- With the additional traffic from the proposed resorts, this intersection will operate at a level of service C or better for all approaches. Due to the high volume of left-turn traffic into Friendship Road from Route 28, it is recommended that a left-turn lane be installed on the westbound approach to this intersection on Route 28. It is recommended that this intersection be controlled with a stop sign on the Friendship Road northbound approach. If the operation of Friendship Road is changed to provide one-way traffic (from west to east) the location of the left-turn lane on Route 28 should be moved to the western leg of Friendship Road.

CHAPTER V CONCLUSIONS

Based on the results of the Traffic Impact Study conducted for the proposed Belleayre Resort at Catskill Park, the following conclusions are evident:

1. Traffic in the area varies significantly by season, time of day, and day of the week. The Belleayre Mountain Ski Center has a major impact on traffic volumes as evidenced by the fact that the highest peak hour volumes on Route 28 occur on winter weekends. This pattern will continue after the Big Indian Plateau and Wildacres Resort projects are completed.
2. Provision of shuttle bus service by the resort will have a positive impact on traffic conditions by eliminating most vehicle trips between the resorts and Belleayre Ski Center.
3. Traffic from the project will vary significantly by season, time of day, and day of the week. For the traffic design analysis it was assumed that for the highest winter traffic weekend, Big Indian Plateau Resort will generate 146 vehicle trips during the peak hour and Wildacres Resort will generate 201 trips. These volumes account for operation of a bus shuttle service between the resorts and Belleayre Mountain. The trip estimates were calculated using data provided by the Institute of Transportation Engineers (ITE) which is the accepted industry standard. During other times of the day (off peak), the number of generated trips will be less. Not all trips generated by the resort will be new trips to the area. Some trips will be made between the various project components and similarly, some trips will be made between the project and the Belleayre Mountain Ski Center. It is anticipated that approximately 50 percent of the peak hour trips generated by the proposed resort during the winter will be shared trips with the Belleayre Ski Center. Instead of adding these trips to the traffic stream on Route 28 travelling out of the project area, patrons will leave the ski center and travel directly to Wildacres or Big Indian Plateau.
4. The traffic analysis presented in the report indicates that traffic volume increases on Route 28 from the proposed project will likely be between 3 and 4 vehicles a minute during the maximum peak hours. For example, the generated trips at the Route 28/CR 49A intersection for the peak periods are shown below:

	Peak Design <u>Saturday AM</u>	Peak Design <u>Saturday PM</u>	Typical <u>Saturday AM</u>	Typical <u>Saturday PM</u>
Route 28/CR 49A	202	198	76	76
Approx. trips/minute (Total trips ÷60 minutes)	3.4	3.3	1.3	1.3

Similar results are found at the other study area intersections in the project corridor. An increase in traffic of this magnitude will typically not be noticeable.

It should also be noted that the trip estimates assume that each of the proposed resort facilities would be 100% occupied. Although this assumption follows the industry standard for trip generation in a traffic study, it is reasonable to assume that a percentage of each resort will be unoccupied for much of the time. This indicates that typically, less resort traffic will be on the roadway network most of the time. Also, in general, the project traffic will be limited to the main arterials through the project area (Route 28, CR 49A). Traffic is not expected to increase on local roads, including the roadways in the Hamlet of Pine Hills.

5. Based on the sight distance analysis, the following improvements are recommended:
 - A driveway ahead warning sign be placed on the CR 49A northbound approach to the Gunnison Road site access.
 - At the CR 49A/Middle Driveway (across from the Belleayre Upper Driveway entrance), advisory speed signs and driveway ahead warning signs be placed on CR 49A northbound and southbound approaches to this intersection. The appropriate advisory speed will be determined based on a field assessment after realignment of CR 49A at this intersection. In addition, clearing along the east-side of CR 49A should be done to maximize the available sight distance.
 - At the CR 49A/Southern Driveway, 30-mph advisory speed signs and driveway warning signs be placed on the northbound and southbound approaches to this intersection. In addition, clearing along the west side of CR 49A should be done to improve the sight distance looking to the left from this driveway.
 - To improve sight distance at the intersection of CR 49A and Highmount Estates, clearing and grading of side slopes are recommended to provide for a 30-mph sight distance. In addition, 30-mph advisory speed signs and intersection warning signs should be installed on CR 49A at both approaches to this intersection.

Any clearing and grading alongside CR49A will be done within the roadway right-of-way or on property owned by the Belleayre Resort at Catskill Park in order to maximize the sight distance.

6. Based on the results of the analysis presented in this report, the following mitigation is recommended:
 - Route 28/Friendship Road (east)- The construction of a westbound left-turn lane on Route 28 at its intersection with the easterly leg of Friendship Road. If the operation of Friendship Road is changed to provide one-way traffic (from west to east) the location of the left-turn lane on Route 28 should be moved to the western leg of Friendship Road.
 - Route 28/CR 49A- A fair share contribution towards the construction of a westbound left-turn lane on Route 28 and the construction of a northbound right-turn lane on CR

49A. A fair share contribution towards the installation of a three-phase traffic signal at the Route 28/CR 49A intersection. It is anticipated that this signal would operate during the winter months and would be on flash mode during the other months.

7. To maintain smooth travel of vehicles on all the study area roadways, it is recommended that information signs be placed on the main roadways directing patrons on a direct path to their proper destination.
8. The Traffic Impact Study is based on worst case traffic operations during the peak seasonal and daily traffic volume conditions in this area. During most times of the year, the traffic volumes on Route 28 are significantly lower than during the peak ski weekend at Belleayre. As a result, there is significant reserve capacity on Route 28 to accommodate the proposed resort project. Mainline improvements to Route 28 are not warranted. In addition to the intersection improvements, various transportation management initiatives are planned that will reduce traffic impacts. These include the use of a shuttle bus for guests and employees, remote park-and-ride lots, and scheduling check in/out times at the resorts to occur during off-peak times. The transportation system can accommodate the traffic generated by the project without these initiatives. Also, with the development of the proposed project there is some potential for the background traffic in the project area to reduce due to a shift in employment opportunities within the project area. It is expected that the proposed resort facilities will generate many new opportunities that may attract local residents for employment. Finally, the project has the potential to reduce the longer distance daily commuting traffic coming to Belleayre. For example, peak days at the Ski Center typically attract 3,000 to 4,000 skiers. The proposed resort has the capacity to house 40 to 50 percent of these skiers and therefore reduce the amount of daily skier commuting traffic on Route 28.

Appendix A – Traffic Counts

**Traffic Impact Study
Belleayre Resort at Catskill Park
Towns of Shandaken and Middletown, NY**

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Weather : Clear
 Counted by:
 Board # :
 :

Site Code : 99057001
 Start Date: 01/15/00
 File I.D. : TMC1AM
 Page : 1

Start Time	ROUTE 28 Southbound			COUNTY ROAD 47 Westbound			PASSENGER, HEAVY ROUTE 28 Northbound			COUNTY ROAD 47 Eastbound			Total
	Left	Thru	Rght	Left	Thru	Rght	Left	Thru	Rght	Left	Thru	Rght	
8:00am	0	8	2	0	0	1	1	39	0	4	1	3	59
8:15	0	12	2	0	2	2	3	60	0	6	0	2	89
8:30	3	15	5	1	1	0	3	47	0	9	0	2	86
8:45	0	13	2	0	1	2	2	80	0	4	0	5	109
Hour Total	3	48	11	1	4	5	9	226	0	23	1	12	343
9:00am	0	14	0	0	0	0	5	64	0	4	0	1	88
9:15	0	14	4	0	0	1	5	76	0	5	0	1	106
9:30	0	21	3	0	1	0	3	48	0	7	0	2	85
9:45	1	14	8	0	0	1	2	52	1	11	0	0	90
Hour Total	1	63	15	0	1	2	15	240	1	27	0	4	369
Grand	4	111	26	1	5	7	24	466	1	50	1	16	712
% of Total	.6%	15.6%	3.7%	.1%	.7%	1.0%	3.4%	65.4%	.1%	7.0%	.1%	2.2%	
Apprch %	19.8%			1.8%			69.0%			9.4%			
% of Apprch	2.8%	78.7%	18.4%	7.7%	38.5%	53.8%	4.9%	94.9%	.2%	74.6%	1.5%	23.9%	

Peak Hour Analysis By Entire Intersection for the Period: 08:00am to 09:45am on 01/15/00

Direction	Street Name	Start	Peak Hr	..... Volumes .....				..... Percentages		
		Peak Hour	Factor	Left	Thru	Rght	Total	Left	Thru	Rght
Southbound	ROUTE 28	08:30am	.761	3	56	11	70	4.2	80.0	15.7
Westbound	COUNTY ROAD 47		.500	1	2	3	6	16.6	33.3	50.0
Northbound	ROUTE 28		.860	15	267	0	282	5.3	94.6	.0
Eastbound	COUNTY ROAD 47		.705	22	0	9	31	70.9	.0	29.0

use 8:45 - 100% redus.

Weather :Clear
 Counted by:
 Board # :
 r :

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 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057001
 Start Date: 01/15/00
 File I.D. : TMC1AM
 Page : 2

PASSENGER
 HEAVY

ROUTE 28		
11	50	3
0	6	0
=====		
11	56	3
=====		
Inbound	70	
Outbound	292	
Total	362	

PASSENGER, HEAVY

COUNTY ROAD 47

15
 28 2
 11

22
 22 0

Inbound	31
Outbound	28
Total	59
0	0

9
 9 0

Inbound 282
 Outbound 66
 Total 348

1	15	263	0
56	0	4	0
9	=====		
=====	15	267	0
66	=====		
ROUTE 28			

COUNTY ROAD 47

3
 0 3

2
 0 2

Inbound	6
Outbound	3 1
Total	9 0 1

3
 0 3
 0

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 518/446-0396

Weather : Clear
 Counted by :
 Board # :
 :

Site Code : 99057001
 Start Date: 01/15/00
 File I.D. : TMC1NOON
 Page : 1

PASSENGER, HEAVY

Start Time	ROUTE 28 Southbound			COUNTY ROAD 47 Westbound			ROUTE 28 Northbound			COUNTY ROAD 47 Eastbound			Total
	Left	Thru	Rght	Left	Thru	Rght	Left	Thru	Rght	Left	Thru	Rght	
11:00am	0	20	5	0	0	1	4	59	0	6	0	7	102
11:15	3	22	5	0	1	2	4	65	0	3	2	5	112
11:30	1	27	7	0	0	1	1	46	0	8	0	0	91
11:45	0	17	9	0	0	0	5	55	0	9	3	8	106
Hour Total	4	86	26	0	1	4	14	225	0	26	5	20	411
12:00pm	0	27	5	0	0	0	5	56	0	7	0	2	102
12:15	2	31	9	1	0	0	3	67	0	5	0	1	119
12:30	0	31	2	0	1	0	9	54	0	5	0	5	107
12:45	1	20	1	0	0	3	5	40	0	7	1	1	79
Hour Total	3	109	17	1	1	3	22	217	0	24	1	9	407
Grand	7	195	43	1	2	7	36	442	0	50	6	29	818
% of Total	.9%	23.8%	5.3%	.1%	.2%	.9%	4.4%	54.0%	0.0%	6.1%	.7%	3.5%	
Apprch %	30.0%			1.2%			58.4%			10.4%			
% of Apprch	2.9%	79.6%	17.6%	10.0%	20.0%	70.0%	7.5%	92.5%	0.0%	58.8%	7.1%	34.1%	

Peak Hour Analysis By Entire Intersection for the Period: 11:00am to 12:45pm on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				Percentages		
				Left	Thru	Rght	Total	Left	Thru	Rght
Southbound	ROUTE 28	11:45am	.792	2	106	25	133	1.5	79.6	18.7
Westbound	COUNTY ROAD 47		.500	1	1	0	2	50.0	50.0	.0
Northbound	ROUTE 28		.907	22	232	0	254	8.6	91.3	.0
Eastbound	COUNTY ROAD 47		.562	26	3	16	45	57.7	6.6	35.5

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 518/446-0396

Weather :Clear
 Counted by:
 Board # :
 :

Site Code : 99057001
 Start Date: 01/15/00
 File I.D. : TMC1PM
 Page : 1

Start Time	ROUTE 28 Southbound			COUNTY ROAD 47 Westbound			PASSENGER, HEAVY ROUTE 28 Northbound			COUNTY ROAD 47 Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30	0	52	2	0	1	0	3	44	0	4	0	4	110
3:45	2	88	8	0	1	1	1	29	0	2	0	5	137
Total	2	140	10	0	2	1	4	73	0	6	0	9	247
4:00pm	1	86	10	0	0	0	4	44	0	2	1	6	154
4:15	1	90	9	0	0	1	3	32	0	4	1	5	146
4:30	1	102	20	0	0	1	5	55	0	7	1	6	198
4:45	1	111	6	0	0	0	7	31	0	4	0	4	164
Hour Total	4	389	45	0	0	2	19	162	0	17	3	21	662
5:00pm	2	49	11	1	2	1	3	32	2	2	0	3	108
5:15	0	32	9	0	0	0	6	39	0	6	0	2	94
Total	2	81	20	1	2	1	9	71	2	8	0	5	202
Grand	8	610	75	1	4	4	32	306	2	31	3	35	1111
% of Total	.7%	54.9%	6.8%	.1%	.4%	.4%	2.9%	27.5%	.2%	2.8%	.3%	3.2%	
Apprch %	62.4%			.8%			30.6%			6.2%			
% of Apprch	1.2%	88.0%	10.8%	11.1%	44.4%	44.4%	9.4%	90.0%	.6%	44.9%	4.3%	50.7%	

Peak Hour Analysis By Entire Intersection for the Period: 03:30pm to 05:15pm on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	..... Volumes .....				..... Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound	ROUTE 28	04:00pm	.890	4	389	45	438	.9	88.8	10.2
Westbound	COUNTY ROAD 47		.500	0	0	2	2	.0	.0	100.0
Northbound	ROUTE 28		.754	19	162	0	181	10.4	89.5	.0
Eastbound	COUNTY ROAD 47		.732	17	3	21	41	41.4	7.3	51.2

Weather : Clear
 Counted by:
 Board # :
 :

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 518/446-0396

Site Code : 99057001
 Start Date: 01/15/00
 File I.D. : TMC1PM
 Page : 2

7%

PASSENGER
 HEAVY

ROUTE 28			
45	383	4	17
0	6	0	162
=====			
45	389	4	2
=====			
Inbound			438
Outbound			181
Total			619

PASSENGER, HEAVY

COUNTY ROAD 47

19			
64	0		
45			

17			
17	0		

Inbound	41		
Outbound	64		
3	3	Total	105
3	0		

21			
21	0		

2			
0	2		

0			
0	0		

Inbound	2		
Outbound	7	0	
Total	9	0	0

4			
3	7		
0			

COUNTY ROAD 47

ROUTE 28			
Inbound			181
Outbound			410
Total			591
0	19	162	0
389	0	0	0
21	=====	=====	=====
=====	19	162	0
410			

COUNTY ROAD 47

Weather :Clear
 Counted by:
 Board # :
 :

Creighton Manning Engineering, LLP
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Site Code : 99057002
 Start Date: 01/15/00
 File I.D. : TMC2AM
 Page : 1

Start Time	MAIN STREET Southbound			ACADENY STREET Westbound			PASSENGER, HEAVY MAIN STREET Northbound			BONNIEVIEW AVE. Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
8:00am	0	0	0	1	0	0	0	1	0	1	0	1	4
8:15	0	2	0	0	0	1	1	4	1	2	0	0	11
8:30	0	0	0	2	0	0	2	2	0	0	0	1	7
8:45	0	3	0	1	0	1	2	4	0	1	1	0	13
Hour Total	0	5	0	4	0	2	5	11	1	4	1	2	35
9:00am	0	0	0	1	0	0	1	4	1	0	1	2	10
9:15	0	2	0	1	1	0	1	1	0	0	0	0	6
9:30	0	3	0	0	0	1	2	2	2	1	0	1	12
9:45	0	4	0	0	0	0	1	2	0	2	0	1	10
Hour Total	0	9	0	2	1	1	5	9	3	3	1	4	38
Grand	0	14	0	6	1	3	10	20	4	7	2	6	73
% of Total	0.0%	19.2%	0.0%	8.2%	1.4%	4.1%	13.7%	27.4%	5.5%	9.6%	2.7%	8.2%	
Apprch %	19.2%			13.7%			46.6%			20.5%			
% of Apprch	0.0%	100.0%	0.0%	60.0%	10.0%	30.0%	29.4%	58.8%	11.8%	46.7%	13.3%	40.0%	

Peak Hour Analysis By Entire Intersection for the Period: 08:00am to 09:45am on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound	MAIN STREET	08:45am	.667	0	8	0	8	.0	100.0	.0
Westbound	ACADENY STREET		.750	3	1	2	6	50.0	16.6	33.3
Northbound	MAIN STREET		.833	6	11	3	20	30.0	55.0	15.0
Eastbound	BONNIEVIEW AVE.		.583	2	2	3	7	28.5	28.5	42.8

Weather : Clear
 Counted by:
 Board # :
 r :

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 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057002
 Start Date: 01/15/00
 File I.D. : TMC2AM
 Page : 2

PASSENGER
 HEAVY

MAIN STREET		
0	8	0
0	0	0

0	8	0
=====		
Inbound	8	
Outbound	15	
Total	23	

PASSENGER, HEAVY

BONNIEVIEW AVE.
 6
 7 1
 0

2	0	

Inbound	7	
Outbound	7	

2	0	Total 14

3 3
 3 0

2
 0 2

1		

Inbound	6	
Outbound	5 3	

Total	11 0	3

0
 2 5
 3

Inbound	20	
Outbound	14	

Total	34	
3	6	11
8	0	0
3	-----	
14	6	11
=====		
14	6	11
=====		

ACADENY STREET
 3
 0
 3

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 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Weather :Clear
 Counted by:
 Board # :
 C : :

Site Code : 99057002
 Start Date: 01/15/00
 File I.D. : TMC2NOON
 Page : 1

Start Time	MAIN STREET Southbound			ACADEMY ST Westbound			PASSENGER, HEAVY MAIN STREET Northbound			BONNIEVIEW AVE. Eastbound			Total
	Left	Thru	Rght	Left	Thru	Rght	Left	Thru	Rght	Left	Thru	Rght	
11:00am	0	2	0	1	1	0	3	7	2	0	0	6	22
11:15	0	1	0	0	0	0	3	1	1	2	1	1	10
11:30	0	1	0	0	1	0	3	1	1	0	0	1	8
11:45	0	2	0	1	1	0	3	7	0	0	0	4	18
Hour Total	0	6	0	2	3	0	12	16	4	2	1	12	58
12:00pm	1	2	1	0	0	0	1	3	3	0	0	0	11
12:15	0	1	1	0	1	0	0	4	0	2	0	0	9
12:30	0	2	0	0	0	0	0	1	0	0	0	0	3
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	1	5	2	0	1	0	1	8	3	2	0	0	23
Grand	1	11	2	2	4	0	13	24	7	4	1	12	81
% of Total	1.2%	13.6%	2.5%	2.5%	4.9%	0.0%	16.0%	29.6%	8.6%	4.9%	1.2%	14.8%	
Apprch %	17.3%			7.4%			54.3%			21.0%			
% of Apprch	7.1%	78.6%	14.3%	33.3%	66.7%	0.0%	29.5%	54.5%	15.9%	23.5%	5.9%	70.6%	

Peak Hour Analysis By Entire Intersection for the Period: 11:00am to 12:45pm on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				Percentages		
				Left	Thru	Rght	Total	Left	Thru	Rght
Southbound	MAIN STREET	11:00am	.750	0	6	0	6	.0	100.0	.0
Westbound	ACADEMY ST		.625	2	3	0	5	40.0	60.0	.0
Northbound	MAIN STREET		.667	12	16	4	32	37.5	50.0	12.5
Eastbound	BONNIEVIEW AVE.		.625	2	1	12	15	13.3	6.6	80.0

Weather :Clear
 Counted by:
 Board # :
 C : :

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Site Code : 99057002
 Start Date: 01/15/00
 File I.D. : TMC2NOON
 Page : 2

PASSENGER
 HEAVY

MAIN STREET		
0	6	0
0	0	0
=====		
0	6	0
=====		
Inbound	6	
Outbound	18	
Total	24	

PASSENGER, HEAVY

BONNIEVIEW AVE.
 12
 15 3
 0
 2
 2 0
 Inbound 15
 Outbound 15
 Total 30
 1 0
 12
 12 0

0
 0 0
 3
 0 3
 Inbound 5
 Outbound 5 2
 Total 10 0 2
 0
 1 5
 4

12 0

Inbound	32		
Outbound	20		
Total	52		
2	12	16	4
6	0	0	0
12	=====		
=====	12	16	4
20			

ACADEMY ST

Creighton Manning Engineering, LLP

4 Automation Lane

Albany, New York 12205-1683

518/446-0396

Site Code : 99057002

Start Date: 01/15/00

File I.D. : TMC2NOON

Page : 1

Weather : Clear

Counted by:

Board # :

:

Start Time	MAIN STREET Southbound			ACADEMY ST Westbound			PASSENGER, HEAVY MAIN STREET Northbound			BONNIEVIEW AVE. Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45	0	2	2	0	0	0	5	0	1	0	0	2	12
Total	0	2	2	0	0	0	5	0	1	0	0	2	12
4:00pm	0	2	0	0	1	1	6	2	0	0	1	7	20
4:15	0	1	0	0	0	0	0	1	2	1	0	1	6
4:30	2	7	0	0	0	0	3	3	0	2	0	3	20
4:45	1	4	2	0	0	0	1	1	0	0	1	3	13
Hour Total	3	14	2	0	1	1	10	7	2	3	2	14	59
5:00pm	0	8	2	2	0	0	3	1	2	0	0	2	20
5:15	1	5	0	1	0	0	4	1	0	0	0	1	13
Total	1	13	2	3	0	0	7	2	2	0	0	3	33
Grand	4	29	6	3	1	1	22	9	5	3	2	19	104
% of Total	3.8%	27.9%	5.8%	2.9%	1.0%	1.0%	21.2%	8.7%	4.8%	2.9%	1.9%	18.3%	
Apprch %	37.5%			4.8%			34.6%			23.1%			
% of Apprch	10.3%	74.4%	15.4%	60.0%	20.0%	20.0%	61.1%	25.0%	13.9%	12.5%	8.3%	79.2%	

Peak Hour Analysis By Entire Intersection for the Period: 03:30pm to 05:15pm on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound	MAIN STREET	04:30pm	.800	4	24	4	32	12.5	75.0	12.5
Westbound	ACADEMY ST		.375	3	0	0	3	100.0	.0	.0
Northbound	MAIN STREET		.792	11	6	2	19	57.8	31.5	10.5
Eastbound	BONNIEVIEW AVE.		.600	2	1	9	12	16.6	8.3	75.0

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Weather :Clear
 Counted by:
 Board # :
 (: :

Site Code : 99057003
 Start Date: 01/15/00
 File I.D. : TMC3AM
 Page : 1

PASSENGER, HEAVY

Start Time	ROUTE 28 Westbound			PINE HILL ROAD Northbound			ROUTE 28 Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
8:00am	0	40	0	2	0	0	0	8	0	50
8:15	2	58	0	1	0	0	0	14	0	75
8:30	3	60	0	1	0	1	0	15	2	82
8:45	1	94	0	5	0	1	0	12	2	115
Hour Total	6	252	0	9	0	2	0	49	4	322
9:00am	1	73	0	1	0	2	0	12	0	89
9:15	0	69	0	4	0	1	0	16	1	91
9:30	2	61	0	3	0	1	0	18	3	88
9:45	6	56	0	7	0	3	0	23	0	95
Hour Total	9	259	0	15	0	7	0	69	4	363
Grand	15	511	0	24	0	9	0	118	8	685
% of Total	2.2%	74.6%	0.0%	3.5%	0.0%	1.3%	0.0%	17.2%	1.2%	
Apprch %	76.8%			4.8%			18.4%			
% of Apprch	2.9%	97.1%	0.0%	72.7%	0.0%	27.3%	0.0%	93.7%	6.3%	

Peak Hour Analysis By Entire Intersection for the Period: 08:00am to 09:45am on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound		08:45am	.0	0	0	0	0	0.0	0.0	0.0
Westbound	ROUTE 28		.792	4	297	0	301	1.3	98.6	.0
Northbound	PINE HILL ROAD		.750	13	0	5	18	72.2	.0	27.7
Eastbound	ROUTE 28		.762	0	58	6	64	.0	90.6	9.3

SB

Weather :Clear
 Counted by:
 Board # :
 :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057003
 Start Date: 01/15/00
 File I.D. : TMC3AM
 Page : 2

PASSENGER, HEAVY

PASSENGER
 HEAVY

ROUTE 28
 13
 310 297

295
 2 297 10%

Inbound 64
 Outbound 310
 Total 374
 5% 58 3

Inbound 301
 Outbound 63 4
 Total 364 0 4

6 6
 6 0

58 63
 5

Inbound 18
 Outbound 10
 Total 28

ROUTE 28

4	13
	0
6	13
10	

4
1
5

PINE HILL ROAD

20%

Weather :Clear
 Counted by:
 Board # :
 :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057003
 Start Date: 01/15/00
 File I.D. : TMC3NOON
 Page : 1

Start Time	ROUTE 28 Southbound			ROUTE 28 Northbound			PASSENGER, HEAVY PINE HILL ROAD Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00am	0	21	4	7	52	0	5	0	0	89
11:15	0	21	1	4	55	0	1	0	1	83
11:30	0	25	1	1	56	0	3	0	1	87
11:45	0	18	1	3	68	0	1	0	4	95
Hour Total	0	85	7	15	231	0	10	0	6	354
12:00pm	0	35	0	3	50	0	2	0	1	91
12:15	0	32	1	6	69	0	0	0	3	111
12:30	0	28	0	0	61	0	3	0	2	94
12:45	0	20	1	3	49	0	0	0	0	73
Hour Total	0	115	2	12	229	0	5	0	6	369
Grand	0	200	9	27	460	0	15	0	12	723
% of Total	0.0%	27.7%	1.2%	3.7%	63.6%	0.0%	2.1%	0.0%	1.7%	
Apprch %	28.9%			67.4%			3.7%			
% of Apprch	0.0%	95.7%	4.3%	5.5%	94.5%	0.0%	55.6%	0.0%	44.4%	

Peak Hour Analysis By Entire Intersection for the Period: 11:00am to 12:45pm on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound	ROUTE 28	11:45am	.821	0	113	2	115	.0	98.2	1.7
Westbound	ROUTE 28		.0	0	0	0	0	0.0	0.0	0.0
Northbound	ROUTE 28		.867	12	248	0	260	4.6	95.3	.0
Eastbound	PINE HILL ROAD		.800	6	0	10	16	37.5	.0	62.5

Weather : Clear
 Counted by:
 Board # :
 :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057003
 Start Date: 01/15/00
 File I.D. : TMC3NOON
 Page : 2

270

PASSENGER, HEAVY

		ROUTE 28			
PASSENGER		2	111		6
HEAVY		0	2		248
		=====			
		2	113		=====
					254
		Inbound	115		
		Outbound	254		
		Total	369		
<hr/>					
PINE HILL ROAD					
	12				
14					
	2				
<hr/>					
	6				
6	0				
	Inbound	16			
	Outbound	14			
	Total	30			
<hr/>					
	10				
10	0				
<hr/>					
		Inbound	260		
		Outbound	123		
		Total	383		
			12	247	
		113	0	1	
		10	=====	=====	
			12	248	
		123			
		ROUTE 28			

Weather :Clear
 Counted by:
 Board # :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057003
 Start Date: 01/15/00
 File I.D. : TMC3PM
 Page : 1

Start Time	ROUTE 28 Southbound			ROUTE 28 Northbound			PASSENGER, HEAVY PINE HILL ROAD Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30	0	55	5	1	42	0	0	0	1	104
3:45	0	107	1	0	36	0	0	0	6	150
Total	0	162	6	1	78	0	0	0	7	254
4:00pm	0	89	2	7	37	0	1	0	0	136
4:15	0	94	3	6	29	0	3	0	2	137
4:30	0	115	5	3	40	0	1	0	4	168
4:45	0	100	5	5	34	0	0	0	6	150
Hour Total	0	398	15	21	140	0	5	0	12	591
5:00pm	0	63	4	3	33	0	0	0	1	104
5:15	0	37	1	7	25	0	4	0	1	75
Total	0	100	5	10	58	0	4	0	2	179
Grand	0	660	26	32	276	0	9	0	21	1024
% of Total	0.0%	64.5%	2.5%	3.1%	27.0%	0.0%	.9%	0.0%	2.1%	
Apprch %	67.0%			30.1%			2.9%			
% of Apprch	0.0%	96.2%	3.8%	10.4%	89.6%	0.0%	30.0%	0.0%	70.0%	

Peak Hour Analysis By Entire Intersection for the Period: 03:30pm to 05:15pm on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	..... Volumes .....				..... Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound	ROUTE 28	04:00pm	.860	0	398	15	413	.0	96.3	3.6
Westbound	ROUTE 28		.0	0	0	0	0	0.0	0.0	0.0
Northbound	ROUTE 28		.915	21	140	0	161	13.0	86.9	.0
Eastbound	PINE HILL ROAD		.708	5	0	12	17	29.4	.0	70.5

Weather :Clear
 Counted by:
 Board # :
 :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057003
 Start Date: 01/15/00
 File I.D. : TMC3PM
 Page : 2

2/90

PASSENGER, HEAVY

		ROUTE 28			
PASSENGER		15	392		5
HEAVY		0	6		140
		=====	=====		
		15	398		145
				=====	
		Inbound	413		
		Outbound	145		
		Total	558		
<hr/>					
PINE HILL ROAD					
	21				
36					
	15				
<hr/>					
	5				
5	0				
	Inbound	17			
	Outbound	36			
	Total	53			
<hr/>					
	12				
12	0				
<hr/>					
		Inbound	161		
		Outbound	410		
		Total	571		
			21	140	
		398	0	0	
		12	=====	=====	
			21	140	
		410			
		ROUTE 28			

Weather :Clear
 Counted by:
 Board # :
 :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057004
 Start Date: 01/15/00
 File I.D. : TMC4AM
 Page : 1

Start Time	ROUTE 28 Southbound			OWL'S NEST Westbound			PASSENGER, HEAVY ROUTE 28 Northbound			COUNTY ROAD 49A Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
8:15	0	9	20	0	3	0	44	15	0	4	0	4	99
8:30	0	12	28	1	0	0	58	15	0	1	0	7	122
8:45	0	8	22	0	2	0	78	22	1	1	0	7	141
Total	0	29	70	1	5	0	180	52	1	6	0	18	362
9:00am	0	11	17	0	2	0	77	14	0	2	0	6	129
9:15	1	12	24	0	2	0	65	33	0	4	1	6	148
9:30	1	19	22	1	1	0	50	18	0	6	0	8	126
9:45	0	31	18	0	0	0	48	21	0	12	0	6	136
Hour Total	2	73	81	1	5	0	240	86	0	24	1	26	539
Grand	2	102	151	2	10	0	420	138	1	30	1	44	901
% of Total	.2%	11.3%	16.8%	.2%	1.1%	0.0%	46.6%	15.3%	.1%	3.3%	.1%	4.9%	
Apprch %	28.3%			1.3%			62.0%			8.3%			
% of Apprch	.8%	40.0%	59.2%	16.7%	83.3%	0.0%	75.1%	24.7%	.2%	40.0%	1.3%	58.7%	

Peak Hour Analysis By Entire Intersection for the Period: 08:15am to 09:45am on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound	ROUTE 28	08:45am	.815	2	50	85	137	1.4	36.4	62.0
Westbound	OWL'S NEST		1.000	1	7	0	8	12.5	87.5	.0
Northbound	ROUTE 28		.886	270	87	1	358	75.4	24.3	.2
astbound	COUNTY ROAD 49A		.732	13	1	27	41	31.7	2.4	65.8

Weather : Clear
 Counted by:
 Board # :
 C :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057004
 Start Date: 01/15/00
 File I.D. : TMC4AM
 Page : 2

1% 4%

PASSENGER
 HEAVY
 COUNTY ROAD 49A
 270
 362 7
 85

ROUTE 28			
84	48	2	13
1	2	0	87
=====			
85	50	2	100
=====			
Inbound			137
Outbound			100
Total			237

PASSENGER, HEAVY
 0
 0 0
 7
 0 7

13 12
 1 1 *7%*
 Inbound 41
 Outbound 362
 1 Total 403
 1 0

Inbound 8
 Outbound 4 1
 Total 12 0 1

26
 27 1 *4%*

Inbound 358			
Outbound 78			
Total 436			
1	268	82	1
50	2	5	0
27	=====		
=====	270	87	1
78	=====		
ROUTE 28	<i>1%</i>	<i>6%</i>	

2
 1 4
 1
 OWL'S NEST

Creighton Manning Engineering L.L.P.
Albany, NY

Weather :Clear
Counted by:
Board # :
r :

Site Code : 99057004
Start Date: 01/15/00
File I.D. : TMC4NOON
Page : 1

Start Time	ROUTE 28 Southbound			OWL'S NEST Westbound			PASSENGER, HEAVY ROUTE 28 Northbound			COUNTY ROAD 49A Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00am	0	26	10	0	2	0	21	34	0	6	0	6	105
11:15	1	16	11	1	1	0	27	39	0	5	1	5	107
11:30	0	22	12	0	1	0	24	29	1	8	2	6	105
11:45	0	21	11	0	1	1	35	37	1	7	2	3	119
Hour Total	1	85	44	1	5	1	107	139	2	26	5	20	436
12:00pm	0	26	16	0	0	0	31	34	0	3	0	9	119
12:15	0	24	13	0	0	0	24	41	1	7	1	9	120
12:30	1	21	8	0	1	0	21	37	0	7	0	6	102
12:45	0	19	6	2	0	1	13	37	0	10	1	7	96
Hour Total	1	90	43	2	1	1	89	149	1	27	2	31	437
Grand	2	175	87	3	6	2	196	288	3	53	7	51	873
% of Total	.2%	20.0%	10.0%	.3%	.7%	.2%	22.5%	33.0%	.3%	6.1%	.8%	5.8%	
Apprch %	30.2%			1.3%			55.8%			12.7%			
% of Apprch	.8%	66.3%	33.0%	27.3%	54.5%	18.2%	40.2%	59.1%	.6%	47.7%	6.3%	45.9%	

Peak Hour Analysis By Entire Intersection for the Period: 11:00am to 12:45pm on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound	ROUTE 28	11:30am	.863	0	93	52	145	.0	64.1	35.8
Westbound	OWL'S NEST		.375	0	2	1	3	.0	66.6	33.3
Northbound	ROUTE 28		.884	114	141	3	258	44.1	54.6	1.1
Eastbound	COUNTY ROAD 49A		.838	25	5	27	57	43.8	8.7	47.3

11:15 -> 61% 10/100=00

Weather : Clear
Counted by:
Board # :
r :

1%

PASSENGER
HEAVY

ROUTE 28			
52	92	0	25
0	1	0	141
=====			
52	93	0	1
=====			
Inbound			145
Outbound			167
Total			312

PASSENGER, HEAVY

COUNTY ROAD 49A
114
168 2
52

24
1
Inbound 57
Outbound 168
5 Total 225
5 0

1
0 1
2
0 2

Inbound 3
Outbound 8 0
Total 11 0 0

2%

24
11% 27 3

ROUTE 28			
Inbound		258	
Outbound		120	
Total		378	
0	111	136	3
93	3	5	0
27	=====		
120		114	141
=====		=====	
120		114	141
=====		=====	
3%		4%	

0
5 8
3

OWL'S NEST

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Weather :Clear
 Counted by:
 Board # :

Site Code : 99057004
 Start Date: 01/15/00
 File I.D. : TMC4PM
 Page : 1

Start Time	ROUTE 28 Southbound			OWL'S NEST Westbound			PASSENGER, HEAVY ROUTE 28 Northbound			COUNTY ROAD 49A Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30	0	20	12	0	2	1	12	42	1	35	2	46	173
3:45	0	32	7	0	1	2	12	25	1	26	2	86	194
Total	0	52	19	0	3	3	24	67	2	61	4	132	367
4:00pm	2	24	10	1	0	0	16	30	0	49	2	95	229
4:15	3	23	6	1	0	0	13	25	0	58	2	99	230
4:30	3	28	7	2	0	2	5	46	2	76	0	110	281
4:45	0	38	5	1	0	1	4	37	0	60	0	87	233
Hour Total	8	113	28	5	0	3	38	138	2	243	4	391	973
5:00pm	3	33	6	0	0	0	6	32	0	17	1	42	140
5:15	0	19	3	0	0	1	3	33	2	26	1	27	115
Total	3	52	9	0	0	1	9	65	2	43	2	69	255
Grand	11	217	56	5	3	7	71	270	6	347	10	592	1595
% of Total	.7%	13.6%	3.5%	.3%	.2%	.4%	4.5%	16.9%	.4%	21.8%	.6%	37.1%	
Apprch %	17.8%			.9%			21.8%			59.5%			
% of Apprch	3.9%	76.4%	19.7%	33.3%	20.0%	46.7%	20.5%	77.8%	1.7%	36.6%	1.1%	62.4%	

Peak Hour Analysis By Entire Intersection for the Period: 03:30pm to 05:15pm on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound	ROUTE 28	04:00pm	.866	8	113	28	149	5.3	75.8	18.7
Westbound	OWL'S NEST		.500	5	0	3	8	62.5	.0	37.5
Northbound	ROUTE 28		.840	38	138	2	178	21.3	77.5	1.1
Eastbound	COUNTY ROAD 49A		.858	243	4	391	638	38.0	.6	61.2

Weather : Clear
 Counted by :
 Board # :
 :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057004
 Start Date: 01/15/00
 File I.D. : TMC4PM
 Page : 2

PASSENGER
 HEAVY

49% 10%

ROUTE 28			
27	112	8	243
1	1	0	138

28	113	8	384
=====			
Inbound			149
Outbound			384
Total			533

PASSENGER, HEAVY

COUNTY ROAD 49A
 38
 66 0
 28

3
 0 3

190 243
 240 3
 Inbound 638
 Outbound 66
 4 Total 704
 4 0

Inbound 8
 Outbound 14 5
 Total 22 0 5

391 386
 391 5

8
 4 14
 2

Inbound			178
Outbound			509
Total			687
5	38	138	2
113	0	0	0
391	-----		-----
509	38	138	2
=====			
ROUTE 28			

OWL'S NEST

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Weather :Clear
 Counted by:
 Board # :
 (:

Site Code : 99057005
 Start Date: 01/15/00
 File I.D. : TMC5AM
 Page : 1

Start Time	COUNTY ROAD 49A Westbound			UPPER DRIVEWAY Northbound			PASSENGER, HEAVY COUNTY RAOD 49A Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
8:15	38	0	0	0	0	10	0	1	0	49
8:30	52	2	0	0	0	11	0	2	0	67
8:45	59	1	0	0	0	13	0	3	5	81
Total	149	3	0	0	0	34	0	6	5	197
9:00am	89	2	0	0	0	10	0	3	0	104
9:15	67	2	0	1	0	16	0	3	1	90
9:30	58	1	0	0	0	8	0	2	0	69
9:45	44	0	0	1	0	10	0	1	0	56
Hour Total	258	5	0	2	0	44	0	9	1	319
10:00am	38	3	0	0	0	10	0	2	4	57
Total	38	3	0	0	0	10	0	2	4	57
Grand	445	11	0	2	0	88	0	17	10	573
% of Total	77.7%	1.9%	0.0%	.3%	0.0%	15.4%	0.0%	3.0%	1.7%	
Apprch %	79.6%			15.7%			4.7%			
% of Apprch	97.6%	2.4%	0.0%	2.2%	0.0%	97.8%	0.0%	63.0%	37.0%	

Peak Hour Analysis By Entire Intersection for the Period: 08:15am to 10:00am on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	..... Volumes .....				..... Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound		08:45am	.0	0	0	0	0	0.0	0.0	0.0
Westbound	COUNTY ROAD 49A		.766	273	6	0	279	97.8	2.1	.0
Northbound	UPPER DRIVEWAY		.706	1	0	47	48	2.0	.0	97.9
Eastbound	COUNTY RAOD 49A		.531	0	11	6	17	.0	64.7	35.2

Weather :Clear
 Counted by:
 Board # :
 r :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057005
 Start Date: 01/15/00
 File I.D. : TMC5AM
 Page : 2

PASSENGER, HEAVY

PASSENGER
 HEAVY

COUNTY ROAD 49A

1
 7 6

6
 0 6

Inbound	17	
Outbound	7	
11	11	Total 24
6	0	

Inbound	279	
Outbound	58	271
Total	337	2 273

170

6 6
 6 0

11 58
 47

COUNTY ROAD 49A

Inbound	48
Outbound	279
Total	327
273	| 1 |
	| 0 |
6	| ===== |
=====	| 1 |
279	|

UPPER DRIVEWAY

45	|
2	|
=====	
47	|

47

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Weather :Clear
 Counted by:
 Board # :
 r :

Site Code : 99057005
 Start Date: 01/15/00
 File I.D. : TMC5NOON
 Page : 1

Start Time	COUNTY ROAD 49A Westbound			UPPER DRIVEWAY Northbound			PASSENGER, HEAVY COUNTY ROAD 49A Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00am	19	1	0	0	0	8	0	1	1	30
11:15	30	1	0	0	0	8	0	1	0	40
11:30	19	4	0	0	0	10	0	1	1	35
11:45	28	4	0	0	0	3	0	2	1	38
Hour Total	96	10	0	0	0	29	0	5	3	143
12:00pm	28	1	0	0	0	11	0	0	0	40
12:15	22	1	0	0	0	10	0	1	2	36
12:30	32	5	0	0	0	18	0	1	2	58
12:45	16	0	0	1	0	15	0	2	0	34
Hour Total	98	7	0	1	0	54	0	4	4	168
Grand	194	17	0	1	0	83	0	9	7	311
% of Total	62.4%	5.5%	0.0%	.3%	0.0%	26.7%	0.0%	2.9%	2.3%	
Apprch %	67.8%			27.0%			5.1%			
% of Apprch	91.9%	8.1%	0.0%	1.2%	0.0%	98.8%	0.0%	56.2%	43.8%	

Peak Hour Analysis By Entire Intersection for the Period: 11:00am to 12:45pm on 01/15/00

Direction	Street Name	Start	Peak Hr	..... Volumes .....				..... Percentages		
		Peak Hour	Factor	Left	Thru	Right	Total	Left	Thru	Right
Southbound		11:45am	.0	0	0	0	0	0.0	0.0	0.0
Westbound	COUNTY ROAD 49A		.818	110	11	0	121	90.9	9.0	.0
Northbound	UPPER DRIVEWAY		.583	0	0	42	42	.0	.0	100.0
Eastbound	COUNTY ROAD 49A		.750	0	4	5	9	.0	44.4	55.5

Weather :Clear
 Counted by:
 Board # :
 r :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057005
 Start Date: 01/15/00
 File I.D. : TMC5NOON
 Page : 2

PASSENGER, HEAVY

PASSENGER
 HEAVY

COUNTY ROAD 49A

0
 11 11

11
 0 11

Inbound 9
 Outbound 11
 4 4 Total 20
 4 0

Inbound 121
 Outbound 46 110
 Total 167 0 110

5
 5 0

4 46
 42

Inbound 42
 Outbound 115
 Total 157

COUNTY ROAD 49A

110 | 0 |
 | 0 |
 5 |====|
 ===== | 0 |
 115 |

42
 0
 =====
 42

UPPER DRIVEWAY

Creighton Manning Engineering, LLP

Weather : Clear

Counted by:

Board # :

:

4 Automation Lane

Albany, New York 12205-1683

518/446-0396

Site Code : 99057005

Start Date: 01/15/00

File I.D. : TMC5PM

Page : 1

PASSENGER, HEAVY

Start Time	COUNTY ROAD 49A Westbound			UPPER DRIVEWAY Northbound			COUNTY ROAD 49A Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30	19	6	0	0	0	69	0	1	1	96
3:45	22	2	0	0	0	63	0	0	1	88
Total	41	8	0	0	0	132	0	1	2	184
4:00pm	26	2	0	0	0	81	0	4	0	113
4:15	17	3	0	0	0	111	0	1	1	133
4:30	16	2	0	0	0	122	0	3	1	144
4:45	14	2	0	2	0	89	0	0	0	107
Hour Total	73	9	0	2	0	403	0	8	2	497
5:00pm	5	1	0	1	0	50	0	1	0	58
5:15	2	1	0	1	0	40	0	0	0	44
Total	7	2	0	2	0	90	0	1	0	102
Grand	121	19	0	4	0	625	0	10	4	783
% of Total	15.5%	2.4%	0.0%	.5%	0.0%	79.8%	0.0%	1.3%	.5%	
Apprch %	17.9%			80.3%			1.8%			
% of Apprch	86.4%	13.6%	0.0%	.6%	0.0%	99.4%	0.0%	71.4%	28.6%	

Peak Hour Analysis By Entire Intersection for the Period: 03:30pm to 05:15pm on 01/15/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	..... Volumes .....				..... Percentages		
				Left	Thru	Right	Total	Left	Thru	Right
Southbound		04:00pm	.0	0	0	0	0	0.0	0.0	0.0
Westbound	COUNTY ROAD 49A		.732	73	9	0	82	89.0	10.9	.0
Northbound	UPPER DRIVEWAY		.830	2	0	403	405	.4	.0	99.5
Eastbound	COUNTY ROAD 49A		.625	0	8	2	10	.0	80.0	20.0

Weather :Clear
 Counted by:
 Board # :

Creighton Manning Engineering, LLP
 4 Automation Lane
 Albany, New York 12205-1683
 518/446-0396

Site Code : 99057005
 Start Date: 01/15/00
 File I.D. : TMC5PM
 Page : 2

PASSENGER, HEAVY

PASSENGER
 HEAVY

COUNTY ROAD 49A

2
 11 9

9
 0 9

Inbound	10
Outbound	11
8	8
0	0
Total	21

Inbound	82
Outbound	411 73
Total	493 0 73

2
 2
 2 0

8 411
 403

Inbound 405
 Outbound 75
 Total 480

COUNTY ROAD 49A

73	|	2	|	402
	|	0	|	1
2	|	=====	|	=====
=====	|	2	|	403
75	|		|	

UPPER DRIVEWAY

Creighton Manning Engineering, L.L.P.

Weather :
 Counted by :
 Board # :
 Other : belleayre resort

4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-6
 Start Date: 01/13/01
 File I.D. : TMC957S7
 Page : 1

Start Time	nys rt 214 Southbound				nys rt 28 Westbound				passenger, heavy south st Northbound				nys rt 28 Eastbound				Total	RTOR=	
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR			
3:30	7	0	15	0	0	59	7	0	0	0	0	0	22	73	1	0	184	0	184
3:45	11	0	18	0	0	59	5	0	0	0	0	0	22	109	0	0	224	0	224
Total	18	0	33	0	0	118	12	0	0	0	0	0	44	182	1	0	408	0	408
4:00pm	8	0	16	0	0	56	8	0	0	0	0	0	25	100	0	0	213	0	213
4:15	10	0	17	0	0	56	8	0	0	0	0	0	27	116	0	0	234	0	234
4:30	18	1	17	0	0	50	5	0	0	0	1	0	19	113	2	0	226	0	226
4:45	16	0	18	0	0	43	4	0	0	0	0	0	28	119	0	0	228	0	228
Hour Total	52	1	68	0	0	205	25	0	0	0	1	0	99	448	2	0	901	0	901
5:00pm	15	0	20	0	0	42	4	0	0	1	0	0	25	145	1	0	253	0	253
5:15	13	0	8	0	1	50	5	0	0	0	0	0	28	135	1	0	241	0	241
Total	28	0	28	0	1	92	9	0	0	1	0	0	53	280	2	0	494	0	494
Grand	98	1	129	0	1	415	46	0	0	1	1	0	196	910	5	0	1803	0	1803
% of Total	5.4%	.1%	7.2%	0.0%	.1%	23.0%	2.6%	0.0%	0.0%	.1%	.1%	0.0%	10.9%	50.5%	.3%	0.0%		0.0%	100.0%
Apprch %	12.6%				25.6%					.1%			61.6%						
% of Apprch	43.0%	.4%	56.6%	0.0%	.2%	89.8%	10.0%	0.0%	0.0%	50.0%	50.0%	0.0%	17.6%	81.9%	.5%	0.0%			

Peak Hour Analysis By Entire Intersection for the Period: 03:30pm to 05:15pm on 01/13/01

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				RTOR	Percentages		
				Left	Thru	Rght	Total		Left	Thru	Rght
Southbound	nys rt 214	04:30pm	.875	62	1	63	126	0	49.2	.7	50.0
Westbound	nys rt 28		.911	1	185	18	204	0	.4	90.6	8.8
Northbound	south st		.500	0	1	1	2	0	.0	50.0	50.0
Eastbound	nys rt 28		.901	100	512	4	616	0	16.2	83.1	.6

Creighton Manning Engineering, L.L.P.

Weather :
 Counted by:
 Board # :
 Other : belleayre resort

4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-6
 Start Date: 01/13/01
 File I.D. : TMC957S6
 Page : 1

Start Time	nys rt 214 Southbound				nys rt 28 Westbound				passenger, heavy south st Northbound				nys rt 28 Eastbound				Total- RTOR=		
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR			
8:00am	0	0	11	0	0	80	3	0	0	0	0	0	11	23	0	0	128	0	128
8:15	1	0	9	0	0	101	7	0	0	0	0	0	6	20	0	0	144	0	144
8:30	3	0	9	0	1	114	7	0	0	0	0	0	9	14	0	0	157	0	157
8:45	4	0	13	0	0	142	10	0	1	0	0	0	10	20	0	0	200	0	200
Hour Total	8	0	42	0	1	437	27	0	1	0	0	0	36	77	0	0	629	0	629
9:00am	1	0	12	0	0	115	6	0	0	0	0	0	20	25	0	0	179	0	179
9:15	6	0	16	0	0	120	8	0	0	0	0	0	11	41	1	0	203	0	203
9:30	3	0	8	0	0	99	3	0	0	0	0	0	16	33	0	0	162	0	162
9:45	3	0	14	0	1	103	7	0	0	0	0	0	5	25	0	0	158	0	158
Hour Total	13	0	50	0	1	437	24	0	0	0	0	0	52	124	1	0	702	0	702
Grand	21	0	92	0	2	874	51	0	1	0	0	0	88	201	1	0	1331	0	1331
% of Total	1.6%	0.0%	6.9%	0.0%	.2%	65.7%	3.8%	0.0%	.1%	0.0%	0.0%	0.0%	6.6%	15.1%	.1%	0.0%			0.0%100.0%
Apprch %	8.5%				69.6%				.1%				21.8%						
% of Apprch	18.6%	0.0%	81.4%	0.0%	.2%	94.3%	5.5%	0.0%	100.0%	0.0%	0.0%	0.0%	30.3%	69.3%	.3%	0.0%			

Peak Hour Analysis By Entire Intersection for the Period: 08:00am to 09:45am on 01/13/01

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				RTOR	Percentages		
				Left	Thru	Rght	Total		Left	Thru	Rght
Southbound	nys rt 214	08:45am	.716	14	0	49	63	0	22.2	.0	77.7
Westbound	nys rt 28		.827	0	476	27	503	0	.0	94.6	5.3
Northbound	south st		.250	1	0	0	1	0	100.0	.0	.0
Eastbound	nys rt 28		.835	57	119	1	177	0	32.2	67.2	.5

Creighton Manning Engineering, L.L.P.

4 Automation Lane
Albany, N.Y. 12205-1683
Turning Movement Counts

Site Code : 99-057-6
Start Date: 01/13/01
File I.D. : TMC957S6
Page : 2

Weather :
Counted by:
Board # :
Other : belleayre resort

passenger	nys rt 214			
heavy	0 48	0 12	57	
	0 1	0 2	0	
	-----	-----	27	
	0 49	0 14	84	
	Inbound	63		
	Outbound	84		
	Total	147		

passenger, heavy			
	0	0	0
	0	0	0
	24		
	3	27	

nys rt 28	
	1
526	476
	49

	471	
	5	476

	55	
3.5%	57	2
	Inbound	177
	Outbound	526
	Total	703
1.7%	117	2
	119	

Inbound	503	
Outbound	133	0
Total	636	0 0

	1
1	0

	14
	119 133
	0
	nys rt 28

	0
0	0

Inbound	1
Outbound	1
Total	2
0	1 0 0 0
0	0 0 0 0
1	-----
1	1 0 0 0
1	
south st	

	0
0	0
1	-----
1	0 0 0

Creighton Manning Engineering, L.L.P.

Weather :
 Counted by:
 Board # :
 Other :belleayre resort

4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-7
 Start Date: 01/13/01
 File I.D. : TMC957S8
 Page : 1

Start Time	nys rt 42 Southbound				nys rt 28 Westbound				passenger, heavy nys rt 28 Eastbound				Total- RTOR=	
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR		
8:00am	6	0	1	0	0	83	9	0	1	23	0	0	123	0 123
8:15	7	0	1	0	0	102	11	0	1	13	0	0	135	0 135
8:30	11	0	4	0	0	116	13	0	6	14	0	0	164	0 164
8:45	4	0	4	0	0	142	10	0	4	14	0	0	178	0 178
Hour Total	28	0	10	0	0	443	43	0	12	64	0	0	600	0 600
9:00am	12	0	2	0	0	116	8	0	1	28	0	0	167	0 167
9:15	11	0	0	0	0	113	18	0	2	26	0	0	170	0 170
9:30	6	0	4	0	0	104	16	0	4	31	0	0	165	0 165
9:45	11	0	2	0	0	93	11	0	2	20	0	0	139	0 139
Hour Total	40	0	8	0	0	426	53	0	9	105	0	0	641	0 641
Grand	68	0	18	0	0	869	96	0	21	169	0	0	1241	0 1241
% of Total	5.5%	0.0%	1.5%	0.0%	0.0%	70.0%	7.7%	0.0%	1.7%	13.6%	0.0%	0.0%		0.0%100.0%
Apprch %	6.9%				77.8%				15.3%					
% of Apprch	79.1%	0.0%	20.9%	0.0%	0.0%	90.1%	9.9%	0.0%	11.1%	88.9%	0.0%	0.0%		

Peak Hour Analysis By Entire Intersection for the Period: 08:00am to 09:45am on 01/13/01

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				RTOR	Percentages		
				Left	Thru	Rght	Total		Left	Thru	Rght
Southbound	nys rt 42	08:45am	.768	33	0	10	43	0	76.7	.0	23.2
Westbound	nys rt 28		.867	0	475	52	527	0	.0	90.1	9.8
Northbound			.0	0	0	0	0	0	0.0	0.0	0.0
Eastbound	nys rt 28		.786	11	99	0	110	0	10.0	90.0	.0

Creighton Manning Engineering, L.L.P.
 4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-7
 Start Date: 01/13/01
 File I.D. : TMC957S8
 Page : 2

Weather :
 Counted by :
 Board # :
 Other : belleayre resort *10%*

passenger		nys rt 42		
heavy	0	9	33	11
	0	1	0	
	0	10	33	52
				63
		Inbound	43	
		Outbound	63	
		Total	106	

passenger, heavy	
	0
	0
	0
	52
	0
	52
	0
	52

485	475	
	10	
	11	
11	0	
	Inbound	110
	Outbound	485
	Total	595
<i>4%</i> 99	95	
	4	

	472	
	3	475
	Inbound	527
	Outbound	132
	Total	659
	33	
	99	132
	nys rt 28	

0.6%

0 0
 0 0

Creighton Manning Engineering, L.L.P.
 4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-7
 Start Date: 01/13/01
 File I.D. : TMC957S9
 Page : 2

Weather :
 Counted by:
 Board # :
 Other : belleayre resort

22%

passenger		nys rt 42		
heavy	0	11	45	13
	0	0	1	
	0	11	46	57
			Inbound	57
			Outbound	57
			Total	114

passenger, heavy	
	0
	0
	0
	44
	44
	0
	0
	0
	44
	0
	44

nys rt 28		
164	153	
	11	
	13	
13	0	
	Inbound	619
	Outbound	164
	Total	783
<i>1%</i>	606	6

Inbound	197
Outbound	652
Total	849

46
 606 652

nys rt 28

0
 0

Creighton Manning Engineering, L.L.P.

4 Automation Lane
Albany, N.Y. 12205-1683
Turning Movement Counts

Site Code : 99-057-7
Start Date: 01/13/01
File I.D. : TMC957S9
Page : 1

Weather :
Counted by:
Board # :
Other :belleayre resort

Start Time	nys rt 42 Southbound				nys rt 28 Westbound				passenger, heavy nys rt 28 Eastbound				Total- RTOR=	
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Total	RTOR
3:30	8	0	2	0	0	46	13	0	5	86	0	0	160	0 160
3:45	16	0	4	0	0	55	13	0	4	136	0	0	228	0 228
Total	24	0	6	0	0	101	26	0	9	222	0	0	388	0 388
4:00pm	11	0	2	0	0	40	15	0	5	87	0	0	160	0 160
4:15	9	0	4	0	0	40	19	0	8	150	0	0	230	0 230
4:30	15	0	1	0	0	47	11	0	0	143	0	0	217	0 217
4:45	9	0	2	0	0	35	5	0	2	142	0	0	195	0 195
Hour Total	44	0	9	0	0	162	50	0	15	522	0	0	802	0 802
5:00pm	13	0	4	0	0	31	9	0	3	171	0	0	231	0 231
5:15	16	0	5	0	0	38	13	0	4	130	0	0	206	0 206
Total	29	0	9	0	0	69	22	0	7	301	0	0	437	0 437
Grand	97	0	24	0	0	332	98	0	31	1045	0	0	1627	0 1627
% of Total	6.0%	0.0%	1.5%	0.0%	0.0%	20.4%	6.0%	0.0%	1.9%	64.2%	0.0%	0.0%		0.0%100.0%
Apprch %	7.4%				26.4%				66.1%					
% of Apprch	80.2%	0.0%	19.8%	0.0%	0.0%	77.2%	22.8%	0.0%	2.9%	97.1%	0.0%	0.0%		

Peak Hour Analysis By Entire Intersection for the Period: 03:30pm to 05:15pm on 01/13/01

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				RTOR	Percentages		
				Left	Thru	Rght	Total		Left	Thru	Rght
Southbound	nys rt 42	04:15pm	.838	46	0	11	57	0	80.7	.0	19.2
Westbound	nys rt 28		.835	0	153	44	197	0	.0	77.6	22.3
Northbound			.0	0	0	0	0	0	0.0	0.0	0.0
Eastbound	nys rt 28		.889	13	606	0	619	0	2.1	97.8	.0

Creighton Manning Engineering, L.L.P.

Weather :
 Counted by:
 Board # :
 C :crossroads ventures

4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

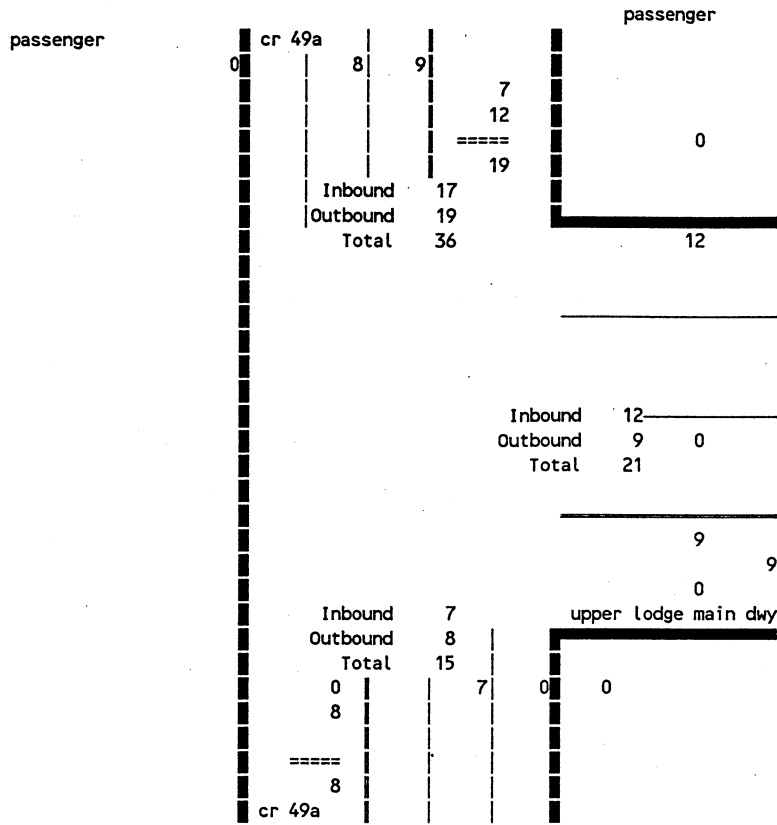
Site Code : 99-057-1
 Start Date: 10/06/00
 File I.D. : TMC957F1
 Page : 1

Start Time	cr 49a Southbound				upper lodge main dwy Westbound				passenger cr 49a Northbound				Total- RTOR=		
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR			
5:00pm	3	0	0	1	0	0	2	0	0	0	0	0	6	1	5
5:15	2	2	0	0	0	0	6	0	0	1	0	0	11	0	11
5:30	3	1	0	0	0	0	1	0	0	0	0	0	5	0	5
5:45	1	3	0	0	0	0	0	0	0	1	0	0	5	0	5
Hour Total	9	6	0	1	0	0	9	0	0	2	0	0	27	1	26
6:00pm	1	2	0	0	0	0	3	0	0	1	0	0	7	0	7
6:15	4	0	0	0	0	0	4	0	0	2	0	0	10	0	10
6:30	3	3	0	0	0	0	3	0	0	1	0	0	10	0	10
6:45	1	3	0	0	0	0	2	0	0	3	0	0	9	0	9
Hour Total	9	8	0	0	0	0	12	0	0	7	0	0	36	0	36
7:00pm	1	3	0	0	0	0	2	0	0	0	0	0	6	0	6
7:15	2	4	0	0	0	0	0	0	0	0	0	0	6	0	6
7:30	2	5	0	0	0	0	1	0	0	0	2	0	10	0	10
7:45	0	3	0	0	0	0	1	0	0	0	0	0	4	0	4
Hour Total	5	15	0	0	0	0	4	0	0	0	2	0	26	0	26
Grand	23	29	0	1	0	0	25	0	0	9	2	0	89	1	88
% of Total	25.8%	32.6%	0.0%	1.1%	0.0%	0.0%	28.1%	0.0%	0.0%	10.1%	2.2%	0.0%		1.1%	98.9%
Apprch %	59.6%				28.1%				12.4%						
% of Apprch	43.4%	54.7%	0.0%	1.9%	0.0%	0.0%	100.0%	0.0%	0.0%	81.8%	18.2%	0.0%			

Peak Hour Analysis By Entire Intersection for the Period: 05:00pm to 07:45pm on 10/06/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				RTOR	Percentages		
				Left	Thru	Rght	Total		Left	Thru	Rght
Southbound	cr 49a	06:00pm	.708	9	8	0	17	0	52.9	47.0	.0
Westbound	upper lodge main dwy		.750	0	0	12	12	0	.0	.0	100.0
Northbound	cr 49a		.583	0	7	0	7	0	.0	100.0	.0
Eastbound			.0	0	0	0	0	0	0.0	0.0	0.0

Weather :
 Counted by:
 Board # :
 C : crossroads ventures



Creighton Manning Engineering, L.L.P.

Weather :
 Counted by:
 Board # :
 :crossroads ventures

4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-2
 Start Date: 10/06/00
 File I.D. : TMC957F2
 Page : 1

Start Time	cr 49a Southbound				nys rt 28 Westbound				passenger, heavy cr 49a Northbound				nys rt 28 Eastbound				Total	RTOR=
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR		
5:00pm	0	1	0	0	4	57	1	0	3	0	3	0	1	37	2	0	109	0 109
5:15	0	0	0	0	2	55	1	0	3	0	5	0	0	48	3	0	117	0 117
5:30	0	0	0	0	4	48	1	0	1	0	5	0	0	33	1	0	93	0 93
5:45	0	1	0	0	4	52	0	0	1	1	2	0	0	33	2	0	96	0 96
Hour Total	0	2	0	0	14	212	3	0	8	1	15	0	1	151	8	0	415	0 415
6:00pm	0	0	0	0	1	46	2	0	2	0	4	0	0	31	2	0	88	0 88
6:15	0	0	1	0	5	42	2	0	2	0	5	0	0	29	3	0	89	0 89
6:30	0	0	0	0	6	63	0	0	1	0	3	0	0	17	0	0	90	0 90
6:45	0	0	0	0	7	49	4	0	3	0	5	0	0	20	3	0	91	0 91
Hour Total	0	0	1	0	19	200	8	0	8	0	17	0	0	97	8	0	358	0 358
7:00pm	1	0	1	0	5	50	0	0	1	0	5	0	0	18	1	0	82	0 82
7:15	1	0	1	0	5	40	1	0	0	0	0	0	0	17	0	0	65	0 65
7:30	0	0	1	0	7	40	1	0	0	0	2	0	0	13	1	0	65	0 65
7:45	0	0	0	0	4	32	0	0	0	0	1	0	1	11	0	0	49	0 49
Hour Total	2	0	3	0	21	162	2	0	1	0	8	0	1	59	2	0	261	0 261
Grand	2	2	4	0	54	574	13	0	17	1	40	0	2	307	18	0	1034	0 1034
% of Total	.2%	.2%	.4%	0.0%	5.2%	55.5%	1.3%	0.0%	1.6%	.1%	3.9%	0.0%	.2%	29.7%	1.7%	0.0%		0.0%100.0%
Apprch %	.8%				62.0%				5.6%				31.6%					
% of Apprch	25.0%	25.0%	50.0%	0.0%	8.4%	89.5%	2.0%	0.0%	29.3%	1.7%	69.0%	0.0%	.6%	93.9%	5.5%	0.0%		

Peak Hour Analysis By Entire Intersection for the Period: 05:00pm to 07:45pm on 10/06/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				RTOR	Percentages		
				Left	Thru	Rght	Total		Left	Thru	Rght
Southbound	cr 49a	05:00pm	.500	0	2	0	2	0	.0	100.0	.0
Westbound	nys rt 28		.923	14	212	3	229	0	6.1	92.5	1.3
Northbound	cr 49a		.750	8	1	15	24	0	33.3	4.1	62.5
Eastbound	nys rt 28		.784	1	151	8	160	0	.6	94.3	5.0

Creighton Manning Engineering, L.L.P.

Weather :
 Counted by :
 Board # :
 :crossroads ventures

4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-3
 Start Date: 10/06/00
 File I.D. : TMC957F3
 Page : 1

Start Time	academy st Southbound				pine hill rd (main st) Westbound				passenger, heavy bonnie view ave Northbound				main st Eastbound				Total	RTOR=		
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR				
5:00pm	1	0	0	0	1	3	0	0	0	0	2	0	0	4	1	0	12	0	12	
5:15	0	0	0	0	1	4	2	0	0	0	1	0	0	3	1	0	12	0	12	
5:30	0	0	0	0	1	1	0	0	0	0	2	0	0	5	1	0	10	0	10	
5:45	0	1	0	0	1	3	0	0	1	0	1	0	0	4	0	0	11	0	11	
Hour Total	1	1	0	0	4	11	2	0	1	0	6	0	0	16	3	0	45	0	45	
6:00pm	1	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	6	0	6	
6:15	0	0	0	0	0	3	0	0	0	0	0	0	0	1	1	0	5	0	5	
6:30	0	0	0	0	2	0	0	0	0	0	3	0	2	2	0	0	9	0	9	
6:45	1	0	0	0	2	4	0	0	0	0	0	0	0	3	0	0	10	0	10	
Hour Total	2	0	0	0	4	8	0	0	0	0	3	0	2	10	1	0	30	0	30	
7:00pm	1	1	0	0	0	3	1	0	1	0	0	0	0	7	0	0	14	0	14	
7:15	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0	0	5	0	5	
7:30	0	0	0	0	0	4	0	0	1	0	0	0	0	4	0	0	9	0	9	
7:45	0	0	0	0	2	2	0	0	0	0	1	0	0	2	0	0	7	0	7	
Hour Total	1	1	0	0	2	13	1	0	2	0	1	0	0	14	0	0	35	0	35	
Grand	4	2	0	0	10	32	3	0	3	0	10	0	2	40	4	0	110	0	110	
% of Total	3.6%	1.8%	0.0%	0.0%	9.1%	29.1%	2.7%	0.0%	2.7%	0.0%	9.1%	0.0%	1.8%	36.4%	3.6%	0.0%	0.0%	100.0%		
Apprch %	5.5%					40.9%					11.8%					41.8%				
% of Apprch	66.7%	33.3%	0.0%	0.0%	22.2%	71.1%	6.7%	0.0%	23.1%	0.0%	76.9%	0.0%	4.3%	87.0%	8.7%	0.0%				

Peak Hour Analysis By Entire Intersection for the Period: 05:00pm to 07:45pm on 10/06/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes					Percentages		
				Left	Thru	Rght	Total	RTOR	Left	Thru	Rght
Southbound	academy st	05:00pm	.500	1	1	0	2	0	50.0	50.0	.0
Westbound	pine hill rd (main st)		.607	4	11	2	17	0	23.5	64.7	11.7
Northbound	bonnie view ave		.875	1	0	6	7	0	14.2	.0	85.7
Eastbound	main st		.792	0	16	3	19	0	.0	84.2	15.7

Creighton Manning Engineering, L.L.P.

4 Automation Lane
Albany, N.Y. 12205-1683
Turning Movement Counts

Site Code : 99-057-4
Start Date: 10/06/00
File I.D. : TMC957F4
Page : 1

Weather :
Counted by:
Board # :
(:crossroads ventures

Start Time	nys rt 28 Westbound				pine hill rd Northbound				passenger nys rt 28 Eastbound				Total- RTOR=		
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR			
5:00pm	5	64	0	0	0	0	3	0	0	38	3	0	113	0	113
5:15	3	63	0	0	0	0	2	0	0	50	1	0	119	0	119
5:30	2	61	0	0	0	0	2	0	0	42	2	0	109	0	109
5:45	3	52	0	0	1	0	2	0	0	27	0	0	85	0	85
Hour Total	13	240	0	0	1	0	9	0	0	157	6	0	426	0	426
6:00pm	6	48	0	0	1	0	4	0	0	24	0	0	83	0	83
6:15	2	46	0	0	0	0	1	0	0	32	2	0	83	0	83
6:30	5	70	0	0	2	0	3	0	0	21	0	0	101	0	101
6:45	4	57	0	0	2	0	3	0	0	18	2	0	86	0	86
Hour Total	17	221	0	0	5	0	11	0	0	95	4	0	353	0	353
7:00pm	5	60	0	0	1	0	1	0	0	23	1	0	91	0	91
7:15	6	53	0	0	1	0	2	0	0	16	2	0	80	0	80
7:30	2	36	0	0	1	0	1	0	0	15	2	0	57	0	57
7:45	4	41	0	0	1	0	1	0	0	9	2	0	58	0	58
Hour Total	17	190	0	0	4	0	5	0	0	63	7	0	286	0	286
Grand	47	651	0	0	10	0	25	0	0	315	17	0	1065	0	1065
% of Total	4.4%	61.1%	0.0%	0.0%	.9%	0.0%	2.3%	0.0%	0.0%	29.6%	1.6%	0.0%		0.0%	100.0%
Apprch %	65.5%				3.3%				31.2%						
% of Apprch	6.7%	93.3%	0.0%	0.0%	28.6%	0.0%	71.4%	0.0%	0.0%	94.9%	5.1%	0.0%			

Peak Hour Analysis By Entire Intersection for the Period: 05:00pm to 07:45pm on 10/06/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				RTOR	Percentages		
				Left	Thru	Rght	Total		Left	Thru	Rght
Southbound		05:00pm	.0	0	0	0	0	0	0.0	0.0	0.0
Westbound	nys rt 28		.917	13	240	0	253	0	5.1	94.8	.0
Northbound	pine hill rd		.833	1	0	9	10	0	10.0	.0	90.0
Eastbound	nys rt 28		.799	0	157	6	163	0	.0	96.3	3.6

Creighton Manning Engineering, L.L.P.

4 Automation Lane
Albany, N.Y. 12205-1683
Turning Movement Counts

Site Code : 99-057-4
Start Date: 10/06/00
File I.D. : TMC957F4
Page : 2

Weather :
Counted by:
Board # :
r :crossroads ventures

passenger

passenger

0

nys rt 28

1
241 240

240

Inbound 163
Outbound 241
157 Total 404

Inbound 253
Outbound 166 13
Total 419

6

157 166
9
nys rt 28

0
Inbound 10
Outbound 19
Total 29
13 1
6
=====
19
pine hill rd

9 0

Creighton Manning Engineering, L.L.P.

Weather :
 Counted by:
 Board # :
 :r :crossroads ventures

4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-5
 Start Date: 10/06/00
 File I.D. : TMC957F5
 Page : 1

Start Time	cr 47 Southbound				nys rt 28 Westbound				passenger cr 47 Northbound				nys rt 28 Eastbound				Total	RTOR	
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR			
5:00pm	1	3	0	0	3	65	1	0	7	0	1	0	0	33	1	0	115	0	115
5:15	0	0	0	0	15	46	2	0	7	3	3	0	1	42	6	0	125	0	125
5:30	0	2	3	0	2	61	2	0	3	0	6	0	2	38	4	0	123	0	123
5:45	0	2	1	0	8	62	0	0	3	2	2	0	1	37	2	0	120	0	120
Hour Total	1	7	4	0	28	234	5	0	20	5	12	0	4	150	13	0	483	0	483
6:00pm	2	1	2	0	8	49	0	0	1	0	5	0	0	14	4	0	86	0	86
6:15	0	1	0	0	8	53	1	0	5	0	1	0	0	37	3	0	109	0	109
6:30	2	0	0	0	7	60	0	0	5	1	6	0	1	26	3	0	111	0	111
6:45	1	0	1	0	11	70	0	0	2	1	1	0	0	16	3	0	106	0	106
Hour Total	5	2	3	0	34	232	1	0	13	2	13	0	1	93	13	0	412	0	412
7:00pm	0	2	0	0	1	59	0	0	3	0	5	0	1	20	0	0	91	0	91
7:15	0	1	0	0	6	54	2	0	1	0	4	0	1	15	4	0	88	0	88
7:30	0	1	0	0	8	47	5	0	1	0	5	0	0	9	3	0	79	0	79
7:45	0	0	0	0	3	56	0	0	0	0	1	0	1	10	0	0	71	0	71
Hour Total	0	4	0	0	18	216	7	0	5	0	15	0	3	54	7	0	329	0	329
Grand	6	13	7	0	80	682	13	0	38	7	40	0	8	297	33	0	1224	0	1224
% of Total	.5%	1.1%	.6%	0.0%	6.5%	55.7%	1.1%	0.0%	3.1%	.6%	3.3%	0.0%	.7%	24.3%	2.7%	0.0%		0.0%	100.0%
Apprch %	2.1%				63.3%				6.9%				27.6%						
% of Apprch	23.1%	50.0%	26.9%	0.0%	10.3%	88.0%	1.7%	0.0%	44.7%	8.2%	47.1%	0.0%	2.4%	87.9%	9.8%	0.0%			

Peak Hour Analysis By Entire Intersection for the Period: 05:00pm to 07:45pm on 10/06/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes					Percentages		
				Left	Thru	Rght	Total	RTOR	Left	Thru	Rght
Southbound	cr 47	05:00pm	.600	1	7	4	12	0	8.3	58.3	33.3
Westbound	nys rt 28		.954	28	234	5	267	0	10.4	87.6	1.8
Northbound	cr 47		.712	20	5	12	37	0	54.0	13.5	32.4
Eastbound	nys rt 28		.852	4	150	13	167	0	2.3	89.8	7.7

Creighton Manning Engineering, L.L.P.

4 Automation Lane

Albany, N.Y. 12205-1683

Turning Movement Counts

Weather :

Counted by:

Board # :

C :crossroads ventures

Site Code : 99-057-5

Start Date: 10/06/00

File I.D. : TMC957F5

Page : 2

passenger		cr 47		passenger	
0	4	7	1	4	0
				5	
				5	
				14	
		Inbound	12		
		Outbound	14		
		Total	26		
nys rt 28					5
20					
258	234				
	4				
					234
	4				

Inbound	167	Inbound	267
Outbound	258	Outbound	163
150	Total	425	28
		Total	430
			1
			150
			163
			12
			nys rt 28

0		Inbound	37		
		Outbound	48		
		Total	85		
		28	20	5	12
		7			0
		13			
		48			
		cr 47			

10/09/00
10:50:44

Creighton Manning Engineering, L.L.P.
4 Automation Lane
Albany, NY 12205
(518) 446-0396
Automatic Traffic Recorder Count

Page: 1

*** Dual Channel 15 Minute ***

Site ID : 99-057-1
Info 1 : upper lodge road
Info 2 : main entr

Date : Oct 8, 2000 Sun
Factor : 1.00

Lane 1-Directional, Axle, /2 Lane 2-Directional, Axle, /2

Hour	1-eb enter					Hour	2-wb exit					Hour	Combined
Starts	0	15	30	45	Total	0	15	30	45	Total	Total		

AM

12

1

2

3

4

5

6

7

8

9

10

11

PM

12

1

2

3

4

5

6

7

8

9

10

11

TOTALS	15%	88	85%	515	603
AVERAGE	6.3 period	25.1	36.8 period	147.1	172.3

Peak PM Hour is *** 3:45pm to 4:45pm ***

Volume	Lane 1 :	67	Lane 2 :	243	Combined:	310
Directional Split :	22%	78%				
Peak Hour Factor :	0.670	0.856		0.824		
Peak / Day Total :	0.761	0.472		0.514		

Creighton Manning Engineering, L.L.P.

Weather :
 Counted by:
 Board # :
 :crossroads ventures

4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-2
 Start Date: 10/08/00
 File I.D. : TMC957S2
 Page : 1

Start Time	cr 49a Southbound				nys rt 28 Westbound				passenger, heavy cr 49a Northbound				nys rt 28 Eastbound				Total- RTOR=			
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR				
4:00pm	3	0	0	0	13	25	1	0	18	2	32	0	0	70	12	0	176	0	176	
4:15	1	0	1	0	8	47	1	0	27	2	45	0	2	61	9	0	204	0	204	
4:30	4	0	0	0	5	29	1	0	36	3	45	0	0	64	4	0	191	0	191	
4:45	0	1	1	0	6	32	2	0	22	0	30	0	0	60	1	0	155	0	155	
Hour Total	8	1	2	0	32	133	5	0	103	7	152	0	2	255	26	0	726	0	726	
5:00pm	0	0	2	0	4	30	1	0	20	1	25	0	0	55	2	0	140	0	140	
5:15	0	0	0	0	3	36	0	0	28	0	42	0	2	54	1	0	166	0	166	
5:30	1	0	0	0	2	34	0	0	12	1	21	0	1	70	1	0	143	0	143	
5:45	0	0	1	0	4	36	0	0	10	0	29	0	1	47	2	0	130	0	130	
Hour Total	1	0	3	0	13	136	1	0	70	2	117	0	4	226	6	0	579	0	579	
6:00pm	0	0	2	0	3	16	0	0	9	2	11	0	0	44	1	0	88	0	88	
6:15	1	0	1	0	4	36	0	0	12	0	10	0	1	56	1	0	122	0	122	
6:30	0	0	0	0	4	30	0	0	3	0	19	0	1	46	0	0	103	0	103	
6:45	1	0	0	0	3	29	0	0	1	0	4	0	0	45	3	0	86	0	86	
Hour Total	2	0	3	0	14	111	0	0	25	2	44	0	2	191	5	0	399	0	399	
Grand	11	1	8	0	59	380	6	0	198	11	313	0	8	672	37	0	1704	0	1704	
% of Total	.6%	.1%	.5%	0.0%	3.5%	22.3%	.4%	0.0%	11.6%	.6%	18.4%	0.0%	.5%	39.4%	2.2%	0.0%			0.0%100.0%	
Apprch %	1.2%					26.1%					30.6%					42.1%				
% of Apprch	55.0%	5.0%	40.0%	0.0%	13.3%	85.4%	1.3%	0.0%	37.9%	2.1%	60.0%	0.0%	1.1%	93.7%	5.2%	0.0%				

Peak Hour Analysis By Entire Intersection for the Period: 04:00pm to 06:45pm on 10/08/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes					Percentages				
				Left	Thru	Rght	Total	RTOR	Left	Thru	Rght		
Southbound	cr 49a	04:00pm	.688	8	1	2	11	.0	72.7	9.0	18.1		
Westbound	nys rt 28		.759	32	133	5	170	0	18.8	78.2	2.9		
Northbound	cr 49a		.780	103	7	152	262	0	39.3	2.6	58.0		
Eastbound	nys rt 28		.863	2	255	26	283	0	.7	90.1	9.1		

Creighton Manning Engineering, L.L.P.

4 Automation Lane
Albany, N.Y. 12205-1683
Turning Movement Counts

Site Code : 99-057-2
Start Date: 10/08/00
File I.D. : TMC957S2
Page : 2

Weather :
Counted by:
Board # :
r :crossroads ventures

12.5%

passenger	0	cr 49a	2	1	7	2
heavy	0		0	0	1	7
	0		2	1	8	5
						14
		Inbound				11
		Outbound				14
		Total				25

passenger, heavy		
	0	
	0	0
	5	
	0	5

nys rt 28	103
	238 133
	2

	133	
	0	133
Inbound	170	
Outbound	415	32
Total	585	0 32

	2	
	2	0
Inbound	283	
Outbound	238	
Total	521	
	252	3
	255	

	26
	26 0

	8
	255 415
	152
	nys rt 28

	0	
	0	
	32	103 7
	1	0 0
	26	
	59	103 7 152 0
	cr 49a	

Inbound	262
Outbound	59
Total	321
	32 103 7 152 0
	1 0 0 0 0
	26
	59 103 7 152 0

1.2%

Creighton Manning Engineering, L.L.P.

Weather :
 Counted by :
 Board # :
 (:crossroads ventures

4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-3
 Start Date: 10/08/00
 File I.D. : TMC957S3
 Page : 1

Start Time	academy st Southbound				pine hill rd (main st) Westbound				passenger bonnie view ave Northbound				main st Eastbound				Total- RTOR=		
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR			
4:00pm	1	0	1	0	0	2	1	0	0	0	3	0	0	1	1	0	10	0	10
4:15	2	0	0	0	1	6	2	0	0	0	5	0	0	7	1	0	24	0	24
4:30	2	1	0	0	2	2	0	0	0	0	2	0	0	7	0	0	16	0	16
4:45	1	0	0	0	2	0	1	0	1	0	0	0	0	2	2	0	9	0	9
Hour Total	6	1	1	0	5	10	4	0	1	0	10	0	0	17	4	0	59	0	59
5:00pm	1	0	0	0	1	4	0	0	0	1	2	0	1	5	1	0	16	0	16
5:15	2	0	0	0	0	4	0	0	0	0	0	0	1	11	0	0	18	0	18
5:30	1	0	0	0	0	5	0	0	0	0	1	0	0	9	0	0	16	0	16
5:45	0	1	0	0	2	4	3	0	0	0	1	0	0	4	1	0	16	0	16
Hour Total	4	1	0	0	3	17	3	0	0	1	4	0	2	29	2	0	66	0	66
6:00pm	1	1	0	0	0	2	0	0	0	1	1	0	0	3	0	0	9	0	9
6:15	2	0	0	0	0	5	0	0	0	0	0	0	0	3	2	0	12	0	12
6:30	3	0	0	0	1	3	2	0	0	0	2	0	0	3	2	0	16	0	16
6:45	2	0	1	0	0	8	0	0	1	0	1	0	1	4	0	0	18	0	18
Hour Total	8	1	1	0	1	18	2	0	1	1	4	0	1	13	4	0	55	0	55
Grand	18	3	2	0	9	45	9	0	2	2	18	0	3	59	10	0	180	0	180
% of Total	10.0%	1.7%	1.1%	0.0%	5.0%	25.0%	5.0%	0.0%	1.1%	1.1%	10.0%	0.0%	1.7%	32.8%	5.6%	0.0%			0.0%100.0%
Apprch %	12.8%				35.0%				12.2%				40.0%						
% of Apprch	78.3%	13.0%	8.7%	0.0%	14.3%	71.4%	14.3%	0.0%	9.1%	9.1%	81.8%	0.0%	4.2%	81.9%	13.9%	0.0%			

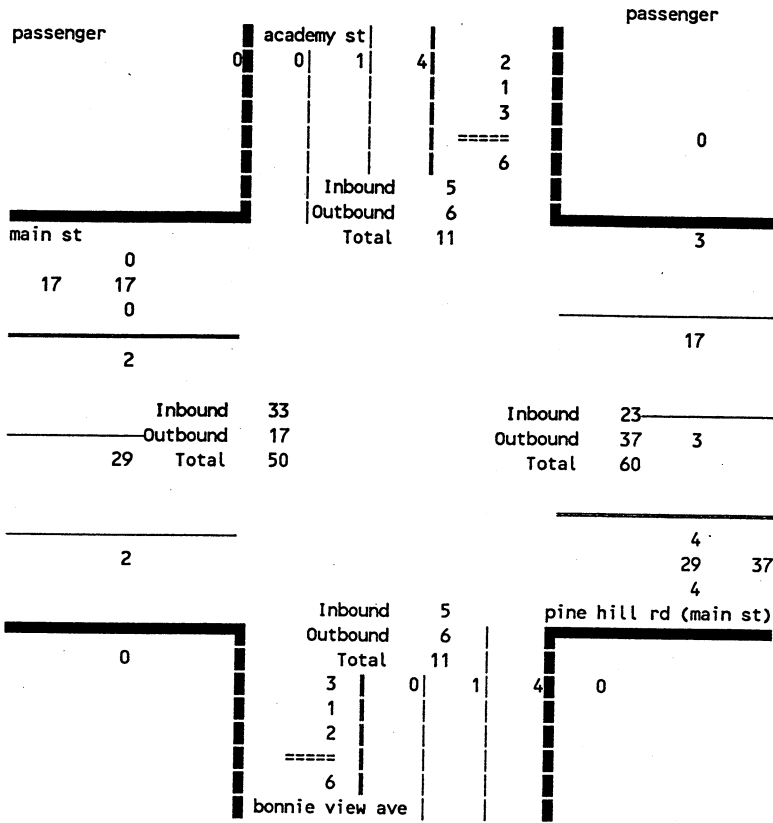
Peak Hour Analysis By Entire Intersection for the Period: 04:00pm to 06:45pm on 10/08/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes					Percentages		
				Left	Thru	Rght	Total	RTOR	Left	Thru	Rght
Southbound	academy st	05:00pm	.625	4	1	0	5	0	80.0	20.0	.0
Westbound	pine hill rd (main st)		.639	3	17	3	23	0	13.0	73.9	13.0
Northbound	bonnie view ave		.417	0	1	4	5	0	.0	20.0	80.0
Eastbound	main st		.688	2	29	2	33	0	6.0	87.8	6.0

Weather :
 Counted by:
 Board # :
 :crossroads ventures

Creighton Manning Engineering, L.L.P.
 4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-3
 Start Date: 10/08/00
 File I.D. : TMC957S3
 Page : 2



Creighton Manning Engineering, L.L.P.
 4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-5
 Start Date: 10/08/00
 File I.D. : TMC95785
 Page : 1

Weather :
 Counted by:
 Board # :
 r :crossroads ventures

Start Time	cr 47 Southbound				nys rt 28 Westbound				passenger, heavy cr 47 Northbound				nys rt 28 Eastbound				Total- RTOR=		
	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR	Left	Thru	Rght	RTOR			
3:45	1	1	1	0	7	40	0	0	4	0	8	0	0	87	10	0	159	0	159
Total	1	1	1	0	7	40	0	0	4	0	8	0	0	87	10	0	159	0	159
4:00pm	0	2	0	0	10	47	0	0	8	0	6	0	3	83	8	0	167	0	167
4:15	0	0	0	0	5	32	2	0	8	1	9	0	4	101	4	0	166	0	166
4:30	1	0	2	0	6	39	1	0	2	1	5	0	1	94	3	0	155	0	155
4:45	0	2	1	0	9	34	1	0	10	0	9	0	3	75	9	0	153	0	153
Hour Total	1	4	3	0	30	152	4	0	28	2	29	0	11	353	24	0	641	0	641
5:00pm	0	1	2	0	5	42	1	0	4	1	9	0	2	77	5	0	149	0	149
5:15	0	3	1	0	8	34	2	0	3	2	5	0	2	62	13	0	135	0	135
5:30	0	0	3	0	10	30	1	0	10	2	6	0	0	85	5	0	152	0	152
5:45	0	1	0	0	4	27	1	0	7	1	5	0	0	67	4	0	117	0	117
Hour Total	0	5	6	0	27	133	5	0	24	6	25	0	4	291	27	0	553	0	553
6:00pm	2	1	0	0	6	28	0	0	2	1	8	0	0	48	4	0	100	0	100
6:15	1	0	1	0	4	37	0	0	6	1	6	0	0	66	4	1	127	1	126
6:30	0	0	2	0	2	25	1	0	2	0	6	0	2	56	2	0	98	0	98
Total	3	1	3	0	12	90	1	0	10	2	20	0	2	170	10	1	325	1	324
Grand	5	11	13	0	76	415	10	0	66	10	82	0	17	901	71	1	1678	1	1677
% of Total	.3%	.7%	.8%	0.0%	4.5%	24.7%	.6%	0.0%	3.9%	.6%	4.9%	0.0%	1.0%	53.7%	4.2%	.1%		.1%	99.9%
Apprch %	1.7%				29.9%				9.4%				59.0%						
% of Apprch	17.2%	37.9%	44.8%	0.0%	15.2%	82.8%	2.0%	0.0%	41.8%	6.3%	51.9%	0.0%	1.7%	91.0%	7.2%	.1%			

Peak Hour Analysis By Entire Intersection for the Period: 03:45pm to 06:30pm on 10/08/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes				RTOR	Percentages		
				Left	Thru	Rght	Total		Left	Thru	Rght
Southbound	cr 47	03:45pm	.667	2	3	3	8	0	25.0	37.5	37.5
Westbound	nys rt 28		.829	28	158	3	189	0	14.8	83.5	1.5
Northbound	cr 47		.722	22	2	28	52	0	42.3	3.8	53.8
Eastbound	nys rt 28		.913	8	365	25	398	0	2.0	91.7	6.2

Weather :
 Counted by:
 Board # :
 (:crossroads ventures

Creighton Manning Engineering, L.L.P.
 4 Automation Lane
 Albany, N.Y. 12205-1683
 Turning Movement Counts

Site Code : 99-057-5
 Start Date: 10/08/00
 File I.D. : TMC95755
 Page : 2

passenger	0	3	3	2	8
heavy	0	0	0	0	2
	0	3	3	2	3
					13
					8
					13
					21

passenger, heavy	0	0	0
	3	0	3
	0	158	0
	0	0	158

nys rt 28
 22
 183 158
 3

	8	
	8	0
Inbound	398	
Outbound	183	
Total	581	

Inbound	189	
Outbound	395	28
Total	584	0 28

0.3% 365

25
 25 0

2
 365 395
 28
 nys rt 28

0	0
0	0

Inbound	52
Outbound	56
Total	108

28	22	2	28	0
3	0	0	0	0
25				
	22	2	28	0
56				

cr 47

Appendix B – Trip Assignment

**Traffic Impact Study
Belleayre Resort at Catskill Park
Towns of Shandaken and Middletown, NY**

Table B-1 – Summary of Vehicle Trip Generation

Land Use (ITE LUC)	ITE LUC ¹	Saturday AM Peak			Saturday PM Peak			Friday PM Peak			Sunday PM Peak		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Wildacres Resort													
168 Lodging Units	260	29	31 (20)	60 (49)	29 (19)	31	60 (50)	18	26	44	28	32	60
250 Room Hotel	310	101	79 (51)	180 (152)	101 (65)	79	180 (144)	73	65	138	64	76	140
18-hole golf course	430	---	---	---	---	---	---	22 (14)	27 (18)	49 (32)	35 (23)	45 (29)	80 (52)
Total Wildacres Resort		130	110 (71)	240 (201)	130 (84)	110	240 (194)	113 (105)	118 (109)	231 (214)	127 (115)	153 (137)	280 (252)
Big Indian Plateau													
183 Club Membership Units	260	32	35 (23)	67 (55)	32 (21)	35	67 (56)	20	28	48	31	36	67
150 Room Hotel	310	60	48 (31)	108 (91)	60 (39)	48	108 (87)	39	35	74	39	45	84
18-hole golf course	430	---	---	---	---	---	---	22 (14)	27 (18)	49 (32)	35 (23)	45 (29)	80 (52)
Total Big Indian Plateau		92	83 (54)	175 (146)	92 (60)	83	175 (143)	81 (73)	90 (81)	171 (154)	105 (93)	126 (110)	231 (203)
Highmount Estates													
21 Single Family Homes	210	10	9 (7)	19 (17)	10 (7)	9	19 (16)	16	9	25	9	8	17

¹ITE LUC= Representative land use code from ITE's Trip Generation manual used in the estimate of trips for each type of development. Actual vehicle trips made are shown in parenthesis. These trips account for a reduction in passenger vehicles due to shuttle bus trips to and from Belleayre Mountain Ski Center in the Saturday winter conditions and to and from the resorts (Wildacres and Big Indian Plateau) during the Friday and Sunday Fall conditions. For example, the hotel at Wildacres would have a total of 180 trips during the Saturday peak without the shuttle and internal trips. Assuming that 50% of the morning trips exiting would be to Belleayre Mountain and 40 % of these would ride the shuttle means that there would be 144 trips made by guests in their own vehicles and 8 shuttle trips for a total of 152 trips.

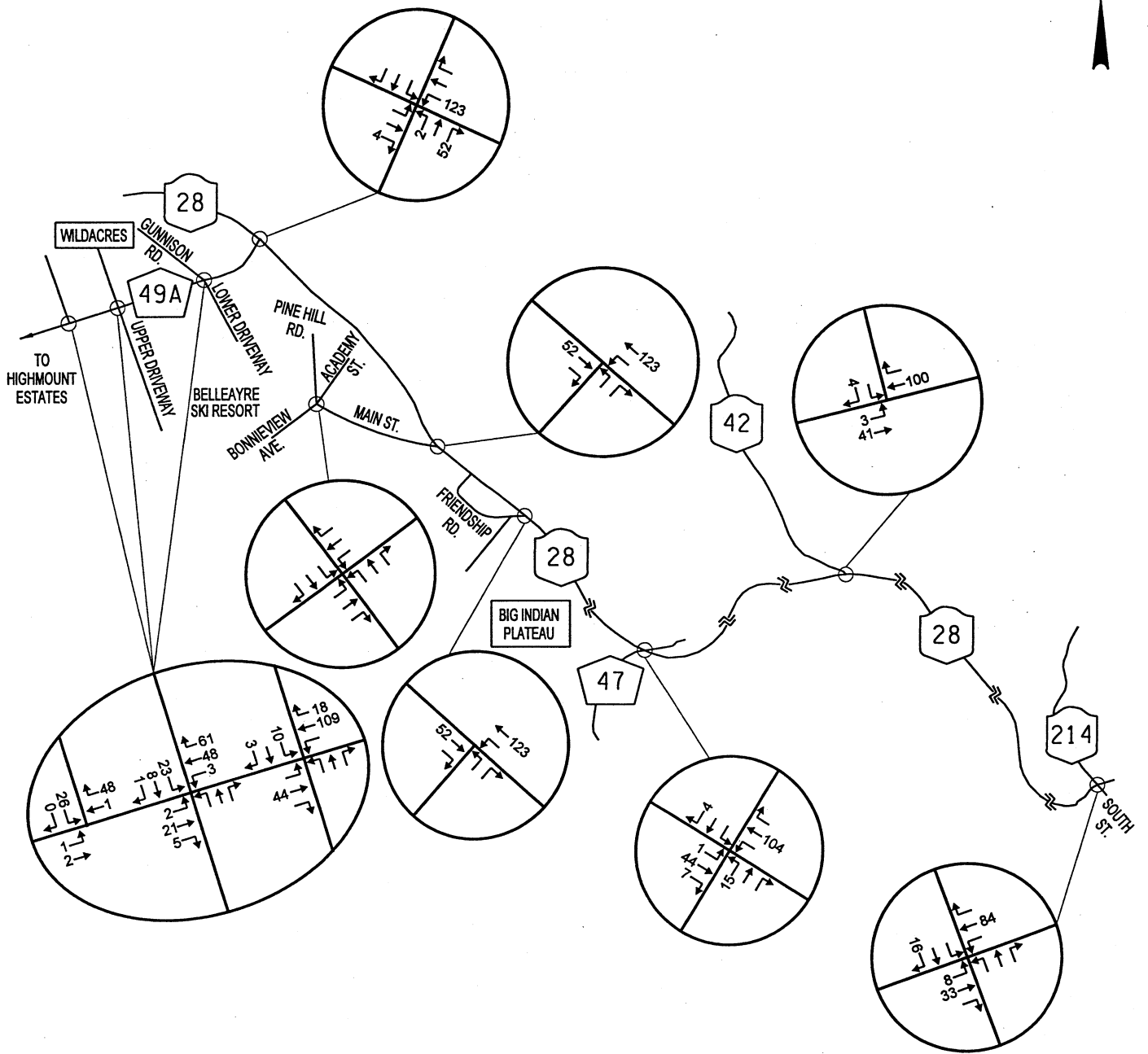


FIGURE B.1
TRIP ASSIGNMENT
SATURDAY, AM PEAK HOUR, WILDACRES

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

CME
CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

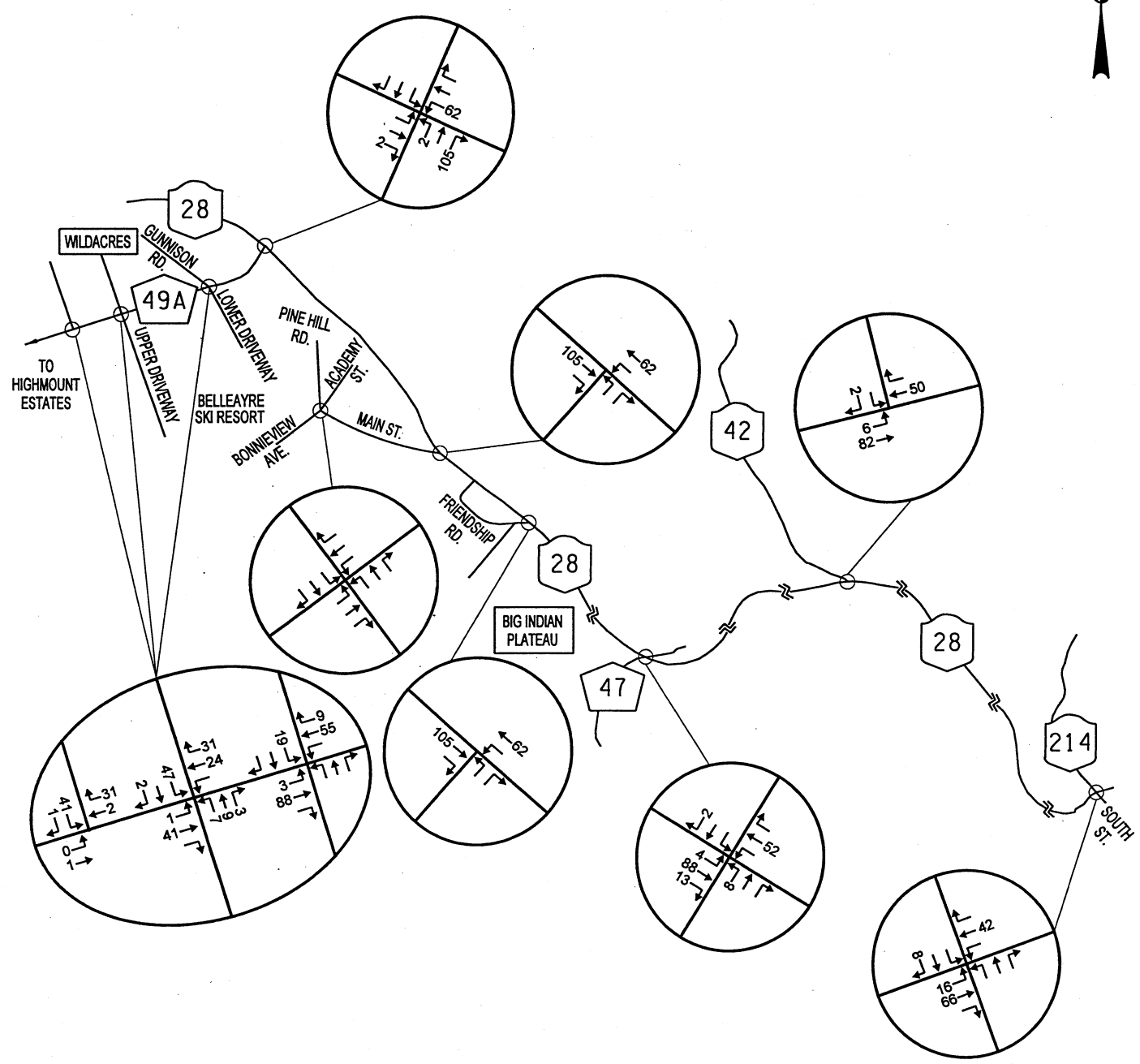


FIGURE B.2
TRIP ASSIGNMENT
SATURDAY, PM PEAK HOUR, WILDACRES

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

CME
CREIGHTON MANNING ENGINEERING, LLP
 4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

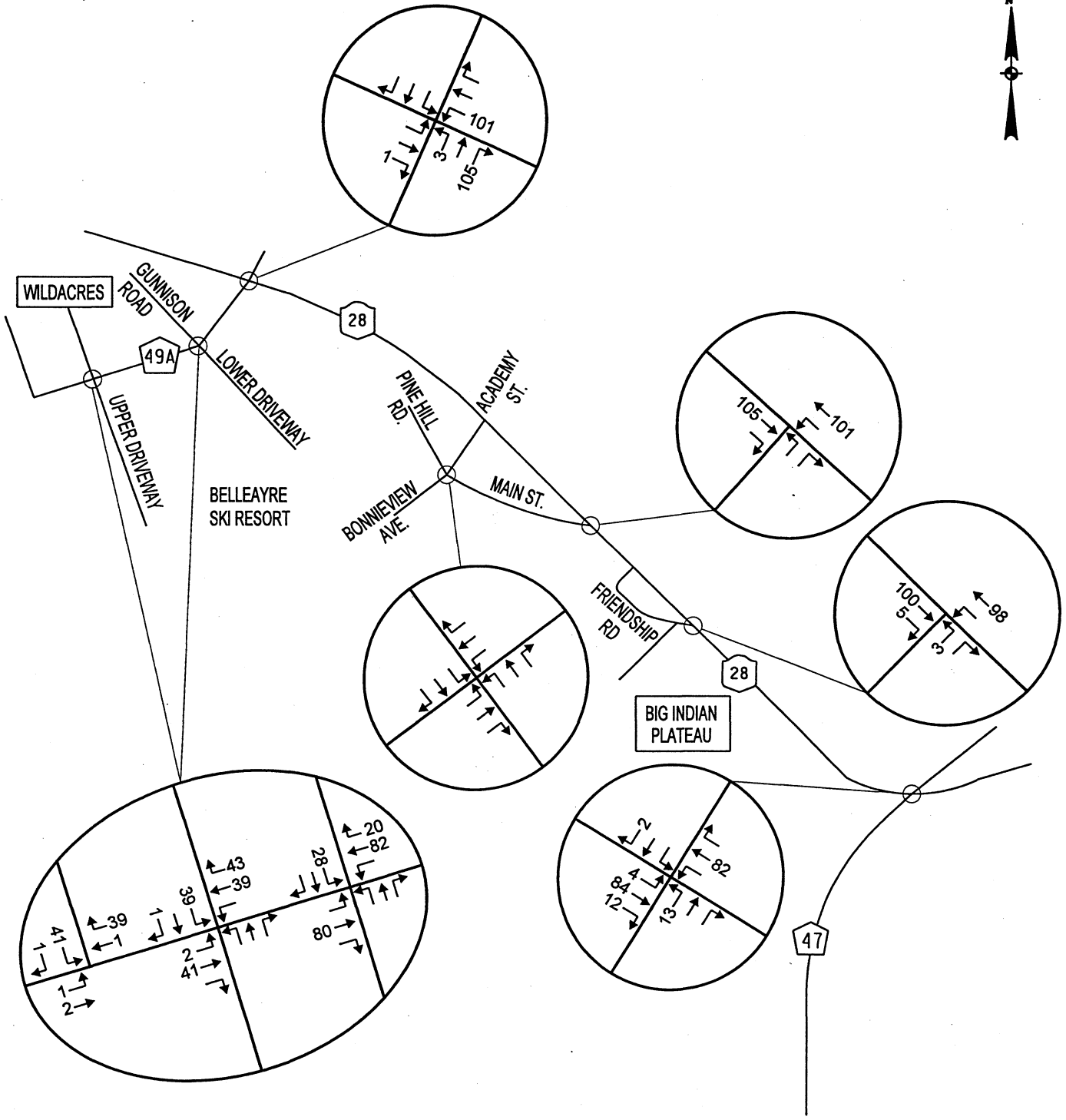


FIGURE B.3
TRIP ASSIGNMENT
FRIDAY, PM PEAK HOUR, WILDACRES

BELLEAYRE RESORT AT CATSKILL PARK
TOWN OF SHANDAKEN AND
MIDDLETOWN, NEW YORK



PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

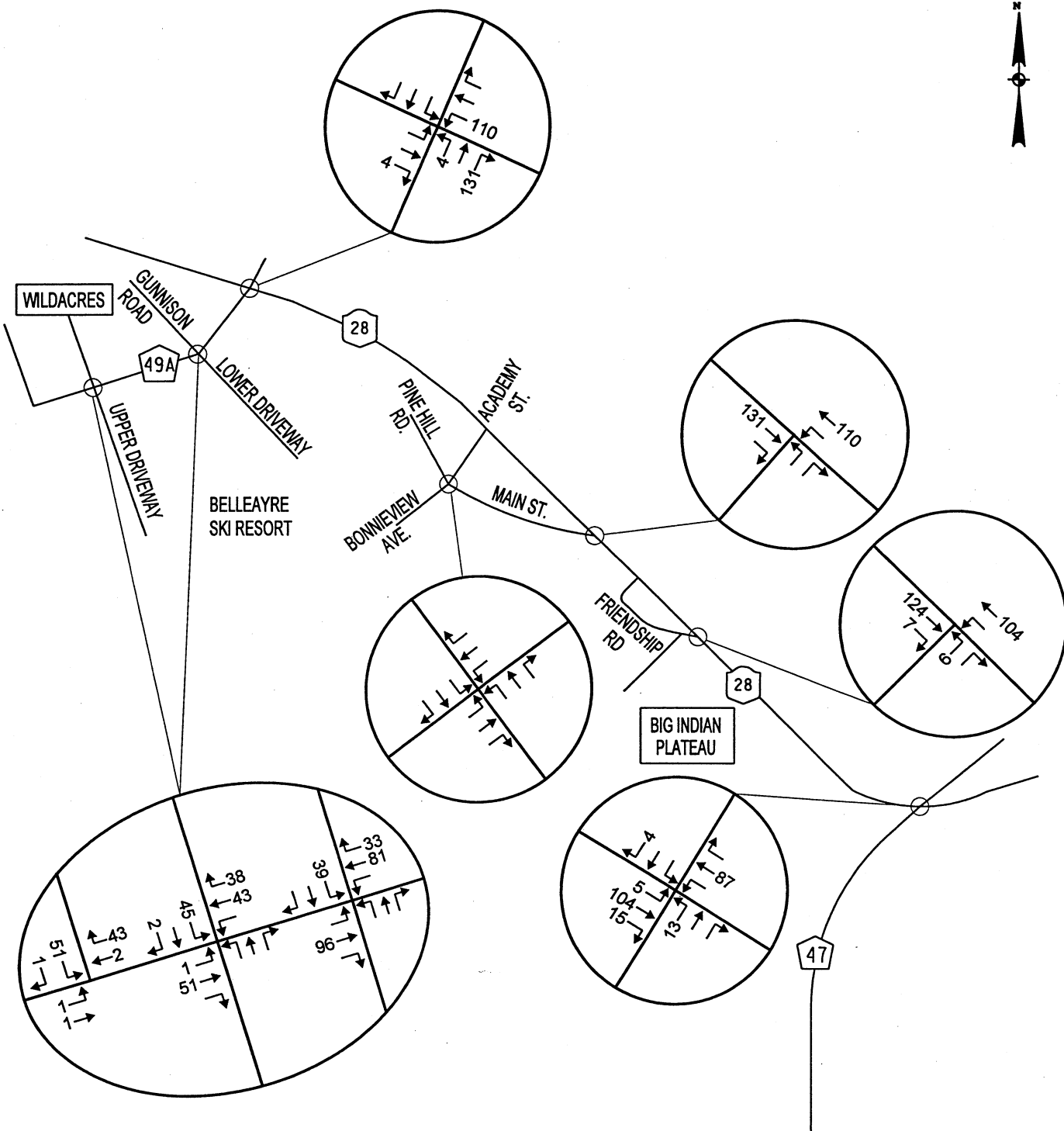


FIGURE B.4
TRIP ASSIGNMENT
SUNDAY, PM PEAK HOUR, WILDACRES

BELLEAYRE RESORT AT CATSKILL PARK
TOWN OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

CME
CREIGHTON MANNING ENGINEERING, LLP
4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

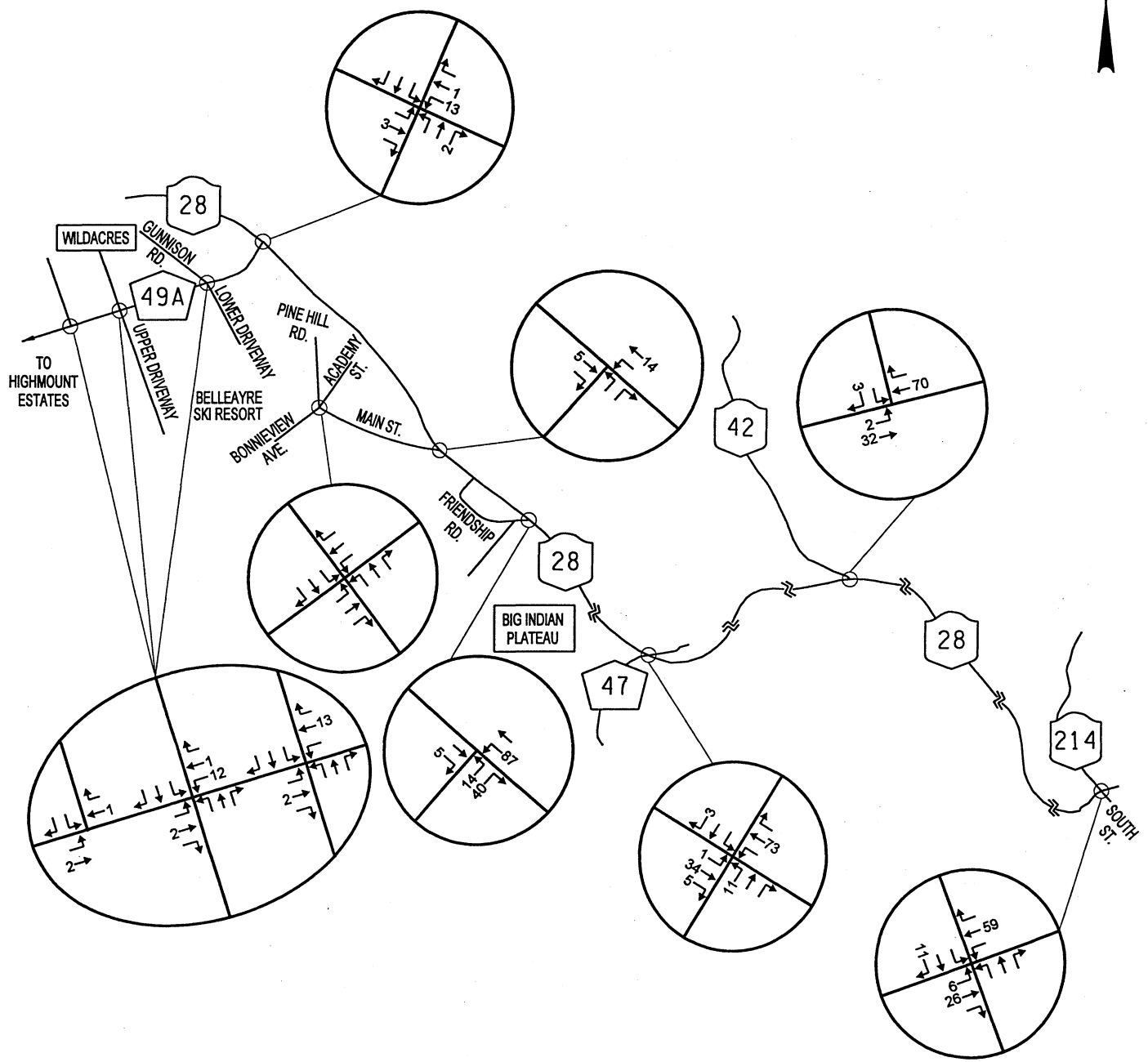


FIGURE B.5
TRIP ASSIGNMENT, SATURDAY
AM PEAK HOUR, BIG INDIAN PLATEAU

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK



PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

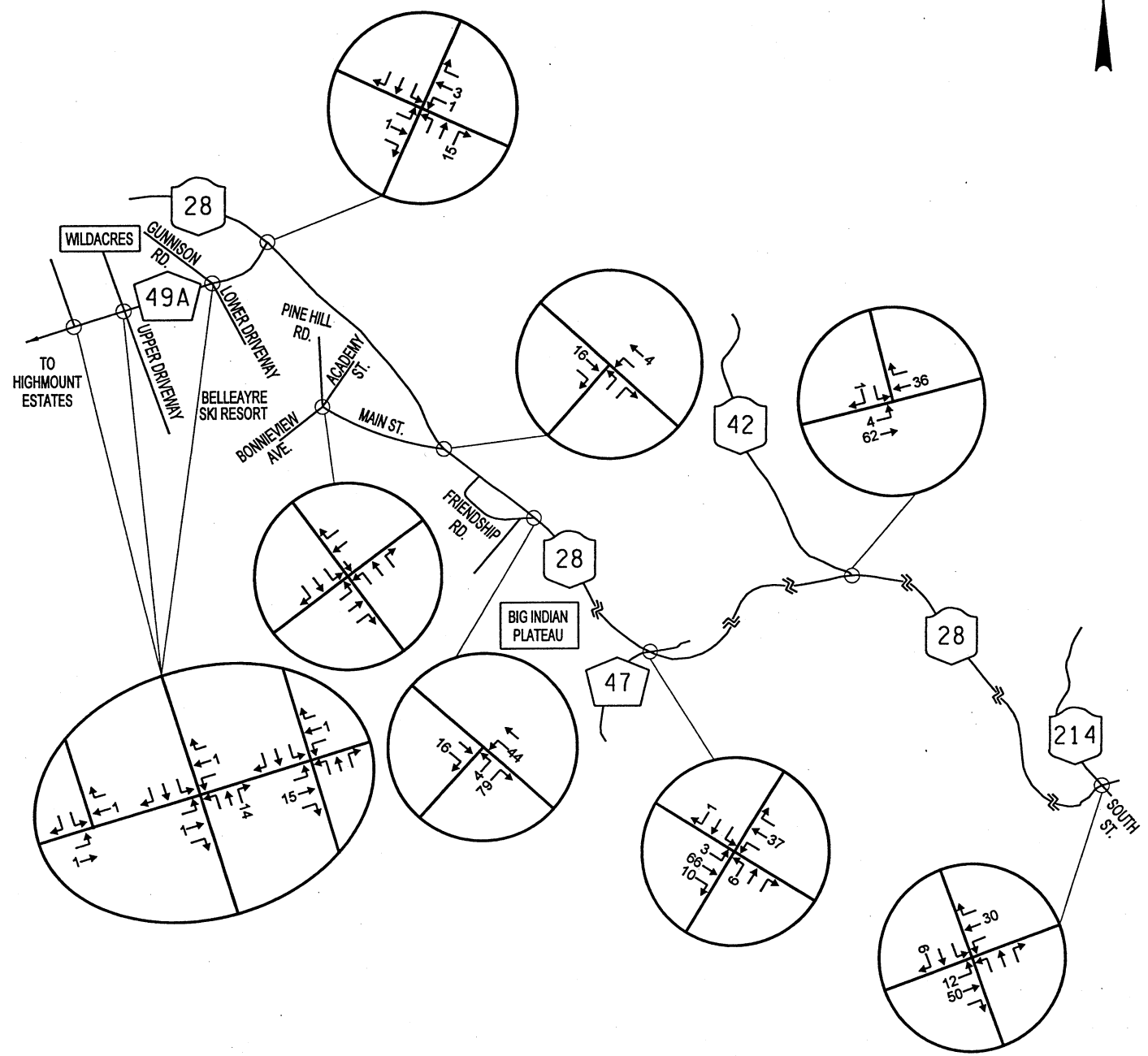


FIGURE B.6
TRIP ASSIGNMENT, SATURDAY
PM PEAK HOUR, BIG INDIAN PLATEAU

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK



PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

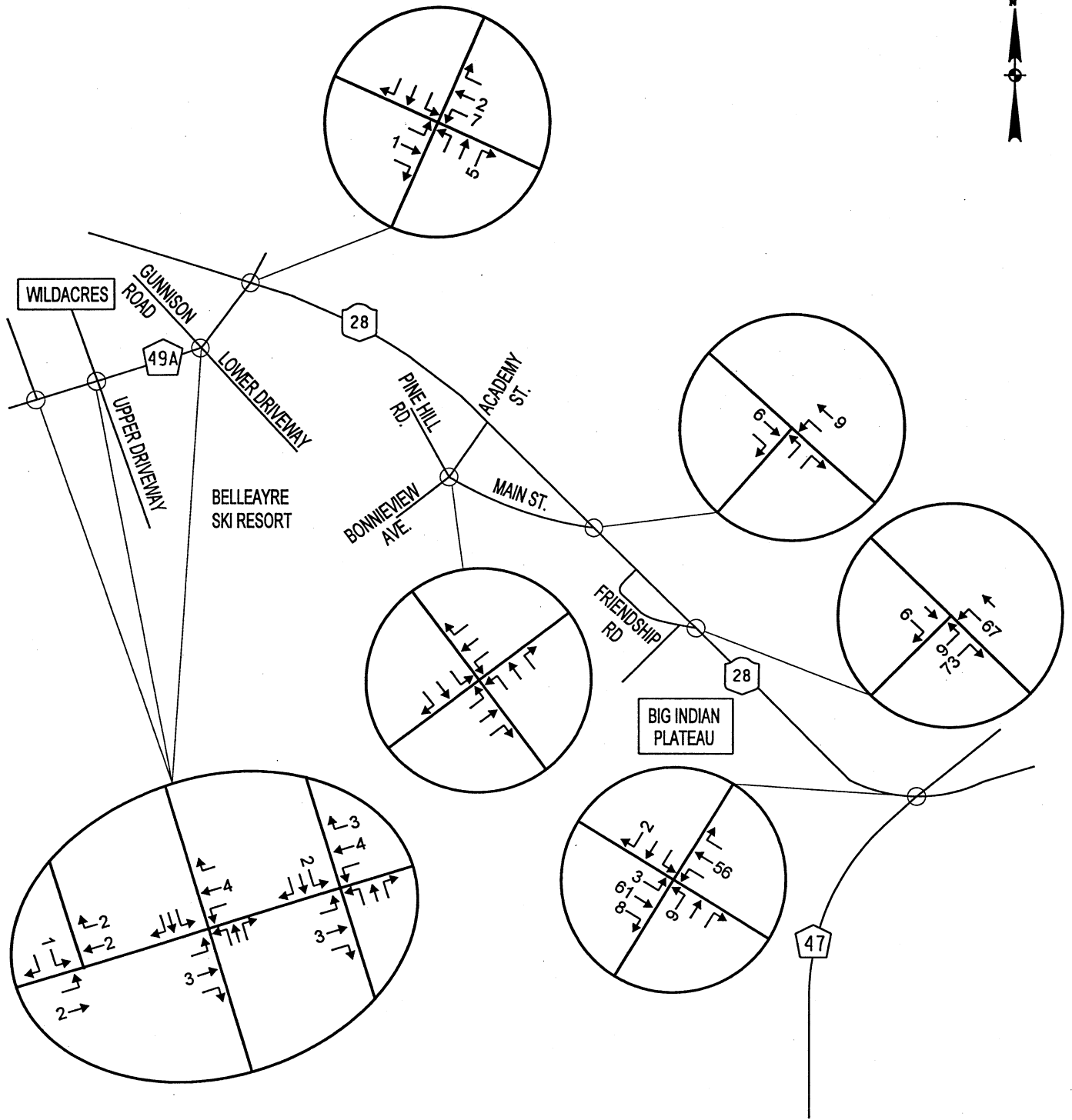


FIGURE B.7
TRIP ASSIGNMENT
FRIDAY, PM PEAK HOUR, BIG INDIAN PLATEAU

BELLEAYRE RESORT AT CATSKILL PARK
TOWN OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

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4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057

SCALE: N.T.S.

DATE: 1/2002

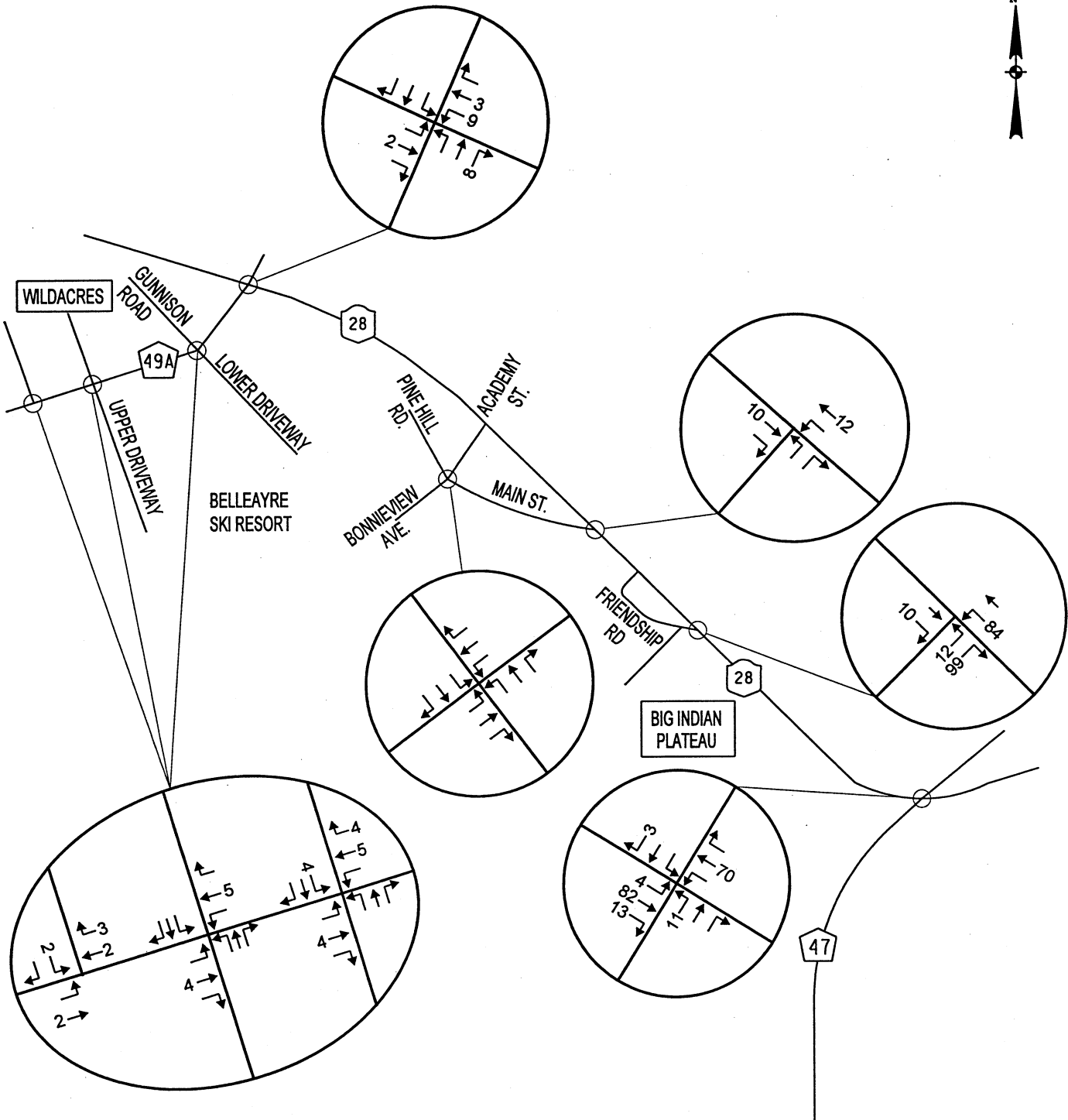


FIGURE B.8
TRIP ASSIGNMENT
SUNDAY, PM PEAK HOUR, BIG INDIAN PLATEAU

BELLEAYRE RESORT AT CATSKILL PARK
TOWN OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

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PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

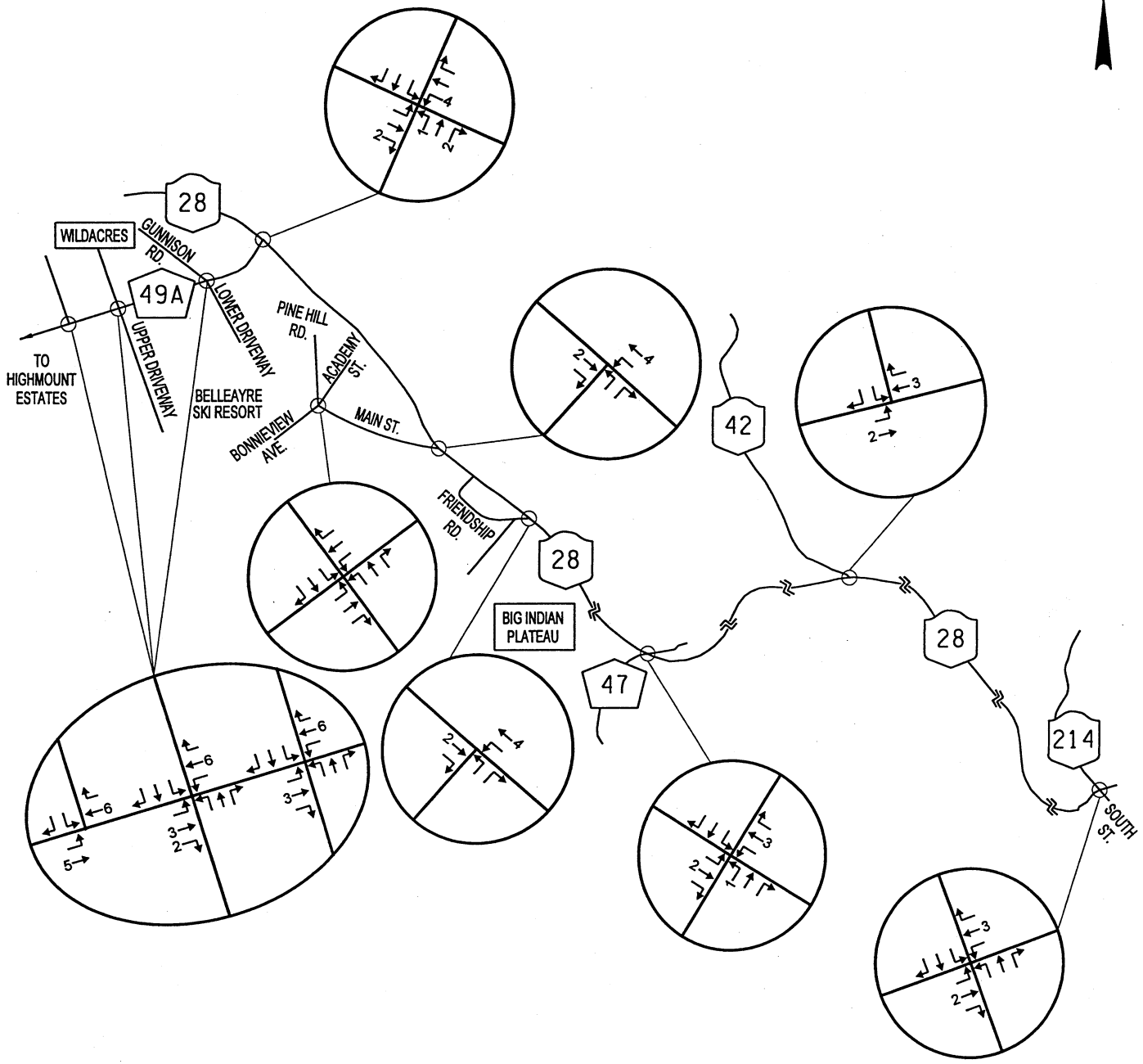


FIGURE B.9
TRIP ASSIGNMENT, SATURDAY
AM PEAK HOUR, HIGHMOUNT ESTATES

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

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4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057 SCALE: N. T. S. DATE: 1/2002

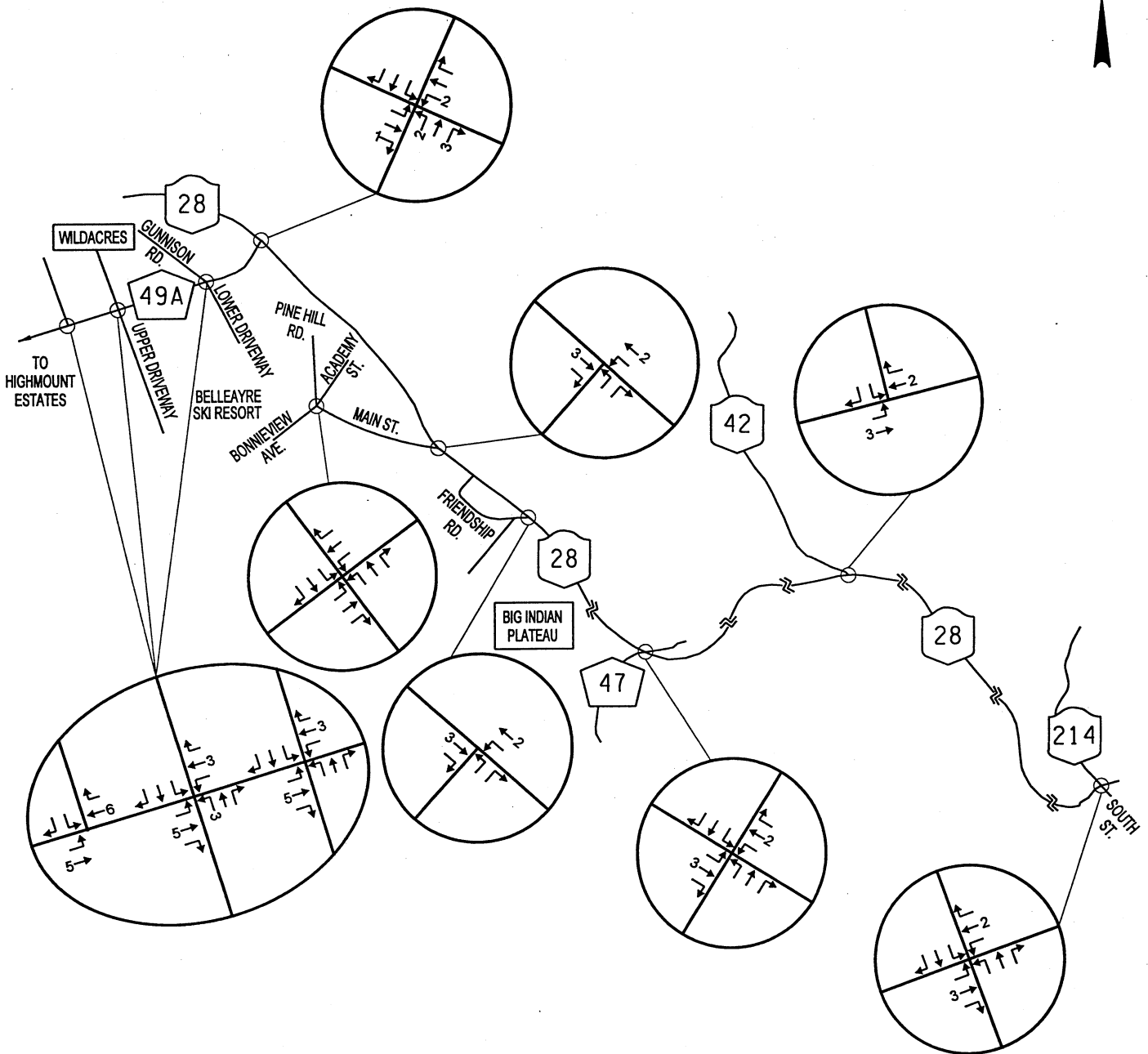


FIGURE B.10
TRIP ASSIGNMENT, SATURDAY
PM PEAK HOUR, HIGHMOUNT ESTATES

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND
MIDDLETOWN, NEW YORK



PROJECT: 99057 SCALE: N.T.S. DATE: 1/2002

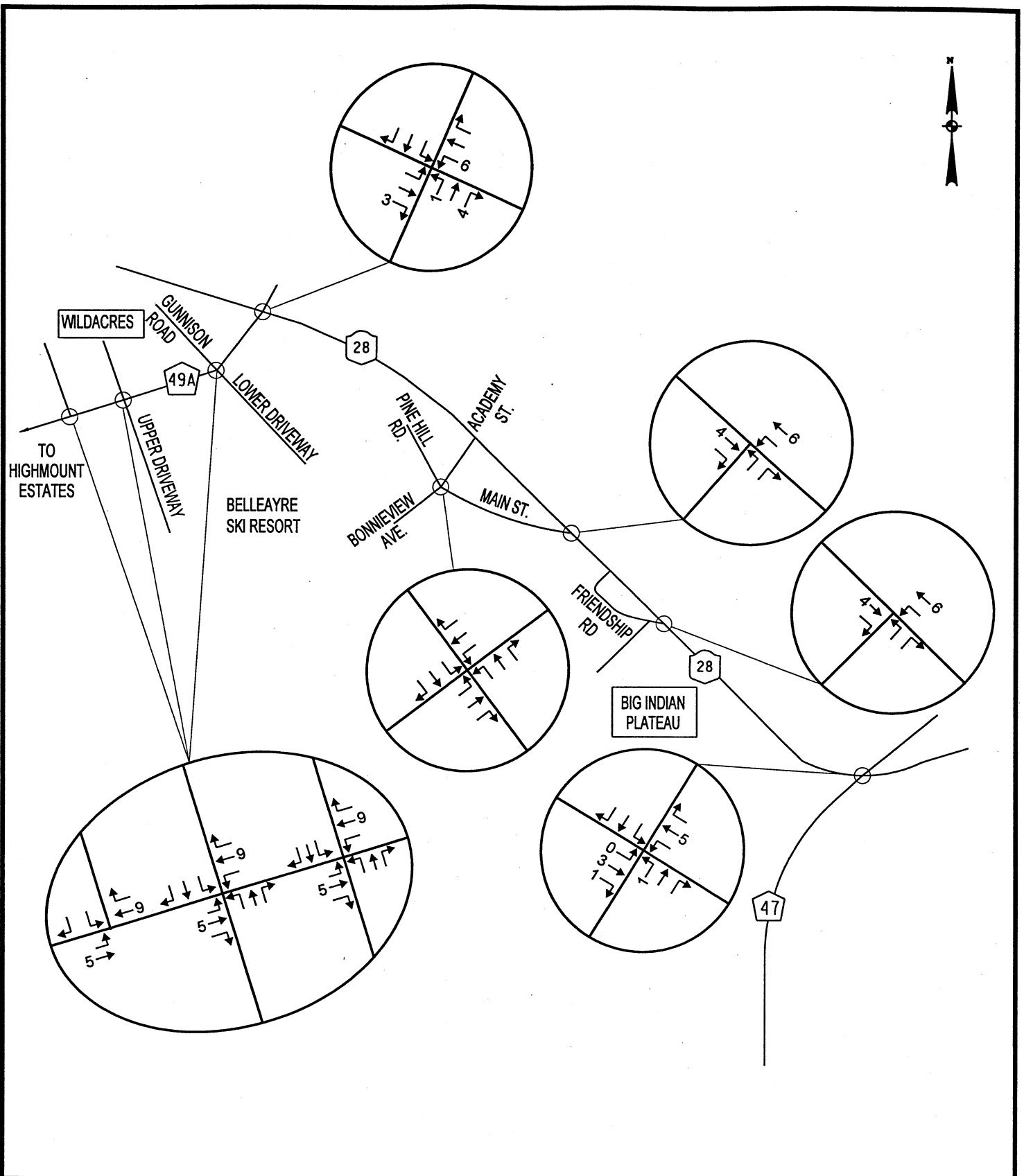


FIGURE B.11
TRIP ASSIGNMENT
FRIDAY, PM PEAK HOUR, HIGHMOUNT ESTATES

BELLEAYRE RESORT AT CATSKILL PARK
TOWN OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

CME
CREIGHTON MANNING ENGINEERING, LLP
 4 AUTOMATION LANE, ALBANY, NY 12205

PROJECT: 99057	SCALE: N. T. S.	DATE: 1/2002
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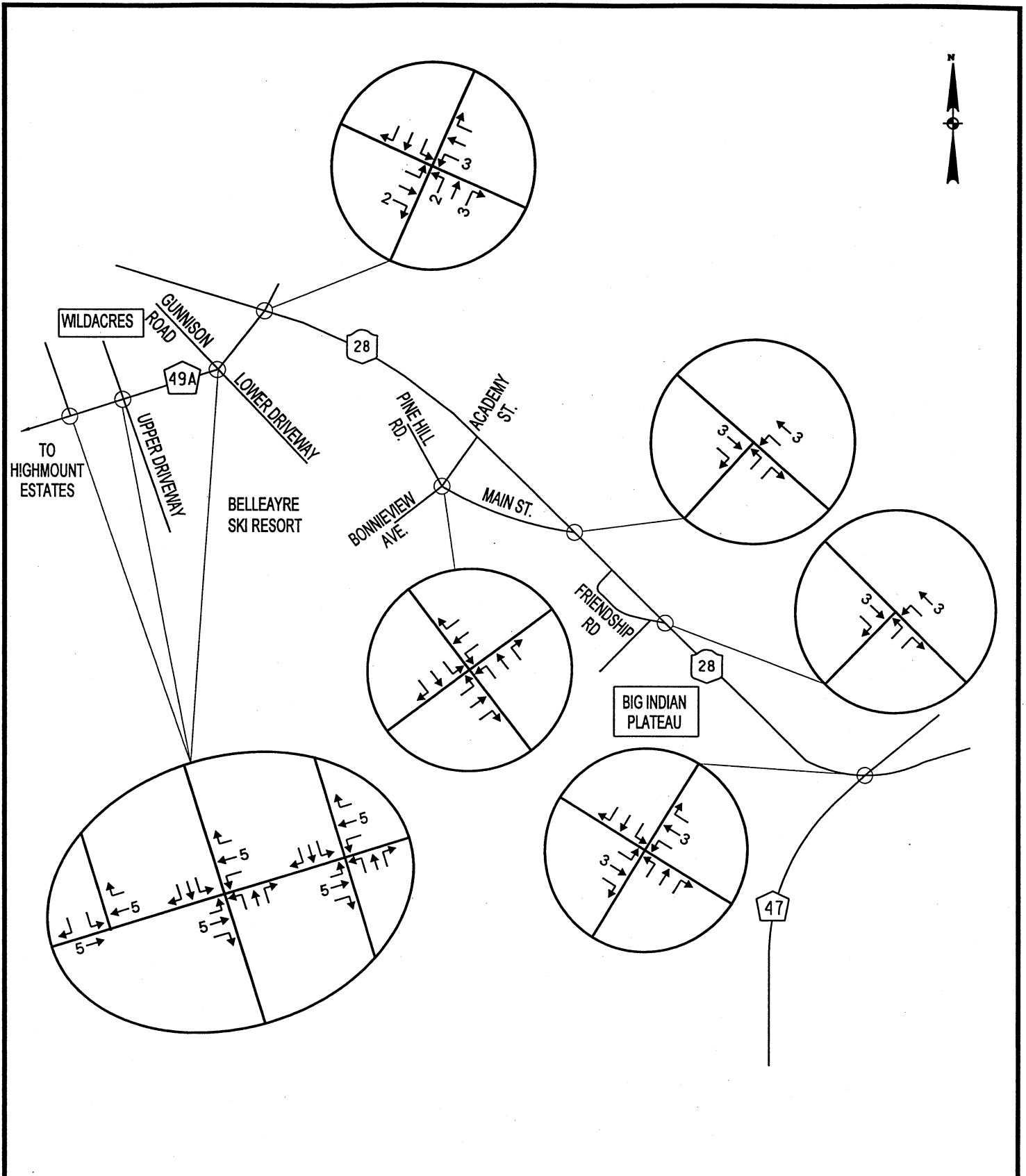



FIGURE B.12
TRIP ASSIGNMENT
SUNDAY, PM PEAK HOUR, HIGHMOUNT ESTATES
BELLEAYRE RESORT AT CATSKILL PARK
TOWN OF SHANDAKEN AND
MIDDLETOWN, NEW YORK

 CREIGHTON MANNING ENGINEERING, LLP 4 AUTOMATION LANE, ALBANY, NY 12205		
PROJECT: 99057	SCALE: N.T.S.	DATE: 1/2002

Appendix C - Level of Service Analysis

**Traffic Impact Study
Belleayre Resort at Catskill Park
Towns of Shandaken and Middletown, NY**

LOS Definitions

The following is an excerpt from the 1994 and 2000 Highway Capacity Manual (HCM).

Level of Service for Signalized Intersections

The portion of total delay attributed to the control facility is quantified. This delay is called control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Level of Service (LOS) criteria for traffic signals are stated in terms of the average control delay per vehicle, typically for a 15-minute analysis period. The criteria are given below. Delay may be measured in the field or estimated using procedures presented in Chapter 9 of the 1997 HCM. Delay is a complex measure and is dependent upon a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group in question.

LOS A describes operations with very low control delay, up to 10 sec per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

LOS B describes operations with control delay greater than 10 and up to 20 sec per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.

LOS C describes operations with control delay greater than 20 and up to 35 sec per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with control delay greater than 35 and up to 55 sec per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with control delay greater than 55 and up to 80 sec per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with delay in excess of 80 sec per vehicle. This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Level of Service Criteria for Unsignalized Intersections

The level of service criteria is given in Table C-1. As used here, total delay is defined as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position.

The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. In situations where the degree of saturation is greater than about 0.9, the amount of average total delay is also dependent on the length of the analysis period.

Table C-1 : Level-of-Service Criteria for Stop Controlled Intersections

Level of Service	Average Total Delay (sec/veh)
A	≤ 10.0
B	>10.0 and ≤ 15.0
C	>15.0 and ≤ 25.0
D	>25.0 and ≤ 35.0
E	>35.0 and ≤ 50.0
F	>50.0

Route 28/Route 214

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc			Intersection	Route 28/Route 214			
Agency/Co.	Town of Shandaken, NY			Jurisdiction				
Date Performed	1/18/01			Analysis Year	99-057 2814exam			
Analysis Time Period	2000 existing winter Sat am pk							
Project Description								
East/West Street: Route 28				North/South Street: Route 214				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	57	119	1	0	476	27		
Peak-Hour Factor, PHF	0.84	0.84	0.84	0.83	0.83	0.83		
Hourly Flow Rate, HFR	67	141	1	0	573	32		
Percent Heavy Vehicles	3	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT			R	
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	1	0	0	14	0	49		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.72	0.72	0.72		
Hourly Flow Rate, HFR	1	0	0	19	0	68		
Percent Heavy Vehicles	0	0	0	14	0	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR				LTR		
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT		LTR			LTR	
v (vph)	67	0		1			87	
C (m) (vph)	968	1453		215			422	
v/c	0.07	0.00		0.00			0.21	
95% queue length	0.22	0.00		0.01			0.78	
Control Delay	9.0	7.5		21.8			15.7	
LOS	A	A		C			C	
Approach Delay	--	--		21.8			15.7	
Approach LOS	--	--		C			C	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc			Intersection	Route 28/Route 214			
Agency/Co.	Town of Shandaken, NY			Jurisdiction				
Date Performed	1/18/01			Analysis Year	99-057 2814nbam			
Analysis Time Period	2008 no bld winter Sat am pk							
Project Description								
East/West Street: Route 28				North/South Street: Route 214				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	72	151	1	0	603	34		
Peak-Hour Factor, PHF	0.84	0.84	0.84	0.83	0.83	0.83		
Hourly Flow Rate, HFR	85	179	1	0	726	40		
Percent Heavy Vehicles	3	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT			R	
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	1	0	0	18	0	62		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.72	0.72	0.72		
Hourly Flow Rate, HFR	1	0	0	24	0	86		
Percent Heavy Vehicles	0	0	0	14	0	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR				LTR		
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT		LTR			LTR	
v (vph)	85	0		1			110	
C (m) (vph)	843	1408		131			321	
v/c	0.10	0.00		0.01			0.34	
95% queue length	0.34	0.00		0.02			1.54	
Control Delay	9.7	7.6		32.7			22.0	
LOS	A	A		D			C	
Approach Delay	--	--		32.7			22.0	
Approach LOS	--	--		D			C	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc			Intersection	Route 28/Route 214			
Agency/Co.	Town of Shandaken, NY			Jurisdiction				
Date Performed	1/18/01			Analysis Year	99-057 2814buam			
Analysis Time Period	2008 bld winter Sat am pk							
Project Description								
East/West Street: Route 28				North/South Street: Route 214				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	86	212	1	0	749	34		
Peak-Hour Factor, PHF	0.84	0.84	0.84	0.83	0.83	0.83		
Hourly Flow Rate, HFR	102	252	1	0	902	40		
Percent Heavy Vehicles	3	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT		R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	1	0	0	18	0	89		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.72	0.72	0.72		
Hourly Flow Rate, HFR	1	0	0	24	0	123		
Percent Heavy Vehicles	0	0	0	14	0	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT	LTR			LTR		
v (vph)	102	0	1			147		
C (m) (vph)	724	1324	62			246		
v/c	0.14	0.00	0.02			0.60		
95% queue length	0.49	0.00	0.05			4.11		
Control Delay	10.8	7.7	64.0			40.7		
LOS	B	A	F			E		
Approach Delay	--	--	64.0			40.7		
Approach LOS	--	--	F			E		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc			Intersection	Route 28/Route 214			
Agency/Co.	Town of Shandaken, NY			Jurisdiction				
Date Performed	1/18/01			Analysis Year	99-057 2814expm			
Analysis Time Period	2000 existing winter Sat pm pk							
Project Description								
East/West Street: Route 28				North/South Street: Route 214				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	100	512	4	1	185	18		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.91	0.91	0.91		
Hourly Flow Rate, HFR	111	568	4	1	203	19		
Percent Heavy Vehicles	1	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT		R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	1	1	62	1	63		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.88	0.88	0.88		
Hourly Flow Rate, HFR	0	1	1	70	1	71		
Percent Heavy Vehicles	0	0	0	6	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT		LTR			LTR	
v (vph)	111	1		2			142	
C (m) (vph)	1353	1011		300			320	
v/c	0.08	0.00		0.01			0.44	
95% queue length	0.27	0.00		0.02			2.33	
Control Delay	7.9	8.6		17.1			25.1	
LOS	A	A		C			D	
Approach Delay	--	--		17.1			25.1	
Approach LOS	--	--		C			D	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc			Intersection	Route 28/Route 214			
Agency/Co.	Town of Shandaken, NY			Jurisdiction				
Date Performed	1/18/01			Analysis Year	99-057 2814nbpm			
Analysis Time Period	2008 no bld winter Sat pm pk							
Project Description								
East/West Street: Route 28				North/South Street: Route 214				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	127	649	5	1	234	23		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.91	0.91	0.91		
Hourly Flow Rate, HFR	141	721	5	1	257	25		
Percent Heavy Vehicles	1	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT		R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	1	1	79	1	80		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.88	0.88	0.88		
Hourly Flow Rate, HFR	0	1	1	89	1	90		
Percent Heavy Vehicles	0	0	0	6	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT	LTR			LTR		
v (vph)	141	1	2			180		
C (m) (vph)	1286	886	203			210		
v/c	0.11	0.00	0.01			0.86		
95% queue length	0.37	0.00	0.03			10.56		
Control Delay	8.1	9.1	22.9			100.9		
LOS	A	A	C			F		
Approach Delay	--	--	22.9			100.9		
Approach LOS	--	--	C			F		

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information					
Analyst	wcc		Intersection	Route 28/Route 214				
Agency/Co.	Town of Shandaken, NY		Jurisdiction					
Date Performed	1/18/01		Analysis Year	99-057 2814bupm				
Analysis Time Period	2008 bld winter Sat pm pk							
Project Description								
East/West Street: Route 28			North/South Street: Route 214					
Intersection Orientation: East-West			Study Period (hrs): 1.00					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	155	768	5	1	308	23		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.91	0.91	0.91		
Hourly Flow Rate, HFR	172	853	5	1	338	25		
Percent Heavy Vehicles	1	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT		R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	1	1	79	1	94		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.88	0.88	0.88		
Hourly Flow Rate, HFR	0	1	1	89	1	106		
Percent Heavy Vehicles	0	0	0	6	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR		LT			LTR		
v (vph)	172	1	2			196		
C (m) (vph)	1201	791	131			138		
v/c	0.14	0.00	0.02			1.42		
95% queue length	0.50	0.00	0.05			36.96		
Control Delay	8.5	9.6	32.9			867.4		
LOS	A	A	D			F		
Approach Delay	--	--	32.9			867.4		
Approach LOS	--	--	D			F		

Route 28/Route 42

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	WCC			Intersection	Route 28/Route 42			
Agency/Co.	Town of Shandaken			Jurisdiction				
Date Performed	1/18/01			Analysis Year	99-057 2842exam			
Analysis Time Period	2000 winter condi Sat am peak							
Project Description								
East/West Street: Route 28				North/South Street: Route 42				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	11	99	0	0	475	52		
Peak-Hour Factor, PHF	0.79	0.79	1.00	1.00	0.87	0.87		
Hourly Flow Rate, HFR	13	125	0	0	545	59		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT						TR	
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	0	0	33	0	10		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.77	1.00	0.77		
Hourly Flow Rate, HFR	0	0	0	42	0	12		
Percent Heavy Vehicles	0	0	0	0	0	10		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					L		R
v (vph)	13					42		12
C (m) (vph)	984					390		503
v/c	0.01					0.11		0.02
95% queue length	0.04					0.36		0.07
Control Delay	8.7					15.3		12.3
LOS	A					C		B
Approach Delay	--	--				14.7		
Approach LOS	--	--				B		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	WCC			Intersection	Route 28/Route 42			
Agency/Co.	Town of Shandaken			Jurisdiction				
Date Performed	1/18/01			Analysis Year	99-057 2842nbam			
Analysis Time Period	2008 winter no bd Sat am peak							
Project Description								
East/West Street: Route 28				North/South Street: Route 42				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	14	125	0	0	602	66		
Peak-Hour Factor, PHF	0.79	0.79	1.00	1.00	0.87	0.87		
Hourly Flow Rate, HFR	17	158	0	0	691	75		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	0		
Configuration	LT						TR	
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	0	0	42	0	13		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.77	1.00	0.77		
Hourly Flow Rate, HFR	0	0	0	54	0	16		
Percent Heavy Vehicles	0	0	0	0	0	10		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					L		R
v (vph)	17					54		16
C (m) (vph)	856					297		410
v/c	0.02					0.18		0.04
95% queue length	0.06					0.66		0.12
Control Delay	9.3					19.8		14.1
LOS	A					C		B
Approach Delay	--	--				18.5		
Approach LOS	--	--				C		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	WCC			Intersection	Route 28/Route 42			
Agency/Co.	Town of Shandaken			Jurisdiction				
Date Performed	1/18/01			Analysis Year	99-057 2842bdam			
Analysis Time Period	2008 winter bd Sat am peak							
Project Description								
East/West Street: Route 28				North/South Street: Route 42				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	19	200	0	0	775	66		
Peak-Hour Factor, PHF	0.79	0.79	1.00	1.00	0.87	0.87		
Hourly Flow Rate, HFR	24	253	0	0	890	75		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT					TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	0	0	42	0	20		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.77	1.00	0.77		
Hourly Flow Rate, HFR	0	0	0	54	0	25		
Percent Heavy Vehicles	0	0	0	0	0	10		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					L		R
v (vph)	24					54		25
C (m) (vph)	722					191		314
v/c	0.03					0.28		0.08
95% queue length	0.10					1.16		0.26
Control Delay	10.2					31.2		17.5
LOS	B					D		C
Approach Delay	--	--				26.9		
Approach LOS	--	--				D		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	WCC			Intersection	Route 28/Route 42			
Agency/Co.	Town of Shandaken			Jurisdiction				
Date Performed	1/18/01			Analysis Year	99-057 2842expm			
Analysis Time Period	2000 winter condi Sat pm peak							
Project Description								
East/West Street: Route 28				North/South Street: Route 42				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	13	606	0	0	153	44		
Peak-Hour Factor, PHF	0.89	0.89	1.00	1.00	0.84	0.84		
Hourly Flow Rate, HFR	14	680	0	0	182	52		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT					TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	0	0	46	0	11		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.84	1.00	0.84		
Hourly Flow Rate, HFR	0	0	0	54	0	13		
Percent Heavy Vehicles	0	0	0	2	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					L		R
v (vph)	14					54		13
C (m) (vph)	1345					299		837
v/c	0.01					0.18		0.02
95% queue length	0.03					0.66		0.05
Control Delay	7.7					19.7		9.4
LOS	A					C		A
Approach Delay	--	--				17.7		
Approach LOS	--	--				C		

TWO-WAY STOP CONTROL SUMMARY								
General Information			Site Information					
Analyst	WCC		Intersection	Route 28/Route 42				
Agency/Co.	Town of Shandaken		Jurisdiction					
Date Performed	1/18/01		Analysis Year	99-057 2842bupm				
Analysis Time Period	2008 winter build Sat pm peak							
Project Description								
East/West Street: Route 28			North/South Street: Route 42					
Intersection Orientation: East-West			Study Period (hrs): 1.00					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	26	915	0	0	282	56		
Peak-Hour Factor, PHF	0.89	0.89	1.00	1.00	0.84	0.84		
Hourly Flow Rate, HFR	29	1028	0	0	335	66		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT					TR		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	0	0	58	0	17		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.84	1.00	0.84		
Hourly Flow Rate, HFR	0	0	0	69	0	20		
Percent Heavy Vehicles	0	0	0	2	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					L		R
v (vph)	29					69		20
C (m) (vph)	1169					139		682
v/c	0.02					0.50		0.03
95% queue length	0.08					2.74		0.09
Control Delay	8.2					55.7		10.4
LOS	A					F		B
Approach Delay	--	--				45.6		
Approach LOS	--	--				E		

Route 28/Route 47

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2000 exist winter sat am			Intersection	Route 28/Route 47			
Agency/Co.	Hogmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 2847/wamex			
Analysis Time Period	2000 existng winter sat am							
Project Description								
East/West Street: Route 28				North/South Street: Route 47				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	62	9	15	268	0		
Peak-Hour Factor, PHF	0.76	0.76	0.76	0.86	0.86	0.86		
Hourly Flow Rate, HFR	0	81	11	17	311	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	22	0	9	0	2	3		
Peak-Hour Factor, PHF	0.71	0.71	0.71	0.70	0.70	0.70		
Hourly Flow Rate, HFR	30	0	12	0	2	4		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (vph)	0	17		42			6	
C (m) (vph)	1261	1515		606			640	
v/c	0.00	0.01		0.07			0.01	
95% queue length	0.00	0.03		0.22			0.03	
Control Delay	7.9	7.4		11.4			10.7	
LOS	A	A		B			B	
Approach Delay	--	--		11.4			10.7	
Approach LOS	--	--		B			B	

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc 2008 no bd winter sat am			Intersection	Route 28/Route 47		
Agency/Co.	Hoghmout, New York			Jurisdiction			
Date Performed	12/4/00			Analysis Year	99-057 2847/wamnb		
Analysis Time Period	2008 no build winter sat am						
Project Description							
East/West Street: Route 28				North/South Street: Route 47			
Intersection Orientation: East-West				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Eastbound			Westbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	0	79	11	19	339	0	
Peak-Hour Factor, PHF	0.76	0.76	0.76	0.86	0.86	0.86	
Hourly Flow Rate, HFR	0	103	14	22	394	0	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0				0
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Northbound			Southbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	28	0	11	0	3	4	
Peak-Hour Factor, PHF	0.71	0.71	0.71	0.70	0.70	0.70	
Hourly Flow Rate, HFR	39	0	15	0	4	5	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	EB	WB	Northbound			Southbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR		LTR			LTR
v (vph)	0	22		54			9
C (m) (vph)	1176	1484		511			536
v/c	0.00	0.01		0.11			0.02
95% queue length	0.00	0.05		0.35			0.05
Control Delay	8.1	7.5		12.9			11.8
LOS	A	A		B			B
Approach Delay	--	--		12.9			11.8
Approach LOS	--	--		B			B

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2008 build winter sat am			Intersection	Route 28/Route 47			
Agency/Co.	Hogmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 2847wambu			
Analysis Time Period	2008 build winter sat am							
Project Description								
East/West Street: Route 28				North/South Street: Route 47				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	2	159	23	19	519	0		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	2	176	25	21	576	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	55	0	11	0	3	11		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	61	0	12	0	3	12		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (vph)	2	21		73			15	
C (m) (vph)	1007	1383		317			455	
v/c	0.00	0.02		0.23			0.03	
95% queue length	0.01	0.05		0.89			0.10	
Control Delay	8.6	7.6		19.7			13.2	
LOS	A	A		C			B	
Approach Delay	--	--		19.7			13.2	
Approach LOS	--	--		C			B	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2000 exist winter sat pm			Intersection	Route 28/Route 47			
Agency/Co.	Hogmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 2847wpmex			
Analysis Time Period	2000 existng winter sat pm							
Project Description								
East/West Street: Route 28				North/South Street: Route 47				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	4	389	45	19	162	0		
Peak-Hour Factor, PHF	0.75	0.75	0.75	0.89	0.89	0.89		
Hourly Flow Rate, HFR	5	518	60	21	182	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	17	3	21	0	0	2		
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.70	0.70	0.70		
Hourly Flow Rate, HFR	23	4	28	0	0	2		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (vph)	5	21		55			2	
C (m) (vph)	1405	1006		394			866	
v/c	0.00	0.02		0.14			0.00	
95% queue length	0.01	0.06		0.49			0.01	
Control Delay	7.6	8.7		15.6			9.2	
LOS	A	A		C			A	
Approach Delay	--	--		15.6			9.2	
Approach LOS	--	--		C			A	

TWO-WAY STOP CONTROL SUMMARY									
General Information				Site Information					
Analyst	wcc 2008 no bd winter sat pm			Intersection	Route 28/Route 47				
Agency/Co.	Hogmount, New York			Jurisdiction					
Date Performed	12/4/00			Analysis Year	99-057 2847wpmnb				
Analysis Time Period	2008 no build winter sat pm								
Project Description									
East/West Street: Route 28				North/South Street: Route 47					
Intersection Orientation: East-West				Study Period (hrs): 1.00					
Vehicle Volumes and Adjustments									
Major Street	Eastbound			Westbound					
Movement	1	2	3	4	5	6			
	L	T	R	L	T	R			
Volume	5	493	57	24	205	0			
Peak-Hour Factor, PHF	0.75	0.75	0.75	0.89	0.89	0.89			
Hourly Flow Rate, HFR	6	657	76	26	230	0			
Percent Heavy Vehicles	0	--	--	0	--	--			
Median Type	Undivided								
RT Channelized			0				0		
Lanes	0	1	0	0	1	0			
Configuration	LTR			LTR					
Upstream Signal		0			0				
Minor Street	Northbound			Southbound					
Movement	7	8	9	10	11	12			
	L	T	R	L	T	R			
Volume	21	4	27	0	0	3			
Peak-Hour Factor, PHF	0.73	0.73	0.73	0.70	0.70	0.70			
Hourly Flow Rate, HFR	28	5	36	0	0	4			
Percent Heavy Vehicles	0	0	0	0	0	0			
Percent Grade (%)	0			0					
Flared Approach		N			N				
Storage		0			0				
RT Channelized			0			0			
Lanes	0	1	0	0	1	0			
Configuration		LTR			LTR				
Delay, Queue Length, and Level of Service									
Approach	EB	WB	Northbound			Southbound			
Movement	1	4	7	8	9	10	11	12	
Lane Configuration	LTR	LTR		LTR			LTR		
v (vph)	6	26		69			4		
C (m) (vph)	1350	881		301			814		
v/c	0.00	0.03		0.23			0.00		
95% queue length	0.01	0.09		0.89			0.01		
Control Delay	7.7	9.2		20.5			9.4		
LOS	A	A		C			A		
Approach Delay	--	--		20.5			9.4		
Approach LOS	--	--		C			A		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2008 build winter sat pm			Intersection	Route 28/Route 47			
Agency/Co.	Hogmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 2847/wpmbu			
Analysis Time Period	2008 build winter sat pm							
Project Description								
East/West Street: Route 28				North/South Street: Route 47				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	12	650	80	24	296	0		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	13	722	88	26	328	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	35	4	27	0	0	6		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	38	4	30	0	0	6		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR	LTR			LTR		
v (vph)	13	26	72			6		
C (m) (vph)	1243	825	217			718		
v/c	0.01	0.03	0.33			0.01		
95% queue length	0.03	0.10	1.46			0.03		
Control Delay	7.9	9.5	29.8			10.1		
LOS	A	A	D			B		
Approach Delay	--	--	29.8			10.1		
Approach LOS	--	--	D			B		

Route 28/Main Street

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc 2000 exist winter sat am			Intersection	Route 28/Main Street		
Agency/Co.	Highmount, New York			Jurisdiction			
Date Performed	12/4/00			Analysis Year	99-057 28mssamex		
Analysis Time Period	2000 existing winter sat am						
Project Description							
East/West Street: Route 28				North/South Street: Main Street			
Intersection Orientation: East-West				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Eastbound			Westbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	0	58	6	4	297	0	
Peak-Hour Factor, PHF	1.00	0.76	0.76	0.79	0.79	1.00	
Hourly Flow Rate, HFR	0	.76	7	5	375	0	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0				0
Lanes	0	1	0	0	1	0	
Configuration			TR	LT			
Upstream Signal		0			0		
Minor Street	Northbound			Southbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	13	0	5	0	0	0	
Peak-Hour Factor, PHF	0.75	1.00	0.75	1.00	1.00	1.00	
Hourly Flow Rate, HFR	17	0	6	0	0	0	
Percent Heavy Vehicles	0	0	20	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	0	0	0	
Configuration		LR					
Delay, Queue Length, and Level of Service							
Approach	EB	WB	Northbound			Southbound	
Movement	1	4	7	8	9	10	11
Lane Configuration		LT		LR			
v (vph)		5		23			
C (m) (vph)		1527		622			
v/c		0.00		0.04			
95% queue length		0.01		0.12			
Control Delay		7.4		11.0			
LOS		A		B			
Approach Delay	--	--	11.0				
Approach LOS	--	--	B				

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2008 no bd winter sat am			Intersection	Route 28/Main Street			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 28mssamnb			
Analysis Time Period	2008 no build winter sat am							
Project Description								
East/West Street: Route 28				North/South Street: Main Street				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	73	8	5	376	0		
Peak-Hour Factor, PHF	1.00	0.76	0.76	0.79	0.79	1.00		
Hourly Flow Rate, HFR	0	96	10	6	475	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration			TR	LT				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	16	0	6	0	0	0		
Peak-Hour Factor, PHF	0.75	1.00	0.75	1.00	1.00	1.00		
Hourly Flow Rate, HFR	21	0	8	0	0	0		
Percent Heavy Vehicles	0	0	20	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		6		29				
C (m) (vph)		1498		545				
v/c		0.00		0.05				
95% queue length		0.01		0.17				
Control Delay		7.4		12.0				
LOS		A		B				
Approach Delay	--	--	12.0					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2008 build winter sat am			Intersection	Route 28/Main Street			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 28mssambu			
Analysis Time Period	2008 build winter sat am							
Project Description								
East/West Street: Route 28				North/South Street: Main Street				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	132	8	5	517	0		
Peak-Hour Factor, PHF	1.00	0.89	0.90	0.90	0.90	1.00		
Hourly Flow Rate, HFR	0	148	8	5	574	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration			TR	LT				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	16	0	6	0	0	0		
Peak-Hour Factor, PHF	0.75	1.00	0.75	1.00	1.00	1.00		
Hourly Flow Rate, HFR	21	0	8	0	0	0		
Percent Heavy Vehicles	0	0	20	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		5		29				
C (m) (vph)		1436		456				
v/c		0.00		0.06				
95% queue length		0.01		0.20				
Control Delay		7.5		13.4				
LOS		A		B				
Approach Delay	--	--		13.4				
Approach LOS	--	--		B				

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc 2000 exist winter sat pm			Intersection	Route 28/Main Street		
Agency/Co.	Highmount, New York			Jurisdiction			
Date Performed	12/4/00			Analysis Year	99-057 28msspmex		
Analysis Time Period	2000 existing winter sat pm						
Project Description							
East/West Street: Route 28				North/South Street: Main Street			
Intersection Orientation: East-West				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Eastbound			Westbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	0	398	15	21	140	0	
Peak-Hour Factor, PHF	1.00	0.86	0.86	0.92	0.92	1.00	
Hourly Flow Rate, HFR	0	462	17	22	152	0	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration			TR	LT			
Upstream Signal		0			0		
Minor Street	Northbound			Southbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	5	0	12	0	0	0	
Peak-Hour Factor, PHF	0.71	1.00	0.71	1.00	1.00	1.00	
Hourly Flow Rate, HFR	7	0	16	0	0	0	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	0	0	0	
Configuration		LR					
Delay, Queue Length, and Level of Service							
Approach	EB	WB	Northbound			Southbound	
Movement	1	4	7	8	9	10	11
Lane Configuration		LT		LR			
v (vph)		22		23			
C (m) (vph)		1094		529			
v/c		0.02		0.04			
95% queue length		0.06		0.14			
Control Delay		8.4		12.1			
LOS		A		B			
Approach Delay	--	--		12.1			
Approach LOS	--	--		B			

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2008 no bd winter sat pm			Intersection	Route 28/Main Street			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 28msspmnb			
Analysis Time Period	2008 no build winter sat pm							
Project Description								
East/West Street: Route 28				North/South Street: Main Street				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	504	19	27	177	0		
Peak-Hour Factor, PHF	1.00	0.86	0.86	0.92	0.92	1.00		
Hourly Flow Rate, HFR	0	586	22	29	192	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1		0	
Configuration			TR	LT				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	6	0	15	0	0	0		
Peak-Hour Factor, PHF	0.71	1.00	0.71	1.00	1.00	1.00		
Hourly Flow Rate, HFR	8	0	21	0	0	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0				0	
Lanes	0	0	0	0	0		0	
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		29		29				
C (m) (vph)		980		439				
v/c		0.03		0.07				
95% queue length		0.09		0.21				
Control Delay		8.8		13.8				
LOS		A		B				
Approach Delay	--	--	13.8					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2008 build winter sat pm			Intersection	Route 28/Main Street			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 28msspmbu			
Analysis Time Period	2008 build winter sat pm							
Project Description								
East/West Street: Route 28				North/South Street: Main Street				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	628	19	27	245	0		
Peak-Hour Factor, PHF	1.00	0.90	0.90	0.90	0.90	1.00		
Hourly Flow Rate, HFR	0	697	21	30	272	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration			TR	LT				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	6	0	15	0	0	0		
Peak-Hour Factor, PHF	0.71	1.00	0.71	1.00	1.00	1.00		
Hourly Flow Rate, HFR	8	0	21	0	0	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		30		29				
C (m) (vph)		892		362				
v/c		0.03		0.08				
95% queue length		0.10		0.26				
Control Delay		9.2		15.8				
LOS		A		C				
Approach Delay	--	--	15.8					
Approach LOS	--	--	C					

Main Street/Bonnieview/Academy Street

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2000 exist winter sat am			Intersection	Main St/Bonnieview/Academy			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 msbvamex			
Analysis Time Period	2000 existng winter sat am							
Project Description								
East/West Street: Bonnieview/Academy				North/South Street: Main Street				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	8	0	6	11	3		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.83	0.83	0.83		
Hourly Flow Rate, HFR	0	11	0	7	13	3		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	2	2	3	3	1	2		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.75	0.75	0.75		
Hourly Flow Rate, HFR	2	2	4	4	1	2		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			2				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR	LTR			LTR		
v (vph)	0	7	8			7		
C (m) (vph)	1615	1621	982			970		
v/c	0.00	0.00	0.01			0.01		
95% queue length	0.00	0.01	0.02			0.02		
Control Delay	7.2	7.2	8.7			8.7		
LOS	A	A	A			A		
Approach Delay	--	--	8.7			8.7		
Approach LOS	--	--	A			A		

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc 2008 nb/bu winter sat am			Intersection	Main St/Bonnieview/Academy		
Agency/Co.	Highmount, New York			Jurisdiction			
Date Performed	12/4/00			Analysis Year	99-057 msbvambu		
Analysis Time Period	2008 nb/bu winter sat am						
Project Description							
East/West Street: Bonnieview/Academy				North/South Street: Main Street			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	0	10	0	8	14	4	
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.83	0.83	0.83	
Hourly Flow Rate, HFR	0	14	0	9	16	4	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	3	3	4	4	1	3	
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.75	0.75	0.75	
Hourly Flow Rate, HFR	4	4	5	5	1	4	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)		0			2		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR		LTR			LTR
v (vph)	0	9		13			10
C (m) (vph)	1609	1617		950			973
v/c	0.00	0.01		0.01			0.01
95% queue length	0.00	0.02		0.04			0.03
Control Delay	7.2	7.2		8.8			8.7
LOS	A	A		A			A
Approach Delay	--	--		8.8			8.7
Approach LOS	--	--		A			A

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2000 exist winter sat pm			Intersection	Main St/Bonnieview/Academy			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 msbvp mex			
Analysis Time Period	2000 existng winter sat pm							
Project Description								
East/West Street: Bonnieview/Academy				North/South Street: Main Street				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street		Northbound			Southbound			
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	4	24	4	11	6	2		
Peak-Hour Factor, PHF	0.80	0.80	0.80	0.79	0.79	0.79		
Hourly Flow Rate, HFR	4	29	4	13	7	2		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street		Westbound			Eastbound			
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	2	1	9	3	0	0		
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.70	0.70	0.70		
Hourly Flow Rate, HFR	2	1	12	4	0	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			2				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (vph)	4	13		15			4	
C (m) (vph)	1624	1592		1010			894	
v/c	0.00	0.01		0.01			0.00	
95% queue length	0.01	0.02		0.05			0.01	
Control Delay	7.2	7.3		8.6			9.0	
LOS	A	A		A			A	
Approach Delay	--	--		8.6			9.0	
Approach LOS	--	--		A			A	

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc 2008 nb/bu winter sat pm			Intersection	Main St/Bonnieview/Academy		
Agency/Co.	Highmount, New York			Jurisdiction			
Date Performed	12/4/00			Analysis Year	99-057 msbvpmbu		
Analysis Time Period	2008 nb/bu winter sat pm						
Project Description							
East/West Street: Bonnieview/Academy				North/South Street: Main Street			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	5	30	5	14	8	3	
Peak-Hour Factor, PHF	0.80	0.80	0.80	0.79	0.79	0.79	
Hourly Flow Rate, HFR	6	37	6	17	10	3	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	3	1	11	4	0	0	
Peak-Hour Factor, PHF	0.70	0.70	0.70	0.70	0.70	0.70	
Hourly Flow Rate, HFR	4	1	15	5	0	0	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			2			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR	LTR			LTR	
v (vph)	6	17	20			5	
C (m) (vph)	1619	1579	986			855	
v/c	0.00	0.01	0.02			0.01	
95% queue length	0.01	0.03	0.06			0.02	
Control Delay	7.2	7.3	8.7			9.2	
LOS	A	A	A			A	
Approach Delay	--	--	8.7			9.2	
Approach LOS	--	--	A			A	

Route 28/CR 49A

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2000 exist winter sat am			Intersection	Route 49A/Route 28			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	11/30/00			Analysis Year	99-057 4928samex			
Analysis Time Period	2000 existing winter sat am							
Project Description								
East/West Street: Route 28				North/South Street: Route 49A				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	2	50	85	270	87	1		
Peak-Hour Factor, PHF	0.82	0.83	0.82	0.89	0.89	0.89		
Hourly Flow Rate, HFR	2	60	103	303	97	1		
Percent Heavy Vehicles	4	--	--	1	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R	LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	13	1	27	1	7	0		
Peak-Hour Factor, PHF	0.73	0.73	0.73	1.00	1.00	1.00		
Hourly Flow Rate, HFR	17	1	36	1	7	0		
Percent Heavy Vehicles	7	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach	N			N				
Storage	0			0				
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LTR		LTR			LTR	
v (vph)	2	303		54			8	
C (m) (vph)	1483	1422		504			225	
v/c	0.00	0.21		0.11			0.04	
95% queue length	0.00	0.81		0.36			0.11	
Control Delay	7.4	8.2		13.0			21.6	
LOS	A	A		B			C	
Approach Delay	--	--	13.0			21.6		
Approach LOS	--	--	B			C		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2008 no bd winter sat am			Intersection	Route 49A/Route 28			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	11/30/00			Analysis Year	99-057 4928samnb			
Analysis Time Period	2008 no build winter sat am							
Project Description								
East/West Street: Route 28				North/South Street: Route 49A				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	3	63	108	342	110	1		
Peak-Hour Factor, PHF	0.82	0.98	0.82	0.89	0.89	0.89		
Hourly Flow Rate, HFR	3	64	131	384	123	1		
Percent Heavy Vehicles	4	--	--	1	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R	LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	16	1	34	1	9	0		
Peak-Hour Factor, PHF	0.73	0.73	0.73	1.00	1.00	1.00		
Hourly Flow Rate, HFR	21	1	46	1	9	0		
Percent Heavy Vehicles	7	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LTR		LTR			LTR	
v (vph)	3	384		68			10	
C (m) (vph)	1450	1384		386			151	
v/c	0.00	0.28		0.18			0.07	
95% queue length	0.01	1.15		0.64			0.21	
Control Delay	7.5	8.6		16.3			30.5	
LOS	A	A		C			D	
Approach Delay	--	--		16.3			30.5	
Approach LOS	--	--		C			D	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	wcc 2008 build winter sat am	Intersection	Route 49A/Route 28
Agency/Co.	Highmount, New York	Jurisdiction	
Date Performed	11/30/00	Analysis Year	99-057 4928sambu
Analysis Time Period	2008 build winter sat am		
Project Description			
East/West Street: Route 28		North/South Street: Route 49A	
Intersection Orientation: East-West		Study Period (hrs): 1.00	

Vehicle Volumes and Adjustments						
Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	3	66	114	483	111	1
Peak-Hour Factor, PHF	0.90	0.92	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	3	71	126	536	123	1
Percent Heavy Vehicles	4	--	--	1	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	1	0	1	0
Configuration	LT		R	LTR		
Upstream Signal		0			0	
Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	19	1	90	1	9	0
Peak-Hour Factor, PHF	0.90	0.90	0.90	1.00	1.00	1.00
Hourly Flow Rate, HFR	21	1	100	1	9	0
Percent Heavy Vehicles	7	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LTR		LTR			LTR	
v (vph)	3	536		122			10	
C (m) (vph)	1450	1382		347			81	
v/c	0.00	0.39		0.35			0.12	
95% queue length	0.01	1.89		1.60			0.42	
Control Delay	7.5	9.3		21.0			55.7	
LOS	A	A		C			F	
Approach Delay	--	--		21.0			55.7	
Approach LOS	--	--		C			F	

SHORT REPORT

General Information				Site Information			
Analyst	SAJ	Intersection	Route 28/CR 49A				
Agency or Co.	Shandaken	Area Type	All other areas				
Date Performed	12/20/00	Jurisdiction					
Time Period	Winter Sat AM Peak	Analysis Year	99-057				

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	1	0	1	1	0	0	1	1	0	1	0
Lane group		LTR		L	TR			LT	R		LTR	
Volume (vph)	3	66	114	483	111	1	19	1	90	1	9	0
% Heavy veh	0	1	0	0	1	0	0	0	0	0	0	0
PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup lost time		2.0		2.0	2.0			2.0	2.0		2.0	
Ext. eff. green		2.0		2.0	2.0			2.0	2.0		2.0	
Arrival type		3		3	3			3	3		3	
Unit Extension		3.0		3.0	3.0			3.0	3.0		3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		12	0		0
Lane Width		12.0		12.0	12.0			9.0	12.0		9.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		0		0	0			0	0		0	
Unit Extension		3.0		3.0	3.0			3.0	3.0		3.0	
Phasing	EW Perm	WB Only	03	04	NS Perm	06	07	08				
Timing	G = 30.0	G = 10.0	G =	G =	G = 20.0	G =	G =	G =				
	Y =	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 75.0						

Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adj. flow rate		203		537	124			22	87		11	
Lane group cap.		692		833	1127			375	754		451	
v/c ratio		0.29		0.64	0.11			0.06	0.12		0.02	
Green ratio		0.40		0.60	0.60			0.27	0.47		0.27	
Unif. delay d1		15.3		12.6	6.4			20.5	11.3		20.3	
Delay factor k		0.11		0.22	0.11			0.11	0.11		0.11	
Increm. delay d2		0.2		1.7	0.0			0.1	0.1		0.0	
PF factor		1.000		1.000	1.000			1.000	1.000		1.000	
Control delay		15.5		14.3	6.5			20.6	11.3		20.3	
Lane group LOS		B		B	A			C	B		C	
Approch. delay		15.5		12.8				13.2			20.3	
Approach LOS		B		B				B			C	
Intersec. delay		13.5			Intersection LOS							B

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2000 exist winter sat pm			Intersection	Route 49A/Route 28			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	11/30/00			Analysis Year	99-057 4928spmex			
Analysis Time Period	2000 existing winter sat pm							
Project Description								
East/West Street: Route 28				North/South Street: Route 49A				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	8	113	28	38	138	2		
Peak-Hour Factor, PHF	0.87	0.87	0.87	0.84	0.84	0.84		
Hourly Flow Rate, HFR	9	129	32	45	164	2		
Percent Heavy Vehicles	1	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	1	0	1	0		
Configuration	LT		R	LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	243	4	391	5	0	3		
Peak-Hour Factor, PHF	0.86	0.86	0.86	0.70	0.70	0.70		
Hourly Flow Rate, HFR	282	4	454	7	0	4		
Percent Heavy Vehicles	1	0	1	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT	LTR		LTR			LTR	
v (vph)	9	45		740			11	
C (m) (vph)	1418	1430		724			265	
v/c	0.01	0.03		1.02			0.04	
95% queue length	0.02	0.10		37.56			0.13	
Control Delay	7.6	7.6		127.6			19.2	
LOS	A	A		F			C	
Approach Delay	--	--		127.6			19.2	
Approach LOS	--	--		F			C	

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information				
Analyst	wcc 2008 no bd winter sat pm		Intersection	Route 49A/Route 28			
Agency/Co.	Highmount, New York		Jurisdiction				
Date Performed	11/30/00		Analysis Year	99-057 4928spmnb			
Analysis Time Period	2008 no build winter sat pm						
Project Description							
East/West Street: Route 28			North/South Street: Route 49A				
Intersection Orientation: East-West			Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments							
Major Street	Eastbound			Westbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	10	143	35	48	175	3	
Peak-Hour Factor, PHF	0.87	0.87	0.87	0.84	0.84	0.84	
Hourly Flow Rate, HFR	11	164	40	57	208	3	
Percent Heavy Vehicles	1	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	1	0	1	0	
Configuration	LT		R	LTR			
Upstream Signal		0			0		
Minor Street	Northbound			Southbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	308	5	495	6	0	4	
Peak-Hour Factor, PHF	0.86	0.86	0.86	0.70	0.70	0.70	
Hourly Flow Rate, HFR	358	5	575	8	0	5	
Percent Heavy Vehicles	1	0	1	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	EB	WB	Northbound			Southbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LT	LTR		LTR			LTR
v (vph)	11	57	938			13	
C (m) (vph)	1366	1380	644			148	
v/c	0.01	0.04	1.46			0.09	
95% queue length	0.02	0.13	156.02			0.29	
Control Delay	7.7	7.7	849.8			31.7	
LOS	A	A	F			D	
Approach Delay	--	--	849.8			31.7	
Approach LOS	--	--	F			D	

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc 2008 build winter sat pm			Intersection	Route 49A/Route 28		
Agency/Co.	Highmount, New York			Jurisdiction			
Date Performed	11/30/00			Analysis Year	99-057 4928spmbu		
Analysis Time Period	2008 build winter sat pm						
Project Description							
East/West Street: Route 28				North/South Street: Route 49A			
Intersection Orientation: East-West				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Eastbound			Westbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	10	144	38	113	178	3	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	11	160	42	125	197	3	
Percent Heavy Vehicles	1	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	1	0	1	0	
Configuration	LT		R	LTR			
Upstream Signal		0			0		
Minor Street	Northbound			Southbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	312	5	618	6	0	4	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.70	0.70	0.70	
Hourly Flow Rate, HFR	346	5	686	8	0	5	
Percent Heavy Vehicles	1	0	1	0	0	0	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	EB	WB	Northbound			Southbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LT	LTR		LTR			LTR
v (vph)	11	125		1037			13
C (m) (vph)	1378	1382		592			72
v/c	0.01	0.09		1.75			0.18
95% queue length	0.02	0.30		229.28			0.65
Control Delay	7.6	7.9					65.9
LOS	A	A		F			F
Approach Delay	--	--					65.9
Approach LOS	--	--		F			F

SHORT REPORT															
General Information						Site Information									
Analyst	SAJ					Intersection	Route 28/CR 49A								
Agency or Co.	Shandaken					Area Type	All other areas								
Date Performed	12/20/00					Jurisdiction									
Time Period	Winter Sat PM Peak					Analysis Year	99-057								
Volume and Timing Input															
	EB			WB			NB			SB					
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT			
Num. of Lanes	0	1	0	1	1	0	0	1	1	0	1	0			
Lane group	LTR			L TR			LT R			LTR					
Volume (vph)	10	144	38	113	178	3	313	5	618	6	0	4			
% Heavy veh	0	1	0	0	1	0	0	0	0	0	0	0			
PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A			
Startup lost time	2.0			2.0			2.0			2.0					
Ext. eff. green	2.0			2.0			2.0			2.0					
Arrival type	3			3			3			3					
Unit Extension	3.0			3.0			3.0			3.0					
Ped/Bike/RTOR Volume	0		0	0		0	0		12	0		0			
Lane Width	12.0			12.0			9.0			12.0					
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N			
Parking/hr															
Bus stops/hr	0			0			0			0					
Unit Extension	3.0			3.0			3.0			3.0					
Phasing	EW Perm	WB Only	03	04	NS Perm	06	07	08							
Timing	G = 20.0	G = 10.0	G =	G =	G = 30.0	G =	G =	G =							
	Y =	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =							
Duration of Analysis (hrs) = 0.25						Cycle Length C = 75.0									
Lane Group Capacity, Control Delay, and LOS Determination															
	EB			WB			NB			SB					
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT			
Adj. flow rate	213			126			201			354			673		
Lane group cap.	481			635			876			494			969		
v/c ratio	0.44			0.20			0.23			0.72			0.69		
Green ratio	0.27			0.47			0.47			0.40			0.60		
Unif. delay d1	22.9			15.5			11.9			18.9			10.3		
Delay factor k	0.11			0.11			0.11			0.28			0.26		
Increm. delay d2	0.7			0.2			0.1			4.9			2.2		
PF factor	1.000			1.000			1.000			1.000			1.000		
Control delay	23.5			15.6			12.1			23.9			12.5		
Lane group LOS	C			B			B			C			B		
Apprch. delay	23.5			13.4			16.4			13.6					
Approach LOS	C			B			B			B					
Intersec. delay	16.7			Intersection LOS						B					

CR 49A/Gunnison Road

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information				
Analyst	<i>wcc 2000 exist winter sat am</i>		Intersection	<i>Route 49A/Gunnison Road</i>			
Agency/Co.	<i>Highmount, New York</i>		Jurisdiction				
Date Performed	<i>11/30/00</i>		Analysis Year	<i>99-057 49grsamex</i>			
Analysis Time Period	<i>2000 existing winter sat am</i>						
Project Description							
East/West Street: <i>Gunnison Rd/Lower Driveway</i>			North/South Street: <i>Route 49A</i>				
Intersection Orientation: <i>North-South</i>			Study Period (hrs): <i>1.00</i>				
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	3	28	10	93	267	2	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	3	31	11	103	296	2	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	<i>Undivided</i>						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	<i>LTR</i>			<i>LTR</i>			
Upstream Signal		0			0		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	10	0	10	3	0	2	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	11	0	11	3	0	2	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		<i>N</i>			<i>N</i>		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		<i>LTR</i>			<i>LTR</i>		
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	<i>LTR</i>	<i>LTR</i>		<i>LTR</i>			<i>LTR</i>
v (vph)	3	103		22			5
C (m) (vph)	1275	1580		602			506
v/c	0.00	0.07		0.04			0.01
95% queue length	0.01	0.21		0.11			0.03
Control Delay	7.8	7.4		11.2			12.2
LOS	A	A		B			B
Approach Delay	--	--		11.2			12.2
Approach LOS	--	--		B			B

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TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc 2008 no bd winter sat am			Intersection	Route 49A/Gunnison Road		
Agency/Co.	Highmount, New York			Jurisdiction			
Date Performed	11/30/00			Analysis Year	99-057 49grsamnb		
Analysis Time Period	2008 no build winter sat am						
Project Description							
East/West Street: Gunnison Rd/Lower Driveway				North/South Street: Route 49A			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	4	34	13	178	338	3	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	4	37	14	131	375	3	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	13	0	13	4	0	3	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	14	0	14	4	0	3	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR		LTR			LTR
v (vph)	4	131		28			7
C (m) (vph)	1192	1568		499			416
v/c	0.00	0.08		0.06			0.02
95% queue length	0.01	0.27		0.18			0.05
Control Delay	8.0	7.5		12.6			13.8
LOS	A	A		B			B
Approach Delay	--	--		12.6			13.8
Approach LOS	--	--		B			B

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TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc 2008 build winter sat am			Intersection	Route 49A/Gunnison Road		
Agency/Co.	Highmount, New York			Jurisdiction			
Date Performed	08/06/01			Analysis Year	99-057 49grsambu		
Analysis Time Period	2008 build winter sat am						
Project Description							
East/West Street: Gunnison Rd/Lower Driveway				North/South Street: Route 49A			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	4	83	13	118	466	21	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	4	92	14	131	517	23	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	13	0	13	14	0	6	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	14	0	14	15	0	6	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR	LTR			LTR	
v (vph)	4	131	28			21	
C (m) (vph)	1039	1498	374			276	
v/c	0.00	0.09	0.07			0.08	
95% queue length	0.01	0.29	0.24			0.25	
Control Delay	8.5	7.6	15.4			19.1	
LOS	A	A	C			C	
Approach Delay	--	--	15.4			19.1	
Approach LOS	--	--	C			C	

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2000 exist winter sat pm			Intersection	Route 49A/Gunnison Road			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	11/30/00			Analysis Year	99-057 49grspmex			
Analysis Time Period	2000 existing winter sat pm							
Project Description								
East/West Street: Gunnison Rd/Lower Driveway				North/South Street: Route 49A				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	2	404	5	5	58	3		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	2	448	5	5	64	3		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	5	0	232	2	0	2		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	5	0	257	2	0	2		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR	LTR			LTR		
v (vph)	2	5	262			4		
C (m) (vph)	1547	1118	609			361		
v/c	0.00	0.00	0.43			0.01		
95% queue length	0.00	0.01	2.24			0.03		
Control Delay	7.3	8.2	15.4			15.1		
LOS	A	A	C			C		
Approach Delay	--	--	15.4			15.1		
Approach LOS	--	--	C			C		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	<i>wcc 2008 no bd winter sat pm</i>			Intersection	<i>Route 49A/Gunnison Road</i>			
Agency/Co.	<i>Highmount, New York</i>			Jurisdiction				
Date Performed	<i>11/30/00</i>			Analysis Year	<i>99-057 49grspmb</i>			
Analysis Time Period	<i>2008 no build winter sat pm</i>							
Project Description								
East/West Street: <i>Gunnison Rd/Lower Driveway</i>				North/South Street: <i>Route 49A</i>				
Intersection Orientation: <i>North-South</i>				Study Period (hrs): <i>1.00</i>				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	3	512	6	6	73	4		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	3	568	6	6	81	4		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	6	0	294	3	0	3		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	6	0	326	3	0	3		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR	LTR			LTR		
v (vph)	3	6	332			6		
C (m) (vph)	1524	1009	520			195		
v/c	0.00	0.01	0.64			0.03		
95% queue length	0.01	0.02	5.03			0.10		
Control Delay	7.4	8.6	23.9			24.0		
LOS	A	A	C			C		
Approach Delay	--	--	23.9			24.0		
Approach LOS	--	--	C			C		

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc 2008 build winter sat pm			Intersection	Route 49A/Gunnison Road		
Agency/Co.	Highmount, New York			Jurisdiction			
Date Performed	08/06/01			Analysis Year	99-057 49grspmbu		
Analysis Time Period	2008 build winter sat pm						
Project Description							
East/West Street: Gunnison Rd/Lower Driveway				North/South Street: Route 49A			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street		Northbound			Southbound		
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	6	620	6	6	132	9	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	6	688	6	6	146	10	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street		Westbound			Eastbound		
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	6	0	294	22	0	3	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	6	0	326	24	0	3	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR	LTR			LTR	
v (vph)	6	6	332			27	
C (m) (vph)	1436	911	443			65	
v/c	0.00	0.01	0.75			0.42	
95% queue length	0.01	0.02	7.86			1.93	
Control Delay	7.5	9.0	36.2			98.4	
LOS	A	A	E			F	
Approach Delay	--	--	36.2			98.4	
Approach LOS	--	--	E			F	

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CR 49A/Belleayre Upper Driveway

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc			Intersection	Route 49A/Upper Driveway			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	11/29/00			Analysis Year	99-057 49upsamex			
Analysis Time Period	2000 existing winter sat am							
Project Description Saturday AM peak								
East/West Street: Upper Driveway				North/South Street: Route 49A				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	11	6	273	6	0		
Peak-Hour Factor, PHF	1.00	0.70	0.70	0.77	0.77	1.00		
Hourly Flow Rate, HFR	0	15	8	354	7	0		
Percent Heavy Vehicles	0	--	--	1	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration			TR	LT				
Upstream Signal		0			0			
Minor Street	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	1	0	47	0	0	0		
Peak-Hour Factor, PHF	0.71	1.00	0.71	1.00	1.00	1.00		
Hourly Flow Rate, HFR	1	0	66	0	0	0		
Percent Heavy Vehicles	0	0	4	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		354		67				
C (m) (vph)		1599		1016				
v/c		0.22		0.07				
95% queue length		0.85		0.21				
Control Delay		7.9		8.8				
LOS		A		A				
Approach Delay	--	--		8.8				
Approach LOS	--	--		A				

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc			Intersection	Route 49A/Upper Driveway			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	11/29/00			Analysis Year	99-057 49upsamnb			
Analysis Time Period	2008 no build winter sat am							
Project Description Saturday AM Peak								
East/West Street: Upper Driveway				North/South Street: Route 49A				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	14	8	346	8	0		
Peak-Hour Factor, PHF	1.00	0.70	0.70	0.77	0.77	1.00		
Hourly Flow Rate, HFR	0	20	11	449	10	0		
Percent Heavy Vehicles	0	--	--	1	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	0		
Configuration			TR	LT				
Upstream Signal		0			0			
Minor Street	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	1	0	60	0	0	0		
Peak-Hour Factor, PHF	0.71	1.00	0.71	1.00	1.00	1.00		
Hourly Flow Rate, HFR	1	0	84	0	0	0		
Percent Heavy Vehicles	0	0	4	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		449		85				
C (m) (vph)		1588		998				
v/c		0.28		0.09				
95% queue length		1.18		0.28				
Control Delay		8.2		8.9				
LOS		A		A				
Approach Delay	--	--	8.9					
Approach LOS	--	--	A					

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc			Intersection	Route 49A/Upper Driveway			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	12/05/01			Analysis Year	99-057 49upsambu2			
Analysis Time Period	2008 build winter sat am							
Project Description								
East/West Street: Upper Driveway				North/South Street: Route 49A				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	2	40	15	361	63	67		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	2	44	16	401	70	67		
Percent Heavy Vehicles	0	--	--	1	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	1	0	60	23	8	1		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR	1	0	66	25	8	1		
Percent Heavy Vehicles	0	0	4	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR	LTR			LTR		
v (vph)	2	401	67			34		
C (m) (vph)	1459	1550	944			173		
v/c	0.00	0.26	0.07			0.20		
95% queue length	0.00	1.05	0.23			0.73		
Control Delay	7.5	8.1	9.1			30.9		
LOS	A	A	A			D		
Approach Delay	--	--	9.1			30.9		
Approach LOS	--	--	A			D		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc			Intersection	Route 49A/Upper Driveway			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	11/29/00			Analysis Year	99-057 49upspmex			
Analysis Time Period	2000 existing winter sat pm							
Project Description								
East/West Street: Upper Driveway				North/South Street: Route 49A				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	8	2	73	9	0		
Peak-Hour Factor, PHF	1.00	0.70	0.70	0.73	0.73	1.00		
Hourly Flow Rate, HFR	0	11	2	99	12	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration			TR	LT				
Upstream Signal		0			0			
Minor Street	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	2	0	403	0	0	0		
Peak-Hour Factor, PHF	0.83	1.00	0.83	1.00	1.00	1.00		
Hourly Flow Rate, HFR	2	0	485	0	0	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		99		487				
C (m) (vph)		1619		1072				
v/c		0.06		0.45				
95% queue length		0.20		2.48				
Control Delay		7.4		11.1				
LOS		A		B				
Approach Delay	--	--		11.1				
Approach LOS	--	--		B				

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc			Intersection	Route 49A/Upper Driveway			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	11/29/00			Analysis Year	99-057 49upspmb			
Analysis Time Period	2008 no build winter sat pm							
Project Description								
East/West Street: Upper Driveway				North/South Street: Route 49A				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	10	3	92	11	0		
Peak-Hour Factor, PHF	1.00	0.70	0.70	0.73	0.73	1.00		
Hourly Flow Rate, HFR	0	14	4	126	15	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration			TR	LT				
Upstream Signal		0			0			
Minor Street	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	3	0	511	0	0	0		
Peak-Hour Factor, PHF	0.83	1.00	0.83	1.00	1.00	1.00		
Hourly Flow Rate, HFR	3	0	615	0	0	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		126		618				
C (m) (vph)		1612		1066				
v/c		0.08		0.58				
95% queue length		0.25		4.06				
Control Delay		7.4		13.0				
LOS		A		B				
Approach Delay	--	--	13.0					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc			Intersection	Route 49A/Upper Driveway		
Agency/Co.	Highmount, New York			Jurisdiction			
Date Performed	12/05/01			Analysis Year	99-057 49upspmbu2		
Analysis Time Period	2008 build winter sat pm						
Project Description							
East/West Street: Upper Driveway				North/South Street: Route 49A			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	1	57	3	92	39	37	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	1	63	3	102	43	34	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	13	9	528	47	0	2	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR	14	10	586	52	0	2	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR		LTR			LTR
v (vph)	1	102		610			54
C (m) (vph)	1535	1549		977			160
v/c	0.00	0.07		0.62			0.34
95% queue length	0.00	0.21		4.86			1.49
Control Delay	7.3	7.5		14.8			38.9
LOS	A	A		B			E
Approach Delay	--	--		14.8			38.9
Approach LOS	--	--		B			E

CR 49A/Wildacres South Driveway

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2008 build winter sat am			Intersection	Rte 49A/South Wildacres drwy			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	12/05/01			Analysis Year	99-057 49sdambu2			
Analysis Time Period	2008 build winter sat am							
Project Description								
East/West Street: South Wildacres Driveway				North/South Street: Route 49A				
Intersection Orientation: North-South				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	1	31	0	0	18	48		
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	0.90		
Hourly Flow Rate, HFR	1	34	0	0	20	53		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT					TR		
Upstream Signal		0			0			
Minor Street	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	0	0	26	0	0		
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	0.90		
Hourly Flow Rate, HFR	0	0	0	28	0	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration					LR			
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	1						28	
C (m) (vph)	1540						924	
v/c	0.00						0.03	
95% queue length	0.00						0.09	
Control Delay	7.3						9.0	
LOS	A						A	
Approach Delay	--	--					9.0	
Approach LOS	--	--					A	

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	wcc 2008 build winter sat pm			Intersection	Rte 49A/South Wildacres drwy		
Agency/Co.	Highmount, New York			Jurisdiction			
Date Performed	12/05/01			Analysis Year	99-057 49sdpmbu2		
Analysis Time Period	2008 build winter sat pm						
Project Description							
East/West Street: South Wildacres Driveway				North/South Street: Route 49A			
Intersection Orientation: North-South				Study Period (hrs): 1.00			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	0	20	0	0	23	31	
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	0.90	
Hourly Flow Rate, HFR	0	22	0	0	25	34	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LT					TR	
Upstream Signal		0			0		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	0	0	0	41	0	1	
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	0.90	
Hourly Flow Rate, HFR	0	0	0	45	0	1	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	0	0	0	
Configuration					LR		
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LT						LR
v (vph)	0						46
C (m) (vph)	1558						949
v/c	0.00						0.05
95% queue length	0.00						0.15
Control Delay	7.3						9.0
LOS	A						A
Approach Delay	--	--					9.0
Approach LOS	--	--					A

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Route 28/Friendship Road (Belleayre Ridge Access)

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	wcc 2008 build winter sat am	Intersection	Route 28/Ridge Driveway
Agency/Co.	Highmount, New York	Jurisdiction	
Date Performed	12/4/00	Analysis Year	99-057 28rdwambu
Analysis Time Period	2008 build winter sat am		

Project Description	
East/West Street: <i>Route 28</i>	North/South Street: <i>Ridge Driveway</i>
Intersection Orientation: <i>East-West</i>	Study Period (hrs): <i>1.00</i>

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	0	145	5	87	498	0
Peak-Hour Factor, PHF	1.00	0.90	0.90	0.90	0.90	1.00
Hourly Flow Rate, HFR	0	161	5	96	553	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	<i>Undivided</i>					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	14	0	40	0	0	0
Peak-Hour Factor, PHF	0.90	1.00	0.90	1.00	1.00	1.00
Hourly Flow Rate, HFR	15	0	44	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		96		59				
C (m) (vph)		1424		579				
v/c		0.07		0.10				
95% queue length		0.22		0.34				
Control Delay		7.7		11.9				
LOS		A		B				
Approach Delay	--	--	11.9					
Approach LOS	--	--	B					

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	wcc 2008 build winter sat pm			Intersection	Route 28/Ridge Driveway			
Agency/Co.	Highmount, New York			Jurisdiction				
Date Performed	12/4/00			Analysis Year	99-057 28rdwpmbu			
Analysis Time Period	2008 build winter sat pm							
Project Description								
East/West Street: Route 28				North/South Street: Ridge Driveway				
Intersection Orientation: East-West				Study Period (hrs): 1.00				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	663	16	44	293	0		
Peak-Hour Factor, PHF	1.00	0.90	0.90	0.90	0.90	1.00		
Hourly Flow Rate, HFR	0	736	17	48	325	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration			TR	LT				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	4	0	79	0	0	0		
Peak-Hour Factor, PHF	0.90	1.00	0.90	1.00	1.00	1.00		
Hourly Flow Rate, HFR	4	0	87	0	0	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		48		91				
C (m) (vph)		866		400				
v/c		0.06		0.23				
95% queue length		0.18		0.88				
Control Delay		9.4		16.6				
LOS		A		C				
Approach Delay	--	--		16.6				
Approach LOS	--	--		C				

**Addendum to the
Traffic Impact Study**

CME Project #99-057

Submitted to:

Crossroads Ventures, LLC
72 Andrew Lane Road
P.O. Box 267
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Prepared by:



4 Automation Lane
Albany, NY 12205-1683

November 27, 2002
Revised August 15, 2003

Comments from Clough Harbour Associates letter dated April 30, 2002

Comment 1: The DEIS contains a great deal of information on traffic in the immediate area of the project but does not address concerns of communities to the north and south along the Route 28 corridor. Route 28 should be examined from the NYS Thruway in Kingston to the project site and include all intersections along the route. It should be assumed that impacts would be present from the beginnings of construction traffic to employee commuter traffic and guests/residents.

Response: The traffic impact study prepared for the proposed project included the analysis of seven existing intersections as outlined in the DEIS Scope which was approved by the lead agency, the New York State Department of Environmental Conservation with involvement by the New York State Department of Transportation Regions 8 and 9, the Towns of Middletown and Shandaken, and Ulster County. The same discussion on increasing the study area to Kingston was brought up during the scoping phase of the project. During this time, NYSDOT Region 8 requested that two study area intersections along Route 28 be added to the original five study area intersections. It was at this time Region 8 agreed that extending the project area to Kingston was not necessary.

It should be noted that the average annual daily traffic (AADT) traffic along Route 28 increases dramatically from west to east. Between County Route 49A and CR 47 in Big Indian the volume is 2,950 daily vehicles, then from CR 47 to State Route 42 the volume is less than 4,500 vehicles per day. East of Route 375 the volumes increase to 15,300 per day. The maximum volume occurs just west of the round about in Kingston (west of the Thruway) with approximately 24,500 daily vehicles. This indicates that any site generated traffic on Route 28 east of the project site will represent smaller and smaller proportions of total traffic on Route 28 due to the higher existing volumes on the eastern segments of Route 28. For this reason adding additional intersections to the study area east of Route 214 was not necessary

Letters have been received from officials concerned about traffic to and from the Resort that will be using Route 28 in the Town of Olive. Although this area was outside the area included in the DEIS Scoping Document, some comments can be made based on the information in the DEIS. On Route 28 east of Route 214 it was forecast that the Resort will be generating 207 trips during the Saturday AM peak hour and 193 trips during the Saturday PM peak hour. It is unlikely that this additional traffic, amounting to about 3 additional cars per minute during the peak hour, will have a significant affect on the conditions at the intersections in the Town of Olive. There have been general concerns about this area, especially in the vicinity of Winchell's Corners, that have been discussed with the New York State Department of Transportation. The Resort sponsors will support the Town in its efforts to address this issue with State officials.

The DEIS scope called for analysis of peak conditions because these will represent the greatest potential impact of the project. These conditions were analyzed and since traffic

operations will be satisfactory during these periods further analysis of traffic for other conditions is not necessary.

Comment 2: Pedestrian traffic on and around the Resort should be openly addressed in the DEIS. The current conditions in the area have been identified as having virtually no pedestrian traffic. It should be assumed that this condition would change with a pedestrian intensive use such as golf. Many who play golf like to walk the course and will walk around the site and off site to local roads. The DEIS should address the compatibility with local road networks and identify areas of concern and offer mitigation to address pedestrian safety. Additionally, as previously stated in our completeness review, there is no information in the DEIS that address pedestrian safety in the vast parking areas proposed on the Resort. The DEIS should also address pedestrian safety with regard to the many golf carts that will be used on the Resort.

Response: As mentioned in the Traffic Impact Study, shuttle buses are expected to play a significant role in transporting skiers to and from Belleayre Mountain Ski Center in the wintertime. It is expected that the shuttle buses would be the preferred mode of travel due to the ski equipment that pedestrians would need to carry back and forth between the Resort and the Ski Center. It is approximately one mile from the Wildacres hotel to the Ski Center making it unlikely that many skiers would walk. However, it is still recommended that a marked crosswalk be provided across CR 49A at the Wildacres Middle Driveway/ Belleayre Mountain Upper Driveway intersection as discussed below as part of the pedestrian connections. Due to the lower traffic volumes south of the driveways, it is recommended that the crosswalk be placed at a location just south of the driveways. Shuttle buses will also provide service between Wildacres and the Wilderness Activity Center; however, during warmer weather pedestrians and/or bikers may use the path to travel between the facilities. Additional off-site pedestrian activity to/from Wildacres Resort is expected to be limited. Due to the location of and terrain surrounding the Big Indian Plateau it is likely that pedestrians wishing to travel off-site will utilize the shuttle system or they will drive.

Golf Carts and Walking Golfers

This comment assumes high levels of pedestrian traffic associated with golfers walking the two proposed golf courses. It is not anticipated that there will be many walking golfers on the two proposed golf courses. Many golf courses today mandate the use of golf carts in order to maintain the speed of play on the course. Few, if any, golfers will walk the Big Indian Country Club golf course. The elevation changes between the golf holes on this golf course will make the use of a golf cart a necessity. The Highmount Golf Club does not have as much elevation difference as the Big Indian Country Club, so is possible that some golfers may walk this golf course. It is not anticipated that golf carts will be used on any other areas of the Resort besides the dedicated golf course cart paths.

Dedicated golf cart paths are proposed throughout both golf courses, including near buildings associated with the golf courses. Golfers will be directed via their scorecard

that golf carts are to remain on the cart paths. The exception to this will be the commonly employed 90-degree rule whereby golfers may only leave the cart path on a 90 degree angle to get to their ball to play their next shot. After playing their shot, golfers return to the cart path on the same 90-degree path.

Wherever cart paths pass over internal project roads, or in the case of the Highmount Golf Club, where carts must pass over Gunnison Road, there will be signage for both the golfers and for motorists. This is illustrated on the attached Figure #1, "Typical Pedestrian and Golf Cart Crossing for Gunnison Road". Stop signs will be put at the cart paths on their approaches to road crossings to stop both carts and walking golfers. Motorists will be advised via signage of pedestrian and golf cart crossings. The crossings themselves will be striped in a typical crosswalk fashion.

Non-golf Pedestrians

It is envisioned that non-golf pedestrian use could also occur between some of the Resort components. For example, Resort guests that occupy the octoplex detached lodging units north of Gunnison Road could conceivably make the choice to walk to the Wildacres Resort Hotel to eat in one of the restaurants. In the previously referenced figure it is shown how the golf cart path crossing of Gunnison Road has been located in relationship to the driveway to these octoplex units. Pedestrians would make use of the road crossing in the same fashion that golfers would and use the golf cart path that leads in a direct fashion to the Wildacres Hotel.

Pedestrian Connections Between Wildacres Hotel and Other Areas

Attached Figure #2 entitled "Pedestrian Connections Wildacres Hotel, Wilderness Activity Center and Belleayre Mountain Ski Center" shows how these areas will be linked for pedestrian use. The connection between the Wildacres Hotel and the Wilderness Activity Center will consist of the following route. Pedestrians will leave the hotel via the sidewalk along the connection between the parking garage and the hotel, pass through the parking garage on a marked and dedicated pedestrian pathway, and then follow a path along the service and parking entrance road, then cross the internal project road at a crosswalk. Pedestrians would then follow a foot path going west and cross County Route 49A at a crosswalk that provides adequate site distances in both directions. Once across County Route 49A, the footpath would continue on to the Wilderness Activity Center.

The previously reference figure also illustrates the location of the proposed crosswalks between the Wildacres Hotel and Belleayre Mountain Ski Center discussed previously in this response.

Pedestrians and Parking Areas

The project design incorporates drop off circles at a number of parking areas, and sidewalk connections between many of the project elements, including the parking areas

described as “vast” in the comment. Contrary to the comment to which this responds, the proposed parking areas are small to moderate in size.

Wildacres

Two-thirds of the total Wildacres Resort parking is under the hotel, 250 spaces, (with valet parking) and in the parking garage, 208 spaces, with a direct pedestrian sidewalk connection to the hotel.

At the golf clubhouse there are a total of 84 spaces. In addition to serving the golf clubhouse this parking area also serves the spa and chapel. There are two bag drop off areas adjacent to the clubhouse parking lot, removed from internal vehicle circulation. A player may drop their bags off, then park their car and return to the drop off area via sidewalks, or the car may be valet parked. Either way there will be minimal vehicle/pedestrian interaction.

There are 65 parking spaces proposed at the Marlowe Mansion that will be converted into a restaurant. Landscaped walks are proposed between the parking area and the restaurant. There is also a circular drop off which at some times may be served with valet parking, thus further reducing potential vehicle/pedestrian conflicts.

The Children’s Center will be a self-contained use with 36 parking spaces. Parking will be located adjacent to the building and accessed by its own short driveway off an internal project road.

The only other parking area at Wildacres that will be used by Resort guests is an 41 space parking area north of Gunnison Road serving the octoplex clubhouse, swimming pool and tennis courts for Resort guests. Here again there is a circular drop off area serving all of these facilities that is removed from the parking area proper as well as the entrance road. There will also be a painted crosswalk between the parking area and the clubhouse.

Big Indian Resort and Spa & Belleayre Highlands

There are 292 parking spaces at the Big Indian Resort and Spa, 250 of these spaces (over 85%) of the spaces are within the hotel, and not surface parking. The 42 surface parking spaces are designed primarily to serve the golf clubhouse and spa with a circular drop off located at the building.

The other parking areas on the Big Indian portion of the site are employee parking lots that will be served by shuttle buses.

The only parking area over 10 spaces at Belleayre Highlands is a 30 space lot directly adjacent to the tennis courts and swimming pool that the parking lot serves. A 30 car parking lot is anything but “vast”, and its adjacency to the functions it serves allows for a direct pedestrian link ensuring pedestrian safety.

NYSDEC Compilation of Comments from CHA dated May 3, 2002

Comment 3: The traffic analysis limits the study area to a section of the Route 28 corridor. The DEIS indicates that various existing commercial establishments (specifically gas stations and supermarkets) in surrounding communities will absorb additional demand for services and products. There is little or no mention of these establishments in the traffic portion of the DEIS. The few establishments mentioned should be examined from a traffic impact perspective as there will be probable impacts in these areas, especially considering many of these establishments are on the south bound side of Route 28. Motorist coming to the proposed resort may/will stop for gas, supplies, or groceries, and will be crossing travel lanes for ingress/egress.

Response: Refer to the response to Comment 1 regarding the study area limits. Any site traffic along Route 28 accessing stores and/or gas stations is expected to be sporadic and would not require a full analysis. It should be noted that the peak travel times at the proposed project are expected to be during off-peak travel periods compared to commuter travel peaks. In addition, it is likely that travelers will choose to patronize facilities on the same side of Route 28 as they travel resulting in right-turn in and right-turn out movements. Regardless, it is highly unlikely that any small commercial establishments would require geometric roadway improvements at their driveway locations. It is reasonable to assume that no more than ten percent of the site traffic travelling to and from the Resort facilities would periodically stop at an individual establishment along Route 28. Based on this assumption and the peak site generated traffic volumes (Figures B.1 through B.12 of the Traffic Impact Study) indicate that the site traffic travelling westbound on Route 28 destined to the Resort facilities might reasonably generate between 8 and 17 trips per hour to the existing establishments on Route 28 during the peak studied periods. This level of traffic increase will not warrant any geometric improvements.

Comment 4: The DEIS will also provide an inventory of local pedestrian traffic in the vicinity of the proposed project site. This section of the DEIS will also describe the current availability of off-street parking in the vicinity and discuss current parking in relation to what would be necessary for any special event. This section of the scope is poorly addressed in the DEIS. Special event parking is not covered, and is a very important aspect of the management of traffic in the area of the proposed facility. Roadways in the area of the proposed project are somewhat narrow, and overflow parking on these roadways would cause a burden on the local road system. A thorough analysis of overflow parking and contingency plan should be included in the DEIS.

Response: As noted in the Traffic Impact Study submitted with the DEIS no pedestrian traffic was observed during the traffic counts. Parking will be provided on site for both the full occupancy of all hotel and detached lodging units, full occupancy of the restaurants and full occupancy of the conference center. Parking space counts for all parking areas are included on plan sheets MP-1 through MP-6. Additional on-site

temporary grass surfaced parking areas that exist next to both hotels will accommodate any overflow parking from special events.

Comment 5: An assessment of potential vehicular and pedestrian conflicts will be included in the DEIS along with mitigation measures for any potentially significant impacts that are identified. It has been indicated in the DEIS that there will be very limited pedestrian traffic on the proposed site due to the extensive use of a shuttle system. It should be anticipated that guests would choose to walk and enjoy the outdoor atmosphere of the Catskills and tend to walk regardless of provided transportation. Pedestrian safety on and off site is of paramount importance, with an emphasis on safety in the parking areas and in the enclosed parking area. A detailed discussion on pedestrian safety should be provided, specifically addressing safety provisions that can or will be provided, such as dedicated pedestrian walks, pedestrian refuges in high traffic areas, crosswalks and other modern pedestrian friendly amenities. A discussion should also be included outlining safety measures to be provided between pedestrians and the golf carts that will undoubtedly be used on the resort.

Response: Sidewalks are proposed where pedestrians may travel between nearby project components. For example, there are sidewalks connecting the Wildacres hotel, including the golf clubhouse, to the restaurant proposed at the Marlowe Mansion. Further discussion of these facilities are provided in the response to comment 2 above.

Tim Miller Associates, Inc. Completeness Review

Comment 6: Sight distances should be added to the full size plans and any easements necessary to obtain clear sight distances should be indicated. Also indicate areas where snow accumulation may be a sight line problem.

Response: Sight distance triangles were added to the plans at each of the proposed site driveway locations on Figures #3, 4, 5, 6, and 7 attached to this document. No easements are needed since the project owns all lands in question. Vegetation should be cleared within the area shown. Snow accumulation may restrict sight distances near the intersections at each of the sight driveways. The Resort maintenance crews will clear this snow as well as the vegetation as necessary to maintain clear sight distances.

Comment 7: There should be a regional map provided to cover the larger area described in the DEIS text. This is important to trip assignment.

Response: A regional map is provided in Figure 1-2 in Section 1 of the DEIS.

Comment 8: Sight distance for the golf course maintenance facility access to County Route 49A needs to be discussed. Sight distances at golf cart path road crossings should be indicated on plans and discussed in the text.

Response: The available sight distance for the golf maintenance facility access to CR 49A and at the golf cart path crossings along Gunnison Road were measured and are summarized in the table below. The sight distance measurement at the maintenance facility was conducted using an 85th percentile speed of 40-mph. This speed was selected based on field measurements of speeds conducted during the period from June 22, 2002 to June 27, 2002 using an Automatic Traffic Recorder (ATR). The ATR data consisted of 687 speed observations. Since there are not speed signs on County Route 49A, it is recommended that the County post it at 40 mph based on these observations. The sight distance for the golf cart crossings was conducted using the local road speed limit on Gunnison Road of 30-mph. The field measured sight distances were compared to three sight distance standards as described below:

1. Desirable Sight Distance: These values were obtained from Table 3 in the New York State Department of Transportation publication *Policy and Standards for Entrances to State Highways*, February, 1998. The desirable sight distances are defined as: "sight distances designed to enable vehicle exiting from the driveway to turn left or right and to accelerate to the operating speed of the highway without causing vehicles on the highway to reduce their speed by more than 10 mph." Similar values were obtained from Table 4 for vehicles traveling along a major route and making a left turn into a driveway.
2. Stopping Sight Distance: Stopping sight distance obtained from Table 5 of the *Policy and Standards for Entrances to State Highways* is the distance it would take a vehicle to stop on wet pavement at the indicated speed. For example, at 40 mph the minimum value is 275' and the desirable value is 325'. If these values are not met, it is recommended in the Standards that "turn restrictions and/or acceleration and/or deceleration lanes to mitigate non-conforming sight distances" be considered.
3. Warning Sign Recommendations: Guidelines for the installation of intersection warning signs provided in the *New York State Official Compilation of Codes, Rules, and Regulations* (Title 17, Transportation) are:
 - At 40-mph: <300 feet of sight distance is critical, an intersection warning sign is warranted.
 - 300-800 feet of sight distance is less than desirable but not critical, an intersection warning sign is not typically needed.
 - >800 feet of sight distance is more than adequate.
 - At 30-mph: <200 feet of sight distance is critical, an intersection warning sign is warranted.
 - 200-600 feet of sight distance is less than desirable but not critical, an intersection warning sign is not typically needed.
 - >600 feet of sight distance is more than adequate.

The comparison of available sight distance to the criteria is shown in the following table:

EVALUATION OF SIGHT DISTANCE

Intersection	Speed (mph)	D _s	Desirable Stopping Sight Distance ¹	Critical Warning Sign Sight Distance ²	D _L	Desirable Sight Distance ¹	D _R	Desirable Sight Distance ¹	D _{LT}	Desirable Sight Distance ¹
CR 49A/Maintenance Facility Drive (with clearing of vegetation)	40	420'	325'	300'	350' 425'	530'	360' 435'	440'	500'	370'
Golf Cart Crossing (hole 8 to 9) / Gunnison Road	30	500'+	200'	200'	325'	360'	500+	260'	NA	
Golf Cart Crossing (hole 1 to 2) / Gunnison Road	30	500'+	200'	200'	325'	360'	500+	260'	NA	

D_L = Sight Distance Left from Driveway

D_R = Sight Distance Right from Driveway

D_{LT} = Sight Distance for Left Turn into Driveway

D_s = Stopping Sight Distance for Vehicle on Main Road Approaching Left-Turning Vehicle

NA = Not applicable, there would be no left turns into the Golf Cart Paths by vehicles traveling on Gunnison Road

Source: 1. NYSDOT, *Policy and Standards for Entrances to State Highways*
 2. New York State *Official Compilation of Codes, Rules and Regulations*

Based on the above criteria, none of the available sight distances were found to be critical. The field visit indicated that the available sight distance looking to the left and right at the maintenance facility could be maximized (increased by ±75 feet) with clearing of roadside vegetation on the west-side of CR49A. Although the sight distance measurements at the golf cart crossings are not critical regarding sight distance, it is recommended that warning signs be placed on Gunnison Road on all approaches to the golf cart crossings due to the unusual and unexpected crossing of golf carts on the local roadway.

Comment 9: Discussion of ATV or snowmobile use needs to include provisions to prevent trespass by unauthorized individuals.

Response: It is unclear where trespassing ATV or snowmobiles may originate, considering most of the undeveloped lands around the project site where such vehicles may originate are State lands where use of vehicles is prohibited. Regardless, the Resort will employ its own internal security force that will deal with all types of trespassers including vehicular trespassers.

Comment 10: Although traffic counts are not required at existing local roads, the intersections need to be characterized generically. Construction traffic has been discussed in terms of volume for cut and fill. Additional information on construction traffic including routing has not been discussed. The lower trip assignment to local roads does not abrogate the need to discuss local intersections with basic descriptions, geometric deficiencies, and sight distances.

Response: The traffic study included a detailed analysis at the seven study area intersections identified in the Scoping document. This analysis includes the assessment and characterization of several local roads including Main Street, Bonnieview Avenue, Academy Street, and Friendship Road. The sight distance analysis included the proposed unsignalized site access intersections for Highmount Estates, Wildacres, and the Route 28/Friendship Road intersection access to Big Indian Plateau. Field evaluations were also completed of the intersections with CR 49 south of the site. These intersections are with very minor roadways many of which are dirt. There will be very little traffic using these roads generated by the project.

It is expected that construction traffic will utilize the Route 28 corridor when travelling to and from the project site. The volume of construction traffic is expected to result in less vehicle trips than the full buildout vehicle trips.

Comment 11: The traffic study does not discuss other recent studies by the New York State Department of Transportation or other agencies. It does include limited data from the 1999 traffic volume report.

Response: The project team consulted with NYSDOT regarding any capital projects the Department was planning along the Route 28 corridor and were not notified of any projects. It was reconfirmed with NYSDOT Region 8 on June 3, 2002 that no capital improvement projects are occurring or have recently occurred on Route 28.

In addition to obtaining some traffic volume data in the NYSDOT *Traffic Volume Report*, additional automatic traffic recorder (ATR) data counts were obtained from NYSDOT for segments along Route 28. The ATR data included counts from 1988 to 2000.

Comment 12: Has the NYSDOT ever been consulted regarding seasonal adjustments? Obtaining traffic counts for NYSDOT does not qualify as consultation. The Scope for attachment 5, Item 6, specifies using NYSDOT projected growth rates.

Response: Yes, NYSDOT has been consulted. NYSDOT was an involved agency in the scoping process for this project, including determining the intersections to be analyzed and the seasons analyzed in the traffic impact study. Due to the extreme seasonal patterns in the project area, traffic counts were conducted during two peak seasons in the project area, winter and fall. Because the traffic analysis was specific to a season, additional seasonal adjustment factors were not necessary. In addition, an analysis was conducted to verify that a summer analysis was not critical in this area.

The analysis presented in the traffic impact study shows the two worst case background volume conditions at the study area intersections, Martin Luther King holiday weekend and the Belleayre Mountain Fall Festival weekend. Regarding growth rates, the two percent background growth rate applied to the existing traffic volumes was based on historical methods used by NYSDOT. An additional one percent was added to the background growth rate to account for additional traffic volume increases expected with

the continuous growth of the Belleayre Mountain Ski Center. In a letter dated March 6, 2002 NYSDOT Region 8 agreed with the methodology and growth rates used in the analysis.

Comment 13: The inventory of pedestrian activity was limited to those locations where intersection counts occurred. There should be discussion of activity at local intersections and internal locations. At a minimum, pedestrian activity should be characterized. Figures should be added to show key pedestrian routes, and text should indicate if these have lights.

Response: Refer to the response to Comment 2.

Comment 14: The discussion of off street parking should be summarized with a table showing land use, number of employees, parking by type (staff, guests, shuttle bus, etc.), pedestrian connections and shuttle bus access. There is no discussion of special event parking.

Response: Regarding the employee parking, a 170-vehicle employee parking lot is proposed on Lasher Road on the south side of Route 28 east of the Big Indian Plateau. Employees using this lot would be shuttled to Wildacres. There is a second employee parking lot with 115 spaces on Big Indian Plateau at the Golf Maintenance facility. It is expected that traffic volume peaks at the employee parking lot would occur before and after shift changes, which are likely to occur during off peaks (peaks different than the peak periods analyzed in the traffic impact study). The guest shuttle busses will be diverted to pick up and drop off employees at the employee lots during these off-peak periods. Diversion to the Lasher Road site would add about five – eight minutes to the trip and diversion to the Golf Maintenance Facility would add two – four minutes. The proposed shuttle bus system is described in the response to comment 16. Pedestrian traffic and special event parking is discussed in response to comments 2 and 4.

Comment 15: The scope requires projected analysis for first year open and one year after full utilization. The traffic report indicates the project will open in 2006 but not be completed until 2008. The scope infers the analysis should then be for 2006 and 2009 (one year of full utilization). The traffic study only shows 2008. If the mitigation is to occur in 2008 this means up to two years of increased traffic without mitigation. Timing of each mitigation measure should be clarified. (The reviewer suggests that intersections at level of service C or better for all movements in the build condition without mitigation would not benefit much from further analysis of 2006 and 2009).

Response: The project scope indicates that the traffic analysis should be completed for the year of opening and one year of full utilization. The traffic analysis presented in the report assumes that the development will be fully occupied by 2008. This detailed analysis presents worst-case conditions regarding the traffic volumes. It is assumed that the traffic related mitigation would be in place when the facility opens and therefore, a separate assessment of the 2006 year of opening conditions was not necessary. Item 6 of Attachment 5, Traffic in the project scope more specifically states that *The Project-*

related impacts will be determined by conducting a comparison of projected future traffic conditions with existing conditions as determined in paragraphs 4 and 5 under two scenarios: one with the Project and one without the Project. These projections will be performed for the full build out of the proposed project, assuming it is in full operation. Background traffic will be projected for the year of full build out using NYSDOT projected growth rates up to the design year.

Comment 16: A qualitative assessment of internal and local vehicular and pedestrian conflicts should be included in the document. This should also include a map indicating shuttle bus routing, parking lots, and major pedestrian ways between different plan elements.

Response: An analysis of the shuttle bus service was conducted to determine the characteristics of the system. Two main services are proposed along with separate internal loop services at Big Indian Plateau/Belleayre Highlands and Wildacres. These routes would be modified depending on the season to accommodate skier trips or golfing trips. Buses operating on the routes would have a capacity to carry up to 30 persons although it was assumed for the analysis that the average peak load would be 20. Average speeds on the internal road system and County Route 49A were assumed to be 20 to 25 mph and on Route 28 speeds were assumed to be 40 mph. These speeds represent averages accounting for acceleration and deceleration, peak speeds would be higher as the buses moved at the prevailing speed of other traffic on the road. The routes are described below and shown for the winter ski season in the attached Figures #8 and #9.

- **Ski Area Express :** This route would operate between the hotel at Big Indian, the Lower Mountain Lodge at the Ski Center and the hotel in Wildacres. The buses would operate on 10 minute headways with five buses operating on this route during peak periods.
- **Ski Area Local:** This route would operate between the club membership units at Big Indian, the Lower Mountain Lodge at the Ski Center, the detached lodging units at Wildacres, the Lower Mountain Lodge at the Ski Center , and then back to the club membership units at Big Indian. The bus would travel along all of the internal roads where it could turn around without using driveways or backing up. The service would be demand activated which means that it would travel down side residential roads when a call was made for a pick-up or when someone on the bus needed to be dropped off on one of these roads. Four buses would be used for this service providing a 20 minute headway.
- **Internal Resort Shuttle:** Two buses would be used for circulation within the Big Indian Plateau area and the Wildacres Resort area. These would run on demand within the Resort. The bus operating in Wildacres would also serve the Wilderness Activity Center.

Comment 17: Police accident reports should be reviewed also. There have been historical problems with State records being incomplete.

Response: The Final Scoping document does not include an accident analysis. This task was added based on a comment received on the DEIS document. Accidents from both NYSDOT and the NYS Department of Motor Vehicles were obtained and reviewed in the analysis and these are presented in Chapter IV of the traffic study provided as Appendix 25 of the DEIS.

Comment 18: Given the deviation of accident rates for zero-to-two accident locations, this data should be deleted from the discussion, as it is not sufficiently precise. The accident rate data was not required as part of the accident history data.

Response: As noted above, the accident analysis computing accident rates and comparing the results to the statewide averages was conducted based on comments received by others. Removing this information would result in failure to respond to the comments. With or without the accident rate comparison, the accident analysis clearly indicates the project corridor does not contain any locations with excessive or prevalent accident types. The analysis also notes where proposed geometric improvements will aid in reducing any potential accidents.

Comment 19: Item 2 requires evaluation of Main Street and Bonnieview Avenue. This evaluation may be more general than is required for intersection to be studied for level of service.

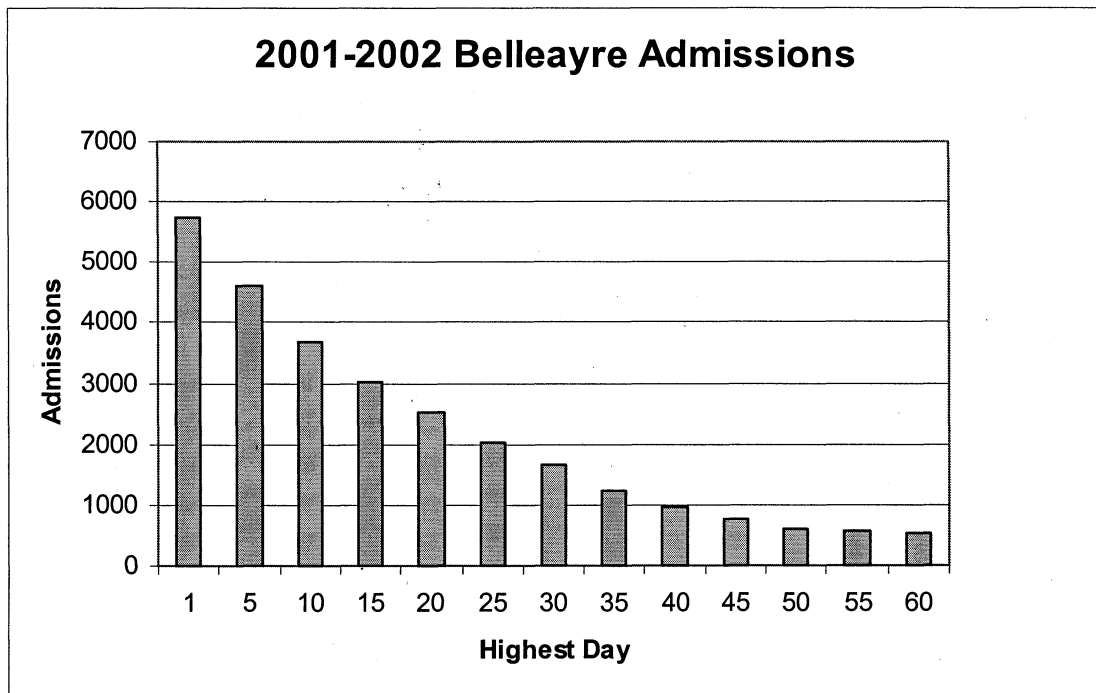
Response: A detailed traffic analysis was conducted at the Main Street/Bonnieview Avenue intersection as outlined in the Scoping Document. The level of service analysis indicates that this intersection will remain at the same acceptable level of service with the development of the project. This assessment is an important documentation for the residents located in the vicinity of this local road intersection that were concerned with potential traffic increases with the project.

Comment 20: Item 3 specifies that existing data from the NYSDOT and County will be obtained. There is no indication that turning movement data or detailed automatic traffic count data was obtained for the NYSDOT or any County data was obtained.

Response: As specified in Chapter II, Section C, Existing Conditions, of the Traffic Impact Study automatic machine count data were obtained by NYSDOT and used in the verification of the seasonal variations experienced in the project area. The automatic machine count data obtained from NYSDOT included information along Route 28 from 1988 to 2000. Due to the non-commuter peak periods and the need for specific data collection during holiday weekends in the project area, applicable turning movement count data was not available from NYSDOT or the County at the studied intersections. However, some additional traffic information was obtained by the Onteora Central School District regarding school bus traffic in the project area. In addition, traffic count data have been obtained from the Delaware County Department of Public Works for CR 38.

Comment 21: Item 3 also specifies that attendance records and trends from the Belleayre Mountain Ski Center be obtained. Recent data should be discussed in light of historic attendance. As this year has had little natural snow there is reason to validate the data. Figure 3.5 should be referenced as to the source and year of data.

Response: Attendance records and trends from the Belleayre Mountain Ski Center were obtained and compared for the 2000/2001 and 2001/2002 ski seasons. Additional peak holiday admissions were obtained for the years 1999 through 2002. Belleayre Mountain has extensive snow making capabilities and can therefore operate effectively during years with little natural snow. This is confirmed since the peak day on the Martin Luther King holiday weekend increased by 6% between 2001 and 2002. Figure 3.5 was based on data collected at Mount Snow in 1996. A distribution illustrating similar peaking patterns by day at Belleayre is shown below.



Comment 22: Item 4 sight distance discussion must show the recommended intersection sight distance and stopping sight distance based on the existing speed limits. The failure to meet even stopping sight distances at site accesses need to be discussed in relation to NYS DOT policy and standards for entrances to State Highways and County standards. The study should also look at sight distances of vehicles turning left from the main highway and vehicles approaching from behind vehicles stopped in the main highway making left turns. In the later case, stopping sight distances should be evaluated.

Response: Automatic traffic recorder machines were installed on CR 49A during the period from June 22, 2002 to June 27, 2002 to obtain speed data for use in the sight distance assessment. The traffic counter indicated that the 85th percentile speed on CR 49A in the vicinity of the proposed Wildacres is approximately 40-mph. The sight

distance analysis along CR 49A was updated using a 40-mph speed (with the exception of the area near the Highmount Estates) and is summarized below. Additional field measurements were conducted to determine stopping sight distance and left-turn sight distance at the proposed site access intersections. The sight distances at the Middle Driveway and Southern Driveway reflect the re-alignment of County Route 49A at these locations, see Figure #10. The criteria used for the evaluation were described in the response to comment #8. The attached figures illustrate the sight triangles on the plans for the Resort. The results of the analysis are also summarized below.

EVALUATION OF SIGHT DISTANCE

Intersection	Speed (mph)	D _s	Desirable Stopping Sight Distance ¹	Critical Warning sign Sight Distance ²	D _L	Desirable Sight Distance ¹	D _R	Desirable Sight Distance ¹	D _{LT}	Desirable Sight Distance ¹
Wildacres Resort - CR 49A / Gunnison Road	40	1000'+	325'	300'	1000'+	530'	800'	440'	800'	370'
Wildacres Resort - CR 49A / Middle Driveway (with re-alignment)	40	600'	325'	300'	650'	530'	520'	440'	500'+	370'
Wildacres Resort - CR 49A / Southern Driveway (with re-alignment)	40	580'	325'	300'	350'	530'	495'	440'	350'	370'
Highmount Estates- CR49A / Access Road	30	265'	200'	200'	250'	360'	250'	260'	325'	230'

D_L = Sight Distance Left from Driveway

D_R = Sight Distance Right from Driveway

D_{LT} = Sight Distance for Left Turn into Driveway

D_S = Stopping Sight Distance for Vehicle on Main Road Approaching Left-Turning Vehicle

- Source: 1. NYSDOT, *Policy and Standards for Entrances to State Highways*
 2. New York State *Official Compilation of Codes, Rules and Regulations*

Based on the above sight distance summary all of movements at all of the locations meet the stopping sight distance criteria. Most locations also meet the desirable criteria for all three movements evaluated – left and right turns out of the side street and left turns into the side street. Looking left at the southern driveway on CR 49A does not meet the desirable condition but it exceeds the critical distance. To mitigate this condition it is recommended that intersection warning signs be placed on the southbound approach to the southern driveway. Also, since the roadway will be re-aligned, the design and construction should maximize sight distance.

The sight distance at Highmount Estates was conducted based on a 30-mph speed. This speed is recommended based on the vertical and horizontal curvature of CR 49A in the vicinity of Highmount Estates and the residential nature of the proposed land use. To further maximize the sight distance at the Highmount Estates access, it is recommended

that the side slopes along CR 49A be cleared and graded. Since the available sight distance is close to the critical range, it is recommended that intersection warning signs be placed along CR 49A at both approaches to this intersection.

Additional sight distance evaluations were also completed along Route 28 as shown below:

Intersection Movement	Speed	D _S	NYSDOT Standard	D _{LT}	NYSDOT Standard
Route 28 WB left-turn at CR 49A	55	630	550	790	610
Route 28 WB left-turn at Friendship Road	55	1000+	550	1000+	610

The stopping sight distance measurement and left turn measurements on Route 28 all meet or exceed the minimum distances indicating that no mitigation is required.

Comment 23: Build conditions should show the delay and level of service with and without mitigation.

Response: Table 4.3 provides a summary of the levels of service with and without mitigation for the build conditions. The only intersection that shows an improved level of service is the Route 28/CR 49A intersection with the construction of a westbound left-turn lane on Route 28, a northbound right-turn lane on CR 49A and the installation of a traffic signal, see Figure #11. The remaining intersection improvements include the addition of turn lanes at unsignalized intersections which does not improve the overall intersection level of service. Therefore it was not necessary to include a separate column in the summary table for levels of service with mitigation. A text write up accompanies the table to further describe each study area intersection operation in addition, copies of the level of service analysis are included in Appendix C of the Traffic Impact Study for reference.

Comment 24: Since standards for level of service are based on lane groups and not approaches, summary tables should show lane groups when different from approach values.

Response: Since the study area intersections typically consist of one lane approaches, the level of service table indicates the appropriate levels of service for each lane group, as it is the same as the approach level of service. The level of service representing the proposed traffic signal at the Route 28/CR 49A intersection is the only location where separate lane group level of services exist for the Route 28 westbound and CR 49A northbound approach. The table below summarized the level of service results by lane group for the Route 28/CR 49A intersection. For additional information, the worksheet found in Appendix C of the Traffic Impact Study should be referenced.

LEVEL OF SERVICE EVALUATION CR 49/SR 28 INTERSECTION

Movement		Saturday AM Peak				Saturday PM Peak			
		2000 Existing	2008 Background	2008 Build No Imp.	Build w/ Imp.	2000 Existing	2008 Background	2008 Build No Imp.	Build w/ Imp.
EB	LT	A (7.4)	A (7.5)	A (7.5)		A (7.6)	A (7.7)	A (7.6)	
WB	LTR	A (8.2)	A (8.6)	A (9.3)		A (7.6)	A (7.7)	A (7.9)	
NB	LTR	B (13.0)	C (16.3)	C (21.0)		F (127.6)	F (>200)	F (>200)	
SB	LTR	C (21.6)	D (30.5)	F (55.7)		C (19.2)	D (31.7)	F (65.9)	
EB	LTR				B (15.5)				C (23.5)
WB	L				B (14.3)				B (15.6)
	TR				A (6.5)				B (12.1)
NB	LT				C (20.6)				C (23.9)
	R				B (11.3)				B (12.5)
SB	LTR				C (20.3)				B (13.6)
Overall					B (13.5)				B (16.7)

X (X.X) = level of service (average delay per vehicle in seconds)

NB= northbound, SB= southbound, EB= eastbound, WB= westbound

Build with improvements includes the installation of a traffic signal system, a westbound left-turn lane and northbound right-turn lane.

Comment 25: Item 6- Have local planning boards been consulted about other projects that need to be included in the no build traffic?

Response: Local planning boards were consulted and there were no additional approved projects identified. The project team was not informed of any projects that need to be included in the no build traffic conditions.

Comment 26: Item 7 requires a check of unsignalized intersections to see if signal installation is warranted. This has not been done even for the intersection with a proposed signal mitigation. There should be a discussion of the warrants for left-turn lanes. Left turn lanes should also be considered where main highway through traffic has nonstandard sight distance to left turn queues in the same lane.

Response: The intersection of Route 28/CR 49A is the only location where a traffic signal is recommended as a mitigation measure. As noted in the text on page 41 of the Traffic Impact Study, the NYSDOT traffic signal warrant criteria was reviewed and the peak hour signal warrant criteria would be met for the winter traffic conditions at this intersection. Traffic signal warrant criteria was also applied to the intersections of Route 28/Route 214 and Route 28/Route 42 which were found not to warrant a signal. Similarly, left-turn lane criteria found on page 743 in *A Policy on Geometric Design of Highways and Streets* (1994, American Association of State Highway and Transportation Officials) was reviewed at the Route 28/Route 49A, Route 28/Route 42, Route 28/Route 214, and Route 28/Friendship Road intersections to determine the need for left-turn lanes at the study area intersections.

Comment 27: Item 8 requires that any local intersections where volume may increase by 10% or more be discussed. This leaves the document to either generically discuss the

local intersections or count them and show volume increase are less than 10 percent. Trip generation assignment of even two percent could result in a volume increase of 10 percent and thus such is insufficient cause to eliminate discussion. Traffic distribution from the project is shown as distribution percentages but also needs to be shown as overall site trips in the network.

Response: Based on comments received from Town of Middletown Planning Board, additional study of numerous intersections to the south and west of the proposed project site were conducted. These intersections included the following:

- Route 28/Fleishmanns Height Road
- Route 28/Dry Brook Road
- Todd Mountain Road/Dry Brook Road
- Dry Brook Road/Mill Brook Road

A review of the study area traffic volumes indicated a maximum of two to three percent of the site traffic would be generated towards these roadways indicating that they will not be significantly affected by project traffic. The maximum number of generated trips expected to travel towards each of these intersections is summarized in the table below. The trip generation estimates included in the table are based on the “design” trip generation values. The “typical” trips expected to be generated by the development are approximately forty percent of the shown values. (A more detailed explanation of the trip generation values is found in Chapter III, Section B of the Traffic Impact Study.)

**Peak Hour Vehicle Trip Generation
At Selected Locations**

Location	Proposed Development	Saturday AM	Saturday PM	Friday PM	Sunday PM
West along Route 28					
	Wildacres	6	4	4	8
	Big Indian	4	4	3	5
	Highmount	3	3	4	4
	Total	13	11	11	17
South along CR 49A					
	Wildacres	3	4	5	5
	Big Indian	3	2	4	4
	Highmount	7	7	10	7
	Total	13	13	19	16

The above table indicates that the maximum number of trips generated west of the project area along Route 28 is approximately 17 trips during the Sunday PM peak hour. Based on the existing traffic counts conducted for the Sunday PM peak hour (Figure 2.5 of the Traffic Impact Study), approximately 520 vehicles travel on Route 28 during this peak period, indicating a three percent increase in traffic. An increase in traffic volumes this small on Route 28 is not expected to affect the capacity and operation of this roadway. Further, it would be expected that a small percentage of these vehicles may travel from Route 28 onto Fleishmanns Height Road or Dry Brook Road indicating that these roadways will also experience little or no impact from the proposed project.

The maximum number of trips generated south of the project area along CR 49A towards Todd Mountain Road, Dry Brook Road, and Mill Brook Road is approximately 19 vehicles during the Friday PM peak hour. The existing traffic counts conducted for the Friday PM peak hour (Figure 2.4 of the Traffic Impact Study) indicates that the current traffic volume along CR 49A is extremely low. This low volume indicates that currently very few vehicles are using these roads and it is likely that few vehicles from the proposed Resort would travel these back routes as indicated in the Traffic Impact Study. As noted in the table, more than half of the nineteen trips shown are expected to be generated from Highmount Estates (proposed on CR 49A south of Belleayre Mountain), a small single-family home development, whose traffic would be more “local” traffic and not follow the visitor travel patterns of the majority of the Wildacres and Big Indian traffic. Further, it is not expected that all of the traffic travelling to and from the south of CR 49 would travel on each of the roadways of concern, again minimizing the impact on these roadways. Regardless, the trip generation indicates a low generation of trips during the peak travel times, a magnitude of volume that would not effect the capacity of Todd Mountain Road, Dry Brook Road, and Mill Brook Road.

Traffic count information has been obtained from the Delaware County Department of Public Works on the traffic volumes on County Route 28 and from the New York State Department of Transportation on Route 28 and Route 30. These counts are summarized below:

EXISTING TRAFFIC VOLUMES

CR 38 – 2,174 Weekday, 2,757 Weekend
Route 28: East of CR 38 – 3,250; West of CR 38 – 4,950
Route 30: East of CR 38 – 3,250; West of CR 38 – 1,800

The counts demonstrate the use of CR 38 as a connector between Route 28 and Route 30 that was described by the Planning Board and the Delaware County Commissioner of Public Works. Based on the counts, the primary movement is to and from the west on Route 28 to and from the east on Route 30. This travel path allows through traffic to avoid the center of Margaretville. Apparently it is used frequently by through truck traffic.

It was projected in the traffic study that there would not be a significant amount of peak hour traffic going to the west from the development. During the discussion with the Middletown planning board it was agreed that there may be a number of employee trips coming from the west that could impact the locations noted above. These trips would occur during non-peak resort generation hours because shifts will be scheduled in off-peak hours. Since it is difficult to predict where employees will live, exact number of employee trips coming from the west can not be estimated exactly. Some of them will live in Arkville and Fleishmans. It is reasonable to expect a number will live further west

and travel along Route 28 past the County Route 38 intersection. Therefore, there is a potential to add between 50 and 100 daily trips at this location. This would represent no more than a 2 - 6 % increase in traffic on Route 28. Most of these trips would not be using County Route 38 because they will not be connecting with Route 30 toward Roxbury.

Although this level of traffic from the project does not indicate a need for mitigation along Route 28 west of the project, there are long standing concerns regarding the use of County Route 38 as a connector. The project sponsors should support the Town and County's efforts to address these concerns with the New York State Department of Transportation.

Comment 28: Page 20 of the traffic study indicates that "There will be no patron parking located on the Wilderness Activity Center site so, no additional trips were added to the trip generation estimates for this facility." It would be expected that some people would still go to this site because of the activity center. Thus, trips would be generated between the activity center and other parts of the site and there would be some level of shuttle bus traffic associated with it.

Response: The text indicates that no additional trips will be generated due to the addition of the Wilderness Activity Center. Since the Activity Center is considered an amenity to the Resort, the trip generation is already included in the total trip generation rates calculated for the Resort (similar to the meeting rooms and restaurants). Since no parking facilities will be located at the Activity Center site, trips to this facility would be shuttle bus trips. These shuttle bus trips to the Activity Center are expected to be minimal and will take place during peaks other than those studied in the Traffic Impact Study.

Comment 29: Shuttle bus routing and frequency needs to be discussed as part of the trips generated by the site.

Response: Refer to the response to comment 16.

Comment 30: Tables 3.2, 3.3, and 3.4 should contain information as to the season for each trip generation period.

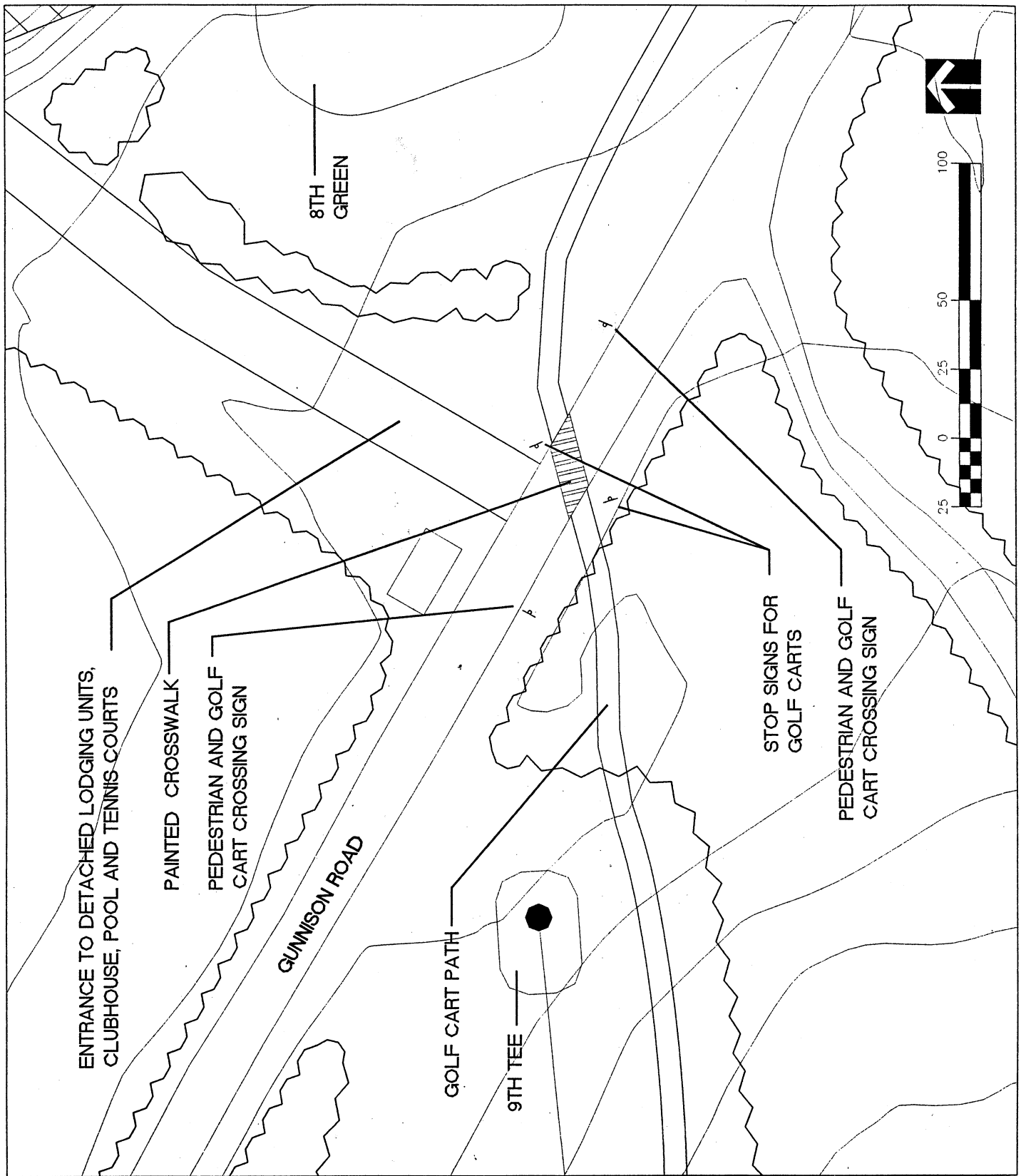
Response: The text in this report section will be modified.

Comment 31: Item 9 requires improvements be shown to offset unacceptable operating conditions. These should be shown in a summary table for level of service with no build, build, and build with mitigation. Where new sight distance conditions do not meet standards, a closer examination of grading and realignment changes to meet acceptable operations versus signing is needed. Sight triangles should also be reviewed for maintenance of vegetative cover.

Response: Table 4.2 of the Traffic Impact Study shows the level of service summary at each study area intersection for the existing, no build and build conditions. The text section following the table further details the operations at each intersection and outlines any recommended improvements. Appendix C of the Traffic Impact Study includes printouts of the capacity analysis worksheets for each analysis condition. Sight distance triangles that can be used to identify areas where vegetative cover should be removed are attached.

Comment 32: An overall evaluation of the County road geometry is needed to review whether the existing speed limit is too high. A map depicting existing warning signs, recommended speed plates, and speed limits should be included to characterize existing conditions.

Response: As noted in Comment # 8, it is recommended that the County install 40 mph speed limit signs on the section of County Route 49A between the Southern Driveway and Route 28. South of this area, 30 mph signs would be appropriate because of the grades and horizontal alignment.



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 Landscape Architecture
 and Engineering, P.C.

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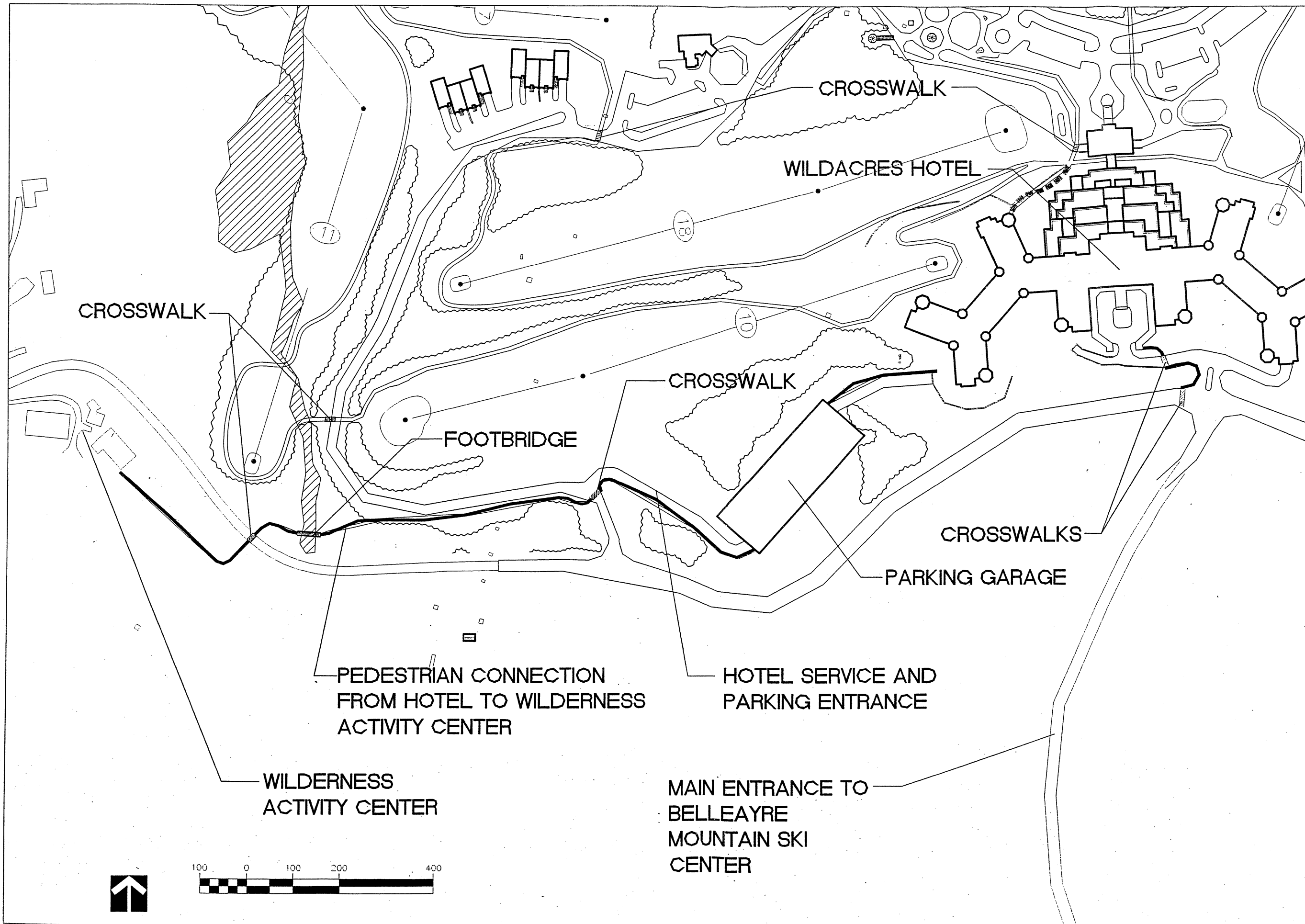
BELLEAYRE RESORT AT CATSKILL PARK
 DRAFT ENVIRONMENTAL IMPACT
 STATEMENT

TYPICAL PEDESTRIAN AND GOLF
 CART CROSSING FOR GUNNISON ROAD

Date: _____

Project: 00052

Figure **1**



the LA group
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and Engineering, P.C.

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BELLEAYRE
RESORT AT
CATSKILL
PARK

DRAFT
ENVIRONMENTAL
IMPACT
STATEMENT

PEDESTRIAN
CONNECTIONS
WILDACRES
HOTEL,
WILDERNESS
ACTIVITY
CENTER AND
BELLEAYRE
MOUNTAIN SKI
CENTER

Project: 00052
Date: _____

Figure 2



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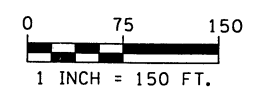



FIGURE 3
SIGHT DISTANCE AT ENTRANCE
WILDACRES RESORT - CR 49A/GUNNISON RD
BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND MIDDLETOWN
ULSTER & DELAWARE COUNTY, NEW YORK

 CREIGHTON MANNING ENGINEERING, LLP <small>4 AUTOMATION LANE, ALBANY, NY 12205</small>		
PROJECT: 99-057	SCALE: AS SHOWN	DATE: AUG. 2003

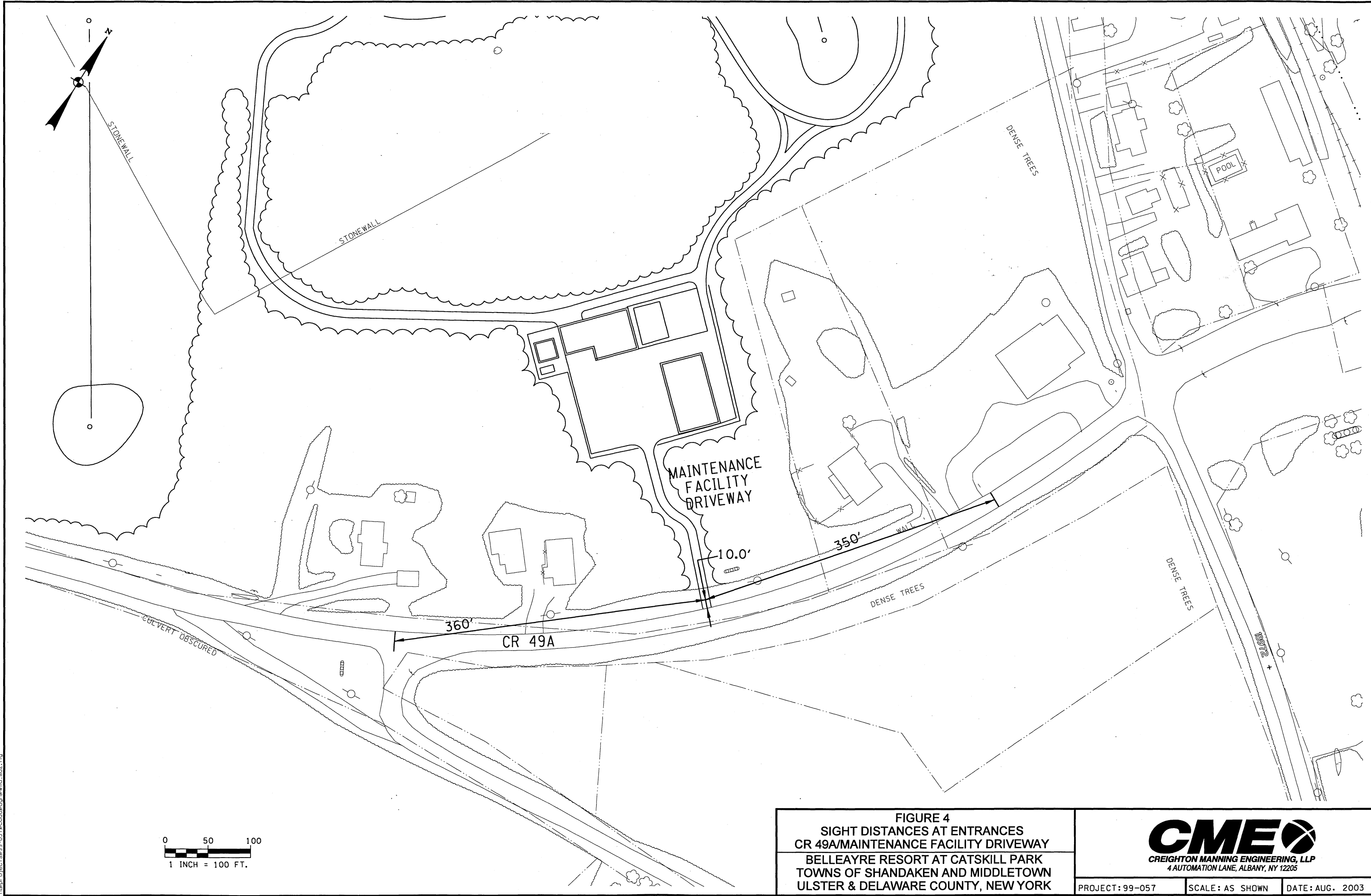


FIGURE 4
SIGHT DISTANCES AT ENTRANCES
CR 49A/MAINTENANCE FACILITY DRIVEWAY
BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND MIDDLETOWN
ULSTER & DELAWARE COUNTY, NEW YORK



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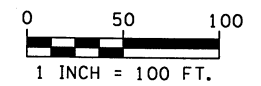
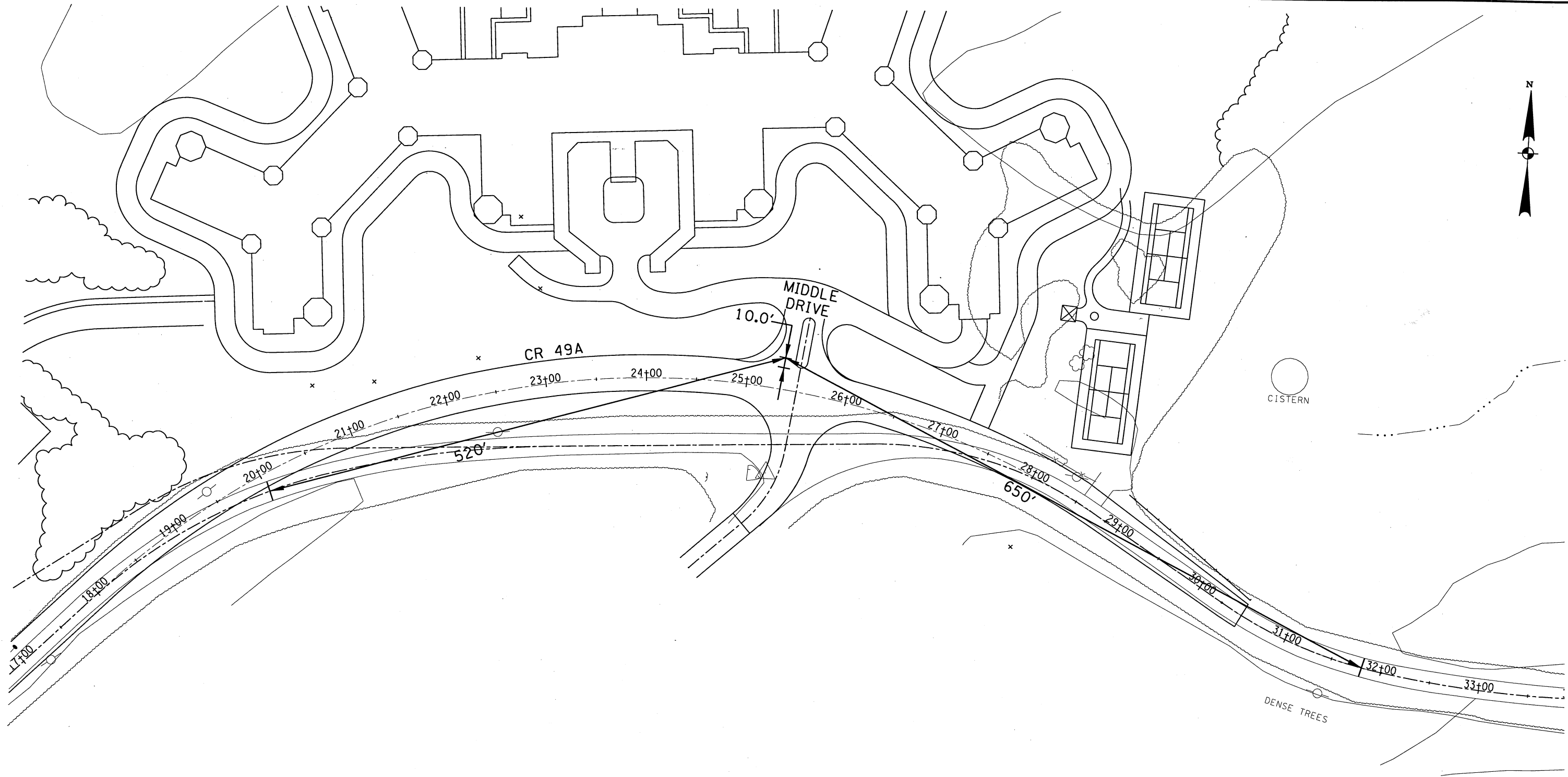


FIGURE 5
SIGHT DISTANCES AT ENTRANCES
WILDACRES RESORT - CR 49A/MIDDLE DRIVE
BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND MIDDLETOWN
ULSTER & DELAWARE COUNTY, NEW YORK



PROJECT: 99-057 SCALE: AS SHOWN DATE: AUG. 2003

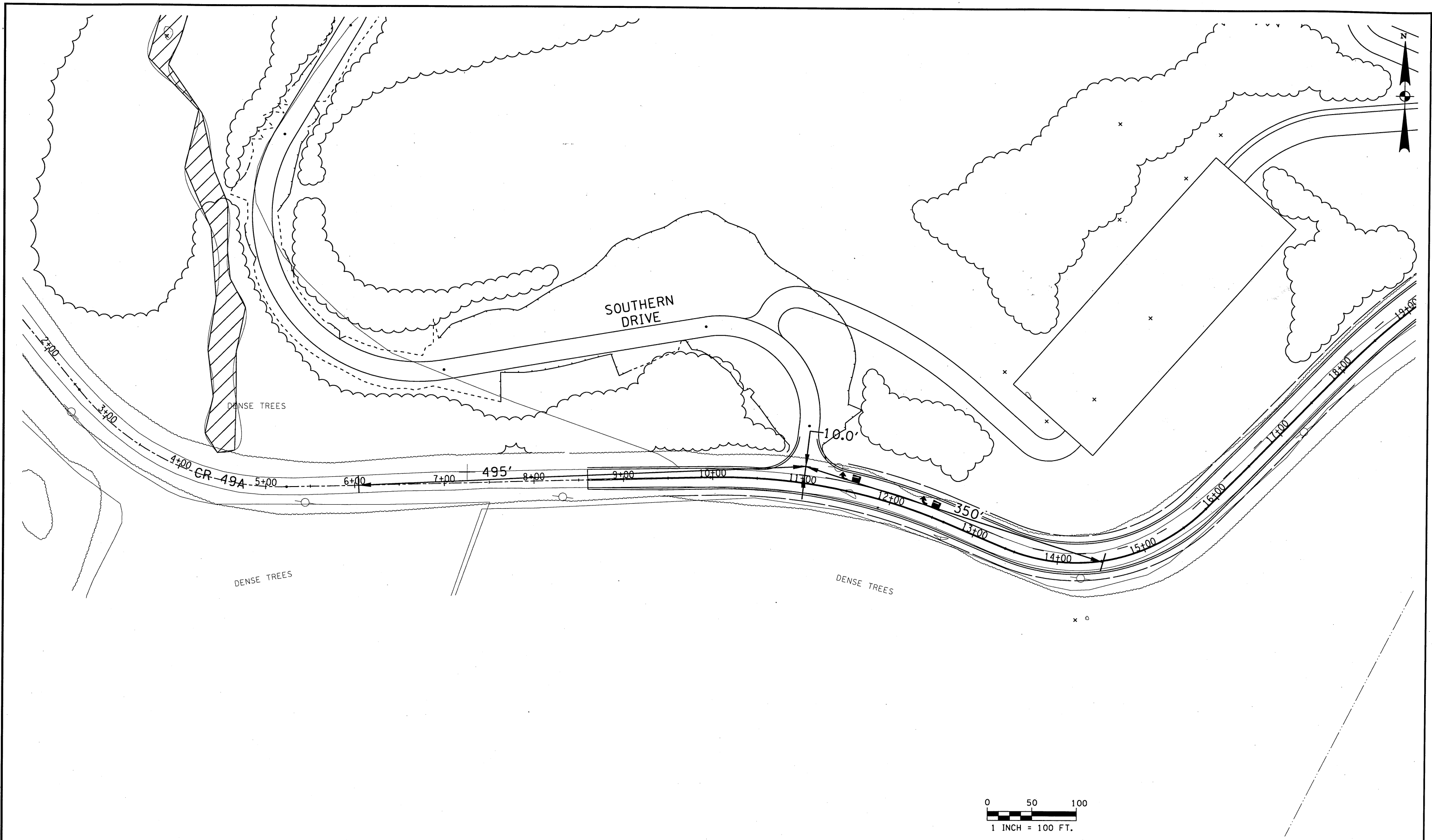

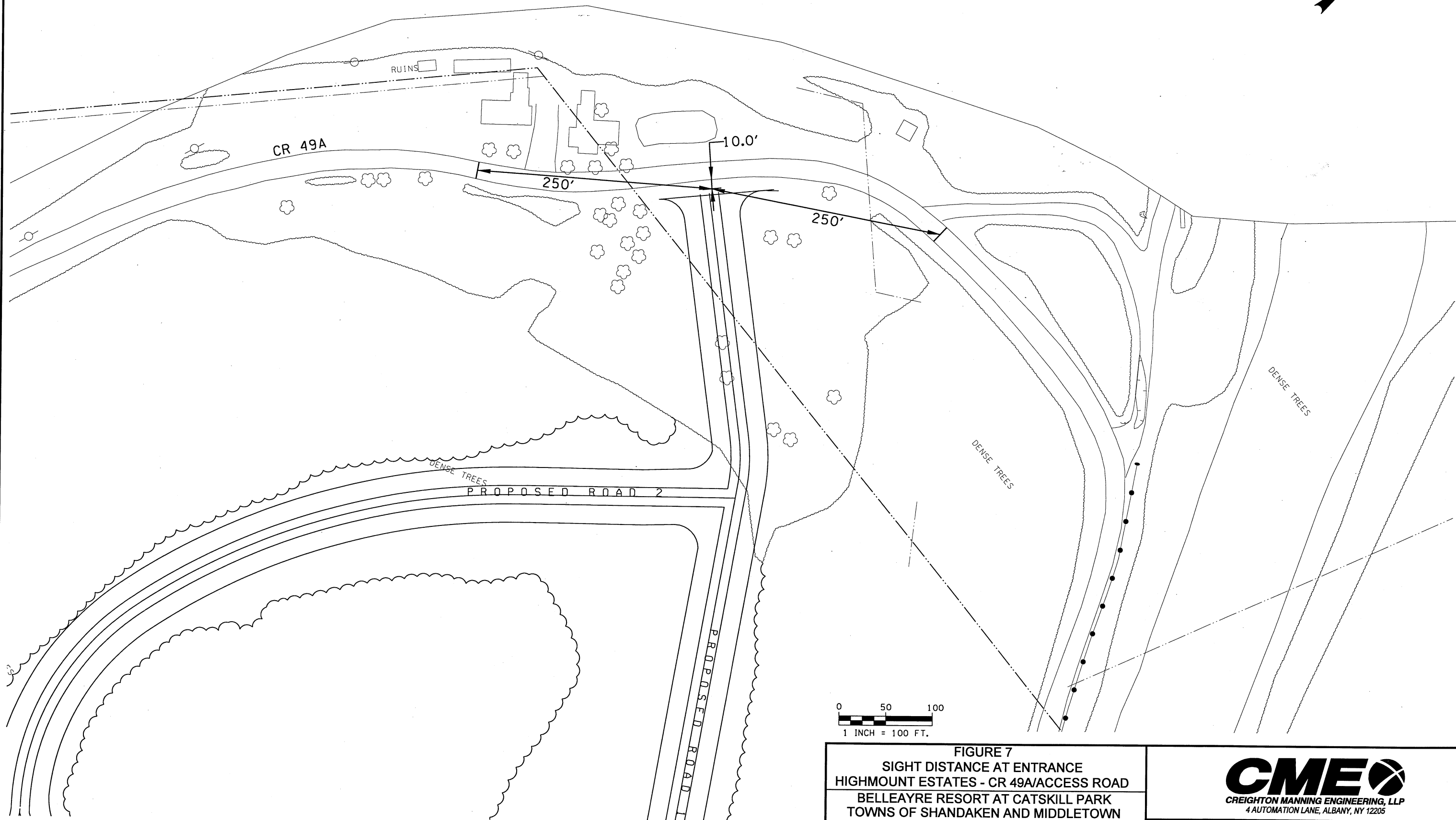
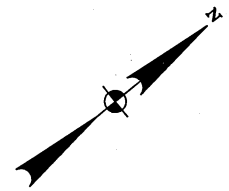


FIGURE 6
 SIGHT DISTANCE AT ENTRANCE
 WILDACRES RESORT - CR 49A/SOUTHERN DRIVE
 BELLEAYRE RESORT AT CATSKILL PARK
 TOWNS OF SHANDAKEN AND MIDDLETOWN
 ULSTER & DELAWARE COUNTY, NEW YORK

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PROJECT: 99-057	SCALE: AS SHOWN	DATE: AUG. 2003

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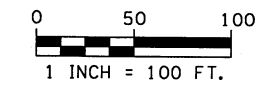


FIGURE 7
SIGHT DISTANCE AT ENTRANCE
HIGHMOUNT ESTATES - CR 49A/ACCESS ROAD
BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND MIDDLETOWN
ULSTER & DELAWARE COUNTY, NEW YORK



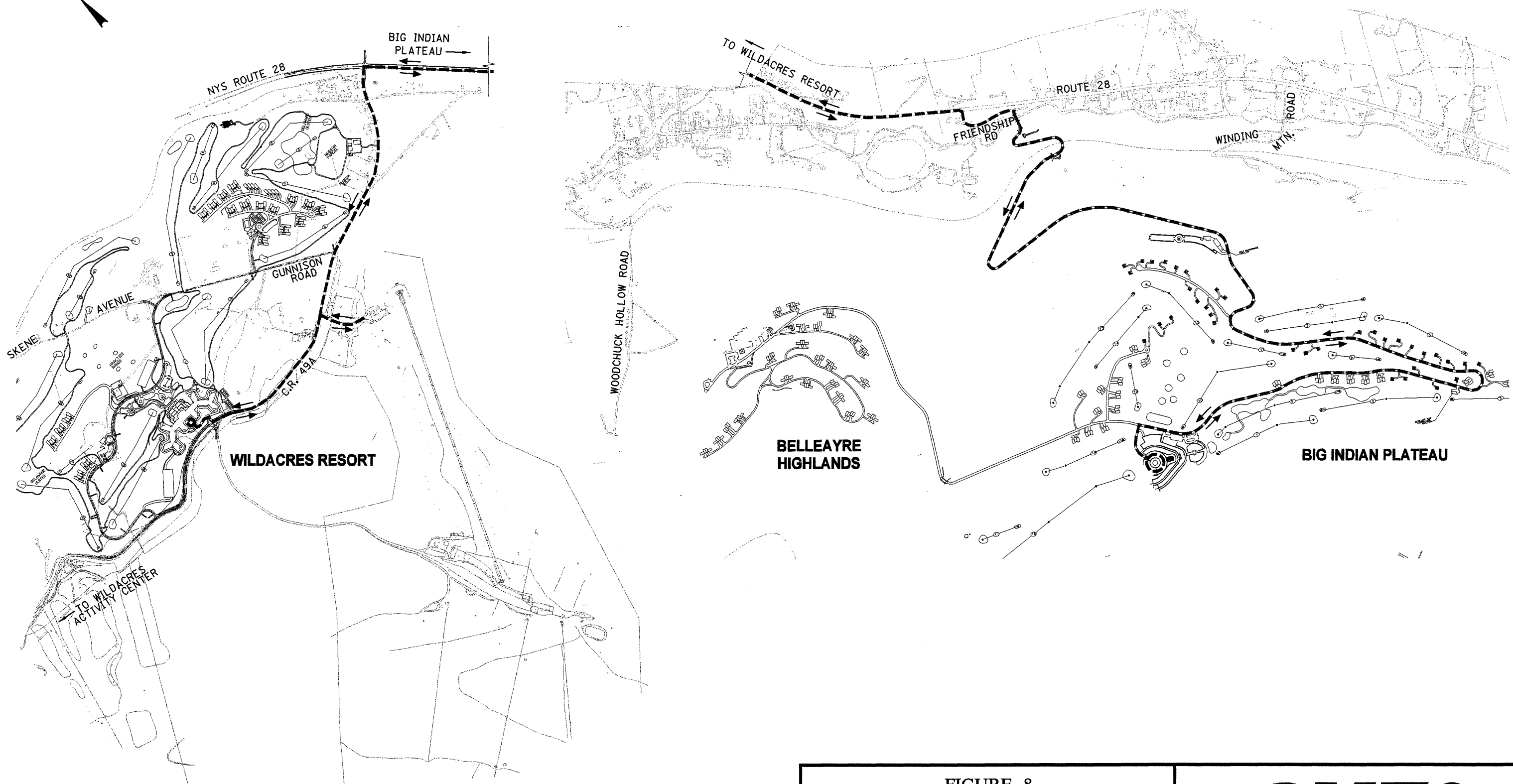
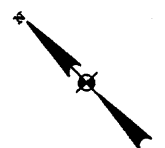



FIGURE 8
SKI AREA EXPRESS BUS ROUTE

BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND MIDDLETOWN
ULSTER & DELAWARE COUNTY, NEWYORK

 CREIGHTON MANNING ENGINEERING, LLP 4 AUTOMATION LANE, ALBANY, NY 12205		
PROJECT: 99-057	SCALE: NONE	DATE: AUGUST 2003

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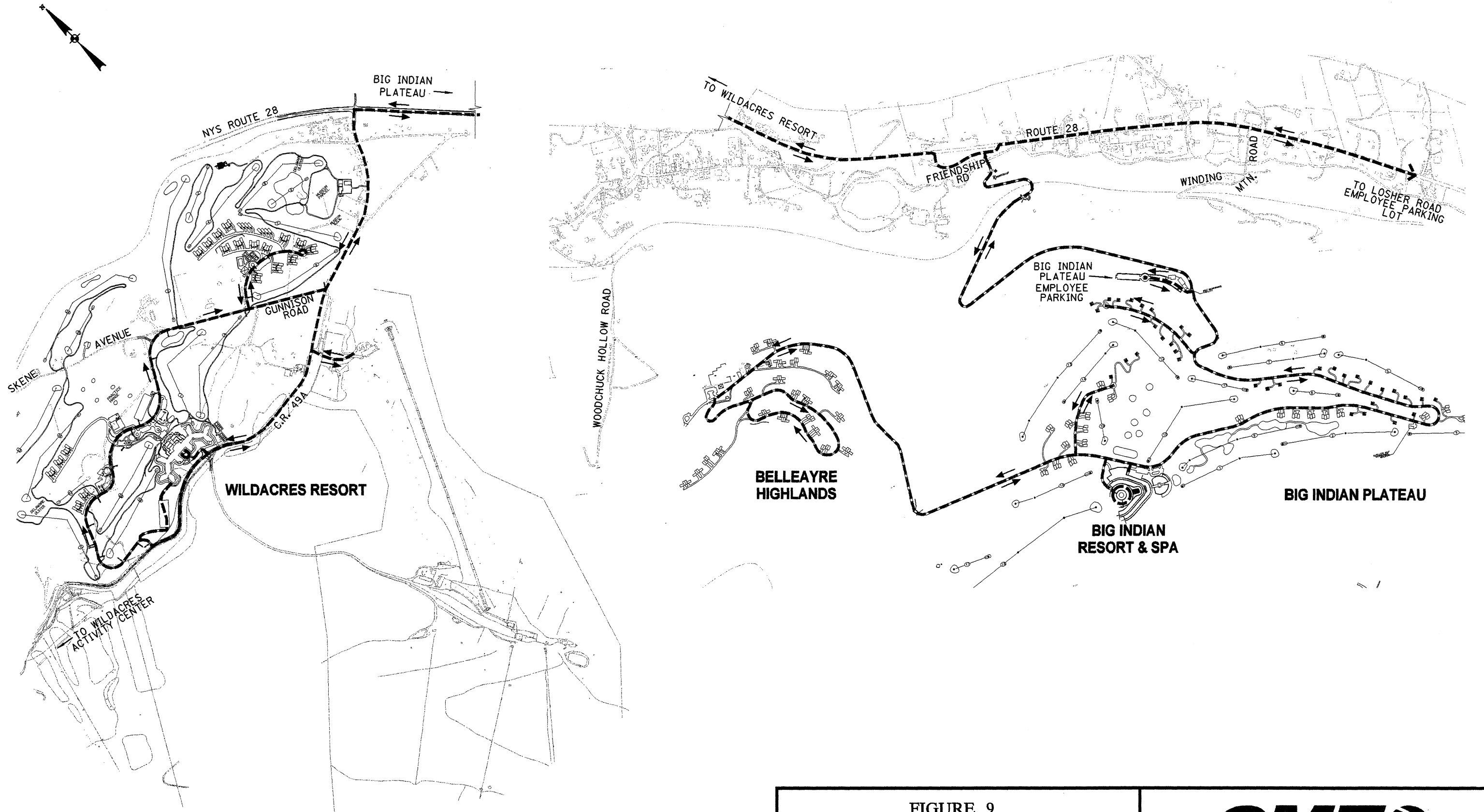
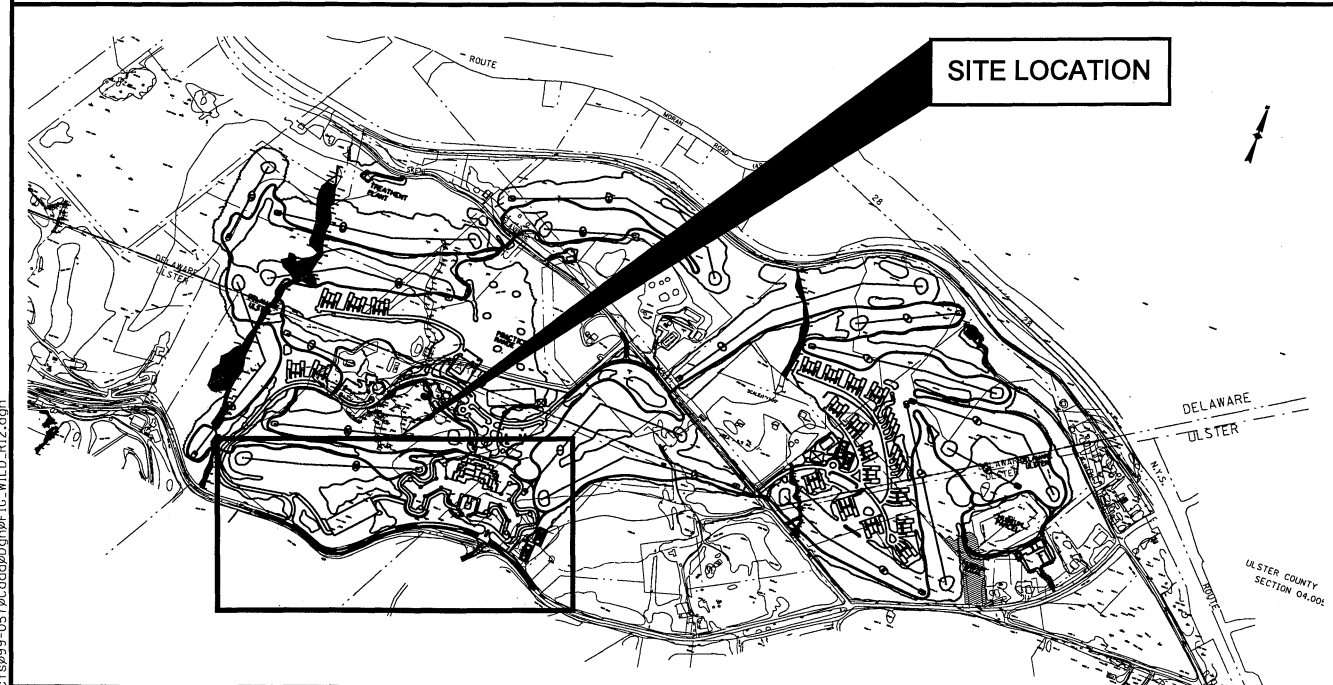
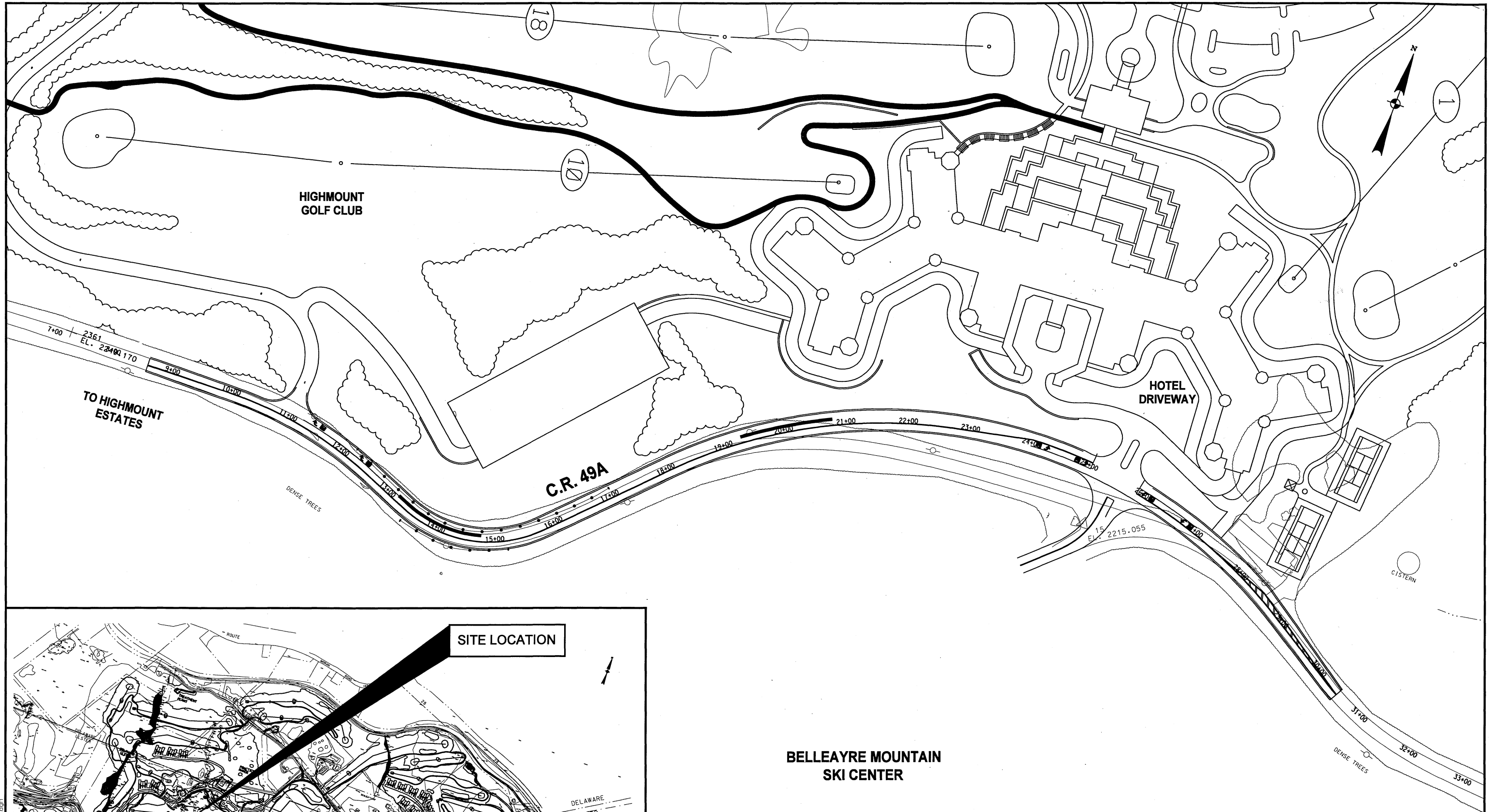


FIGURE 9
SKI AREA LOCAL BUS ROUTE

BELLEAYRE RESORT AT CATSKILL PARK
 TOWNS OF SHANDAKEN AND MIDDLETOWN
 ULSTER & DELAWARE COUNTY, NEWYORK





BELLEAYRE MOUNTAIN
SKI CENTER

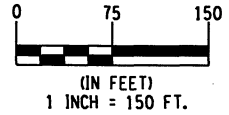


FIGURE 10
PROPOSED ROADWAY IMPROVEMENTS
CR49A AT WILDACRES MAIN DRIVEWAY
BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND MIDDLETOWN
ULSTER & DELAWARE COUNTY, NEW YORK



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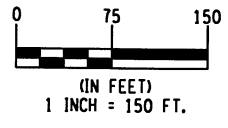
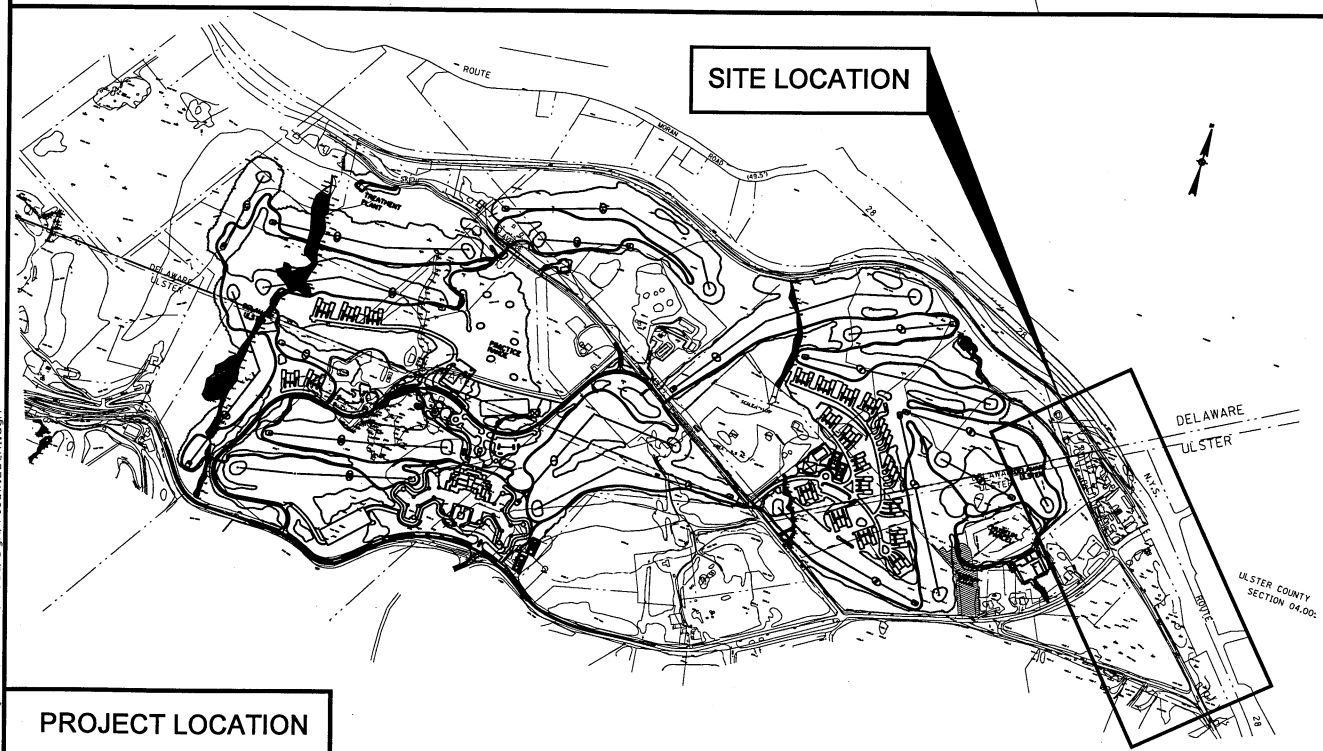
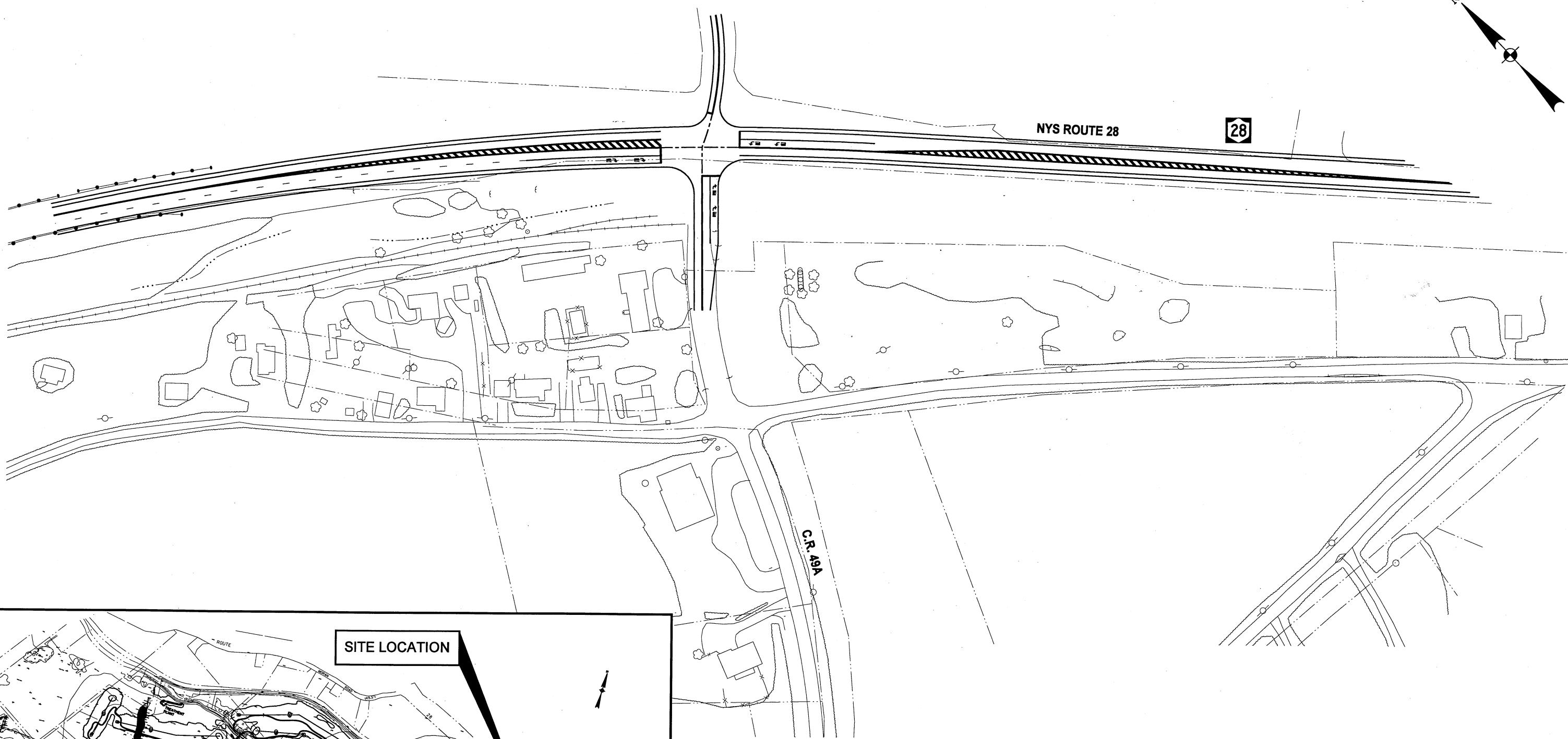
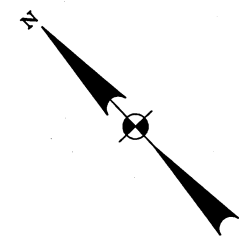


FIGURE 11
PROPOSED IMPROVEMENTS
NYS ROUTE 28/COUNTY ROAD 49A
BELLEAYRE RESORT AT CATSKILL PARK
TOWNS OF SHANDAKEN AND MIDDLETOWN
ULSTER & DELAWARE COUNTY, NEW YORK



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