

3.7 Vehicular Traffic and Roadways

3.7.1 Introduction

The project site is located in the Town of Carmel, Putnam County, New York. The site location and regional transportation network are shown in Figure 3.7-1. A *Traffic Impact Study*, prepared by John Collins Engineer's, P.C., dated February 5, 2009 is included as Appendix H of this document.

This section examines the current and future transportation operations in the vicinity of the Union Place development. The current operations are based on the existing transportation network and are referred to herein as the Existing Conditions. Future transportation operations are examined for the No Build (without the Union Place Project) and Build (with the Union Place Project) Conditions. The Build Condition is further divided to analyze transportation operations with and without potential transportation improvements. The No Build Condition is the future baseline traffic condition. The Build Condition represents the combination of the No Build Condition with the traffic that would result from development and operation of the project.

3.7.2 Existing Traffic Conditions

Regional Road Network

The subject site is in the hamlet of Mahopac, Town of Carmel, Putnam County, New York. The eastern boundary of the site is designated as US Route 6. The western boundary is Baldwin Place Road. The northern boundary is the New York State Gas and Electric utility easement. The project site lies at the Westchester/Putnam County border approximately three and a quarter miles east of the intersection of the Taconic State Parkway and US Route 6 in Shrub Oak and roughly seven and a half miles to the west of the intersection of US Route 6 and NYS Route 52 in Carmel. Access to Interstate 684 is located 5 miles to the east via US Route 202/35. Refer to Figure 3.7-1, Transportation Network, for a depiction of the roadways in the vicinity of the project site.

The Taconic State Parkway and Interstate 684 connect with major east-west highways including Interstate 84 to the north and Interstate 287/87 to the south. They also provide access to Westchester County toward New York City.

Local Road Network

Figure 3.7-1 shows the local road network in the vicinity of the subject site. The project is proposed to be developed on an approximately 287± acre piece of property located between US Route 6 and Baldwin Place Road in the Town of Carmel, New York. Access to the site is proposed via connections to US Route 6 and Baldwin Place Road. The connections to US Route 6 will include locations opposite NYS Route 118, the Mahopac Village Shopping Center, and near the Mahopac Post Office at the north end of the site. The site is also proposed to be accessed by a connection to Baldwin Place Road forming a full movement intersection at Grand Meadow Drive. The site's proximity to US Route 6 and US Route 202/118/35 provides easy access to local and regional highways.

The Union Place project will be served by various area and local roadways including US Route 6, NYS Route 118, Baldwin Place Road, Miller Road, Mahopac Avenue, Union Valley Road & NYS Route 6N. The following is a brief description of each of these roadways:

US Route 6 is a major arterial throughout much of southeastern New York State beginning in Orange County, continuing through Rockland, Westchester and Putnam Counties and into Connecticut serving many existing commercial uses along its length. In the immediate vicinity of the site, US Route 6 currently consists of one lane in each direction. It has signalized intersections with NYS Route 6N/Curry Street, Mahopac Avenue, the southern Somers Commons access driveway, NYS Route 118/Baldwin Place Road, Miller Road/Jonathan Road and Union Valley Road. The roadway generally consists of two 12 foot wide lanes with 8 to 10 foot wide shoulders. Several of the study area intersections have additional separate turning lanes as well. Within the study area the pavement is generally in good condition.

Access to the site is proposed via US Route 6 at three locations as described in greater detail in Section 3.7.8. Within the study area, the roadway has a posted speed limit of 55 mph up to the Somers Commons intersection at which point the speed limit becomes 40 mph as the road continues into the Village of Mahopac.

The US Route 6 corridor serves as a primary artery between Interstate 84 to the east and the Taconic State Parkway to the west. The NYSDOT has completed widening the road to two lanes in each direction from the Taconic State Parkway to Navajo Road and recently secured additional right-of way for its future widening to two lanes from Mahopac Avenue to Baldwin Place Road. NYSDOT's long term plans for the US Route 6 corridor include extending the four lane section currently ending at Navajo Road in a northerly direction, through the US Route 6/NYS Route 118 intersection area. Putnam County has requested funding for improvements to the remaining section, between Navajo Road and Miller Road, from the NYSDOT, thus completing the upgrade of US Route 6 to two lanes in the project vicinity.

NYS Route 118 is a state highway which originates at a signalized full movement intersection with US Route 6 and Baldwin Place Road. NYS Route 118 is generally a north south roadway in northern Westchester County. In the vicinity of the site it serves mostly residential neighborhoods. The roadway consists of one lane in each direction and also has a signalized intersection with NYS Route 202. In the vicinity of the Somers Commons Shopping Center the roadway has a posted speed limit of 30 mph which changes to 40 mph after its intersection with Miller Road. The roadway generally consists of two 12 foot wide lanes with separate turning lanes at certain intersections. Shoulder widths range from 6 to 8 feet. Within in the study area the pavement is in good condition.

Baldwin Place Road (C.R. 37) is a County Road which originates at a full movement signalized intersection with US Route 6 and NYS Route 118. The roadway continues in a northerly direction past unsignalized intersections with Stillwater Road and Myrtle Avenue and terminates at a signalized "T" intersection with NYS Route 6N. Baldwin Place Road consists of one lane in each direction for its entire length. The roadway has a posted speed limit of 40 mph, which is reduced to 30 mph in the vicinity of the Mahopac High School and Middle School located along the more northerly section of the roadway. The roadway generally consists of two 12 foot wide lanes with 1 to 2 foot shoulders. The pavement in the vicinity of the project is generally in good condition.

The site is proposed to be accessed via Baldwin Place Road at a full movement intersection with Grand Meadow Drive. Also, approaching US Route 6, Baldwin Place Road is proposed to be realigned to intersect with a new roadway within the site.

Miller Road is a Town Road which originates at a signalized full movement intersection with US

Route 6 and continues in a southerly direction to its termination point at an unsignalized "T" intersection with NYS Route 118. The roadway serves several small businesses as well as the Mahopac Village Center (A&P Shopping Center). Approaching its intersection with US Route 6 the roadway has a grade of about 5 percent. It has a 30 mph speed limit and consists of one lane in each direction. The roadway generally consists of two 12 foot lanes with no shoulders; the pavement is generally in good condition.

Mahopac Avenue is a Town roadway in Somers and originates at a signalized full movement intersection with US Route 6. The roadway continues in a southerly direction to an unsignalized, full movement, "all way stop" controlled intersection with Granite Springs Road and terminates at a signalized intersection with NYS Route 35. The roadway consists of one lane in each direction and has a posted speed limit of 30 mph for its entire length. The roadway generally consists of two 11 foot wide lanes with 1 to 2 foot shoulders. The pavement in the vicinity of the project is in fair condition.

Union Valley Road is a Town roadway which originates at a signalized "T" type intersection with US Route 6. The roadway travels in generally an east/west direction intersecting with Lovell Street and terminates at an unsignalized intersection with Croton Falls Road. The roadway, which serves mostly residential land uses, consists of one lane in each direction and has a posted speed limit of 30 mph for its entire length. Union Valley Road serves as an alternate route for vehicles traveling to and from Interstate 684. In the vicinity of U.S. Route 6, the roadway generally consists of two 12 foot wide lanes with no shoulders. Within the study area the pavement is in good condition.

NYS Route 6N is a state roadway which originates at a signalized full movement intersection with US Route 6 and Curry Street. The roadway travels in generally a north/south direction for three quarters of its length then changes orientation to an east/west direction past Lake Mahopac to its termination point at another signalized intersection with US Route 6 in the Mahopac hamlet. The roadway, which serves mostly residential land uses, consists of one lane in each direction and has a posted speed limit of 30 mph for its entire length. NYS Route 6N serves as an alternate route for vehicles traveling between Mahopac and Jefferson Valley in Yorktown. The roadway generally consists of two 12 foot wide lanes with 4 to 6 foot wide shoulders. Within the study area the pavement is in good condition.

U.S. Route 202 is a major east/west state arterial throughout southeastern New York State beginning in northern New Jersey and traveling east through Rockland and Westchester Counties and finally into Connecticut. In the vicinity of site, the roadway has a signalized intersection with NYS Route 118. The roadway has a posted speed limit of 40 mph and generally consists of two 12 foot wide lanes with 5 foot wide shoulders. The pavement in the vicinity of the project is in good condition.

Overhill Road is a town roadway which originates at an unsignalized "T" shaped intersection with NYS Route 118. The roadway continues to the east through several unsignalized intersection and serving residential homes and changes designation to Tighe Road at a ninety degree turn to the south. The roadway consists of two 11 to 12 foot wide lanes with no shoulders. The pavement is generally in good condition and the speed limit is posted as 30 mph.

Stillwater Road is a town roadway serving generally residential land uses which originates at an unsignalized "T" shaped intersection with Baldwin Place Road. The roadway continues to the west to another unsignalized "T" intersection where the roadway splits to the north and south.

The roadway terminates at two unsignalized "T" intersections with NYS Route 6N. Stillwater Road generally consists of two 11 foot wide lanes with no shoulders. The pavement is in good condition and the roadway has a posted speed limit of 30 mph.

Maple Drive is a local town roadway which originates at an unsignalized "T" shaped intersection with Baldwin Place Road. The roadway continues west to an intersection with Grandview Drive and Summit Drive to its termination point at an unsignalized intersection with Hickory Road. The roadway, which serves residential homes, varies between 18 and 20 feet in width with no centerline striping and no shoulders. The pavement is in good condition and there is no posted speed limit for the roadway.

Kennard Drive is a town roadway which originates at an unsignalized "T" shaped intersection with Baldwin Place Road approximately 115 feet west of U.S. Route 6. The roadway continues to the west past an unsignalized intersection with Spring Drive and Shore Drive. It terminates at an unsignalized intersection with Mahopac Avenue/Lake Baldwin Road. The roadway, which serves residential homes, varies from 18 to 20 feet in width with no centerline striping and no shoulders. The pavement is generally in good condition and the roadway has no posted speed limit.

Grand Meadow Drive originates at an unsignalized "T" intersection with Baldwin Place Road. The roadway serves both a daycare/preschool as well as a residential development that is currently under construction. There is no outlet from this roadway. The roadway is approximately 22 feet wide with no centerline striping or shoulders. The pavement is in good condition, however since the roadway is serving an active construction site, a final top course has not yet been applied. There is no posted speed limit on the roadway.

Jonathan Drive is a town roadway which originates at a signalized intersection with U.S. Route 6 and Miller Road. The roadway serves a residential townhouse development with approximately 60 dwelling units. There is no other outlet from the development. Jonathan Drive is approximately 26 feet wide with no centerline striping and no shoulders. The pavement is in good condition and there is no posted speed limit on the roadway.

The Somers Commons shopping center is accessed via four separate driveway connections. These include two connections to U.S. Route 6 south of the NYS Route 118/Baldwin Place Road intersection and two connections to NYS Route 118 to the east of the NYS Route 118/Baldwin Place Road intersection. The northern driveway on U.S. Route 6 and the western driveway on NYS Route 118 are each right turn entry, right turn exit only driveways with lane widths varying between 15 and 17 feet. The southern driveway to U.S. Route 6 forms a signalized "T" intersection. The entrance lane is approximately 20' wide while the exit is formed by two 12 foot wide lanes. Finally, the eastern access driveway to NYS Route 118 forms a "T" shaped unsignalized intersection. This driveway consists of two 15 foot wide lanes. The pavement is in good condition at all of the driveways.

The A & P shopping center is accessed via a driveway connection to U.S. Route 6 and a connection to Miller Road. The access connection to U.S. Route 6 has a separate right turn entry lane northbound on U.S. Route 6 as well as a separate left turn lane for entry movements southbound on U.S. Route 6. The entry driveway is approximately 24 feet wide. The exit driveway is also 24 feet wide and is a right turn exit only driveway onto U.S. Route 6. The driveway connection to Miller Road forms an unsignalized "T" shaped intersection. This access is approximately 26 feet wide with no centerline striping.

The Mahopac High School is accessed via separate entrance and exit driveway connections to Baldwin Place Road. The entrance driveway is approximately 24 feet wide and is located approximately 275 feet north of Muscoot Road. The exit driveway intersects Baldwin Place Road opposite Gleneida Boulevard forming an unsignalized full movement intersection. This driveway consists of two 11 foot wide lanes.

In order to establish the existing traffic volumes for the study intersections in the vicinity of the Union Place property, manual turning movement traffic counts were conducted by John Collins Engineers, P.C., during June and September 2008 during normal weather conditions and while schools were in session. The data from these counts was used to determine the 2008 existing traffic volumes for the Weekday Peak AM, Weekday Peak PM and Saturday Peak hours. These counts were supplemented with traffic counts obtained from the NYSDOT as well as previous counts conducted by John Collins Engineers for area roadways during 2003, 2004 and 2005.

Based upon a review of these counts, the weekday morning peak hour period of 7:30 AM to 8:30 AM was determined to be critical with respect to traffic analysis. The critical period for the weekday evening peak hour was identified as 5:00 PM to 6:00 PM, and the Saturday peak hour was determined to be 12:00 AM to 1:00 PM.

The most recent counts were conducted at the following intersections as outlined in the Adopted Scoping Document for the Union Place Smart Growth Neighborhood. The numbers below correspond with the intersection numbers used in the Traffic Impact Analysis and are shown on the Traffic Figures 3.7-2 through 3.7-23.

1. NYS Route 6N and Baldwin Place Road
2. Baldwin Place Road and Myrtle Avenue
3. Baldwin Place Road and Stillwater Road
4. Baldwin Place Road and Maple Drive
5. US Route 6 and Somers Commons South Access
6. US Route 6 and NYS Route 6N/Curry Street
7. US Route 6 and Mahopac Avenue
8. US Route 6 and Somers Commons North Access
9. NYS Route 118 and Somers Commons West Access
10. NYS Route 118 and Somers Commons East Access
11. NYS Route 118 and Miller Road
12. Site Access at US Route 6 and Mahopac Village Center (A&P Shopping Center)
13. US Route 6 and Miller Road/Jonathan Drive
14. US Route 6 and Union Valley Road
15. Main Entrance at US Route 6 and NYS Route 118/Baldwin Place Road
16. NYS Route 118 and Overhill Road
17. NYS Route 118 and US Route 202
18. Baldwin Place Road and Kennard Drive
19. Site Access at Baldwin Place Road and Grand Meadow Drive
20. Baldwin Place Road and Gleneida Road/Mahopac High School Exit Driveway
21. Baldwin Place Road and Gleneida Road/Mahopac High School Entrance Driveway
22. Proposed Residential Site Access at US Route 6

Additional traffic counts were completed at the intersections of U.S. Route 6 and Mahopac Avenue and U.S. Route 6 and Miller Road/Jonathan Drive during December of 2009 to verify that the 2008 Existing Traffic Volumes are still representative of current conditions. These traffic counts indicated that the traffic volumes as of December 2009 are consistent with the 2008

Existing Traffic Volumes used in the report. It is therefore not necessary to apply an additional growth factor to the exiting volumes to account for the time since the original traffic counts were completed.

Machine Automatic Traffic Recorder (ATR) counts were also collected for U.S. Route 6 along the site frontage, Baldwin Place Road (CR 37), NYS Route 118, and Mahopac Avenue for a one week period from Tuesday September 23, 2008 to Tuesday September 30, 2008 to document hourly and daily traffic variations. These machine counts include data collected on one Friday and one Saturday for each location. Copies of the machine counts are contained in Appendix H herein.

3.7.3 Level of Service Criteria

Peak hour vehicle delays were calculated to establish the quality of operation (level of service) at intersection approach lanes under the existing conditions. Future conditions without the project (No-Build condition) and future conditions with the project (Build condition) were also analyzed.

In order to determine existing and future traffic operating conditions at the study area intersections, capacity analyses were performed based on procedures from the 2000 I.T.E. Highway Capacity Manual. The analysis for each intersection includes the effect of trucks and heavy vehicles on the intersections Level of Service and Delay. The following is a brief description of the methodology:

Signalized Intersection Capacity Analysis

The capacity analysis for a signalized intersection is performed in accordance with the procedures described in the 2000 Highway Capacity Manual, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Level of Service. A Level of Service "A" represents the best condition and a Level of Service "F" represents the worst condition. A Level of Service "C" is generally used as a design standard while a Level of Service "D" is acceptable during peak periods. A Level of Service "E" represents an operation near capacity. In order to identify an intersection's Level of Service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection. Synchro/Sim traffic techniques were also utilized to analyze signalized intersections.

Unsignalized Intersection Capacity Analysis

The unsignalized intersection capacity analysis was performed in accordance with the procedures described in the 2000 Highway Capacity Manual. The procedure is based on total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. The average total delay for any particular critical movement is a function of the service rate or capacity of the approach and the degree of saturation. In order to identify the level of service, the average amount of vehicle delay is computed for each critical movement to the intersection as well as for the overall intersection.

Unlike signalized intersections, unsignalized intersections can operate at levels of service E and F and still not necessitate improvement as there is no minimum level of service set for unsignalized intersections. If an unsignalized intersection operates at an "F" Level of Service, then it is typical to review that intersection and determine if a signal is warranted. As a result of

the preceding, unsignalized intersections operating at LOS E or F are treated differently than signalized intersections operating at these same levels.

Additional information concerning signalized and unsignalized levels of service can be found in Appendix H of this DEIS. Table 3.7-1 presents the levels of service criteria for signalized and unsignalized intersections.

Table 3.7-1 Level of Service Criteria			
UNSIGNALIZED INTERSECTIONS		SIGNALIZED INTERSECTIONS	
Level of Service	Average Total Delay (Seconds Per Vehicle)	Level of Service	Stopped Delay Per Vehicle (Sec)
A	≤ 10	A	≤ 10
B	>10 and ≤ 15	B	>10 and ≤ 20
C	>15 and ≤ 25	C	>20 and ≤ 35
D	>25 and ≤ 35	D*	>35 and ≤ 55
E	>35 and ≤ 50	E	>55 and ≤ 80
F	> 50	F	> 80.0

SOURCE: Highway Capacity Manual, Transportation Research Board, National Research Council, Special Report 209, Washington, D.C..

* For urban areas, the minimum level of service for design of lane-groups (one or more movements) assuming reasonable costs and impacts.

The New York State Department of Transportation (NYSDOT) generally seeks a minimum level of service D (delay of 55 seconds or less for a signalized intersection) for all lane groups. The NYSDOT Highway Design Manual notes: “In some cases, it may be necessary to accept level of service E or F on individual lane groups due to unreasonable costs or impacts associated with improving the level of service.” A lane group is a set of lanes on an approach having the same common movement(s).

For all intersections, the volume to capacity ratio is an indication of the unused capacity or the ability of the intersection to process more traffic. It is possible to have a movement with an adequate level of service (level of service A, B, C or D) and be at capacity for the movement. It is also possible to have a movement with a level of service E or F, with additional capacity available on the movement. The NYSDOT goal for volume to capacity (V/C) ratios at signalized intersections for lane groups is generally below 0.95. The ability of an entire intersection to handle more traffic is a complex issue as traffic can be added to under capacity movements without impacting over capacity movements.

3.7.4 Existing Levels of Service

Existing traffic volumes for the roadway network are shown in Figures 3.7-2, 3.7-3 and 3.7-4. A summary of the capacity analyses for the area intersections under Existing Conditions is provided in the Level of Service Summary Table 3.7-2.

Table 3.7-2
Level of Service Summary Table

LOCATION	YEAR 2008 EXISTING*						YEAR 2016 NO-BUILD						YEAR 2016 BUILD						
	AM	V/C	PM	V/C	SAT	V/C	AM	V/C	PM	V/C	SAT	V/C	AM	V/C	PM	V/C	SAT	V/C	
1. NYS ROUTE 6N & BALDWIN PLACE ROAD SIGNALIZED																			
EASTBOUND THROUGH / RIGHT	B[12.9]	0.57	B[18.2]	0.77	B[12.9]	0.58	B[13.7]	0.60	C[20.8]	0.82	B[13.7]	0.62	B[13.7]	0.60	C[20.8]	0.82	B[13.7]	0.62	
WESTBOUND LEFT/ THROUGH	B[10.3]	0.62	D[43.5]	0.99	B[20.0]	0.84	B[12.5]	0.69	F[90.1]	1.13	D[37.3]	0.96	B[17.7]	0.79	F[147.8]	1.27	E[79.7]	1.11	
NORTHBOUND LEFT/ RIGHT	D[40.3]	0.52	F[81.1]	0.97	E[61.9]	0.86	D[43.4]	0.60	F[120.4]	1.11	F[86.9]	0.99	D[45.3]	0.64	F[190.6]	1.29	F[142.4]	1.17	
OVERALL	B[15.4]	-	D[38.4]	-	C[24.4]	-	B[17.3]	-	E[65.1]	-	D[37.0]	-	B[19.8]	-	F[103.1]	-	E[67.7]	-	
WITH NORTHBOUND RIGHT TURN LANE																			
EASTBOUND THROUGH / RIGHT	-	-	-	-	-	-	B[13.7]	0.61	B[16.9]	0.73	C[26.4]	0.67	B[13.7]	0.61	B[16.9]	0.73	C[26.4]	0.67	
WESTBOUND LEFT/ THROUGH	-	-	-	-	-	-	B[12.5]	0.69	C[26.0]	0.91	C[26.9]	0.96	B[17.9]	0.80	D[54.1]	1.03	D[54.6]	1.01	
NORTHBOUND LEFT	-	-	-	-	-	-	C[33.4]	0.28	E[70.1]	0.64	D[54.9]	0.42	C[33.4]	0.28	E[70.1]	0.64	D[54.9]	0.42	
NORTHBOUND RIGHT	-	-	-	-	-	-	C[22.3]	0.02	D[51.8]	0.50	C[29.2]	0.02	C[22.8]	0.07	D[43.3]	0.12	C[30.9]	0.13	
OVERALL	-	-	-	-	-	-	B[14.8]	-	C[28.6]	-	C[29.6]	-	C[17.2]	-	D[38.5]	-	D[42.2]	-	
2. BALDWIN PLACE ROAD & MYRTLE AVENUE UNSIGNALIZED																			
EASTBOUND LEFT/ RIGHT	B[13.2]	0.34	C[16.7]	0.37	B[13.8]	0.31	B[14.7]	0.41	C[21.3]	0.50	C[16.8]	0.42	C[16.4]	0.49	D[29.8]	0.66	C[23.2]	0.59	
NORTHBOUND LEFT/ THROUGH	A[7.9]	0.01	A[8.3]	0.03	A[8.0]	0.01	A[8.0]	0.01	A[8.6]	0.03	A[8.1]	0.01	A[8.1]	0.01	A[9.0]	0.04	A[8.5]	0.01	
3. BALDWIN PLACE ROAD & STILLWATER ROAD UNSIGNALIZED																			
EASTBOUND LEFT/ RIGHT	B[14.8]	0.44	F[54.1]	0.81	C[16.9]	0.43	C[17.6]	0.53	F[173.1]	1.22	D[35.4]	0.98	D[25.6]	0.69	F[525.2]	2.02	F[84.0]	0.99	
NORTHBOUND LEFT/ THROUGH	A[8.0]	0.03	A[8.6]	0.22	A[8.4]	0.14	A[8.1]	0.04	A[9.0]	0.26	A[8.8]	0.25	A[8.5]	0.06	A[9.9]	0.34	A[9.7]	0.27	
WITH SIGNALIZATION																			
EASTBOUND	-	-	-	-	-	-	B[14.5]	0.21	E[59.9]	0.72	C[28.2]	0.13	B[15.0]	0.29	E[77.7]	0.89	C[28.6]	0.19	
NORTHBOUND	-	-	-	-	-	-	A[8.3]	0.27	B[17.5]	0.84	B[10.7]	0.67	A[8.7]	0.33	D[54.7]	1.06	D[37.9]	0.96	
SOUTHBOUND	-	-	-	-	-	-	A[8.9]	0.37	B[10.7]	0.30	A[6.1]	0.32	A[9.6]	0.46	B[15.7]	0.43	A[6.7]	0.41	
OVERALL	-	-	-	-	-	-	A[9.7]	-	C[22.7]	-	A[9.8]	-	B[10.3]	-	D[47.9]	-	C[25.0]	-	
4. BALDWIN PLACE ROAD & MAPLE DRIVE UNSIGNALIZED																			
EASTBOUND LEFT / RIGHT	B[12.7]	0.05	C[20.0]	0.15	C[18.1]	0.14	B[14.0]	0.06	D[26.5]	0.22	C[23.8]	0.20	A[9.2]	0.03	A[9.8]	0.06	A[9.8]	0.06	
NORTHBOUND LEFT/ THROUGH	A[8.2]	0.00	A[8.1]	0.01	A[8.4]	0.02	A[8.5]	0.00	A[8.4]	0.02	A[8.7]	0.03	A[7.5]	0.00	A[7.5]	0.01	A[7.5]	0.02	
5. US ROUTE 6 & SOMERS COMMONS ACCESS (SOUTH) SIGNALIZED																			
EASTBOUND THROUGH	B[12.5]	0.44	B[13.5]	0.50	B[15.4]	0.57	B[14.7]	0.56	B[19.8]	0.74	C[25.3]	0.83	C[21.2]	0.77	D[43.6]	0.98	F[94.0]	1.13	
EASTBOUND RIGHT	A[1.4]	0.06	A[1.5]	0.13	A[1.7]	0.18	A[1.4]	0.07	A[1.6]	0.13	A[1.8]	0.21	A[1.4]	0.07	A[1.6]	0.15	A[1.9]	0.22	
WESTBOUND LEFT	A[6.0]	0.10	A[8.3]	0.27	B[10.8]	0.34	A[8.5]	0.13	B[19.1]	0.46	C[31.6]	0.65	B[17.3]	0.20	E[70.3]	0.88	F[96.5]	0.96	
WESTBOUND THROUGH	A[6.4]	0.41	B[13.0]	0.48	B[14.3]	0.53	B[14.5]	0.55	B[14.9]	0.68	B[16.5]	0.78	B[15.4]	0.61	B[16.9]	0.96	E[60.5]	1.07	
NORTHBOUND LEFT	D[53.8]	0.16	E[63.7]	0.55	E[63.1]	0.56	D[54.0]	0.17	E[65.0]	0.59	E[64.4]	0.60	D[54.0]	0.17	E[65.0]	0.59	E[64.4]	0.60	
NORTHBOUND RIGHT	D[39.7]	0.01	D[40.0]	0.03	D[39.3]	0.03	D[39.7]	0.01	D[40.0]	0.03	D[39.4]	0.03	D[39.7]	0.01	D[40.0]	0.03	D[40.1]	0.08	
OVERALL	B[10.4]	-	B[16.6]	-	B[17.3]	-	B[14.9]	-	B[19.9]	-	C[22.5]	-	B[18.6]	-	C[31.7]	-	E[70.2]	-	
WITH SIGNAL IMPROVEMENTS AND BUILD SCENARIO LANE IMPROVEMENTS																			
EASTBOUND THROUGH	-	-	-	-	-	-	B[15.6]	0.56	C[24.3]	0.78	C[25.3]	0.83	B[12.5]	0.41	C[20.1]	0.58	C[20.7]	0.65	
EASTBOUND RIGHT	-	-	-	-	-	-	A[1.4]	0.07	A[2.4]	0.14	A[2.3]	0.23	A[1.4]	0.07	A[2.4]	0.14	A[2.3]	0.23	
WESTBOUND LEFT	-	-	-	-	-	-	B[14.9]	0.12	C[21.9]	0.44	C[27.2]	0.55	B[10.3]	0.13	B[15.4]	0.44	B[18.3]	0.56	
WESTBOUND THROUGH	-	-	-	-	-	-	A[3.2]	0.54	B[10.1]	0.68	B[15.2]	0.75	A[1.7]	0.33	A[9.9]	0.54	C[21.3]	0.59	
NORTHBOUND LEFT	-	-	-	-	-	-	D[52.1]	0.16	E[65.0]	0.59	E[68.1]	0.70	D[52.1]	0.16	D[54.7]	0.46	D[53.1]	0.50	
NORTHBOUND RIGHT	-	-	-	-	-	-	D[38.2]	0.01	D[36.6]	0.04	D[39.8]	0.08	D[38.2]	0.01	C[31.8]	0.03	C[33.4]	0.06	
OVERALL	-	-	-	-	-	-	B[10.3]	-	B[19.9]	-	C[22.0]	-	A[8.3]	-	B[16.4]	-	C[21.2]	-	

Table 3.7-2
Level of Service Summary Table

LOCATION	YEAR 2008 EXISTING*						YEAR 2016 NO-BUILD						YEAR 2016 BUILD						
	AM	V/C	PM	V/C	SAT	V/C	AM	V/C	PM	V/C	SAT	V/C	AM	V/C	PM	V/C	SAT	V/C	
6. US ROUTE 6 & CURRY STREET/NYS ROUTE 6N SIGNALIZED																			
EASTBOUND LEFT	B[15.5]	0.05	B[15.6]	0.06	C[21.4]	0.19	B[15.5]	0.08	B[15.9]	0.05	C[24.6]	0.25	B[16.1]	0.06	C[20.4]	0.08	C[27.5]	0.25	
EASTBOUND THROUGH/RIGHT	C[29.4]	0.52	C[30.5]	0.59	D[36.7]	0.67	C[31.4]	0.63	C[33.0]	0.68	F[117.6]	1.15	D[37.1]	0.79	D[40.8]	0.86	F[90.8]	1.08	
WESTBOUND LEFT	B[15.7]	0.14	B[16.9]	0.34	C[23.7]	0.35	B[16.7]	0.27	B[19.0]	0.36	C[30.3]	0.49	C[21.2]	0.28	C[25.4]	0.55	C[27.3]	0.62	
WESTBOUND THROUGH/RIGHT	C[26.3]	0.52	C[25.8]	0.54	C[34.4]	0.67	B[17.7]	0.60	B[16.9]	0.62	D[38.1]	0.82	B[18.4]	0.66	B[20.0]	0.87	F[90.0]	1.11	
NORTHBOUND LEFT / THROUGH/RIGHT	E[56.3]	0.69	D[51.2]	0.68	D[44.3]	0.58	E[60.1]	0.82	D[53.6]	0.66	D[46.4]	0.64	E[64.1]	0.79	E[56.3]	0.71	D[48.9]	0.7	
SOUTHBOUND LEFT / THROUGH/RIGHT	D[52.0]	0.60	D[44.7]	0.44	D[49.5]	0.17	D[53.5]	0.69	D[45.0]	0.32	D[50.5]	0.51	D[53.5]	0.63	D[45.0]	0.32	D[50.5]	0.63	
OVERALL	C[33.5]	-	C[31.1]	-	D[36.7]	-	C[31.4]	-	C[28.9]	-	E[75.9]	-	C[34.2]	-	C[32.8]	-	F[81.0]	-	
WITH TIMING IMPROVEMENTS																			
EASTBOUND LEFT	-	-	-	-	-	-	B[15.9]	0.08	B[17.7]	0.06	C[20.6]	0.23	B[16.8]	0.10	C[22.3]	0.08	C[29.1]	0.29	
EASTBOUND THROUGH	-	-	-	-	-	-	C[27.7]	0.68	C[33.1]	0.69	C[34.1]	0.75	D[35.7]	0.87	D[41.0]	0.86	D[46.3]	0.95	
WESTBOUND LEFT	-	-	-	-	-	-	B[18.9]	0.25	C[23.3]	0.38	C[24.8]	0.45	C[23.6]	0.35	D[35.0]	0.59	D[46.5]	0.71	
WESTBOUND THROUGH	-	-	-	-	-	-	C[26.9]	0.64	C[31.6]	0.63	C[34.1]	0.75	C[28.9]	0.72	D[41.5]	0.87	D[50.8]	0.97	
NORTHBOUND LEFT / THROUGH	-	-	-	-	-	-	D[36.9]	0.59	D[51.1]	0.63	D[54.6]	0.69	D[38.6]	0.64	D[53.8]	0.68	D[53.6]	0.75	
SOUTHBOUND LEFT / THROUGH	-	-	-	-	-	-	D[46.1]	0.68	D[45.1]	0.32	D[54.6]	0.55	D[46.1]	0.68	D[45.1]	0.32	D[54.6]	0.56	
OVERALL	-	-	-	-	-	-	C[30.0]	-	C[34.4]	-	D[36.9]	-	C[34.1]	-	D[42.1]	-	D[48.9]	-	
7. US ROUTE 6 & MAHOPAC AVENUE SIGNALIZED																			
EASTBOUND LEFT	B[10.3]	0.03	C[24.0]	0.25	B[19.1]	0.15	B[12.5]	0.04	C[29.5]	0.30	C[26.6]	0.22	B[16.9]	0.06	C[28.8]	0.30	C[27.0]	0.22	
EASTBOUND THROUGH	C[33.2]	0.77	D[42.0]	0.86	E[61.1]	0.95	D[41.9]	0.89	E[69.9]	1.03	F[109.2]	1.14	F[118.1]	1.16	F[187.2]	1.32	F[249.8]	1.48	
WESTBOUND LEFT	B[19.6]	0.32	C[23.6]	0.22	C[29.6]	0.32	C[29.4]	0.47	C[30.5]	0.34	C[33.9]	0.44	D[37.3]	0.54	D[38.5]	0.57	D[47.2]	0.67	
WESTBOUND THROUGH/RIGHT	C[21.7]	0.61	D[37.9]	0.87	C[30.9]	0.81	C[24.8]	0.71	E[70.0]	1.04	D[53.9]	0.99	C[31.1]	0.83	F[234.2]	1.44	F[201.0]	1.37	
NORTHBOUND LEFT / THROUGH/RIGHT	D[49.8]	0.27	D[43.7]	0.47	D[42.5]	0.26	D[51.0]	0.33	D[45.8]	0.54	D[43.6]	0.32	D[52.7]	0.39	D[48.1]	0.61	D[45.4]	0.40	
SOUTHBOUND LEFT / THROUGH/RIGHT	D[54.4]	0.31	E[57.2]	0.28	E[61.4]	0.41	E[55.0]	0.34	E[57.6]	0.30	D[54.9]	0.19	E[55.0]	0.34	E[57.6]	0.30	D[54.9]	0.19	
OVERALL	C[29.2]	-	D[39.9]	-	D[46.3]	-	D[35.2]	-	E[65.4]	-	E[78.6]	-	E[76.8]	-	F[187.1]	-	F[207.3]	-	
WITH EB & NB LANE WIDENING																			
EASTBOUND LEFT	-	-	-	-	-	-	B[12.6]	0.04	B[15.5]	0.22	B[14.4]	0.15	B[16.2]	0.06	C[33.3]	0.40	C[32.8]	0.29	
EASTBOUND THROUGH/RIGHT	-	-	-	-	-	-	B[17.7]	0.47	B[10.8]	0.41	B[11.1]	0.48	C[20.0]	0.60	B[11.2]	0.52	B[12.1]	0.61	
WESTBOUND LEFT	-	-	-	-	-	-	B[10.4]	0.26	A[6.2]	0.16	A[6.6]	0.23	B[14.3]	0.37	A[7.7]	0.35	B[11.2]	0.51	
WESTBOUND THROUGH/RIGHT	-	-	-	-	-	-	C[24.8]	0.71	C[20.7]	0.79	C[20.1]	0.79	C[29.9]	0.82	D[53.0]	1.07	D[53.1]	1.07	
NORTHBOUND LEFT / THROUGH	-	-	-	-	-	-	D[50.2]	0.25	D[54.4]	0.59	D[54.8]	0.47	D[50.2]	0.25	D[54.4]	0.59	D[54.8]	0.47	
NORTHBOUND RIGHT	-	-	-	-	-	-	D[47.5]	0.04	D[46.6]	0.00	D[45.1]	0.00	D[49.9]	0.18	D[47.0]	0.05	D[46.4]	0.06	
SOUTHBOUND LEFT / THROUGH	-	-	-	-	-	-	D[53.2]	0.31	D[54.9]	0.25	D[54.6]	0.42	D[53.2]	0.31	D[54.9]	0.25	D[54.6]	0.42	
OVERALL	-	-	-	-	-	-	C[22.3]	-	B[18.2]	-	B[17.2]	-	C[25.5]	-	C[33.3]	-	C[32.1]	-	
8. US ROUTE 6 & SOMERS COMMONS ACCESS (NORTH) UNSIGNALIZED																			
WESTBOUND/RIGHT	B[12.1]	0.11	C[15.3]	0.20	C[17.0]	0.22	B[13.5]	0.14	D[26.5]	0.36	E[35.1]	0.44	C[16.9]	0.19	F[82.7]	0.72	F[269.9]	1.21	
WITH LANE IMPROVEMENTS																			
WESTBOUND/RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	A[9.4]	0.08	B[11.2]	0.14	B[11.4]	0.14	
9. NYS ROUTE 118 & SOMERS COMMONS ACCESS (WEST) UNSIGNALIZED																			
NORTHBOUND / RIGHT	B[10.0]	0.05	A[9.0]	0.02	A[9.5]	0.05	B[10.5]	0.06	A[9.3]	0.02	A[10.0]	0.05	B[11.2]	0.07	B[11.4]	0.03	B[12.8]	0.08	
10. NYS ROUTE 118 & SOMERS COMMONS ACCESS (EAST) UNSIGNALIZED																			

Table 3.7-2
Level of Service Summary Table

LOCATION	YEAR 2008 EXISTING*						YEAR 2016 NO-BUILD						YEAR 2016 BUILD						
	AM	V/C	PM	V/C	SAT	V/C	AM	V/C	PM	V/C	SAT	V/C	AM	V/C	PM	V/C	SAT	V/C	
WESTBOUND LEFT/ THROUGH NORTHBOUND LEFT /RIGHT WITH SIGNALIZATION	A[8.4]	0.06	A[8.1]	0.15	A[8.3]	0.15	A[8.6]	0.07	A[8.5]	0.17	A[8.8]	0.17	A[8.8]	0.07	F[631.5]	2.17	F[610.6]	2.09	
	B[12.3]	0.09	E[44.2]	0.71	D[31.8]	0.57	B[13.7]	0.11	F[134.7]	1.07	F[83.1]	0.88	C[16.3]	0.14	A[9.8]	0.22	B[10.4]	0.23	
	-	-	-	-	-	-	A[6.4]	0.59	A[8.8]	0.27	A[3.7]	0.31	A[6.4]	0.59	B[10.8]	0.47	A[4.7]	0.51	
	-	-	-	-	-	-	A[6.8]	0.60	B[16.4]	0.82	A[9.9]	0.71	A[7.7]	0.66	E[78.3]	1.10	D[40.4]	1.00	
	-	-	-	-	-	-	A[9.9]	0.06	E[61.3]	0.62	D[37.5]	0.52	A[9.9]	0.06	E[61.3]	0.62	D[37.5]	0.52	
OVERALL	-	-	-	-	-	-	A[6.6]	-	C[20.6]	-	B[10.6]	-	A[7.1]	-	D[54.2]	-	C[26.5]	-	
11. NYS ROUTE 118& MILLER ROAD UN SIGNALIZED																			
SOUTHBOUND/LEFT/RIGHT WITH SIGNALIZATION	D[26.6]	0.67	F[191.5]	1.31	F[149.0]	1.22	E[46.0]	0.83	F[431.4]	1.85	F[385.0]	1.76	F[188.1]	1.28	F[1185]	3.48	F[1212]	3.56	
EASTBOUND	-	-	-	-	-	-	B[10.5]	0.55	A[8.7]	0.36	B[12.5]	0.48	B[11.3]	0.60	B[11.2]	0.56	B[18.0]	0.74	
WESTBOUND	-	-	-	-	-	-	A[9.0]	0.38	C[25.5]	0.89	B[19.2]	0.77	B[10.8]	0.57	D[54.7]	1.06	D[43.4]	1.00	
SOUTHBOUND	-	-	-	-	-	-	B[17.2]	0.54	D[49.5]	0.87	D[42.0]	0.85	B[17.9]	0.58	D[51.7]	0.89	D[42.3]	0.87	
OVERALL	-	-	-	-	-	-	B[11.8]	-	C[27.4]	-	C[24.0]	-	B[12.7]	-	D[41.3]	-	C[34.7]	-	
12. US ROUTE 6 & A&P SHOPPING CENTER DRIVE/SITE ACCESS UN SIGNALIZED																			
WESTBOUND/ RIGHT	B[12.1]	0.06	C[18.4]	0.37	C[19.0]	0.42	B[13.2]	0.07	D[27.2]	0.51	D[29.2]	0.58	-	-	-	-	-	-	
SOUTHBOUND/ LEFT	A[8.8]	0.03	B[10.4]	0.11	B[11.6]	0.21	A[9.2]	0.03	B[11.8]	0.14	B[13.6]	0.27	-	-	-	-	-	-	
WITH LANE AND SIGNAL IMPROVEMENTS																			
EASTBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	D[54.7]	0.30	D[54.3]	0.64	D[54.0]	0.85	
EASTBOUND THROUGH/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	D[38.2]	0.01	D[44.7]	0.13	D[38.0]	0.15	
WESTBOUND LEFT/ THROUGH	-	-	-	-	-	-	-	-	-	-	-	-	E[62.5]	0.05	D[543.7]	0.11	D[52.5]	0.16	
WESTBOUND RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	D[52.8]	0.11	D[52.8]	0.05	D[45.6]	0.45	
NORTHBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	E[63.3]	0.49	C[33.8]	0.59	D[54.5]	0.78	
NORTHBOUND THROUGH/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	A[2.3]	0.30	C[33.1]	0.68	C[20.3]	0.67	
NORTHBOUND RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	E[70.5]	0.33	C[24.1]	0.38	C[23.3]	0.53	
SOUTHBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	C[32.2]	0.71	D[46.3]	0.80	D[45.7]	0.96	
SOUTHBOUND THROUGH/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	A[8.9]	0.22	D[35.2]	0.52	D[39.4]	0.65	
OVERALL	-	-	-	-	-	-	-	-	-	-	-	-	C[24.9]	-	D[40.8]	-	D[38.7]	-	
13. US ROUTE 6 & MILLER ROAD/ JONATHAN DRIVE SIGNALIZED																			
EASTBOUND LEFT	B[17.7]	0.05	B[18.4]	0.09	B[16.6]	0.04	B[18.0]	0.06	C[20.1]	0.15	B[17.8]	0.09	C[23.2]	0.19	D[39.6]	0.42	C[26.3]	0.23	
EASTBOUND THROUGH/ RIGHT	C[27.5]	0.63	C[26.6]	0.59	D[51.9]	0.96	C[31.0]	0.72	C[34.2]	0.79	F[125.8]	1.19	D[35.5]	0.81	F[131.7]	1.24	F[266.7]	1.53	
WESTBOUND LEFT	B[12.4]	0.05	B[19.7]	0.59	E[65.8]	0.89	B[14.3]	0.07	D[47.4]	0.87	E[79.2]	0.96	B[17.4]	0.15	D[124.2]	1.11	F[86.9]	0.99	
WESTBOUND THROUGH / RIGHT	B[14.9]	0.53	B[16.9]	0.62	B[13.5]	0.63	B[16.8]	0.62	C[21.8]	0.77	B[19.4]	0.80	C[28.4]	0.87	D[41.9]	0.98	E[64.6]	1.10	
NORTHBOUND/ LEFT/ THROUGH / RIGHT	D[45.8]	0.11	E[65.9]	0.81	E[62.2]	0.73	D[45.9]	0.12	E[74.8]	0.88	E[68.4]	0.81	D[45.4]	0.09	D[54.4]	0.62	D[49.2]	0.43	
SOUTHBOUND LEFT / THROUGH / RIGHT	D[47.6]	0.22	D[51.7]	0.18	E[62.9]	0.33	D[48.1]	0.25	D[51.7]	0.18	E[63.3]	0.34	D[48.1]	0.25	D[54.6]	0.21	E[60.6]	0.27	
OVERALL	C[22.4]	-	C[27.8]	-	D[41.0]	-	C[24.8]	-	D[36.4]	-	E[73.6]	-	C[31.6]	-	F[87.0]	-	F[154.3]	-	
14. US ROUTE 6 & UNION VALLEY ROAD SIGNALIZED																			
WESTBOUND LEFT/ RIGHT	D[35.4]	0.66	D[37.8]	0.69	D[39.6]	0.75	D[39.1]	0.74	D[45.6]	0.82	D[51.8]	0.89	D[53.5]	0.90	E[76.3]	1.01	F[107.9]	1.11	
NORTHBOUND THROUGH / RIGHT	A[9.6]	0.40	B[12.3]	0.61	B[12.6]	0.60	B[10.2]	0.45	B[15.6]	0.74	B[16.1]	0.74	B[11.5]	0.54	F[102.7]	1.17	F[96.2]	1.15	
SOUTHBOUND LEFT/ THROUGH	B[11.1]	0.52	B[12.3]	0.61	B[16.6]	0.74	B[12.3]	0.59	B[16.2]	0.75	C[29.9]	0.93	C[20.1]	0.82	E[70.5]	1.08	F[189.0]	1.37	
OVERALL	B[16.3]	-	B[17.1]	-	B[19.5]	-	B[17.8]	-	C[21.4]	-	C[28.9]	-	C[24.8]	-	F[86.7]	-	F[136.3]	-	
14. WITH LANE AND SIGNAL IMPROVEMENTS																			
WESTBOUND LEFT	-	-	-	-	-	-	D[36.3]	0.68	D[49.7]	0.60	D[48.2]	0.63	D[45.9]	0.84	D[55.0]	0.72	D[54.8]	0.77	
WESTBOUND RIGHT	-	-	-	-	-	-	C[24.1]	0.06	C[30.1]	0.00	C[28.2]	0.03	C[24.2]	0.07	C[30.4]	0.02	C[28.4]	0.04	

Table 3.7-2
Level of Service Summary Table

LOCATION	YEAR 2008 EXISTING*						YEAR 2016 NO-BUILD						YEAR 2016 BUILD						
	AM	V/C	PM	V/C	SAT	V/C	AM	V/C	PM	V/C	SAT	V/C	AM	V/C	PM	V/C	SAT	V/C	
NORTHBOUND THROUGH	-	-	-	-	-	-	B[101.1]	0.45	A[7.1]	0.79	B[10.6]	0.79	B[10.8]	0.50	D[54.1]	1.06	D[48.2]	1.05	
NORTHBOUND RIGHT	-	-	-	-	-	-	A[6.9]	0.01	B[13.8]	0.01	B[15.5]	0.03	A[7.1]	0.04	B[14.4]	0.08	C[17.6]	0.20	
SOUTHBOUND LEFT	-	-	-	-	-	-	A[6.7]	0.04	B[10.2]	0.11	B[12.7]	0.13	A[7.1]	0.08	D[37.8]	0.41	D[37.3]	0.43	
SOUTHBOUND THROUGH	-	-	-	-	-	-	B[11.9]	0.56	B[17.2]	0.64	B[16.3]	0.83	B[17.4]	0.77	C[24.5]	0.82	D[53.5]	1.04	
OVERALL	-	-	-	-	-	-	B[16.7]	-	B[18.1]	-	B[19.5]	-	C[21.1]	-	D[41.8]	-	D[49.1]	-	
15. US ROUTE 6 & UNION VALLEY ROAD SIGNALIZED																			
EASTBOUND LEDT/ THROUGH	F[84.6]	0.91	E[76.4]	0.81	F[101.8]	0.99	F[99.5]	0.99	F[86.1]	0.89	F[127.9]	1.08	E[77.4]	0.87	F[214.5]	1.30	F[181.3]	1.23	
EASTBOUND RIGHT	A[0.0]	0.04	A[0.1]	0.09	A[0.1]	0.08	A[0.1]	0.07	A[0.2]	0.13	A[0.2]	0.13	A[0.1]	0.10	A[0.7]	0.37	A[0.7]	0.38	
WESTBOUND LEFT	E[57.3]	0.37	E[58.9]	0.54	E[72.5]	0.74	E[61.3]	0.51	E[69.4]	0.75	F[125.6]	1.05	E[61.3]	0.51	E[69.4]	0.75	F[125.6]	1.05	
WESTBOUND THROUGH	E[55.6]	0.30	E[77.8]	0.85	E[62.5]	0.56	E[56.1]	0.33	F[87.3]	0.92	E[64.3]	0.60	E[69.3]	0.70	F[193.7]	1.25	F[141.8]	1.10	
WESTBOUND RIGHT	A[0.0]	0.01	A[0.1]	0.07	A[0.1]	0.07	A[0.0]	0.02	A[0.1]	0.08	A[0.1]	0.08	A[0.0]	0.04	A[0.1]	0.10	A[0.1]	0.11	
NORTHBOUND LEFT	C[23.2]	0.19	D[43.1]	0.63	D[38.1]	0.56	C[28.3]	0.36	F[136.4]	1.10	F[117.4]	1.05	F[189.8]	1.28	F[865.5]	2.80	F[1060]	3.24	
NORTHBOUND/ THROUGH/ RIGHT	D[42.3]	0.74	D[50.0]	0.85	E[74.6]	1.00	D[47.8]	0.90	F[132.0]	1.17	F[203.6]	1.35	D[51.0]	0.96	C[26.5]	0.35	F[192.6]	1.34	
SOUTHBOUND LEFT	C[24.3]	0.14	C[29.3]	0.23	D[43.6]	0.55	C[28.8]	0.19	D[35.6]	0.29	F[45.2]	0.58	C[32.7]	0.29	B[19.9]	0.21	F[54.6]	0.93	
SOUTHBOUND / THROUGH/ RIGHT	D[39.1]	0.66	E[57.4]	0.91	D[53.7]	0.88	D[45.0]	0.78	F[117.1]	1.13	F[124.0]	1.15	D[40.5]	0.42	E[58.6]	0.92	D[49.2]	1.01	
OVERALL	D[48.5]	-	D[53.5]	-	E[63.1]	-	D[53.7]	-	F[99.4]	-	F[130.6]	-	E[66.2]	-	F[197.1]	-	F[231.2]	-	
EASTBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	D[41.9]	0.15	D[49.6]	0.70	D[53.7]	0.64	
EASTBOUND THROUGH	-	-	-	-	-	-	-	-	-	-	-	-	D[52.2]	0.61	D[48.3]	0.71	D[47.7]	0.71	
EASTBOUND RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	A[0.0]	0.10	A[0.1]	0.36	A[0.1]	0.37	
WESTBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	D[52.5]	0.51	C[33.9]	0.63	D[50.4]	0.87	
WESTBOUND THROUGH	-	-	-	-	-	-	-	-	-	-	-	-	D[40.5]	0.40	D[55.0]	0.80	D[44.6]	0.61	
WESTBOUND RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	A[0.0]	0.04	A[0.1]	0.30	A[0.0]	0.11	
NORTHBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	C[32.0]	0.75	D[46.3]	1.03	D[50.9]	1.06	
NORTHBOUND THROUGH/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	A[2.7]	0.42	B[13.4]	0.36	B[17.8]	0.67	
SOUTHBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	B[13.9]	0.11	D[37.5]	0.37	D[36.8]	0.58	
SOUTHBOUND THROUGH	-	-	-	-	-	-	-	-	-	-	-	-	B[18.6]	0.36	C[34.9]	0.67	D[47.5]	0.85	
OVERALL	-	-	-	-	-	-	-	-	-	-	-	-	C[22.6]	-	C[28.3]	-	C[32.9]	-	
16. NYS ROUTE 118 & OVERHILL ROAD UN SIGNALIZED																			
WESTBOUND LEFT/ RIGHT	B[13.0]	0.17	C[16.9]	0.24	C[15.2]	0.22	B[14.4]	0.21	C[20.8]	0.34	C[19.3]	0.34	C[17.5]	0.31	D[33.4]	0.54	D[31.5]	0.55	
SOUTHBOUND LEFT/ THROUGH	A[7.9]	0.04	A[9.6]	0.13	A[8.8]	0.11	A[8.0]	0.05	B[10.2]	0.17	A[9.3]	0.14	A[8.4]	0.07	B[11.5]	0.24	B[10.6]	0.22	
17. NYS ROUTE 118 & NYS ROUTE 202 SIGNALIZED																			
WESTBOUND LEFT/ RIGHT	D[37.1]	0.69	F[102.1]	1.09	F[99.6]	1.09	D[40.9]	0.76	F[151.0]	1.22	F[153.4]	1.23	D[54.2]	0.90	F[206.4]	1.36	F[229.0]	1.41	
NORTHBOUND/ THROUGH/ RIGHT	C[30.8]	0.50	D[47.4]	0.92	C[29.5]	0.66	C[33.7]	0.60	E[74.9]	1.04	D[42.7]	0.88	D[42.0]	0.78	F[106.1]	1.13	D[52.4]	0.94	
SOUTHBOUND LEFT/ THROUGH	E[57.2]	1.02	C[22.7]	0.77	C[27.7]	0.85	F[112.6]	1.18	F[161.1]	1.29	F[103.4]	1.15	F[193.6]	1.37	F[251.2]	1.50	D[287.6]	1.58	
OVERALL	D[47.4]	-	E[59.7]	-	D[54.0]	-	E[79.7]	-	F[126.9]	-	F[101.4]	-	F[124.8]	-	F[185.9]	-	F[203.0]	-	
WITH WESTBOUND RIGHT TURN LANE																			
WESTBOUND LEFT	-	-	-	-	-	-	D[47.3]	0.73	E[61.2]	0.64	E[71.6]	0.80	D[54.6]	0.73	E[61.2]	0.64	E[71.6]	0.80	
WESTBOUND RIGHT	-	-	-	-	-	-	B[10.2]	0.05	D[41.4]	0.17	C[27.1]	0.06	B[11.0]	0.14	D[43.9]	0.35	C[29.1]	0.21	
NORTHBOUND THROUGH/ RIGHT	-	-	-	-	-	-	C[24.1]	0.56	A[6.9]	0.57	B[16.7]	0.56	C[24.7]	0.58	A[7.3]	0.63	B[18.8]	0.65	
SOUTHBOUND LEFT/ THROUGH	-	-	-	-	-	-	D[42.4]	1.04	B[12.1]	0.65	B[11.8]	0.72	D[54.4]	1.13	D[40.5]	0.96	D[49.7]	1.00	
OVERALL	-	-	-	-	-	-	D[38.1]	-	B[19.0]	-	C[25.5]	-	D[44.7]	-	C[30.1]	-	D[41.6]	-	
18. BALDWIN PLACE ROAD & KENNARD DRIVE UN SIGNALIZED																			
WESTBOUND LEFT/ RIGHT	A[8.3]	0.01	A[8.2]	0.01	A[8.4]	0.01	A[8.5]	0.01	A[8.4]	0.01	A[8.8]	0.01	-	-	-	-	-	-	

Traffic and Transportation
October 27, 2010

Table 3.7-2
Level of Service Summary Table

LOCATION	YEAR 2008 EXISTING*						YEAR 2016 NO-BUILD						YEAR 2016 BUILD					
	AM	V/C	PM	V/C	SAT	V/C	AM	V/C	PM	V/C	SAT	V/C	AM	V/C	PM	V/C	SAT	V/C
NORTHBOUND LEFT/RIGHT	B[11.0]	0.06	B[11.3]	0.04	B[11.6]	0.04	B[11.7]	0.05	B[12.3]	0.04	B[12.7]	0.05	-	-	-	-	-	-
19. BALDWIN PLACE ROAD & GRAND MEADOW DRIVE/SITE ACCESS UN SIGNALIZED																		
EASTBOUND LEFT/RIGHT	B[11.1]	0.01	B[13.7]	0.02	B[14.4]	0.02	B[13.9]	0.06	C[16.9]	0.08	C[16.8]	0.09	-	-	-	-	-	-
NORTHBOUND LEFT/ THROUGH WITH SIGNALIZATION	A[8.5]	0.01	A[8.0]	0.00	A[8.2]	0.00	A[8.7]	0.00	A[8.3]	0.02	A[8.6]	0.02	-	-	-	-	-	-
EASTBOUND LEFT/ THROUGH/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	C[31.1]	0.10	C[30.1]	0.08	C[35.5]	0.14
WESTBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	C[30.8]	0.05	C[28.8]	1.00	C[30.3]	0.10
WESTBOUND THROUGH/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	C[30.9]	0.07	C[31.1]	0.37	C[32.3]	0.34
NORTHBOUND LEFT/ THROUGH/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	C[29.8]	0.14	B[13.9]	0.13	A[9.6]	0.10
SOUTHBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	B[18.8]	0.71	D[45.9]	0.93	D[44.1]	0.96
SOUTHBOUND THROUGH/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	B[11.9]	0.14	B[13.8]	0.12	A[9.4]	0.10
OVERALL	-	-	-	-	-	-	-	-	-	-	-	-	B[19.4]	-	D[35.7]	-	D[35.5]	-
20. BALDWIN PLACE ROAD & GLENEIDA ROAD/ MAHOPAC HIGH SCHOOL EXIT UN SIGNALIZED																		
EASTBOUND LEFT	B[10.5]	0.12	B[13.5]	0.21	B[11.5]	0.05	B[11.1]	0.14	B[14.8]	0.24	B[12.3]	0.05	B[11.8]	0.15	C[17.5]	0.29	B[14.0]	0.06
EASTBOUND THROUGH/ RIGHT	A[9.7]	0.14	A[9.5]	0.10	A[9.5]	0.02	A[9.8]	0.15	A[9.8]	0.11	A[9.7]	0.02	B[10.1]	0.15	B[10.1]	0.12	B[10.1]	0.02
WESTBOUND LEFT/ THROUGH/ RIGHT	B[10.9]	0.06	B[11.1]	0.04	A[9.8]	0.03	B[11.5]	0.07	B[11.7]	0.05	B[10.1]	0.03	B[12.3]	0.07	B[12.8]	0.06	B[10.8]	0.04
SOUTHBOUND LEFT/ THROUGH/ RIGHT	A[7.6]	0.00	A[7.8]	0.01	A[7.6]	0.00	A[7.5]	0.00	A[7.9]	0.01	A[7.6]	0.00	A[7.5]	0.00	A[8.1]	0.01	A[7.8]	0.00
21. BALDWIN PLACE ROAD & MAHOPAC HIGH SCHOOL ENTRANCE UN SIGNALIZED																		
NORTHBOUND LEFT/ THROUGH/ RIGHT	A[7.6]	0.03	A[8.0]	0.09	A[7.6]	0.01	A[7.7]	0.03	A[8.1]	0.10	A[7.7]	0.01	A[7.8]	0.03	A[8.3]	0.10	A[7.8]	0.01
22. NYS ROUTE 6 & RESIDENTIAL SITE ACCESS UN SIGNALIZED																		
EASTBOUND LEFT/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	E[37.4]	0.47	F[105.3]	0.55	F[193.6]	0.81
NORTHBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	A[9.8]	0.02	B[11.5]	0.09	B[12.3]	0.06
SIGNALIZED																		
EASTBOUND LEFT/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	C[27.1]	0.09	D[45.8]	0.09	C[31.4]	0.14
NORTHBOUND LEFT	-	-	-	-	-	-	-	-	-	-	-	-	A[5.5]	0.04	A[3.4]	0.15	A[5.1]	0.14
NORTHBOUND THROUGH	-	-	-	-	-	-	-	-	-	-	-	-	A[7.8]	0.49	B[10.2]	0.78	C[23.3]	0.93
SOUTHBOUND THROUGH/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	B[11.7]	0.72	B[10.4]	0.79	C[31.8]	0.98
OVERALL	-	-	-	-	-	-	-	-	-	-	-	-	B[10.5]	-	B[10.4]	-	C[27.4]	-
22. PROPOSED NEW INTERNAL ROADWAY & REALIGNED BALDWIN PLACE ROAD UN SIGNALIZED																		
EASTBOUND LEFT/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	B[12.1]	0.12	C[22.3]	0.27	C[23.1]	0.24
NORTHBOUND LEFT/ THROUGH/ RIGHT	-	-	-	-	-	-	-	-	-	-	-	-	A[8.5]	0.03	B[11.2]	0.14	B[11.6]	0.15

* As noted in the text leading to this table, counts were completed at the intersections of U.S. Route 6 and Mahopac Avenue and U.S. Route 6 and Miller Road/Jonathan Drive during December of 2009 to verify that the 2008 Existing Traffic Volumes are still representative of current conditions. These traffic counts indicated that the traffic volumes as of December 2009 are consistent with the 2008 Existing Traffic Volumes used in the report. It is therefore not necessary to apply an additional growth factor to the exiting volumes to account for the time since the original traffic counts were completed.
Source: John Collins Engineers, P.C., 2009.

3.7.5 No-Build Traffic Conditions

In order to account for normal traffic growth in the area, the Year 2008 Existing Traffic Volumes were projected to the 2016 Design Year by applying a background growth of 6 percent. The resulting Year 2016 Projected Traffic Volumes are shown on Figure numbers 3.7-5, 3.7-6 and 3.7-7. In addition, other traffic volumes which will be associated with other specific developments in the area were also identified. These developments included the Lupi Car wash and Grand Meadow Estates in Carmel as well as the Somers Realty Planned Hamlet Development, the Baldwin Place Golf Center redevelopment and Somers Woods all located in Somers. The Other Development Traffic Volumes are shown on Figure numbers 3.7-8, 3.7-9 and 3.7-10 and are broken down for each of the individual developments on the A, B, C, and D plates respectively. These Other Development Traffic Volumes were then added to the Year 2016 Projected Traffic Volumes to obtain the Year 2016 No-Build Traffic Volumes.

The total 2016 No-Build Traffic Volumes are shown on Figures 3.7-11, 3.7-12 and 3.7-13, for the Weekday AM Peak, Weekday PM Peak and Saturday Peak hours, respectively. No-Build levels of service are shown in the Level of Service Summary Table 3.7-2.

3.7.6 Build Traffic Conditions

The project location, with entrances from US Route 6, would provide easy access to the commercial and office uses proposed along the main street area from all points east and west. The new Town by-pass road will offer an alternative to US Route 6 for vehicles traveling in this area helping to alleviate the existing traffic congestion. As noted earlier, regional traffic improvements to this area include the proposed widening of US Route 6 from Navajo Street to Miller Road, which would establish two through lanes from the Taconic State Parkway to the vicinity of the project site.

In order to estimate the anticipated amount of traffic to be generated by the Union Place development during peak hours, information published by the Institute of Transportation Engineers (ITE) as contained in their publication entitled, "Trip Generation", 8th Edition, December 2008, was utilized.

It should also be noted that for a mixed use development such as this, a significant portion of the trips between the various uses remain internal to the project (i.e., between different land uses). In addition, for the commercial uses, a significant portion of these trips are attracted as "pass-by" or "diverted link" trips which represent trips that are already present on the roadway system. The ITE data indicates that the "pass-by"/"diverted link" trips can range from 20 percent to 50 percent depending on the specific commercial use. A "pass-by" credit of 25 percent has been considered for the retail portions of the development.

Tables 3.5-3 and 3.5-4 summarize trip generation rates and the number of trips assigned to the project components. The project will generate approximately 1,180 new vehicular trips in the weekday AM peak hour, 2,282 new vehicular trips in the weekday PM peak hour, and 2,217 new vehicular trips during the Saturday peak hour.¹

¹ Note that the number of trips generated in a given hour includes the trips generated by the residential development and represent ingoing and outgoing trips.

Table 3.7-3 Project Site Trip Generation Rates						
Land Uses (size) {ITE Code} ¹	Trip Rates					
	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Retail - 493,000 square feet {820}*	0.49	0.31	1.88	1.88	2.45	2.45
Office - 485,000 square feet {710}*	1.20	0.16	0.22	1.06	0.15	0.13
Apartments - 180 units {220}**	0.10	0.41	0.42	0.23	0.28	0.23
Hotel - 90 rooms {310}***	0.26	0.19	0.26	0.27	0.42	0.43
Condominiums - 300 units {230}**	0.07	0.34	0.33	0.16	0.23	0.20

¹Trip Generation, Institute of Transportation Engineers, 8th edition, Washington DC, 2008.
 *Trip Generation rates for commercial uses are per 1,000 square feet.
 **Trip Generation rates for residential are per unit.
 *** Trip Generation rates for hotel are per room.

Table 3.7-4 Project Site Trip Generation									
Land Uses (size) {ITE Code} ¹	Trips								
	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Retail - 493,000 square feet {820}*	181	116	297	695	695	1390	907	907	1814
Office - 485,000 square feet {710}*	582	78	660	105	514	619	73	63	136
Apartments - 180 units {220}**	15	62	77	65	35	100	43	36	79
Hotel - 90 rooms {310}***	23	17	40	23	24	47	38	39	77
Condominiums - 300 units {230}**	18	88	106	84	42	126	60	51	111
Total	819	361	1,180	972	1310	2,282	1,121	1,096	2,217

¹Trip Generation, Institute of Transportation Engineers, 8th edition, Washington DC, 2008.

As can be seen on Figure 3.7-1, a new road connection from Baldwin Place Road opposite Grand Meadow Drive extending through the project site and connecting to US Route 6 opposite the driveway to the Mahopac Village Center is proposed as part of this project. This new connector road will provide an alternate travel path for vehicles destined from Baldwin Place Road to US Route 6. This will result in a diversion of existing traffic and has been considered in the Traffic Impact Study. In addition, a primary access from US Route 6 opposite NYS Route 118 will serve as a major access to the project. As illustrated in Figure 3.7-24 the Conceptual Access Improvement Plan, the project will include the reconstruction of this intersection into a more typical four-way intersection. The provision of additional turn lanes and lane widening along this section of US Route 6, between NYS Route 118 and Mahopac Village Center drive, will be undertaken in association with the development. The new roadway network is considered in the distribution of trips to the roadway system.

An arrival and departure distribution was established based on the existing traffic volumes and from a review of the employment and population centers in the area to assign the site generated traffic volumes to the roadway network. Due to the layout of the site and the proposed access points separate arrival and departure distributions were established for the Retail/Office Land Uses and for the Residential Land Uses. The resulting arrival and departure distributions are

shown on Figure numbers 3.7-14 and 3.7-15 for the Retail/Office Land Uses and 3.7-16 and 3.7-17 for the Residential Land Uses.

The trips projected for the AM, PM and Saturday peak hours were distributed over the project network (see Figures 3.7-18, through 3.7-20).

The project-generated traffic was added to the No-Build traffic to produce the Build traffic condition. Figures 3.7-21, 3.7-22 and 3.7-23 show traffic volumes for the Build condition.

In order to evaluate existing and future traffic operating conditions for the area intersections, capacity analyses were conducted utilizing the procedures described above. The capacity analysis worksheets and the Synchro/Sim traffic analysis are contained in Appendix H of this DEIS. It should be noted that the SYNCHRO analysis was used to generate the signal timings and coordination scenarios for the signalized intersections. While SYNCHRO does generally follow the analysis methods of the 2000 Highway Capacity Manual there are some differences thus the Synchro analyses were used to generate the HCS analyses for each intersection. The analysis supports the need to implement a coordinated and interconnected signal system to provide the most efficient operations along this corridor.

The following is a brief description of each of the intersections analyzed, the results of the capacity analyses and any corresponding recommended improvements. Build Traffic Levels of Service are shown in the Level of Service Summary Table 3.7-2.

1. NYS Route 6N and Baldwin Place Road

Baldwin Place Road intersects with NYS Route 6N at a "T" shaped signalized intersection.

Capacity analysis conducted at this location utilizing the Year 2008 existing traffic volumes indicate this intersection is currently operating at an overall Level of Service "B" during the Weekday Peak AM Hour, an overall Level of Service "D" with an average vehicle delay of 38.4 seconds during the Weekday Peak PM Hour and an overall Level of Service "C" during the Saturday Peak Hour.

In the 2016 No-Build Condition, with construction of separate left and right turn lanes and signal timing adjustments, the intersection is projected to operate at an overall Level of Service "D" or better during the peak AM, PM and Saturday peak hour periods. These improvements are expected to be implemented on a regional basis.

For the 2016 Build Condition, upon completion of the recommended improvements, the intersection will continue to operate at an overall Level of Service "D" or better during the AM, PM and Saturday hours.

2. Baldwin Place Road and Myrtle Avenue

Myrtle Avenue intersects Baldwin Place Road at a "T" shaped, unsignalized intersection.

Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that this intersection is currently operating at a Level of Service "C" or better during each of the Peak Hours.

Capacity analysis conducted utilizing the Year 2016 No-Build and Build Traffic Volumes indicates that the intersection will to operate at a Level of Service "D" with an average vehicle

delay of 29.8 seconds or better during each of the peak periods.

As documented in the next section, a new traffic signal at the Baldwin Place Road and Stillwater Road intersection is anticipated and this will provide sufficient gaps in the traffic flow to allow the intersection of Baldwin Place Road and Myrtle Avenue to operate at acceptable Levels of Service.

No geometric improvements are recommended at this location.

3. Baldwin Place Road and Stillwater Road

Baldwin Place Road intersects with Stillwater Road to form an unsignalized, "T" shaped intersection.

Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that this intersection is currently operating at an overall Level of Service "C" or better during the AM and Saturday Peak Hours while it operates at an overall Level of Service "F" with an average vehicle delay of 54.1 seconds during the PM Peak Hour. These delays are expected to increase under the future No-Build Conditions.

Capacity analysis conducted utilizing the Year 2016 Build Traffic Volumes indicates that the intersection will operate at an Level of Service "D" with an average vehicle delay of 25.6 seconds during the AM Peak Hour and an Level of Service "F" with average vehicle delays of 525.2 seconds and 84.0 seconds respectively during both the PM and Saturday Peak Hours without any intersection modifications.

It is recommended that a signal be installed at this intersection to accommodate expected traffic volume increases. Capacity analysis conducted utilizing the Year 2016 No-Build and Year 2016 Build Traffic Volumes indicates that with the signal, the intersection will operate at an overall Level of Service "D" with an average vehicle delay of 47.9 seconds or better during each of the Peak Hours.

It is anticipated that these improvements are to be made by Putnam County. A fair share contribution to this improvement will be made by the Applicant.

4. Baldwin Place Road and Maple Drive

Maple Drive intersects Baldwin Place Road at an unsignalized "T" shaped intersection.

Capacity analysis conducted utilizing the Year 2008 Existing Traffic Volumes indicates that this intersection is currently operating at a Level of Service "B" during the AM Peak Hour and at a Level of Service "C" during the PM and Saturday Peak Hour. Similar Levels of Service can also be expected for under the 2016 No-Build Condition.

With the completion of the Union Place Project, the proposed new connector is expected to act as a bypass roadway diverting traffic from the southern portion of Baldwin Place Road. Therefore, the volumes traveling through the Baldwin Place Road and Maple Drive intersection will be greatly reduced. Capacity analysis conducted utilizing the Year 2016 Build Traffic Volumes, which includes these diverted traffic volumes, indicates that the intersection will operate at a Level of Service "B" or better during each of the Peak Hours.

No improvements are recommended at this location.

5. US Route 6 & Somers Commons South Access

The Somers Commons South Access intersects US Route 6 at a signalized “T” shaped intersection.

Capacity analysis conducted utilizing the Year 2008 Existing Traffic Volumes indicates that the intersection is currently operating at an overall Level of Service “B” during each of the Peak Hours.

No-Build Conditions at this intersection are expected to continue to operate at an overall level of service “B” during the Weekday Peak AM and PM Hours, while the Saturday Peak Hour overall Level of Service is expected to be a “C”.

Build Conditions are expected to experience Levels of Service “E” or “F” for several of the movements during the PM and Saturday Peak Hours. However, recommended improvements to nearby intersections as well as signal timing and coordination improvements along the corridor are expected to improve the traffic flow at this intersection.

Improvements to this portion of US Route 6 are to be implemented on a regional basis.

6. US Route 6 and NYS Route 6N/Curry Street

NYS Route 6N and Curry Street intersect US Route 6 at a signalized full movement intersection.

The capacity analysis indicates that, under Existing Conditions, this intersection operates at Level of Service “D” with an average vehicle delay of 36.7 seconds or better during the AM, PM and Saturday peak periods.

The analysis indicates that for the future No-Build and Build Conditions the intersection will operate at a Level of Service “C” during the AM and PM Peak Hours with the northbound and southbound approaches experiencing longer delays for the earlier and the northbound approach experiencing the longest delays for the latter. During the Saturday Peak Hour the intersection is expected to operate at a Level of Service “F” with an average vehicle delay of 81.0 seconds.

Signal timing improvements can be made such that the intersection will operate at an acceptable Level of Service “D” with an average vehicle delay of 42.1 seconds for the Saturday Peak Hour.

7. US Route 6 and Mahopac Avenue

Mahopac Avenue and US Route 6 intersect at a signalized, full movement intersection.

Capacity analysis conducted at this intersection utilizing the 2008 Existing Traffic Volumes indicates that it is currently operating at an overall Level of Service “D” with an average vehicle delay of 46.3 seconds or better during each of the Peak Hours with certain movements operating at a Level of Service “E”.

Reanalyzing the intersection with the 2016 No-Build Traffic Volumes indicates that it will experience an overall Level of Service “E” with an average vehicle delay of 78.6 seconds or better during the Weekday PM and Saturday Peak Hours in the future.

To accommodate future No-Build Traffic Volumes, it is recommended that the eastbound approach be widened to provide two through lanes through the intersection and a northbound right turn lane. Analyzing the intersection with these improvements and the 2016 Build Traffic Volumes indicates an overall Level of Service "C" or better can be expected.

Improvement to this portion of US Route 6 and this intersection are expected to be implemented on a regional basis.

8. US Route 6 and Somers Commons North Access

The Somers Commons North Access intersects with US Route 6 at an unsignalized "T" shaped, right turn in, right turn out type intersection.

The capacity analysis conducted at this location utilizing the 2008 Existing Traffic Volumes indicates that this intersection is currently operating at a Level of Service "C" or better during each of the Peak Hours.

The capacity analysis conducted utilizing the Year 2016 No-Build and Year 2016 Build Traffic Volumes indicates that the intersection will operate at a Level of Service "F" with an average vehicle delay of 269.9 or better during the PM and Saturday Peak Hours. However, proposed improvements along this section of US Route 6 include two through lanes in the northbound direction through this intersection. Reanalyzing the intersection with the proposed improvements indicates the intersection will operate at a Level of Service "B" or better during each of the peak hours.

Improvements to this intersection will be accomplished in conjunction with the Union Place project and will be coordinated with overall regional corridor improvements.

9. NYS Route 118 and Somers Commons West Access

The Somers Commons West Access intersects with NYS Route 118 at an unsignalized "T" shaped, right turn in, right turn out type intersection.

Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that this intersection is currently operating at a Level of Service "B" or better during each of the Peak Hours.

The 2016 No-Build and Build Traffic Volumes indicates the intersection will continue to operate at Levels of Service B" or better during each of the Peak Hours.

No improvements are required or recommended at this location.

10. NYS Route 118 and Somers Commons East Access

NYS Route 118 and the Somers Commons East Access intersect at an unsignalized "T" shaped intersection.

Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that this intersection is currently operating at an overall Level of Service "D" with an average vehicle delay of 31.8 seconds or better during the AM and Saturday Peak Hours while it operates at a Level of Service "E" with an average vehicle delay of 44.2 seconds during the PM Peak Hour.

Capacity analysis conducted utilizing the Year 2016 No-Build and Build Traffic Volumes indicates that the intersection will operate at an overall Level of Service "C" during the AM Peak Hour and an overall Level of Service "F" with an average vehicle delay of 134.7 seconds or better during both the PM and Saturday Peak Hours without any intersection modifications. A new traffic signal would be required to improve this condition.

Therefore, it is recommended that the intersection be monitored to determine if a traffic signal will be warranted at this intersection. Capacity analysis conducted utilizing the Year 2016 No-Build and Year 2016 Build Traffic Volumes indicates that with the signal, the intersection will operate at an overall Level of Service "D" with an average vehicle delay of 54.2 seconds during the PM Peak Hour. During the AM and Saturday Peak Hours the intersection is expected to operate at an overall Level of Service "A" and "C" respectively. .

No specific improvements to this intersection are proposed in relation to this project.

11. NYS Route 118 and Miller Road

NYS Route 118 and Miller Road intersect at a signalized "T" shaped intersection.

Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that the Miller Road approach is currently operating at a Level of Service "D" with an average vehicle delay of 26.6 seconds during the AM Peak Hour while it operates at a Level of Service "F" with an average vehicle delay of 191.5 or better during the PM and Saturday Peak Hours.

Capacity analysis conducted utilizing the Year 2016 No-Build and Build Traffic Volumes indicates that the intersection will operate at a Level of Service "E" with an average vehicle delay of 46.0 during the AM Peak Hour and a Level of Service "F" with an average vehicle delay of 431.4 or better during both the PM and Saturday Peak Hours without any intersection modifications.

It is recommended that a signal be installed at this intersection to accommodate expected future traffic volumes. Capacity analysis conducted utilizing the Year 2016 No-Build and Year 2016 Build Traffic Volumes indicates that with the signal, the intersection will operate at an overall Level of Service "B" during the AM Peak Hour, at an overall Level of Service "D" with an average vehicle delay of 41.3 seconds during the PM Peak Hour and at an overall Level of Service "C" during the Saturday Peak Hour.

Improvements to this intersection are not proposed in relation to this project.

12. Site Access at US Route 6 and Mahopac Village Center (A&P Shopping Center) Access

The A&P Shopping Center is currently accessed via an unsignalized "T" shaped intersection with US Route 6.

Capacity analysis conducted utilizing the Year 2008 Existing Traffic Volumes indicates that the intersection is currently operating at a Level of Service "C" or better during each of the Peak Hours. Under the Year 2016 No-Build Condition the intersection is expected to experience similar levels of service during the Weekday Peak AM Hour, while the PM and Saturday Peak Hours Level of Service are expected to be "D" with an average vehicle delay of 29.2 seconds or better.

As previously described, under the Build Condition, access to the Union Place site is proposed via a new roadway connection to be located opposite the A&P Shopping Center Access. At the intersection with US Route 6, the new roadway will consist of two left turn lanes and a through-right turn lane. Improvements to US Route 6 will also be needed under this scenario including the widening of the roadway to include two through lanes in each direction and a separate right turn lane southbound. With the installation of a traffic signal at this intersection, left turns out of the A&P Shopping Center will then be allowed.

Capacity analysis conducted utilizing the Year 2016 Build Traffic Volumes indicates that the intersection will operate at an overall Level of Service "C" during the AM Peak Hour and an overall Level of Service "D" with an average vehicle delay of 40.8 seconds or better during the PM and Saturday Peak Hour.

Improvements to this intersection will be accomplished as part of the Union Place project and coordinated with the US Route 6 regional corridor improvements.

13. US Route 6 and Miller Road/Jonathan Drive

Miller Road intersects US Route 6 opposite Jonathan Drive at a signalized full movement intersection.

The capacity analysis conducted utilizing the 2008 Existing Traffic Volumes at this intersection indicates an overall Level of Service "C" is currently experienced during the AM and PM Peak Hours and an overall Level of Service "D" with an average vehicle delay of 41.0 seconds is currently experienced during the Saturday Peak Hour.

Under future No-Build and Build Conditions the intersection will continue to operate at a Level of Service "C" during the AM Peak Hour while the PM and Saturday Peak Hours will experience an overall Level of Service "F" with an average vehicle delay of 154.3 seconds and the eastbound and westbound approaches experiencing the longest delays. The improvements at the US Route 6 and Mahopac Village Center driveway, which will also allow left turns exiting, should help alleviate the traffic conditions at this intersection. The existing traffic signal should be interconnected with the new signal at the new intersection.

No other geometric improvements are recommended at this location.

14. US Route 6 and Union Valley

Union Valley Road and US Route 6 intersect at a signalized, "T" shaped intersection.

The analysis of 2008 Existing Traffic Volumes indicates that it is currently operating at an overall Level of Service "B" during each of the Peak Hours. Reanalyzing the intersection with the 2016 No-Build Traffic Volumes indicates that it will experience an overall Level of Service "C" or better during each of the Peak Hours in the future without the project.

It is expected that this intersection, without any improvements, will exceed capacity and operate at Levels of Service "F" during the PM and Saturday Peak Hours. Therefore it is recommended that the southbound approach be widened to provide a separate left turn lane and the westbound approach be widened to provide a separate right turn lane. Reanalyzing the intersection with these improvements indicates an overall Level of Service "D" with an average vehicle delay of 49.1 seconds or better can be expected.

Improvements to this intersection are to be implemented on a regional basis. The Union Place project will contribute to the funding of this improvement.

15. Main Entrance at US Route 6 and NYS Route 118/Baldwin Place Road

NYS Route 118 currently intersects US Route 6 opposite Baldwin Place Road at a full movement, signalized intersection.

The capacity analysis conducted at this location utilizing the 2008 Existing Traffic Volumes indicates that this intersection is currently operating at an overall Level of Service "D" with an average vehicle delay of 53.5 seconds or better during the AM and PM Peak Hours and at an overall Level of Service "E" with an average vehicle delay of 63.1 seconds during the Saturday Peak Hour.

The capacity analysis conducted utilizing the Year 2016 No-Build Traffic Volumes indicates that the intersection will continue to operate at an overall Level of Service "D" with an average vehicle delay of 53.7 seconds during the AM Peak hour and at an overall Level of Service "F" with an average vehicle delay of 130.6 seconds or better during the PM and Saturday Peak Hours.

Under Build Conditions it is proposed that Baldwin Place Road will be realigned into the site. This will allow the existing intersection to be reconstructed resulting in a new roadway that will intersect as the forth leg of the intersection at a more conventional alignment opposite NYS Route 118. It is proposed that this approach will consist of one through lane with separate left turn and right turn lanes. It is also recommended that US Route 6 be widened to provide two through lanes in each direction through this intersection. Reanalyzing the intersection with the proposed lane geometry indicates that, under Build Conditions, an overall Level of Service "C" or better can be expected for each of the Peak Hours.

Improvements are to be implemented on a regional basis as corridor improvements. The Union Place project will contribute to the funding of this improvement and coordinate with the regional corridor improvements.

16. NYS Route 118 and Overhill Road

Overhill Road intersects with NYS Route 118 at an unsignalized "T" shaped intersection.

Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that this intersection is currently operating at a Level of Service "C" or better during each of the Peak Hours. Reanalyzing the intersection with the 2016 No-Build Traffic Volumes indicates the intersection will continue to operate at Level of Service "C".

Reanalyzing the intersection utilizing the 2016 Build Traffic Volumes indicates the intersection is expected to operate at a Level of Service "C" during AM Peak Hour and at a Level of Service "D" with an average vehicle delay of 33.4 seconds or better during the PM and Saturday Peak Hours.

No improvements are recommended at this location.

17. NYS Route 118 and US Route 202

NYS Route 118 and US Route 202 intersect at a signalized, "T" shaped intersection.

Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that this intersection is currently operating at an overall Level of Service "D" with an average vehicle delay of 54.0 seconds or better during the AM and Saturday Peak Hours while it operates at an overall Level of Service "E" with an average vehicle delay of 59.7 seconds during the PM Peak Hour. During both the PM and Saturday Peak Hours the individual lane movement of the southbound NYS Route 118 is currently operating at Level of Service "F".

To improve operating conditions at this intersection it is recommended that the westbound US Route 202 approach be widened to provide separate left turn and right turn lanes. With this improvement and corresponding signal upgrades, it is expected that the intersection will operate at an overall Level of Service "D" with an average vehicle delay of 44.7 seconds or better during the AM and Saturday Peak Hours and at an overall Level of Service "C" during the PM Peak Hour for future No-Build and Build Conditions.

Improvements at this intersection are expected to be implemented on a regional basis.

18. Baldwin Place Road and Kennard Drive

Baldwin Place Road and Kennard Drive intersect at an unsignalized, "T" shaped intersection.

Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that the intersection is currently operating at Level of Service "B" during each of the Peak Hours. Similar Levels of Service are also expected under future No-Build Conditions.

Under the Build Condition it is proposed that Baldwin Place Road will realign to intersect with the new internal site roadway as previously discussed. With these improvements Kennard Drive will connect to US Route 6 via a separate right turn in, right turn out access near the reconstructed intersection of NYS Route 118, US Route 6 and the site access. It is expected that this intersection will continue to operate at acceptable Levels of Service.

Improvements to this intersection will be accomplished as part of the Union Place project.

19. Site Access at Baldwin Place Road and Grand Meadow Drive

Baldwin Place Road and Grand Meadow Drive currently intersect at an unsignalized, "T" shaped intersection.

Capacity analysis conducted utilizing the Year 2008 Existing Traffic Volumes indicates that the intersection is currently operating at a Level of Service "B" during each of the Peak Hours. Under the Year 2016 No-Build Condition the intersection is expected to experience similar levels of service during the Weekday Peak AM Hour, while the PM and Saturday Peak Hours Level of Service is expected to be a "C".

Under the Build Condition, access to the Union Place site is proposed via a new roadway connection opposite the Grand Meadow Drive. This access road, which will be signalized, will provide an alternative for residents and other local travelers to bypass the main US Route 6 entrance roadway if desired. The interior by-pass road, designed to alleviate traffic congestion on US Route 6, is accessed at this location.

The new roadway will consist of a shared through-left turn lane and a separate right turn lane.

Improvements to Baldwin Place Road will be needed under this scenario including the widening of the roadway to include a separate southbound left turn lane. The intersection will be signalized upon completion of the Union Place development. With these improvements, Capacity analysis conducted utilizing the Year 2016 Build Traffic Volumes indicates that the intersection will operate at an overall Level of Service "B" during the AM Peak Hour and at an overall Level of Service "D" with an average vehicle delay of 35.7 seconds during the PM and Saturday Peak Hours.

Improvements to this intersection will be accomplished in conjunction with the Union Place project.

20. Baldwin Place Road and Gleneida Road/Mahopac High School Exit Driveway

Gleneida Road intersects Baldwin Place Road opposite the Mahopac High School Exit Driveway at an unsignalized intersection. The High School Driveway is an exit only at this location.

The capacity analysis conducted utilizing the 2008 Existing Traffic Volumes at this intersection indicates a Level of Service "B" or better is currently experienced on all approaches during each of the Peak Hours. The analysis indicates that similar Levels of Service can be expected under future 2016 No-Build Conditions.

Reanalyzing the intersection with the 2016 Build Traffic Volumes indicates that the intersection is expected to operate at Level of Service "B" or better during the AM and Saturday Peak Hours, and at Level of Service "C" or better during the Saturday Peak Hour.

No improvements are recommended at this location.

21. Baldwin Place Road and Mahopac High School Entrance Driveway

Baldwin Place Road and the Mahopac High School Entrance Driveway intersect at an unsignalized, "T" shaped intersection.

Capacity analysis conducted at this intersection utilizing the 2008 Existing Traffic Volumes indicates that it is currently operating at a Level of Service "A" during each of the Peak Hours.

Reanalyzing the intersection with the 2016 No-Build and Build Traffic Volumes indicates that it will continue to operate at a Level of Service "A" during each of the Peak Hours in the future. No improvements are recommended at this location.

22. Proposed Residential Site Access on US Route 6

The residential portion of the site, which includes 300 flats, townhouses and cottage units, is proposed to be accessed via the construction of a new roadway connection to US Route 6. This access road will be located south of the Mahopac Post Office north of Union Valley Road and access will form a "T" shaped intersection with US Route 6. It is proposed that the new roadway approach to US Route 6 consist of two lanes and the northbound US Route 6 approach be widened to provide a separate left turn lane. The residential road will connect to the proposed development by-pass road near the projects center, in the vicinity of Building F.

Capacity analysis conducted utilizing the Year 2016 Build Traffic Volumes indicates that the

intersection will experience a Level of Service “E” with an average vehicle delay of 37.4 during the AM Peak Hour and a Level of Service “F” with an average vehicle delay of 193.6 during both the PM and Saturday Peak Hours. Therefore, it is also recommended that this new intersection be monitored for potential future signalization. The analysis conducted as a signalized intersection indicates that it will experience Level of Service “C” or better during peak periods.

Improvements to this intersection will be accomplished in conjunction with the Union Place project as part of the Highway Work Permit process.

3.7.7 Traffic Accident Data

All accident data for area roads over the last three-year period was collected from the New York State Department of Transportation. Copies of the accident data are contained in Appendix H of the DEIS. According to Records Officer Bonniello², Accident Data from the Carmel Police Department is recorded in the NYSDOT Accident Database. Table 3.7-5 provides a summary of the accidents by location, type, weather conditions, number of vehicles involved and other important contributing factors.

Table 3.7-5 Collision Data Summary Table												
Location	Number of Collisions										Light Conditions *	
	Number of Collisions	Fatalities	Injuries **	Property Damage Only	Non-Reportable	Wet Road	Fixed Object *	Pedestrian & Bike *	Truck * and **	Light Conditions *		
										Dawn/Dusk *	Day *	Night *
NYS Route 118 Including Miller Road Intersection to US Route 202	48	1	12	30	5	5	8	0	1	2	23	15
Miller Road Including US Route 6 Intersection to NYS Route 118	7	0	3	4	0	2**	0	0	0	0	4	2
Baldwin Place Road from NYS Route 118 to NYS Route 6N	31	2	16	13	0	8**	10	0	0	2	21	6
US Route 6 from NYS Route 6N to Union Valley Road	197	0	83	94	20	32	14	2	9	11	131	47
* Excludes partially coded non-reportable collisions. ** Excludes Pickups and Vans Complete data only available through December 31, 2007. Source: New York State Department of Transportation, January 1, 2005 to December 31, 2007.												

3.7.8 Site Access Locations

As shown on the Overall Site Plan, Figure 2-2, there are a total of five site access points for the

² Phone conversation with Records Officer Bonniello, July 17, 2010.

Union Place project, three for direct access to the commercial/business portion of the site, one to provide access between US Route 6 and the Union Heights residential area; and one with direct access between US Route 6 and the restaurant and pharmacy area. Three of the access roads are located along US Route 6 and two are located on Baldwin Place Road.

The boulevard style main entrance to the project will be at a point where US Route 6 and Baldwin Place Road/NYS Route 118 currently intersect. There is an existing Mobil gas station at the location of the proposed entrance roadway which will be removed to accommodate the new roadway. There is also a Citgo Gas Station at the northeast corner of the intersection and a Getty Gas station at the southwest corner of the intersection. Opposite the proposed entrance roadway location is the Somers Commons Shopping Center. Sidewalks are provided along the southeast corner of the intersection along the Somers Commons Shopping Center property. Sidewalks will also be provided along the proposed site roadway. Since there is an existing gas station at the proposed roadway location the grades in this are relatively level. Also since the roadway will connect to an existing intersection, the provided sight distances will satisfy NYS DOT requirements.

A traffic roundabout is proposed to be located approximately 300 feet from the main entrance intersection to disperse traffic between Baldwin Place Road and the West Access Road, which provides access to the parking areas for the main street commercial area. Beyond the roundabout, the road will extend roughly 250 feet before intersecting with the North Entrance Road also referred to as the Baldwin Place Road/US Route 6 Bypass (Town by-pass road). At this point the main entrance road becomes "Main Street", which will convey traffic and pedestrians through the village center.

The Town by-pass road runs along the east (back) side of the buildings on the east side of Main Street intersecting with the terminus of 1st, 2nd, 3rd, 4th and 5th Streets (the five cross streets to Main Street) before finding its way past the entrances to the anchor (Building A) and Buildings C, D and E before ending at Baldwin Place Road. The Union Heights road system terminates at the Town by-pass road at the end of 1st Street. All roads including the Town by-pass road will be planted with street trees and shrubs in accordance with the Layout and Landscape Plans attached to this DEIS. As an attractive alternate to traveling on US Route 6, the Town by-pass road can reduce traffic delays at local intersections and increase convenience for all motorists, including school buses, using the roads in the vicinity of the project site.

The intersection of US Route 6 and Baldwin Place Road will be upgraded and realigned, and the existing signal will be upgraded. Traffic operating conditions have been conducted at this intersection which is labeled as intersection number 15 in the Traffic Impact Study.

The second site access connection to U.S. Route 6 will be in conjunction with the Town Bypass Roadway which is proposed to connect opposite the existing A&P Shopping Center access driveway approximately 1,300 feet east of the main entrance. The Mahopac Senior Center is accessed via Route 6 to the north of this location otherwise there are no other existing land uses immediately adjacent the proposed site access location. The existing terrain in the area of the proposed site access will require some excavation and regarding to meet the existing grade of U.S. Route 6. Also it appears that there is an existing utility pole in the area of the site access that will have to be relocated. This intersection will require the installation of a traffic signal and therefore will meet all NYS DOT requirements.

This access road would also be a boulevard type road approximately 650 feet in length. This

access road would terminate at a second roundabout where it intersects with the Baldwin Place Road/US Route 6 Bypass. This access will include installation of a new traffic signal. Traffic operating conditions for this intersection have been conducted at this intersection which is labeled as intersection number 12 in the Traffic Impact Study.

A third entry into the site from US Route 6 for use by residents of Union Heights would be located east of the Mahopac Post Office. The terrain in the vicinity of this proposed access is relatively level both along US Route 6 as well as for the proposed roadway. Therefore adequate sight distances will be easily attainable with the clearing of nearby trees and shrubs.

After traversing the residences this third access road continues into the site and meets with an access drive that would be constructed at the rear of the Putnam County Senior Center prior to intersecting with the Baldwin Place Road/US Route 6 Bypass. This access will be stop sign controlled. Traffic operating conditions for this intersection have been conducted at this intersection which is labeled as intersection number 22 in the Traffic Impact Study.

Based on the proposed layout, Baldwin Place Road will be rerouted to connect with the main entrance boulevard, as shown on the site plan. As part of the proposed rerouting, Kennard Road, which currently intersects with Baldwin Place Road about 250 feet north of its confluence with US Route 6, will be extended to US Route 6 as a right turn entry and right turn exit intersection. Traffic from the residential neighborhood to the west, the only adjacent land use, will use alternate routes to access Baldwin Place Road at its intersection with Maple Drive. Traffic at this location is assessed as part of the overall traffic analysis of the Main Access US Route 6 and Baldwin Place Road Intersection.

The second access off of Baldwin Place Road, the Town by-pass road would be situated opposite Grand Meadow Drive. Grand Meadow Avenue currently provides access to a daycare facility as well as a residential development which is currently under construction. There are no other adjacent land uses. However, there are other residences along Baldwin Place Road to the north and south of this location. Due to the terrain in the vicinity of the proposed site access it appears that regrading will be required to meet the existing grade of Baldwin Place Road. Also it appears there is a utility pole that may need to be relocated during construction of the new roadway. Some clearing and/or pruning of nearby vegetation will be completed to provide adequate sight distances.

The Grand Meadow Drive entrance into and associated route through the project ties Baldwin Place Road to US Route 6 at several locations either directly or via connections to other roads planned for the Proposed Action. This internal road network will allow residents and other local travelers to bypass the main US Route 6 entrance roadway if desired. Installation of a new traffic signal will likely to be required at this location. Traffic operating conditions have been conducted at this intersection which is labeled as intersection number 19 in the Traffic Impact Study.

Finally, the proposed plan includes a connector road from the Putnam County Senior Center to the drive that links Union Heights with the remainder of the development. This will allow users of the senior center direct access to the shopping, services, offices and amenities associated with Union Place.

The project location and multiple entrances would provide easy access to the commercial and office uses proposed along the main street area and will offer an alternative to US Route 6 for new commercial development. Access from US Route 6 will also provide easy access for

construction and delivery vehicles.

3.7.9 Internal Circulation

As described above, the internal circulation pattern has been developed which will allow for direct access to the varying uses on the site, while at the same time allowing for excellent connections among the various uses in addition to providing traffic calming via the internal roundabout structures.

The commercial portion of the site is developed around a "spine" with the buildings located on either side of the road. Sidewalks to facilitate pedestrian access have been provided along each side of the roadways with crosswalks at each intersection. The parking areas are located behind the buildings away from the main street thoroughfare. An external ring road encircles the commercial/business portion of the site, encouraging pedestrian access internal to the commercial/business area, while allowing direct vehicle access to the parking along the perimeter of this area.

The new road which runs between Baldwin Place Road and US Route 6, allows for connection of the Union Heights residential area with the commercial/business portion of the site. This new road will also serve as a bypass to Baldwin Place Road/US Route 6 for site generated commercial and business traffic. For those patrons and residents choosing to use an automobile within the proposed development, the internal road network provides a convenient, safe and attractive means for them to reach their destination without having to travel outside of the project bounds.

Roundabouts have been included in the access design from US Route 6 to provide for traffic calming of vehicles entering and exiting the main street area. As can be seen in Figure 2-2 Overall Site Plan, crosswalks and side walks have been included in the design of the roundabouts. The curvilinear design of the roads in the Union Heights residential area will also serve to reduce vehicle speeds internal to the site.

The project design offers excellent emergency access through the availability of five external access points and through the interconnectivity of the developed areas of the site.

3.7.10 Pedestrian and Bicycle Facilities

There were no pedestrians observed crossing at any of the traffic count locations during the peak hours. In general, pedestrian volumes in the area are considered very light. Under the existing condition, the only locations where pedestrian facilities are provided are in the vicinity of the U.S Route 6 and NYS Route 118/Baldwin Place Road intersection and in and around the Somers Commons Shopping Center. Otherwise, there are generally no pedestrian facilities provided along the area roadways. US Route 6 has shoulders which are used by bicyclists. The County Bike Way can be accessed via NYS Route 118 near the Somers Commons Shopping Center, as well as via Miller Road and Union Valley Road.

The main street commercial/business area of the site has been laid out to be pedestrian friendly with pedestrian facilities throughout to accommodate trips between buildings and parking areas. As can be seen in Figure 2-2 Overall Site Plan, crosswalks have been located at five of the internal intersections along the main commercial street. Sidewalks are proposed along either side of the main street, in and among the buildings along the main street, and between the buildings and the parking areas adjacent to Baldwin Place Road. Parking areas are located

behind the buildings separated from the pedestrian areas. The ring road around the commercial portion of the site allows for easy direct access to the parking areas while reducing conflicts with pedestrian movement. Green space and attractive landscape and built elements will add to the visual appeal of the area for pedestrians. Bicycle racks may be installed along the sidewalk areas on the main street to encourage bicycle use, particularly within the project. It is anticipated that the side streets from the parking areas will be stop sign controlled to minimize vehicle conflict and to facilitate movement along the main commercial street.

3.7.11 Mass Transit

Putnam County Department of Planning provides public bus transportation within the project area. Putnam Area Rapid Transit (PART) runs four bus lines to serve the County east of the Taconic State Parkway. The PART Route 2, which provides service from Putnam Plaza in Carmel to the Jefferson Valley Mall in the northern part of Yorktown, runs along US Route 6 and Baldwin Place Road past all of the entrances to the Proposed Action. Stops are established at multiple locations in the vicinity of the project including at the Mahopac Hills Senior Center, Mahopac Village (A&P), Somers Commons, US Route 6 and Baldwin Place Road, Baldwin Place Road and Myrtle Avenue and Mahopac High School.

This bus is scheduled to depart from Putnam Plaza on the hour every other hour starting at 6:00 AM (8:00 AM on Saturday) and ending at 6:00 PM (4:00 PM on Saturday). It arrives and leaves Jefferson Valley Mall on the hour every other hour starting at 7:00 AM (9:00 AM on Saturday) and ending at 7:00 PM (5:00 PM on Saturday). Service is not currently provided on Sunday. PART schedules and routes are available from the Putnam Transit section of the Putnam County web site at <http://www.putnamcountyny.com/PART/routeinfo.htm>.

Connections are available to PART Routes 1, 3 and 5 at the Putnam Plaza. A demand responsive para-transit system is also available, run by Putnam County, which provides para-transit service to senior citizens and persons with disabilities. A full description of the Putnam County bus service provided by Putnam County Department of Planning including fares and schedules is available at www.putnamcountyny.com/PART.

3.7.12 School Bus Traffic

The site lies entirely within the Mahopac School District and is located just to the south of the Mahopac High School/Middle School Campus, which is accessed from Baldwin Place Road. The bus depot for the entire school district is located at 10 Myrtle Road, however access to the bus depot is primarily from Baldwin Place Road. According to the School District³ there are approximately 56 school buses which enter and exit the bus depot starting at 6:45 a.m. Bus routing for the High School and Middle School are combined. Arrival time at the High School/Middle School is 7:15 a.m. to 7:35 a.m. and dismissal occurs at 1:53 p.m. As with any of the high schools in this area, there are after school activities. Approximately 10 afternoon activity buses depart the school campus at approximately 3:30 p.m.

In addition to school bus traffic generated by the High School/Middle School, the same 56 buses have second runs to accommodate the elementary schools in the Mahopac School District, which also travel on Baldwin Place Road. This school bus vehicle traffic is part of the existing condition and was accounted for in the 2008 volume counts.

³ TMA staff phone conversation with Mr. Ed Harkins, Director of Transportation, Mahopac Central Schools, February 2, 2009.

The proposed new Town Road, which will serve as a by-pass to US Route 6 in this area, will provide a convenient alternative routing for school buses traveling to areas to the north and/or east of the districts bus garage located off Myrtle Avenue.

Based upon a projected increase in school age children of 83 students; and based upon the school district practice of transporting all students, it is anticipated that an additional two school buses may be necessary to service the residents of Union Heights.

3.7.13 Construction Traffic

Construction traffic consists primarily of construction vehicles arriving at the beginning and departing at the end of the construction period, trucks carrying and delivering supplies, and daily trips of construction workers.

As discussed in Socioeconomic section 3.9, it is estimated that approximately 3,500 full time equivalent jobs will be created as a result of the proposed Union Place project, this represents an average of 700 jobs annually over the five year build out period. The 700 annual jobs are a combination of construction workers, material delivery persons and other workers. Construction workers typically arrive and depart the site prior to standard peak hours of traffic as would the initial construction vehicles. Trucks delivering construction supplies would arrive and leave during the day. The applicant will work with the town to establish specific requirements for construction-related vehicles. Construction vehicles and employees would park on-site at all times possible.

Trip generation for the project is anticipated to be more than 700 trips during the peak hour in the peak direction. It is anticipated that 971 new trips will be entering the site during the p.m. peak hour and 1,554 trips will be exiting the site during the p.m. peak hour. Each of the construction entrances is anticipated to operate at acceptable levels of service "D" or better under full build conditions, thus it can be assumed that the construction access points have sufficient capacity to handle the construction traffic at acceptable levels of service.

Construction Operations

The heaviest volume of construction traffic is expected to occur at the beginning of the construction as site clearing and rough grading is conducted, and when asphalt and building materials are transported to the site. Trucks hauling excess material from the project site will be needed during the grading activities. Grading is anticipated to be conducted according to the phasing plan presented in the drawing set.

Construction traffic will use the two stabilized construction entrances shown on the engineer's erosion control plan. It is anticipated that all large construction vehicles will access the site via the two stabilized construction access points from US Route 6. Excess material will be transported off site during non-peak traffic hours when additional traffic capacity is available.

Site construction activities will comply with Town ordinances regarding construction restrictions. Construction-generated dust will be controlled by the following procedures: i) minimizing the extent of soil that is left unvegetated at any one time; ii) the use of fast-germinating seed with mulch or other temporary soil cover; iii) spraying water on unpaved areas and areas of construction traffic when needed; and, iv) covering construction vehicles used to transport soil.

Town road surfaces will be cleaned at the end of each work week to remove tracked soil from

truck movements, unless more frequent cleaning is needed. Town road surfaces will be cleaned on an "as needed" basis, in addition to the cleaning at the end of each work week. Any damage to local roads attributed to construction traffic from this site will be repaired by the Applicant.

Additional Heavy Vehicle and Truck Traffic Description

In general the study area intersections experience a Heavy Vehicle percentage between 1% and 5% during each of the Peak Hours. In addition classification data collected by the machine traffic counts, which are contained in Appendix "B" of the Traffic Impact Study, indicates that the Heavy Vehicle Percentage along the U.S. Route 6 corridor is approximately 5% in each direction. The type of development proposed typically has truck trip generation which is approximately 2% of the total trip generation during the peak periods. Thus, the site truck generation will be less than the existing heavy vehicle percentages.

3.7.14 Parking Accumulation Study

A Mixed Use Parking and Loading Table is included on the Site Plan (refer to Sheet SP.1) which indicates the allocation of parking among the various uses on the site. The site plan provides 3,855 parking spaces plus an additional 95 spaces of handicapped parking totaling 3,950. A Shared Parking Accumulation Study has been conducted for the Proposed Action and is included in Appendix H. This study was conducted to identify the number of parking spaces required to adequately serve the development without creating excessive parking areas.

The parking evaluation considers the mixed use nature of the development which allows "shared parking" to occur. According to the Urban Land Institute's publication Shared Parking, Second Edition, shared parking is the use of a parking space to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two factors:

- Variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses, and
- Relationships among the land uses that result in visiting multiple land uses on the same auto trip.

The proposed Union Place development satisfies both of these criteria as the peak hours of parking generation for the residential, retail, office, hotel, and community center land uses generally do not coincide with each other. Case studies presented by the Urban Land Institute, such as that for the Block at Orange Development located in Orange, California, indicate that for similar type developments the actual parking utilization tends to be less than estimated by parking requirements calculated for each individual land use and concludes that this is due to the effects of shared parking. The Block at Orange Development contains a regional shopping center of approximately 500,000 s.f., several sit down and fast food restaurants, office space totaling 375,000 s.f., and health club similar to what is expected for the Union Place Development. A more detailed description of the analysis procedures presented by the Urban Land Institute and how they were applied to the Union Place Development are presented in Appendix H of this DEIS.

The proposed project has been divided into four areas based upon location and similarity of parking needs. Buildings N, O and P were not included in this study because of their distance from the core of the proposed development, which eliminates the possibility of sharing parking with the remainder of the buildings. Table 3.7-5 shows the recommended parking and the

amount of proposed parking for both weekday and weekend conditions.

Table 3.7-6 Summary of Recommended and Proposed Parking					
Parking Section	Location	Weekday		Weekend	
		Recommended Parking	Proposed Parking	Recommended Parking	Proposed Parking
1	Main /Access to Third Street	651	968	720	968
2	Third Street to First Street	1,067	966	761	966
3	First Street to Building "A" Access	1,473	1,221	560	1,221
4	Building "A"	532	534	599	534
Total	Entire Site	3,677	3,689*	2,513	3,689*

* Does not include parking spaces provided for Buildings N, O and P (166 spaces) as they are located outside of the four Parking Sections included in the Study.
Source: Shared Parking Accumulation Study and Loading Evaluation, John Collins Engineers, P.C. 2009.

The parking accumulation study demonstrates that the project can support and, as designed, provides sufficient parking for the project as a whole through sharing of parking spaces between sections and uses. The final layout of the buildings and supporting parking for specific areas on the site will be adjusted to meet the identified demand as the project moves through the SEQRA and site plan review processes. The Town of Carmel Planning Board has review authority over the number of parking spaces required for a given project and can waive or modify parking requirements pursuant to the parking provisions of the proposed Smart Growth Village zoning provisions.

3.7.15 Mitigation Measures

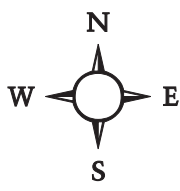
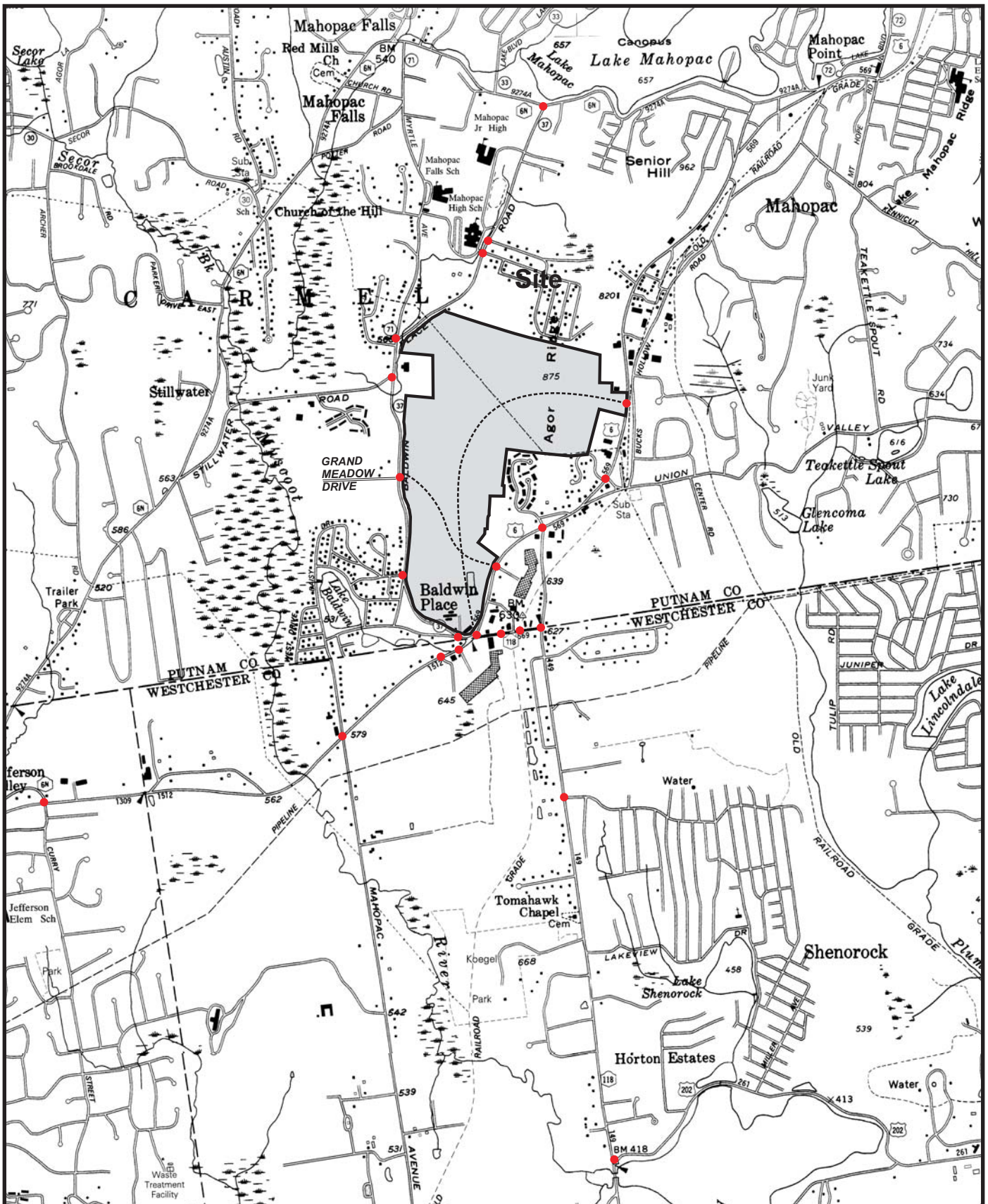
The Applicant will work with the Putnam County Department of Planning to provide bus stops to accommodate the project. It is envisioned that as many as three stops may be integrated into the site's design. One stop could be located at the community center of the Union Heights neighborhood, one stop could be located in the vicinity of the park adjacent to Building F, and a third stop could be located on the end of the main street, in the vicinity of building M. The number and specific locations of the potential stops would be identified and refined during the site plan review and approval process in coordination with the Putnam County Department of Planning.

According to the results of the *Traffic Impact Study* (Appendix H), there are certain existing traffic delays occurring during peak periods. With the completion of the improvements as listed in Table 3.7-6, the traffic to and from Union Place can be accommodated. Traffic flow and public safety in the vicinity of the site will be provided as a result of the proposed road improvements and project mitigation measures that are shown in Figure 3.7-24. Table 3C included in Appendix H provides a budget estimate and list of the agency responsible for the identified traffic improvement measures.

Table 3.7-7 Summary of Recommended Improvements				
Location		2016 No-Build	2016 Build Mitigation Measures	Responsibility
1	NYS Route 6N & Baldwin Place Road	Widen northbound Baldwin Place Road approach to provide separate left and right turn lanes.	Widen northbound Baldwin Place Road approach to provide separate left and right turn lanes.	Regional
2	Baldwin Place Road & Myrtle Avenue	None	None	N/A
3	Baldwin Place Road & Stillwater Road	Install Traffic Signal	Install Traffic Signal	Putnam County
4	Baldwin Place Road & Maple Drive	None	None	N/A
5	US Route 6 & Somers Commons Access (South)	Widen eastbound US Route 6 approach to provide two through lanes and a separate right turn lane.	Widen eastbound US Route 6 approach to provide two through lanes and a separate right turn lane.	Regional
6	US Route 6 & Curry Street/US Route 6N	Modify Traffic Signal Timings	Modify Traffic Signal Timings	Regional
7	US Route 6 & Mahopac Avenue	Widen eastbound US Route 6 approach to provide two through lanes. Widen northbound Mahopac Avenue approach to provide separate left and right turn lanes.	Widen eastbound US Route 6 approach to provide two through lanes. Widen northbound Mahopac Avenue approach to provide separate left and right turn lanes.	Regional / Somers Other Developments
8	US Route 6 & Somers Commons Access (North)	None	Widen northbound US Route 6 approach to provide two through lanes.	Regional / Union Place
9	US Route 118 & Somers Commons Access (West)	None	None	N/A
10	US Route 118 & Somers Commons Access (East)	Install Traffic Signal	Install Traffic Signal	Somers Other Developments
11	US Route 118 & Miller Road	Install Traffic Signal	Install Traffic Signal	Somers Other Developments
12	US Route 6 & A&P Shopping Center Drive/ Site Access	None	Widen northbound approach to provide two through lanes. Construct southbound US Route 6 right turn lane. Construct access roadway to provide a separate left turn lane, a shared left-through lane and a separate right turn lane. Install Traffic signal.	Regional / Union Place
13	US Route 6 & Miller Road / Jonathan Drive	None	None	N/A
14	US Route 6 & Union Valley	None	Widen southbound approach to provide a	Regional/ Union Place

Table 3.7-7 Summary of Recommended Improvements				
Location		2016 No-Build	2016 Build Mitigation Measures	Responsibility
	Road		separate left turn lane and widen westbound approach to provide separate left and right turn lanes. Restripe northbound approach to provide a separate right turn lane.	
15	US Route 6 & NYS Route 118/Baldwin Place Rd	None	Widen northbound and southbound approaches to provide two through lanes. Construct Site Driveway approach to provide separate left through and right turn lanes.	Regional/ Union Place
16	NYS Route 118 & Overhill Road	None	None	N/A
17	NYS Route 118 & NYS Route 202	Widen westbound US Route 202 approach to provide a separate right turn lane.	Widen westbound US Route 202 approach to provide a separate right turn lane	Regional
18	Baldwin Place Road & Kennard Drive	None	Reconstruct to intersect with US Route 6 at right turn entry/right turn exit only roadway	Union Place
19	Baldwin Place Road & Grand Meadow Drive/Site Access	None	Widen southbound approach to provide separate left turn lane. Construct westbound Site Roadway approach to provide a shared left-through lane and a separate right turn lane. Install Traffic signal.	Union Place
20	Baldwin Place Road & Gleneida Road / Mahopac High School Exit	None	None	N/A
21	Baldwin Place Road & Mahopac High School Entrance	None	None	N/A
22	NYS Route 6 & Residential Site Access	None	Widen northbound US Route 6 approach to provide separate left turn lane.	Union Place
23	Reconfigured Baldwin Place Road	None	Relocate Baldwin Place Road to connect Route 6 directly opposite Route 118	Union Place
24	Connect New County By-pass Road	None	Construct new County Road from Baldwin Place Road to Route 6 opposite Mahopac Village Plaza	Union Place

Source: John Collins Engineers, P.C., 2009.



LEGEND

- Site Property
- Intersections Studied

Figure 3.7-1: Site Location Map
 Union Place
 Town of Carmel, Putnam County, New York
 Base Map: USGS 7.5-minute Topographic Map,
 Mohegan Lake Quad
 Scale: 1" = 2,000'

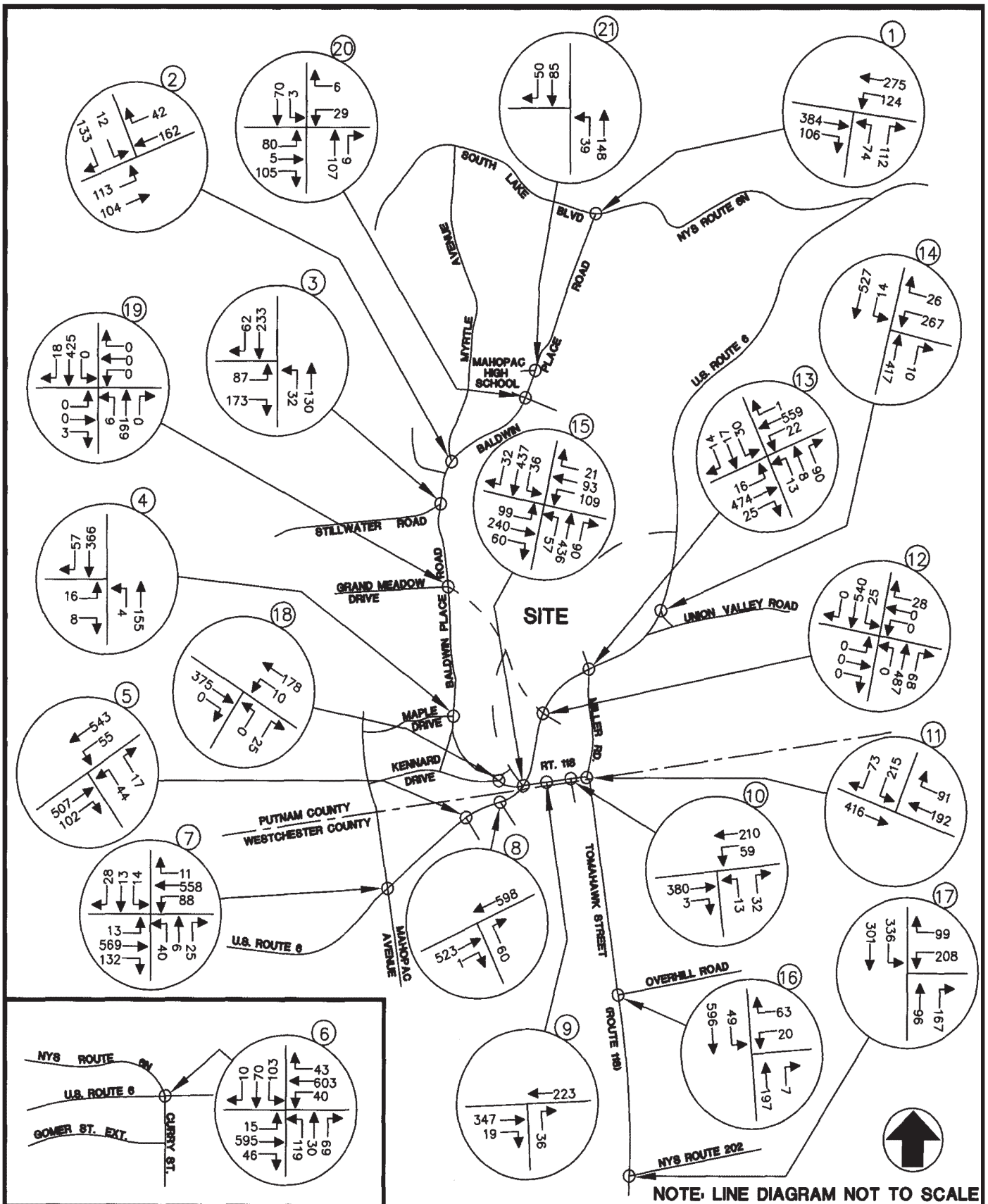
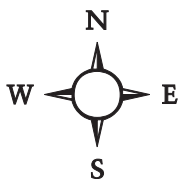


Figure 3.7-2: 2008 Existing Traffic Volumes
 Weekday Peak AM Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



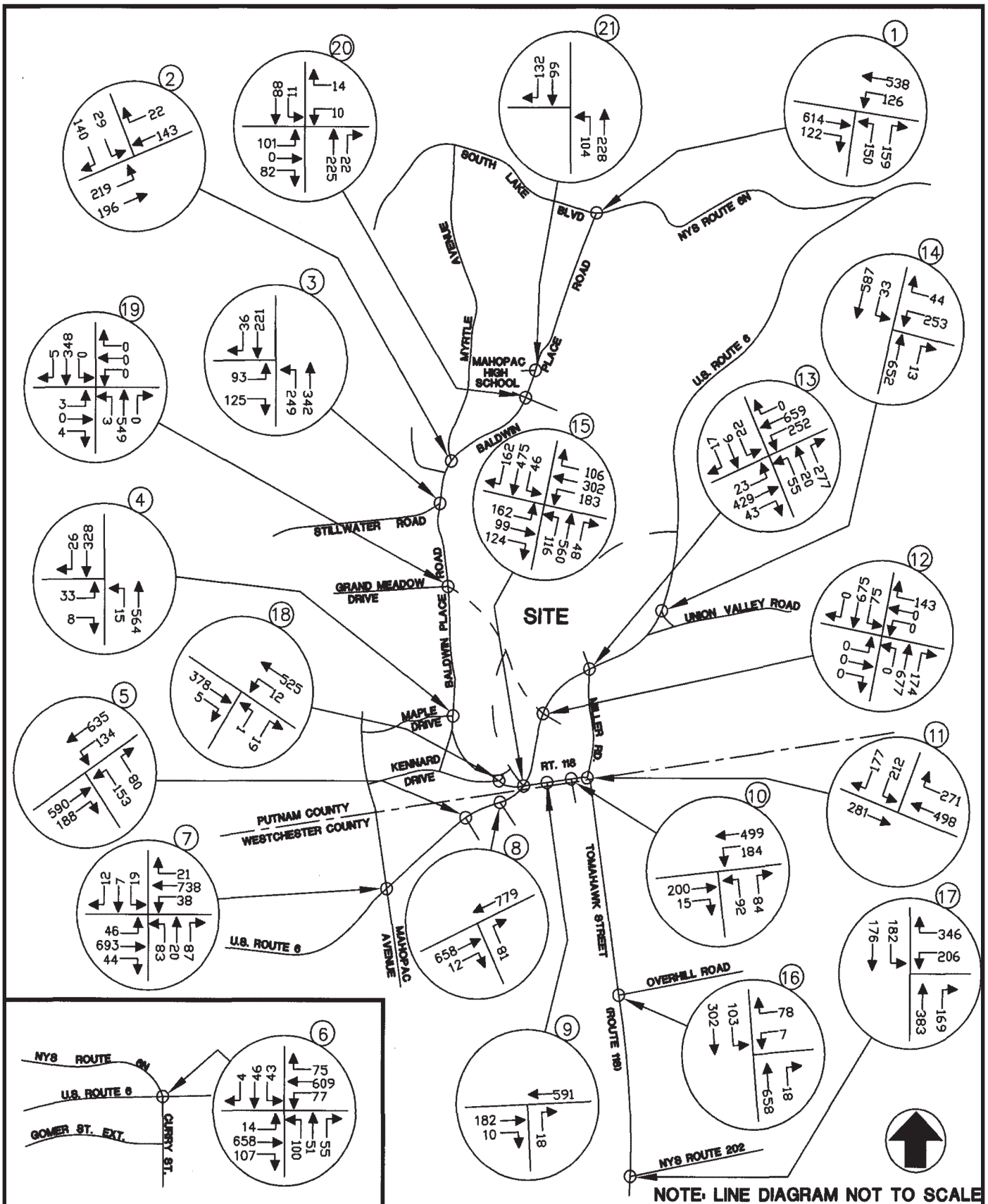
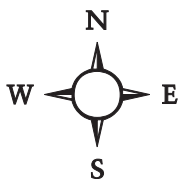


Figure 3.7-3: 2008 Existing Traffic Volumes
Weekday Peak PM Hour
Union Place
Town of Carmel, Putnam County, New York
Source: John Collins Engineers, P.C.
Date: January, 2009



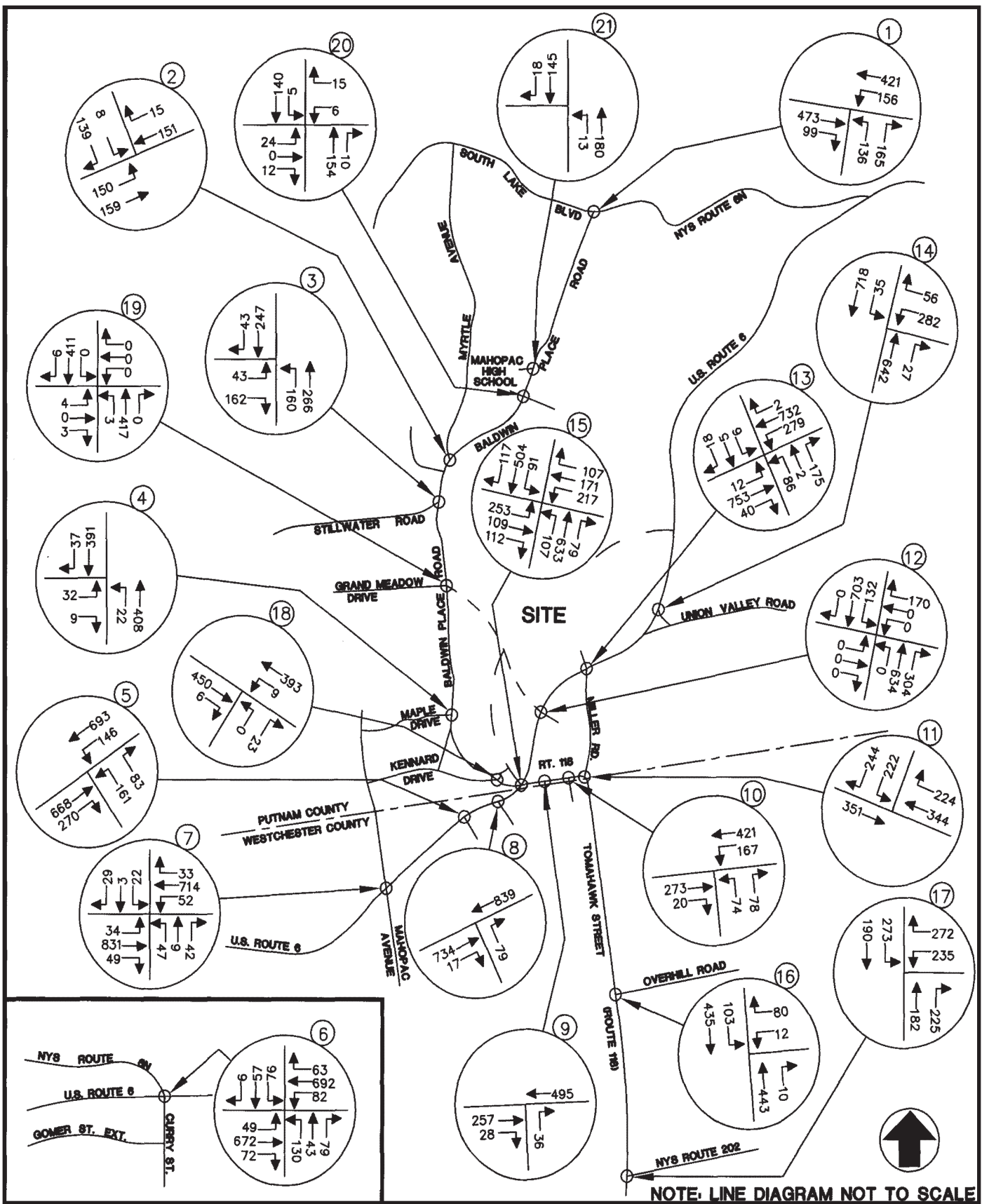
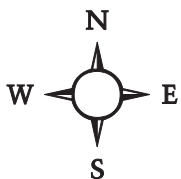


Figure 3.7-4: 2008 Existing Traffic Volumes
Saturday Peak Hour
Union Place
Town of Carmel, Putnam County, New York
Source: John Collins Engineers, P.C.
Date: January, 2009



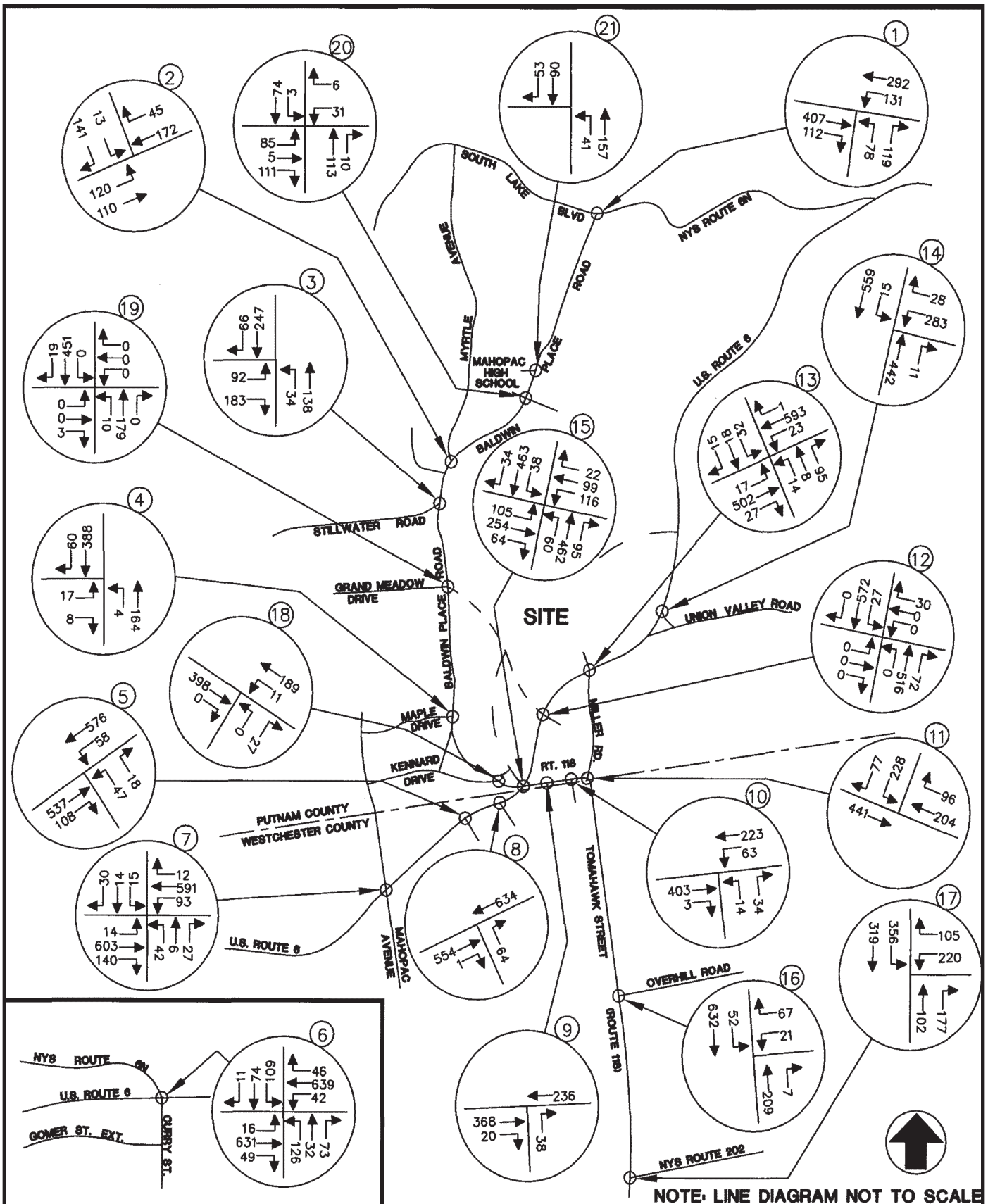
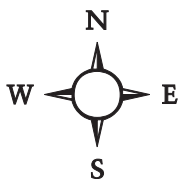


Figure 3.7-5: 2016 Projected Traffic Volumes
 Weekday AM Peak Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



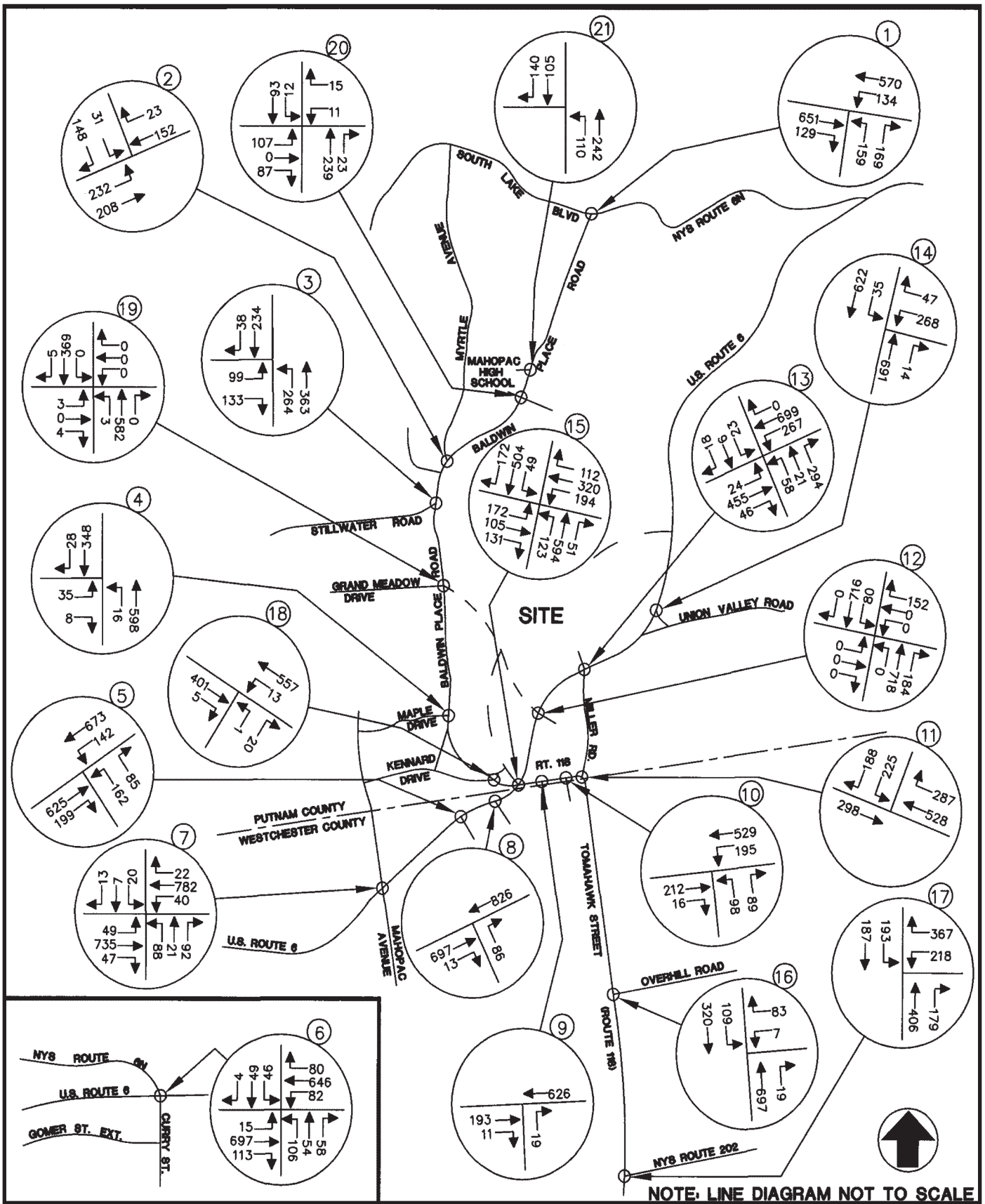
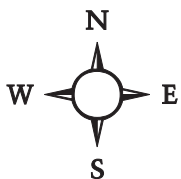


Figure 3.7-6: 2016 Projected Traffic Volumes
 Weekday PM Peak Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



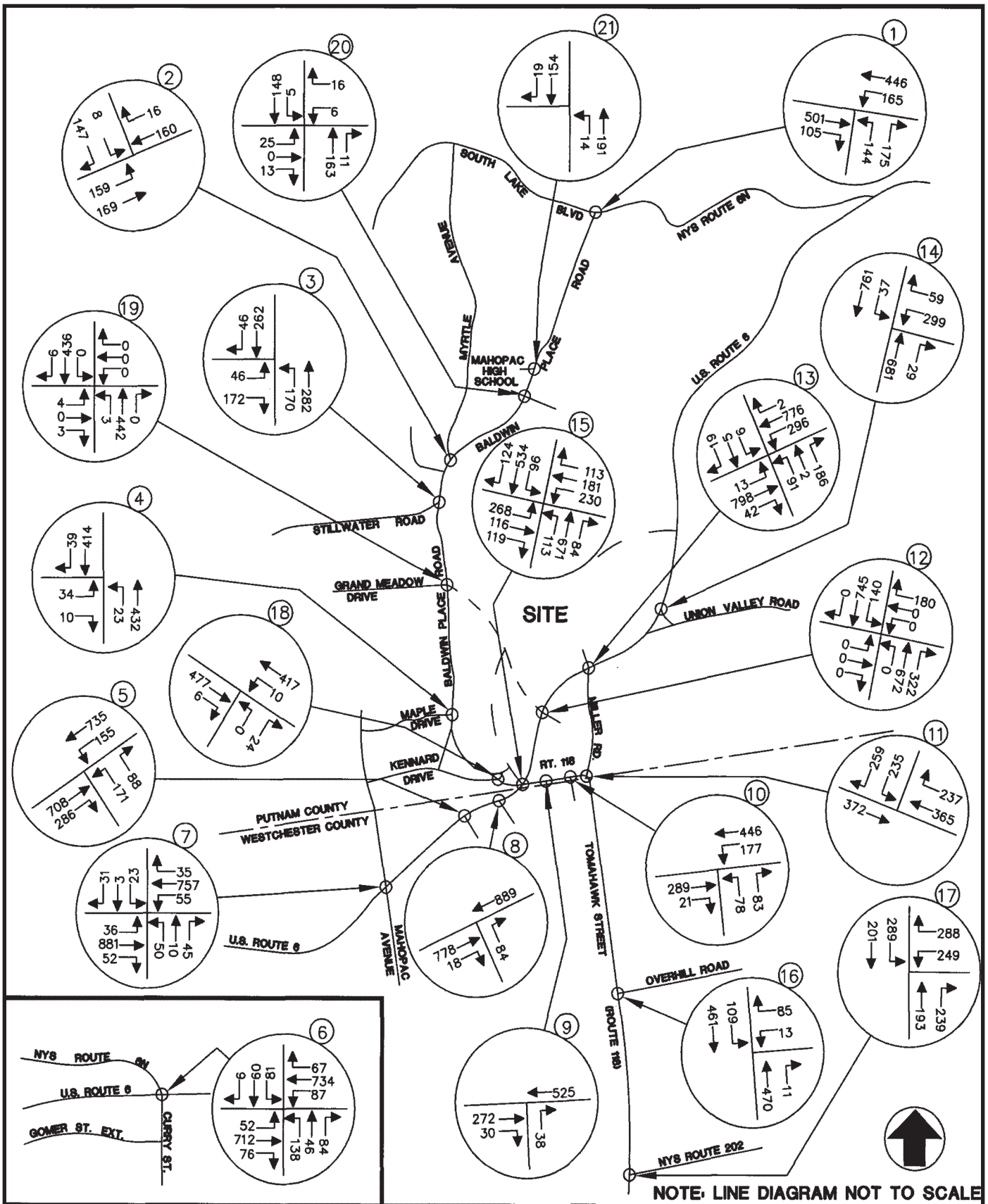
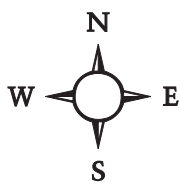
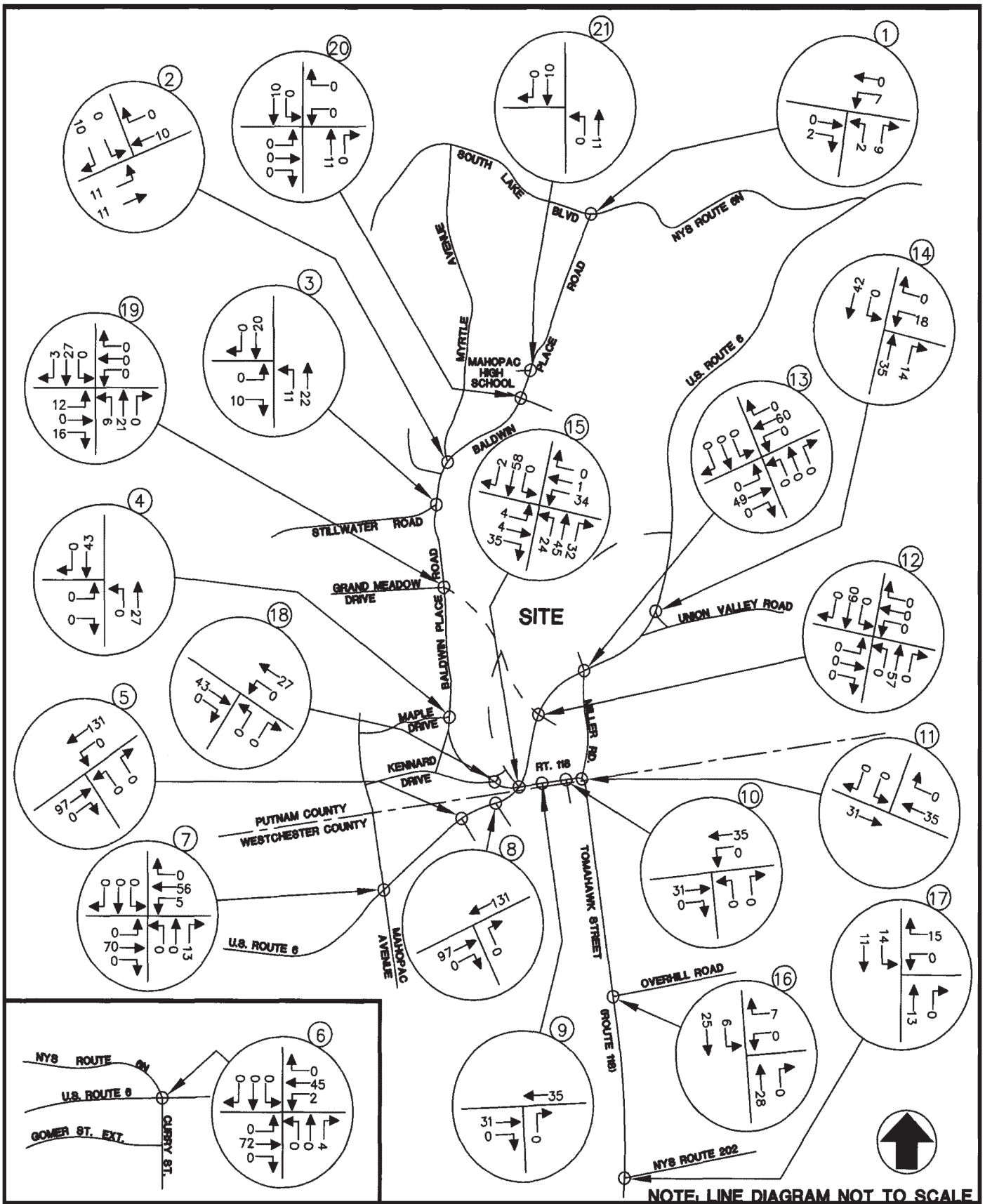


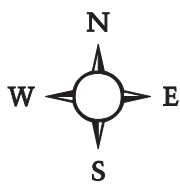
Figure 3.7-7: 2016 Projected Traffic Volumes
 Saturday Peak Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009





NOTE: LINE DIAGRAM NOT TO SCALE

Figure 3.7-8: Total Other Development Traffic Volumes
 Weekday AM Peak Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



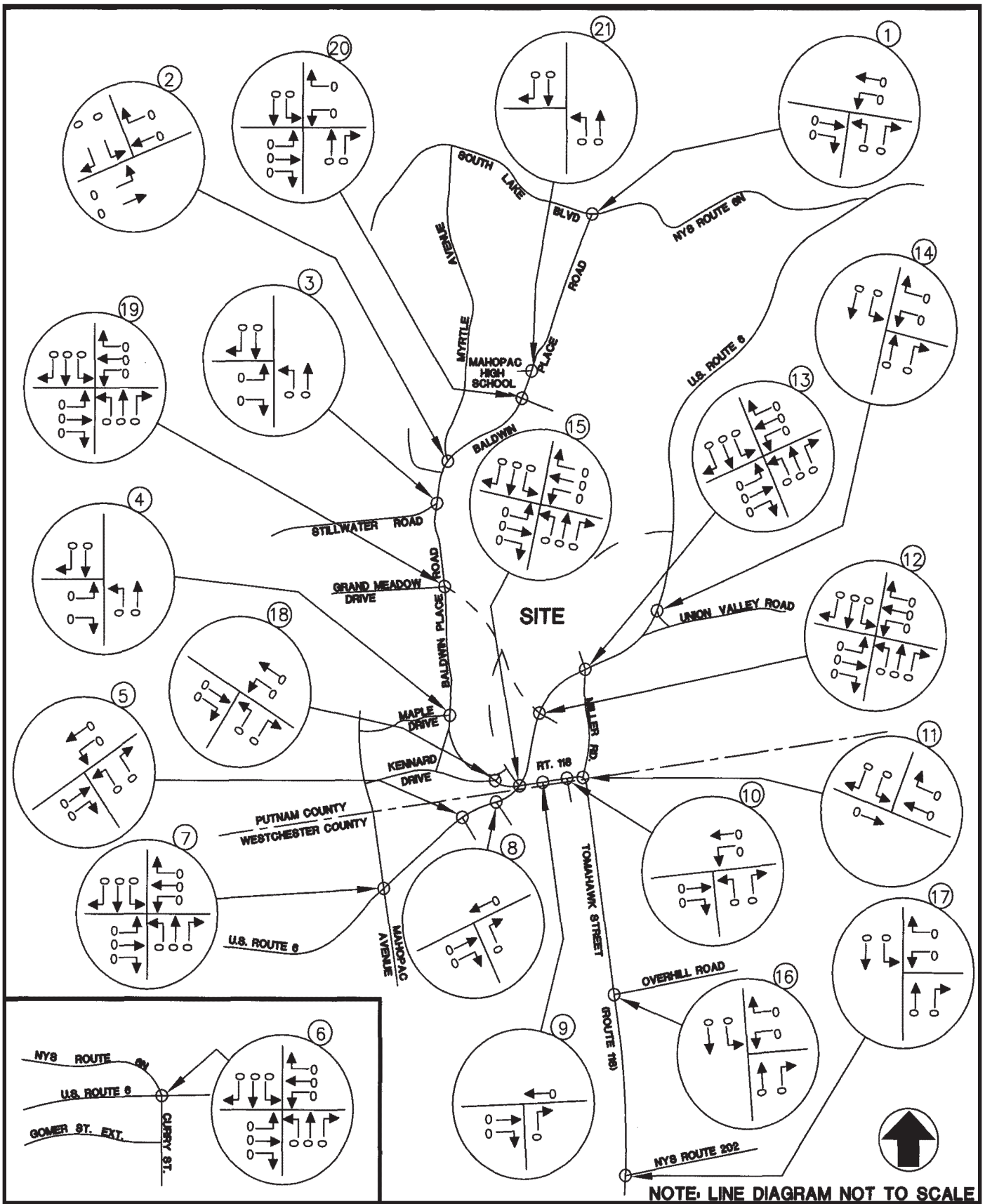
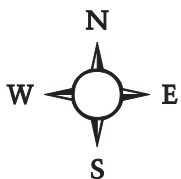


Figure 3.7-8A: Lupi Carwash Other Development Traffic Volumes
 Weekday Peak AM Hour

Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



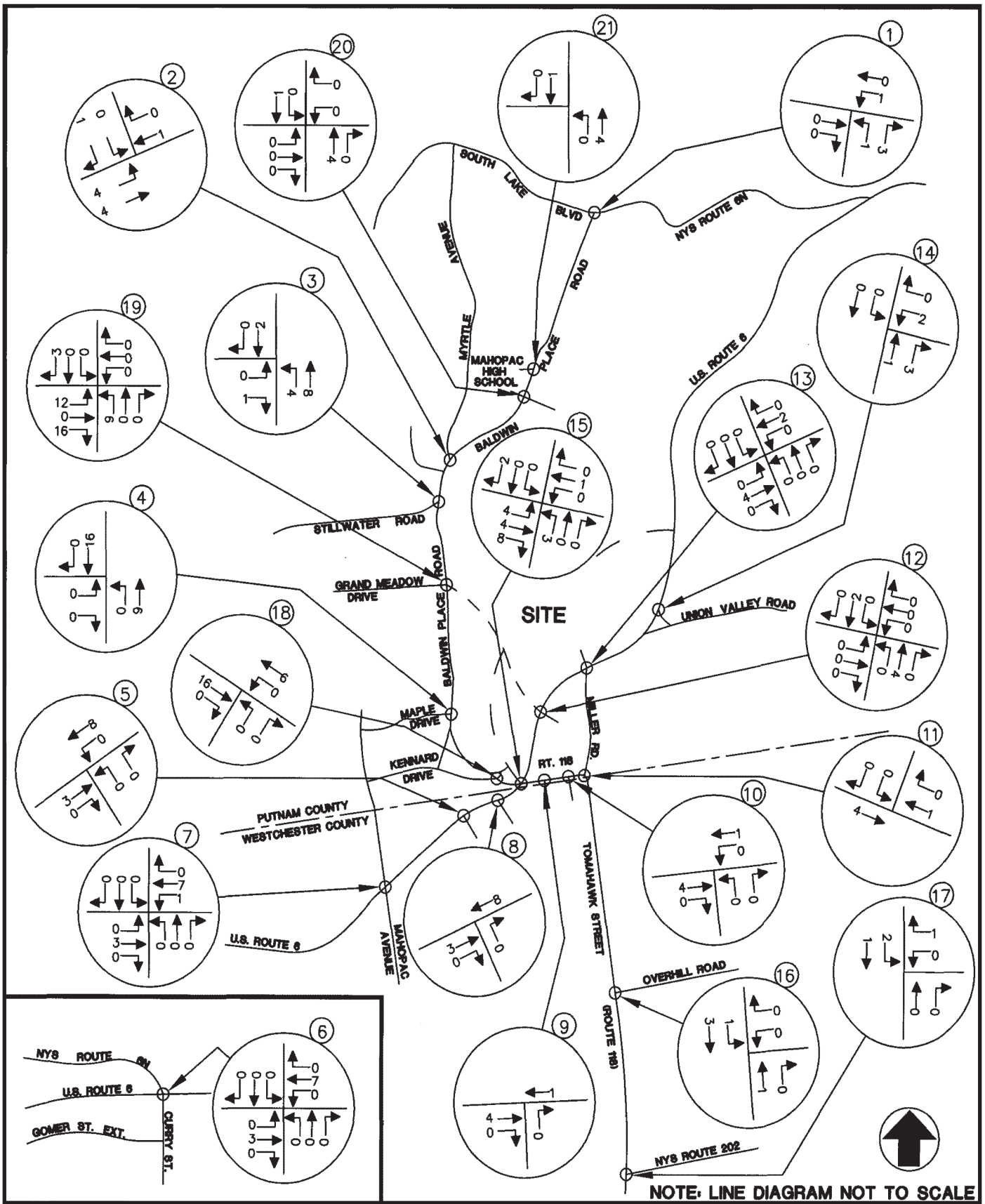
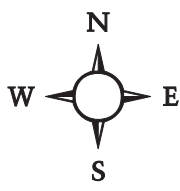


Figure 3.7-8B: Grand Meadow Estates Other Development
Traffic Volumes Weekday Peak AM Hour
Union Place
Town of Carmel, Putnam County, New York
Source: John Collins Engineers, P.C.
Date: January, 2009



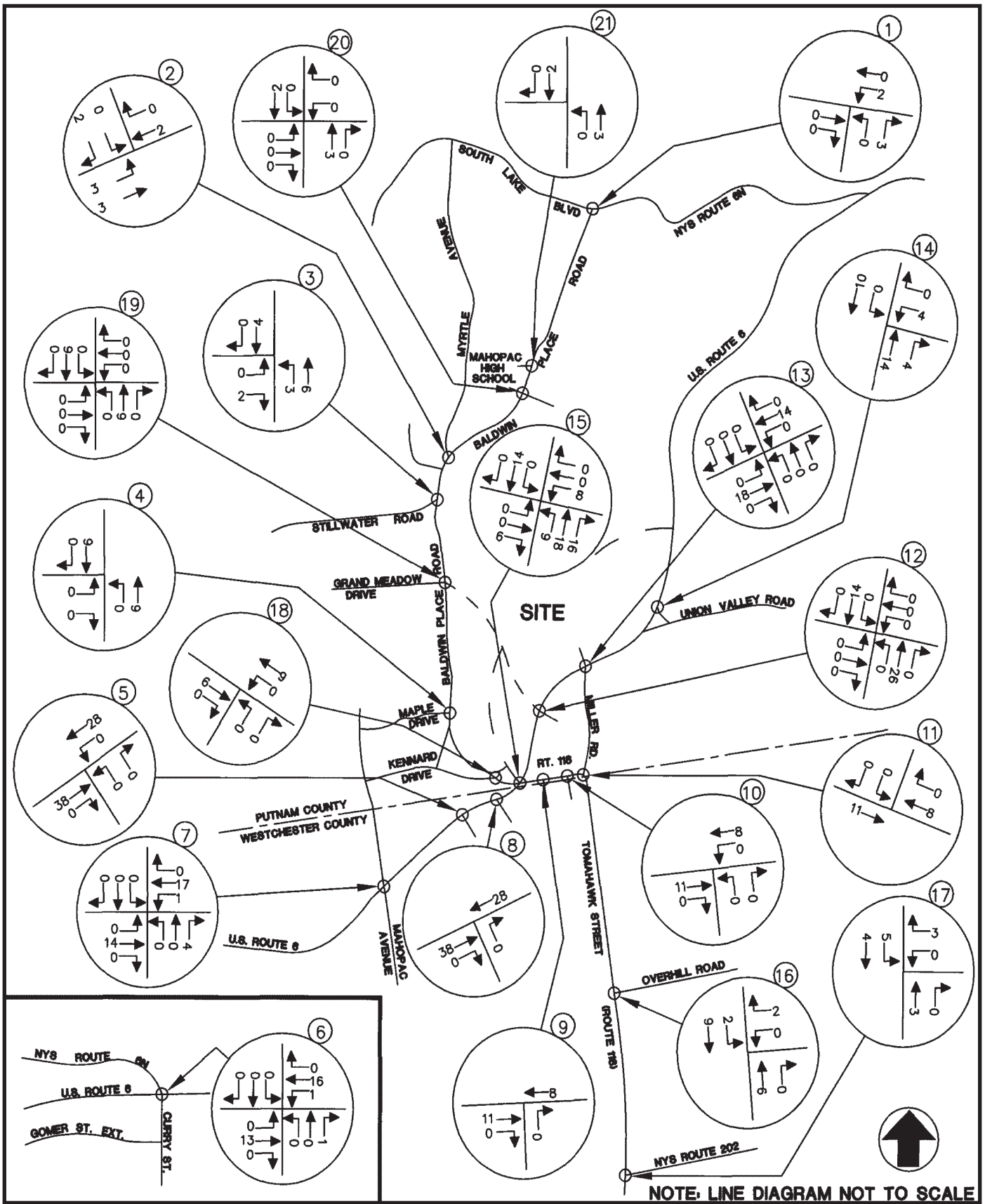
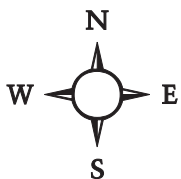
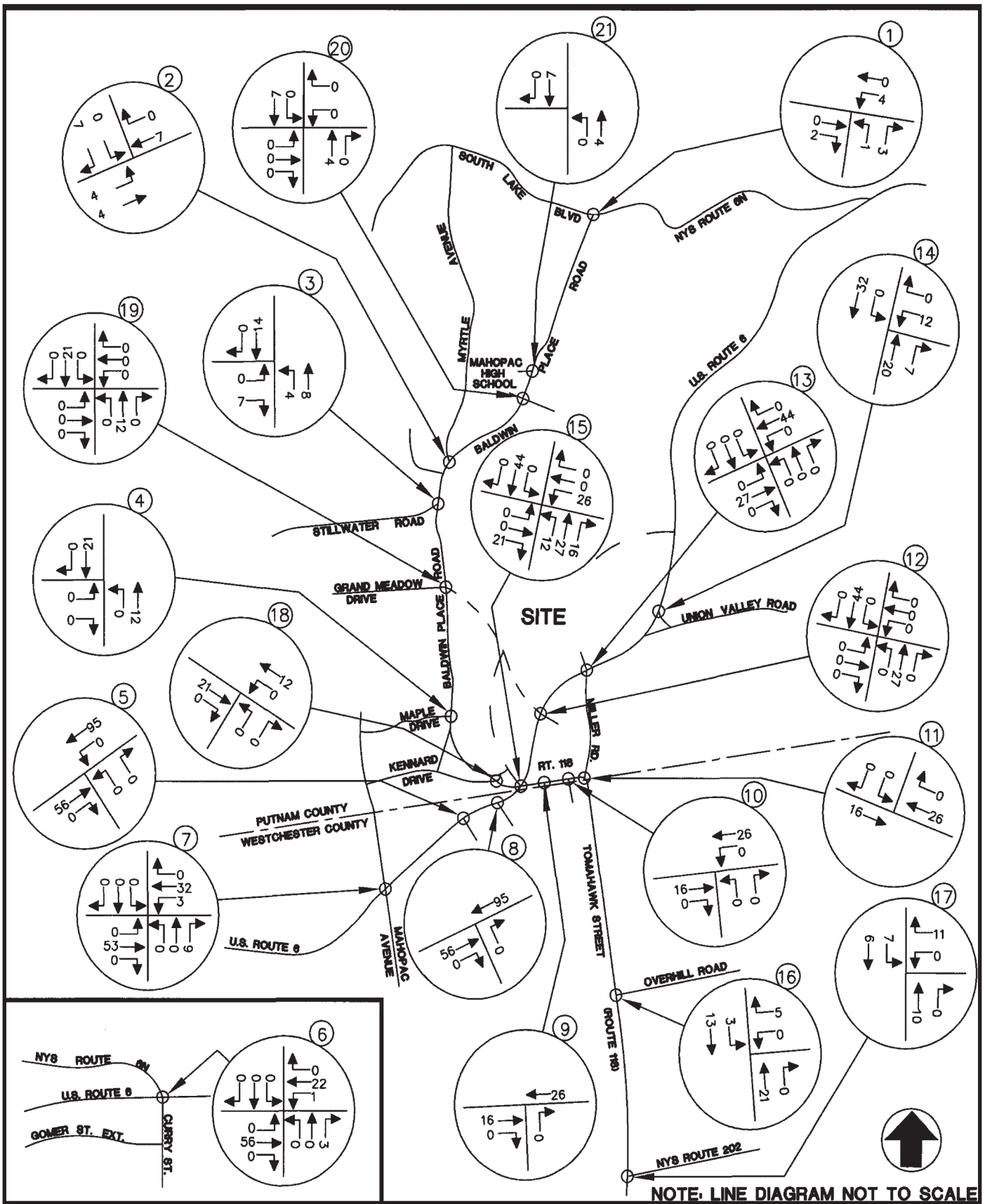


Figure 3.7-8C: Zappi Property Other Development
 Traffic Volumes Weekday Peak AM Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009

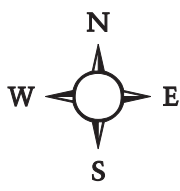




NOTE: LINE DIAGRAM NOT TO SCALE

Figure 3.7-8D: Planned Hamlet Somers Realty Corp. Other Development Traffic Volumes Weekday Peak AM Hour Union Place

Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



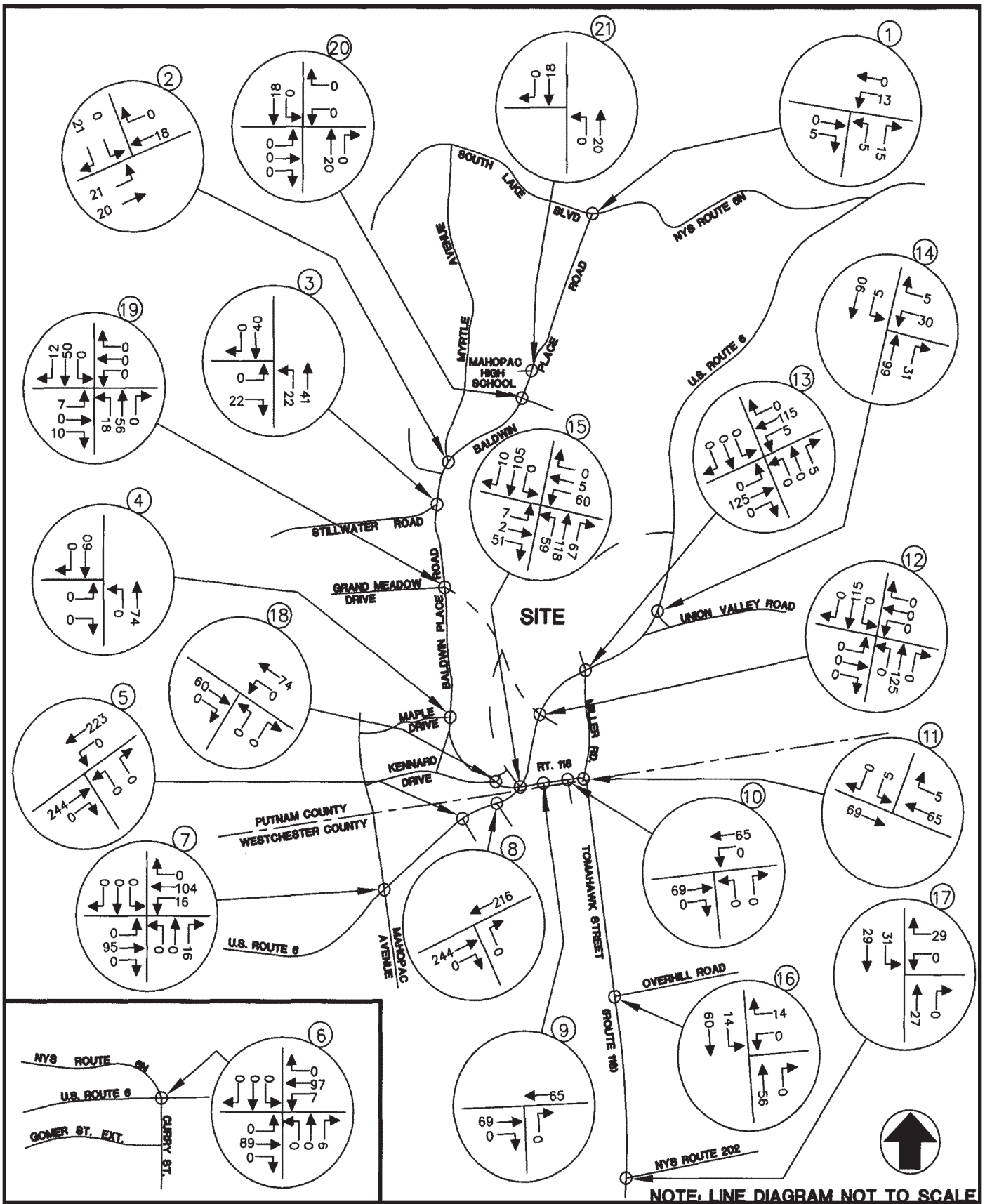
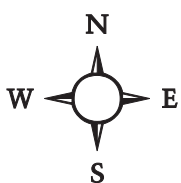


Figure 3.7-9: Total Other Development Traffic Volumes
 Weekday PM Peak Hour
 Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009



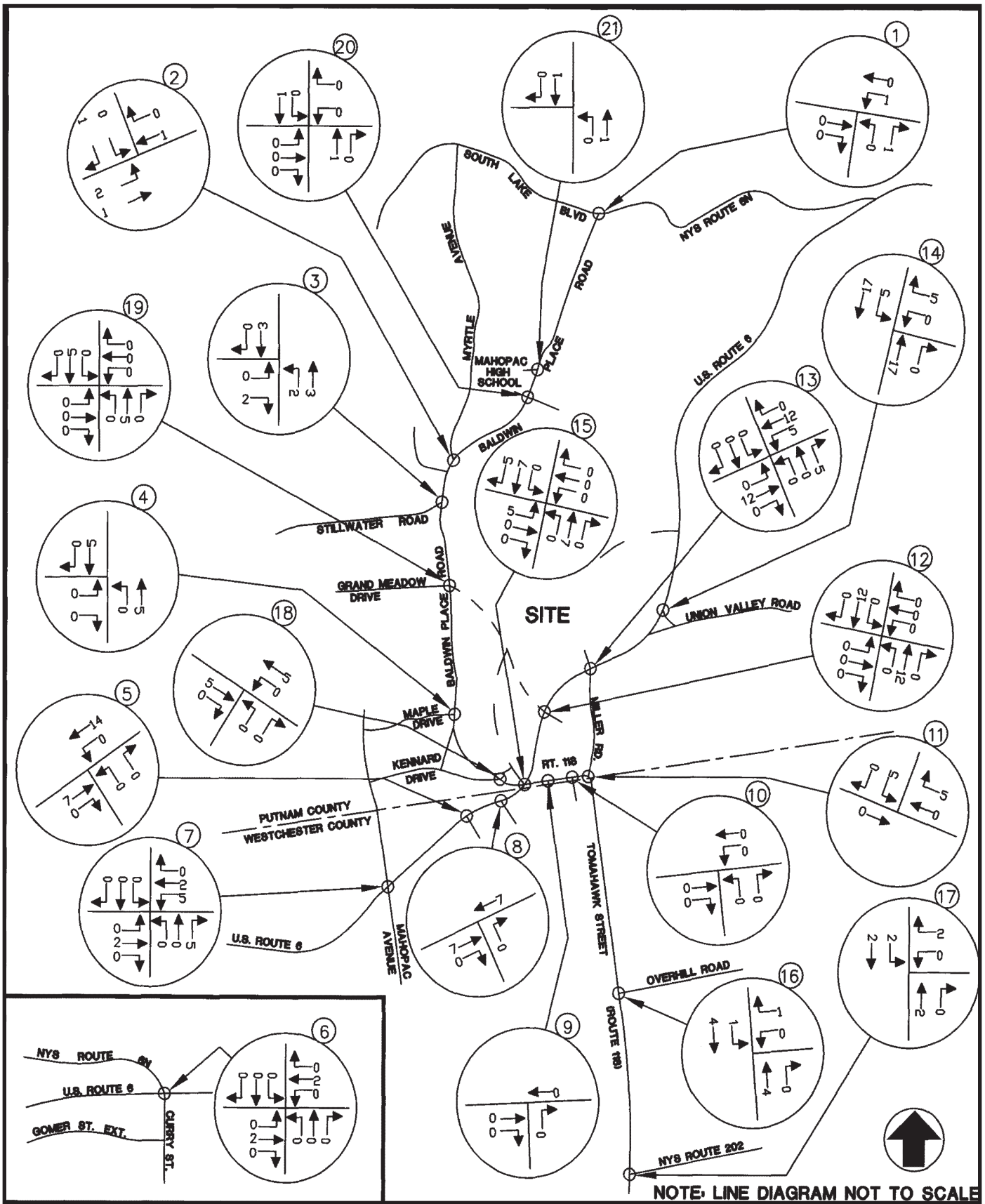
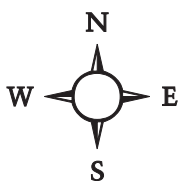


Figure 3.7-9A: Lupi Carwash Other Development Traffic Volumes
 Weekday Peak PM Hour
 Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009



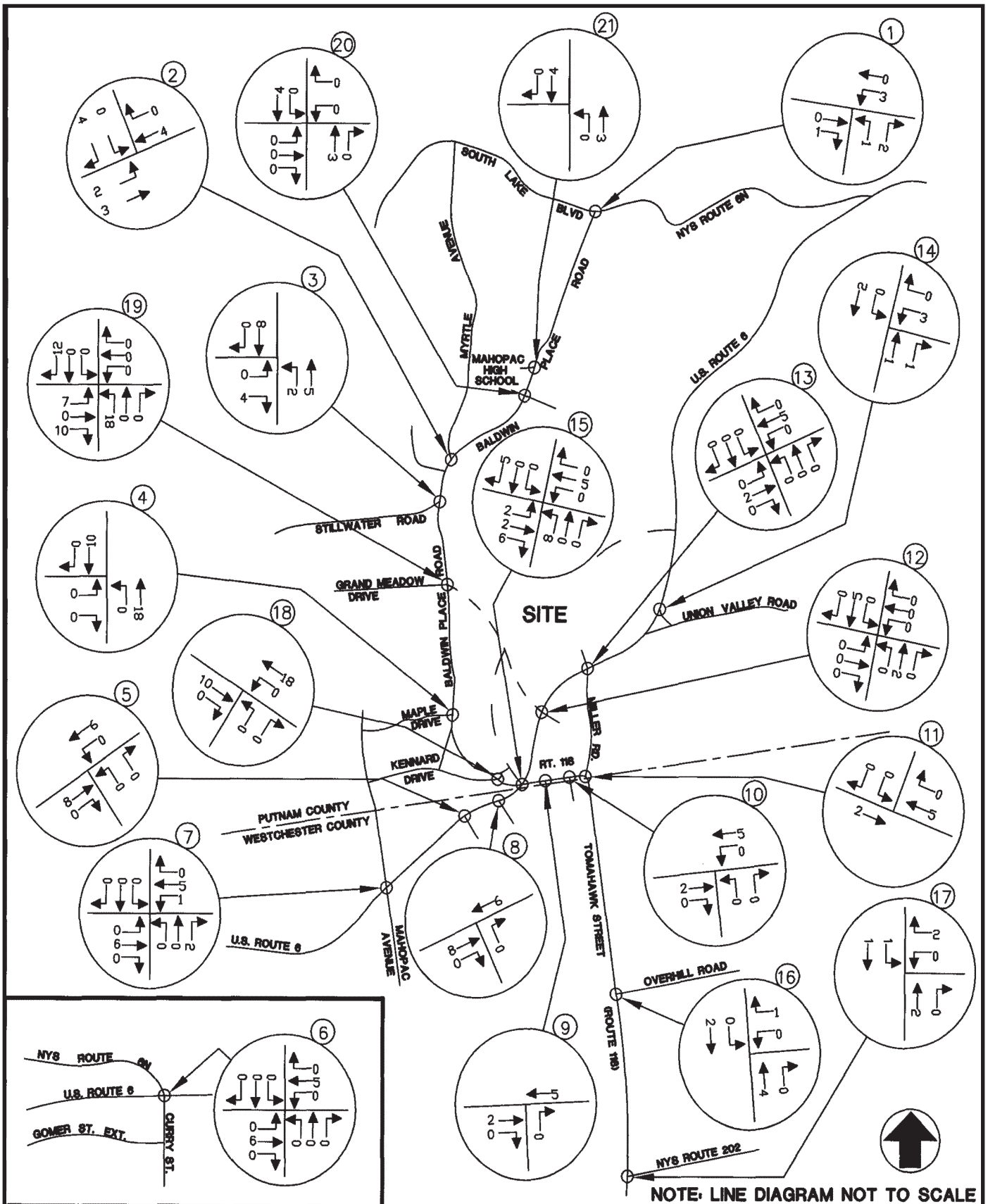
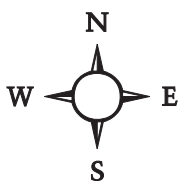


Figure 3.7-9B: Grand Meadow Estates Other Development
 Traffic Volumes Weekday Peak PM Hour
 Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009



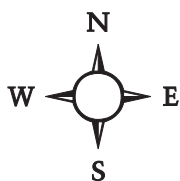
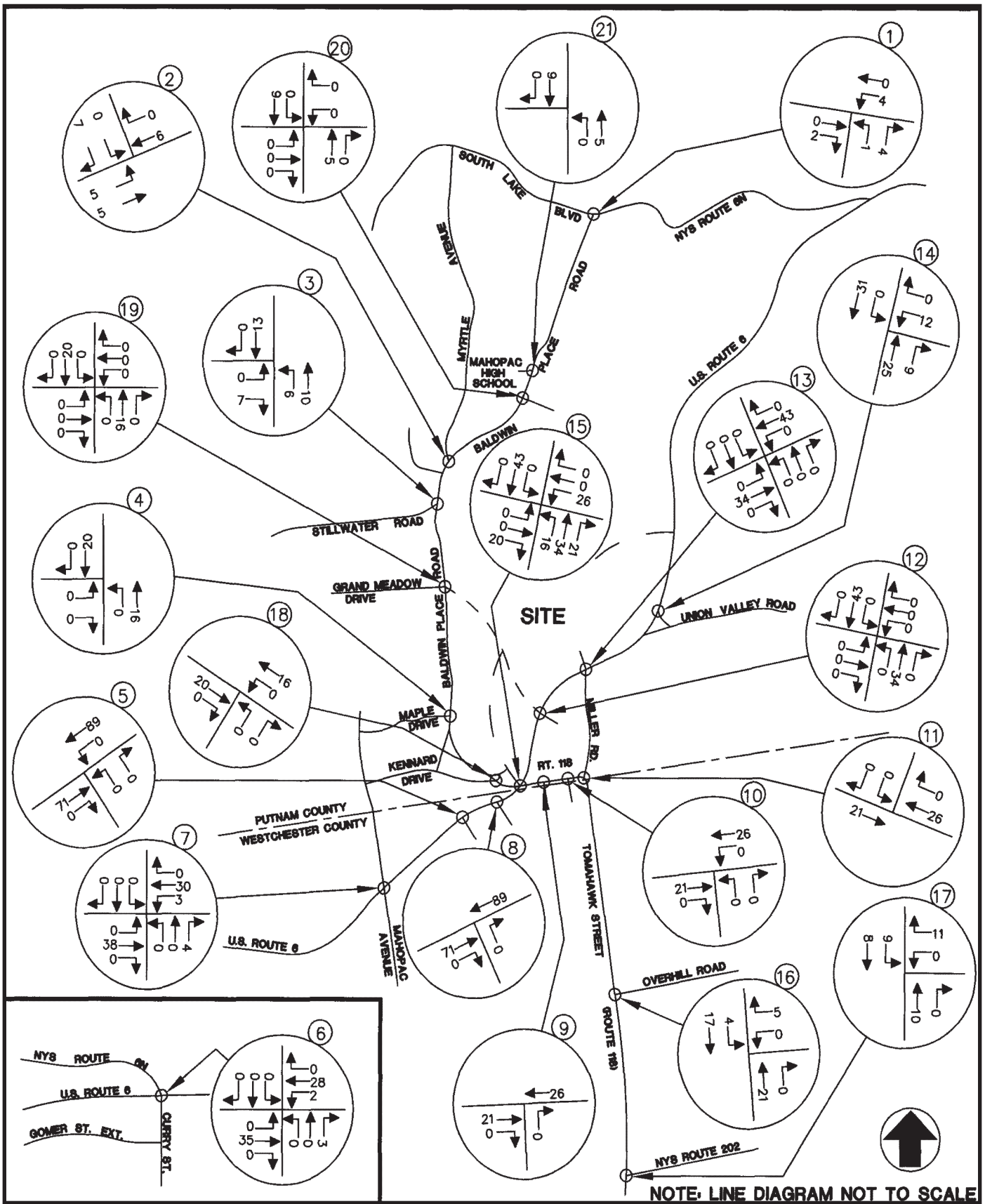


Figure 3.7-9C: Zappi Property Other Development
Traffic Volumes Weekday Peak PM Hour
Union Place
Town of Carmel, Putnam County, New York
Source: John Collins Engineers, P.C.
Date: January, 2009

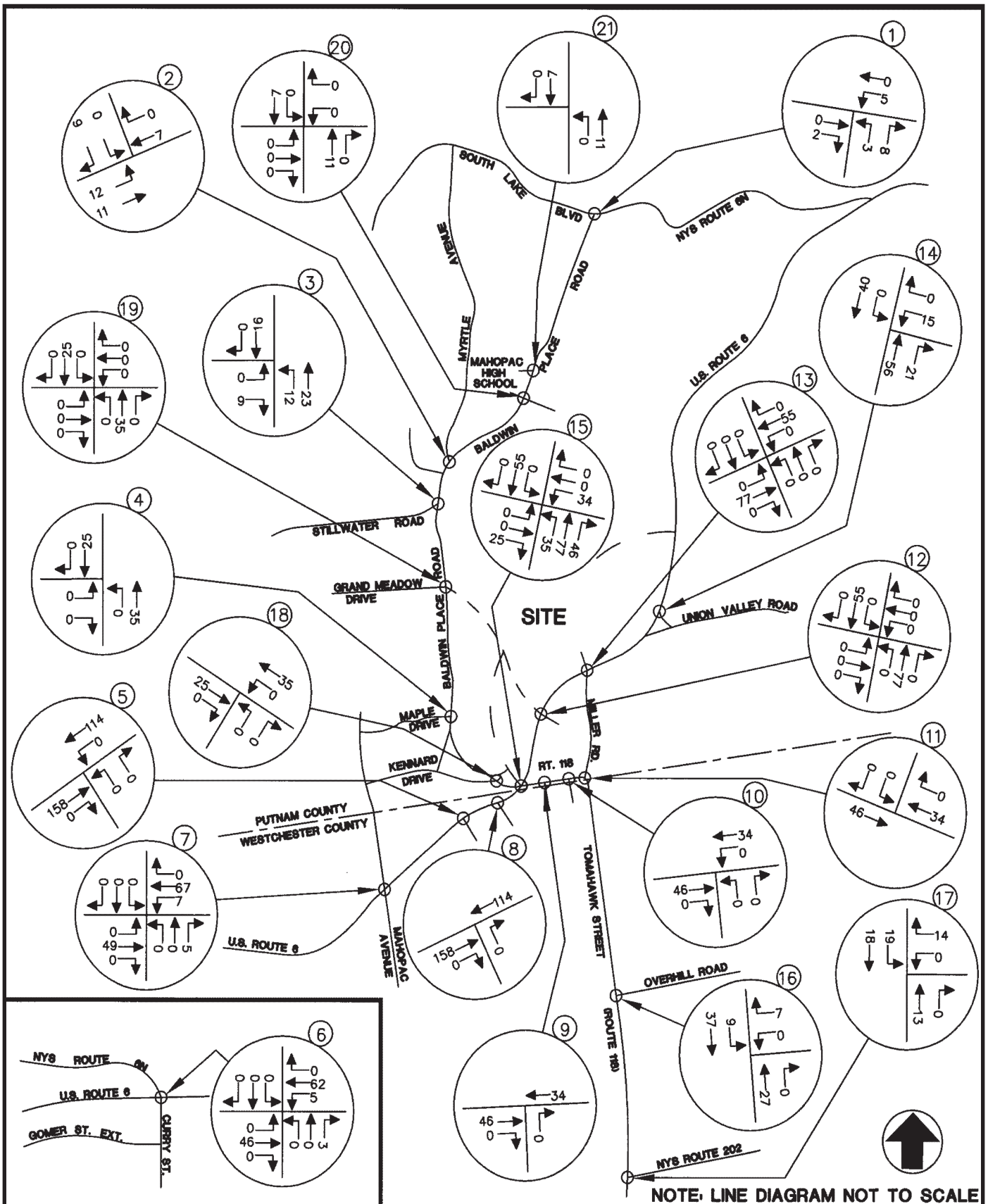
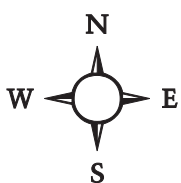


Figure 3.7-9D: Planned Hamlet Somers Realty Corp. Other
Development Traffic Volumes Weekday Peak PM Hour
Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009



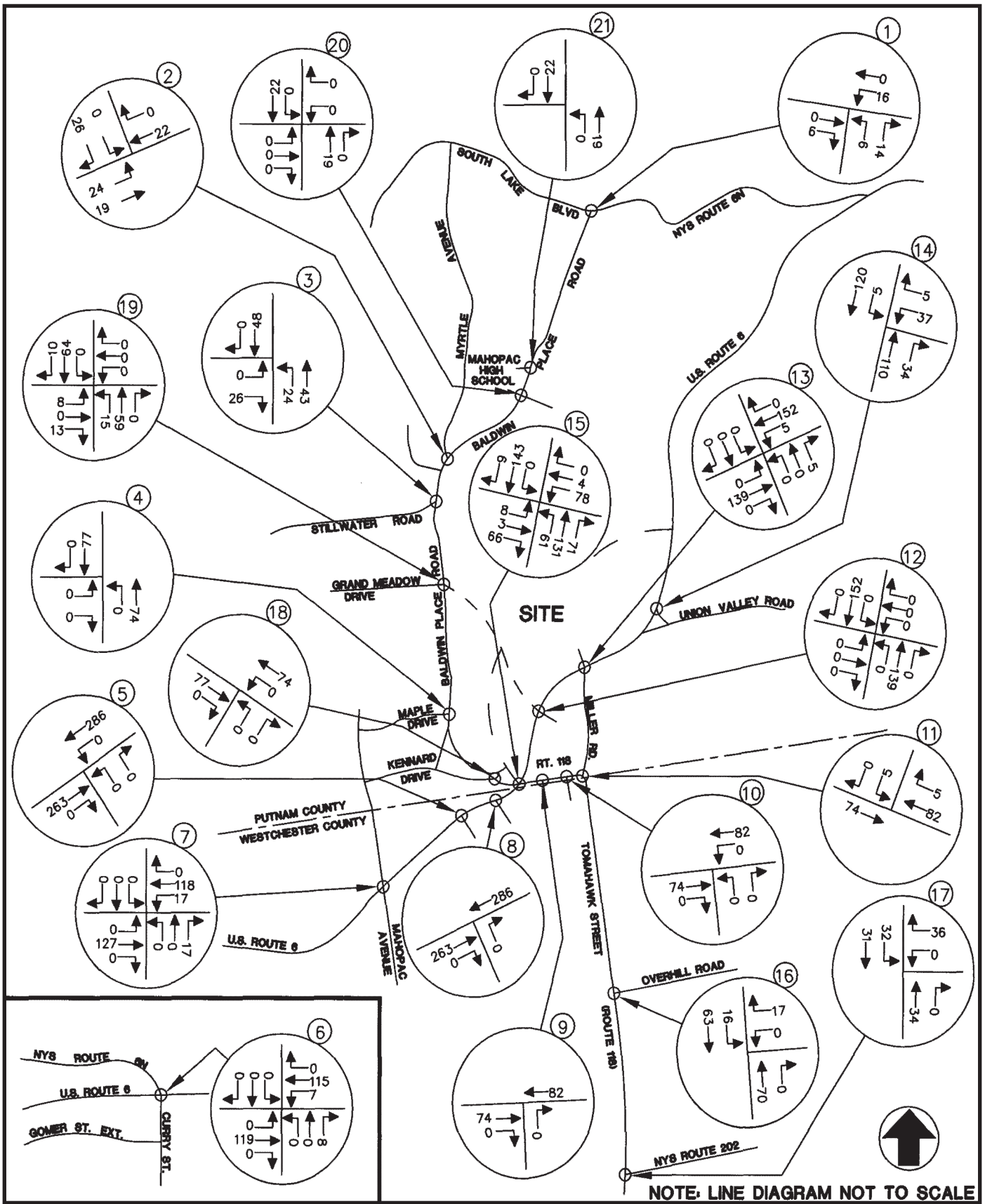
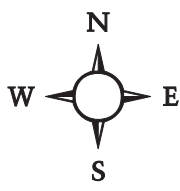


Figure 3.7-10: Total Other Development Traffic Volumes
 Saturday Peak Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



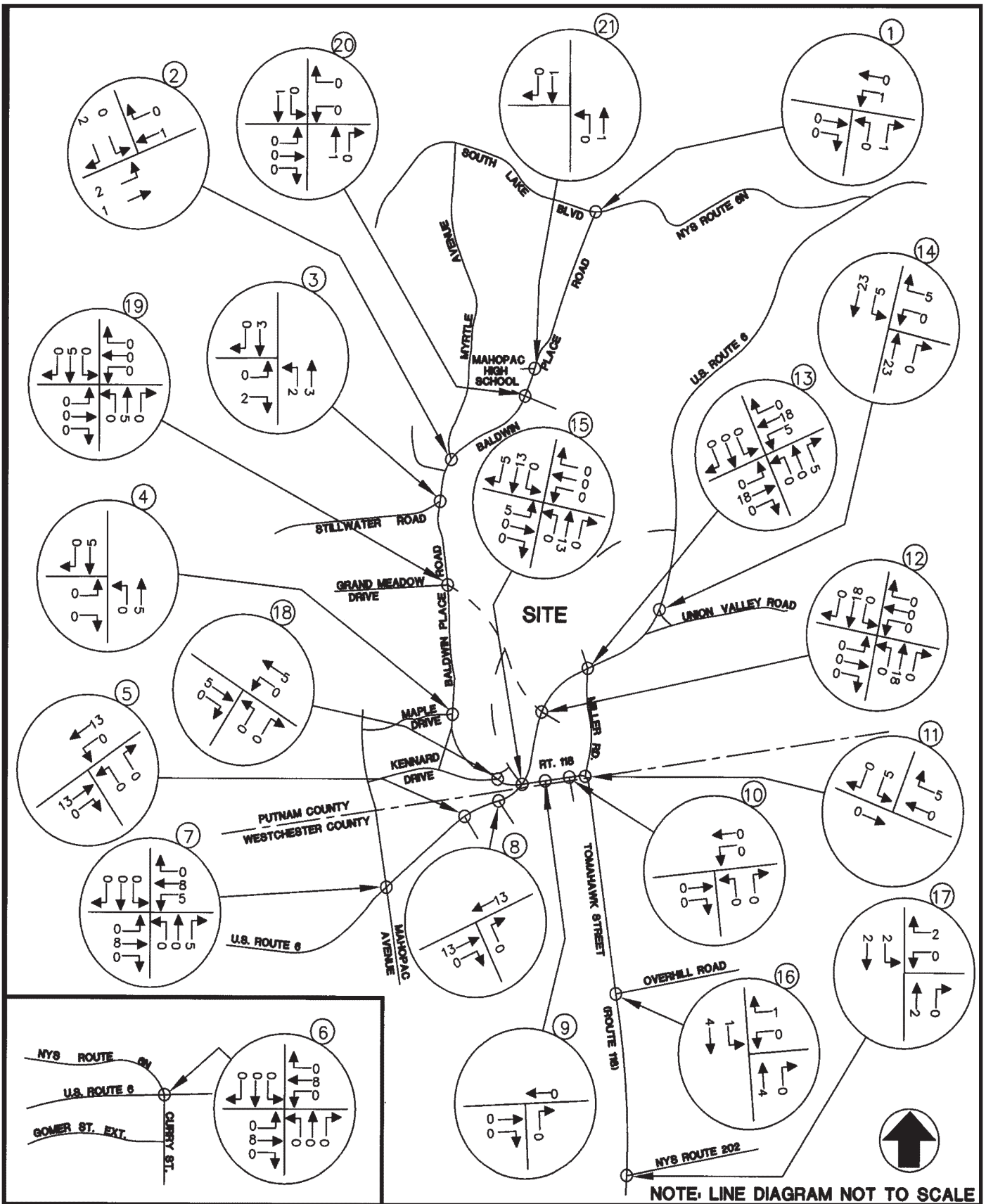
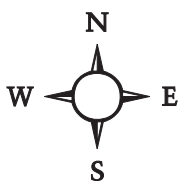


Figure 3.7-10A: Lupi Carwash Other Development Traffic Volumes
 Saturday Peak Hour
 Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009



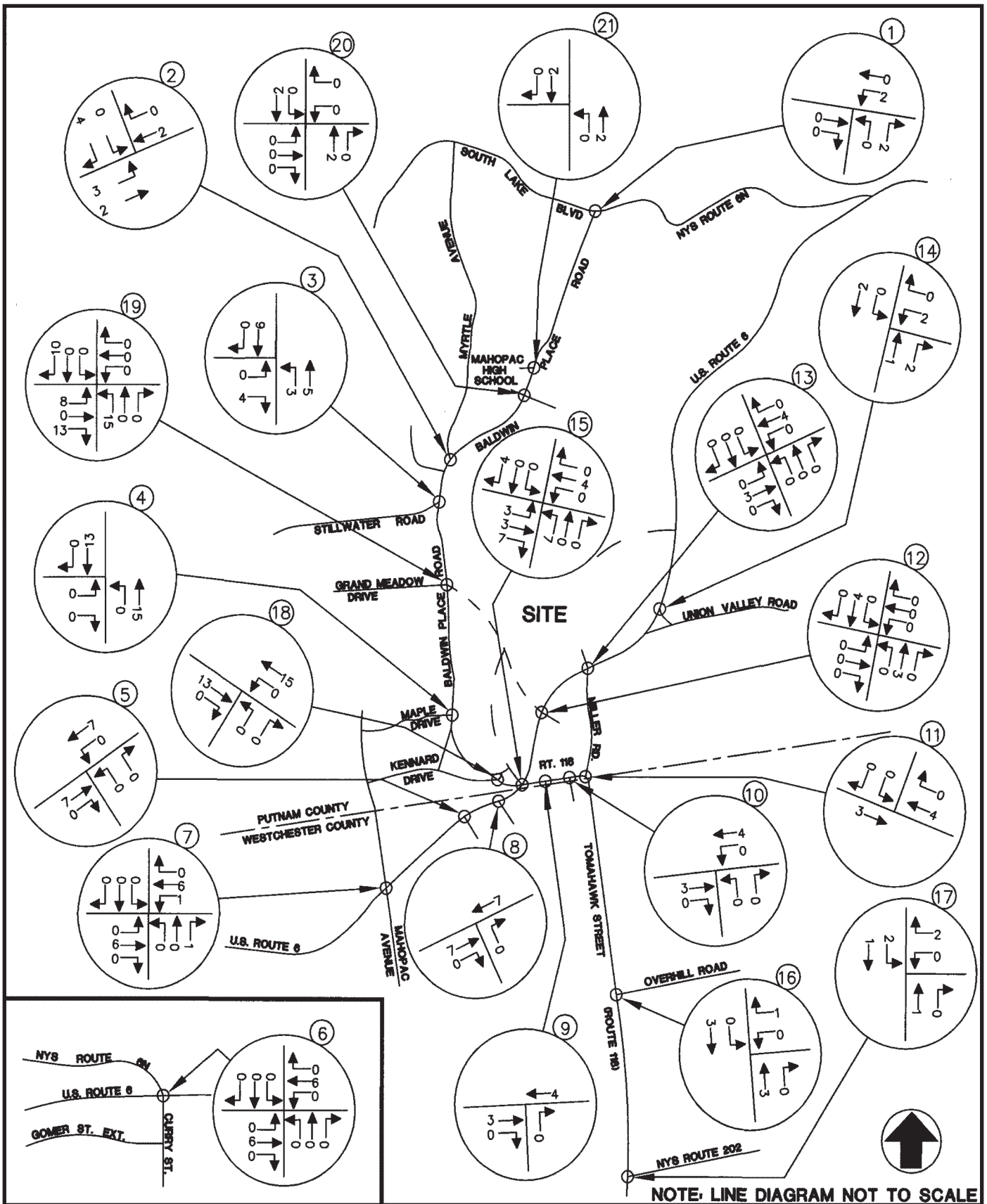
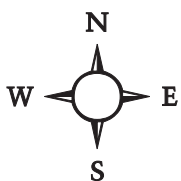


Figure 3.7-10B: Grand Meadow Estates Other Development
 Traffic Volumes Saturday Peak Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



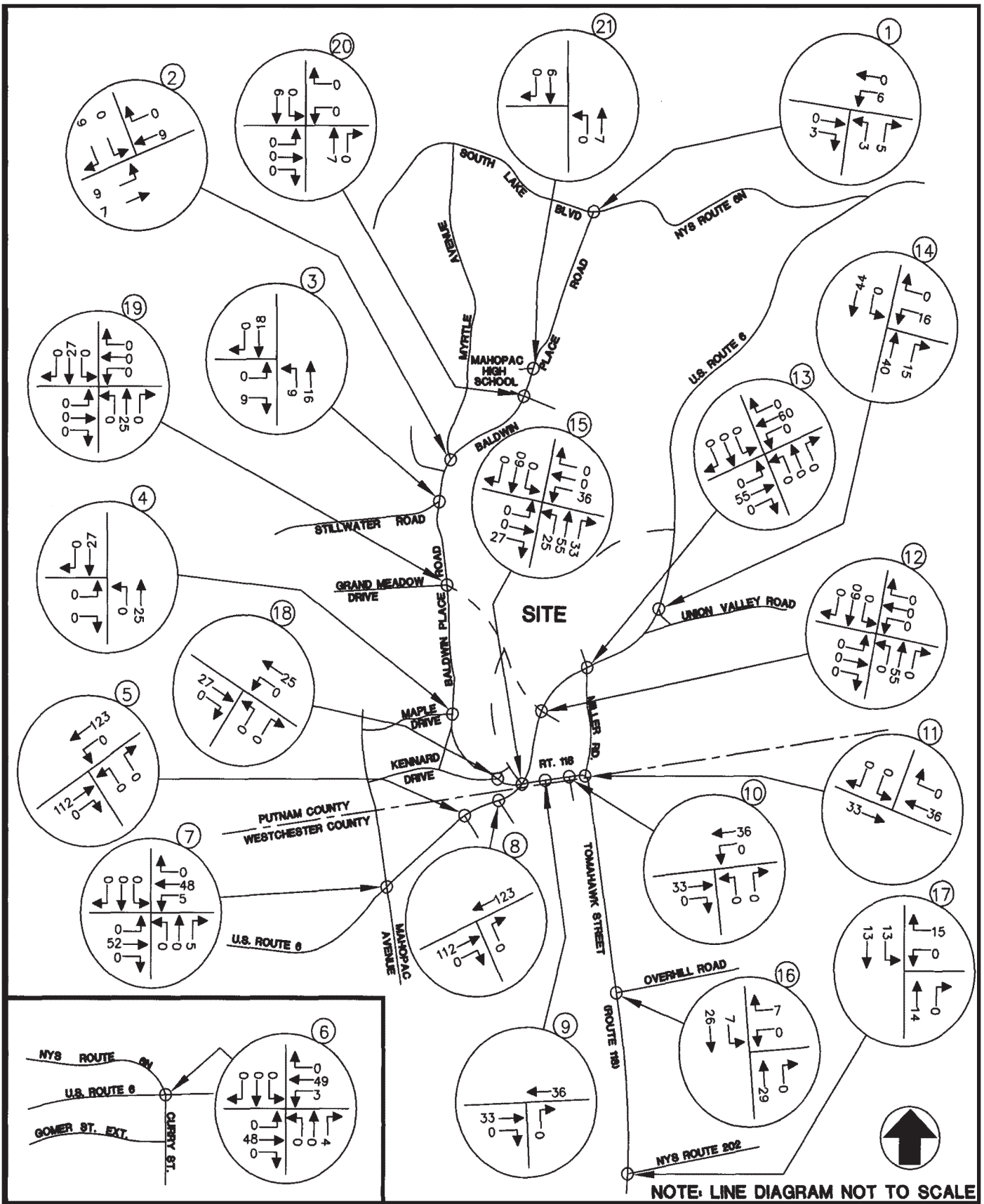
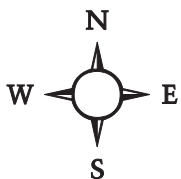


Figure 3.7-10C: Zappi Property Other Development
 Traffic Volumes Saturday Peak Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



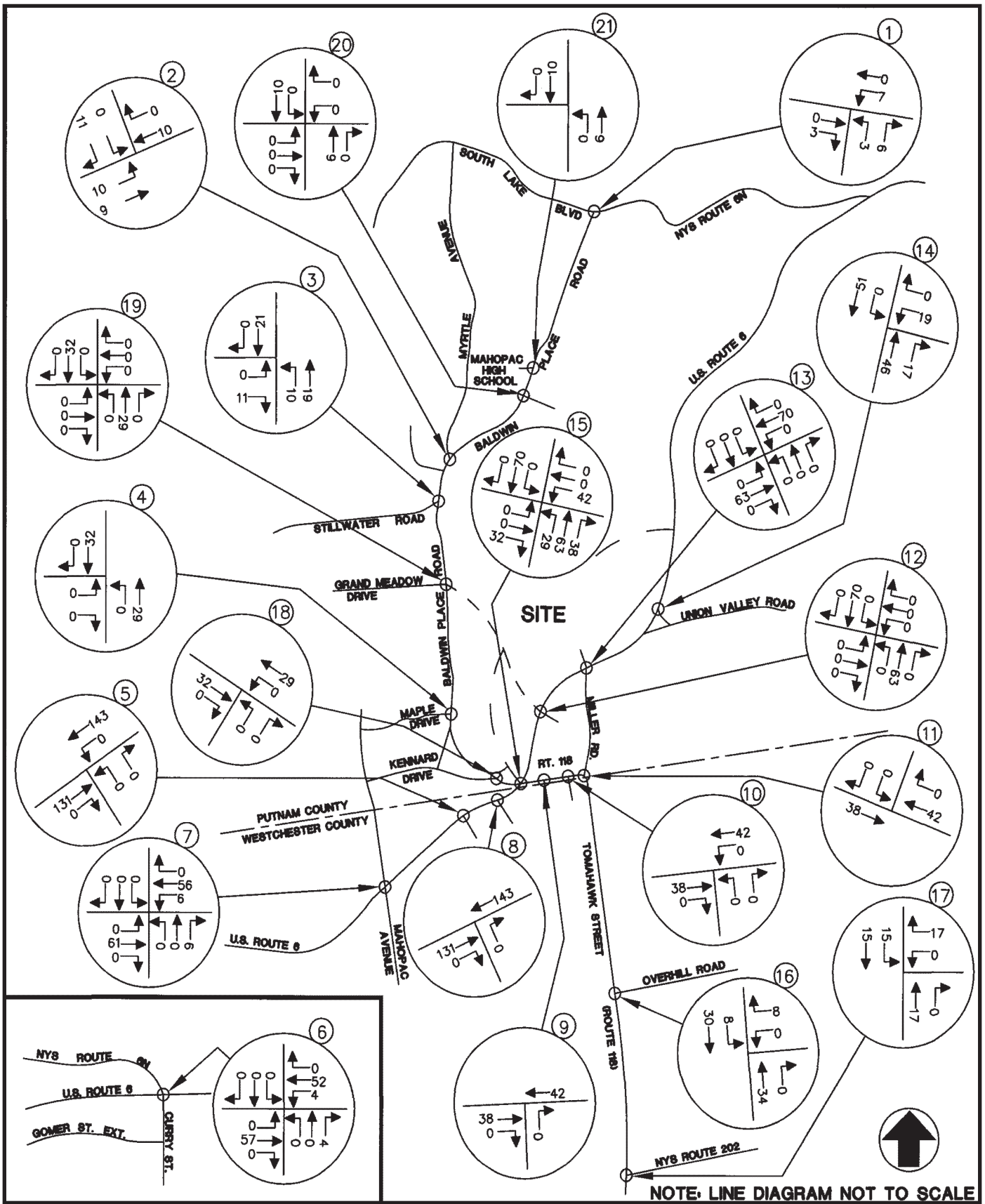
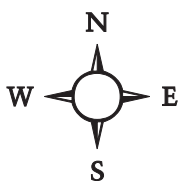


Figure 3.7-10D: Planned Hamlet Somers Realty Corp. Other Development Traffic Volumes Saturday Peak Hour Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009



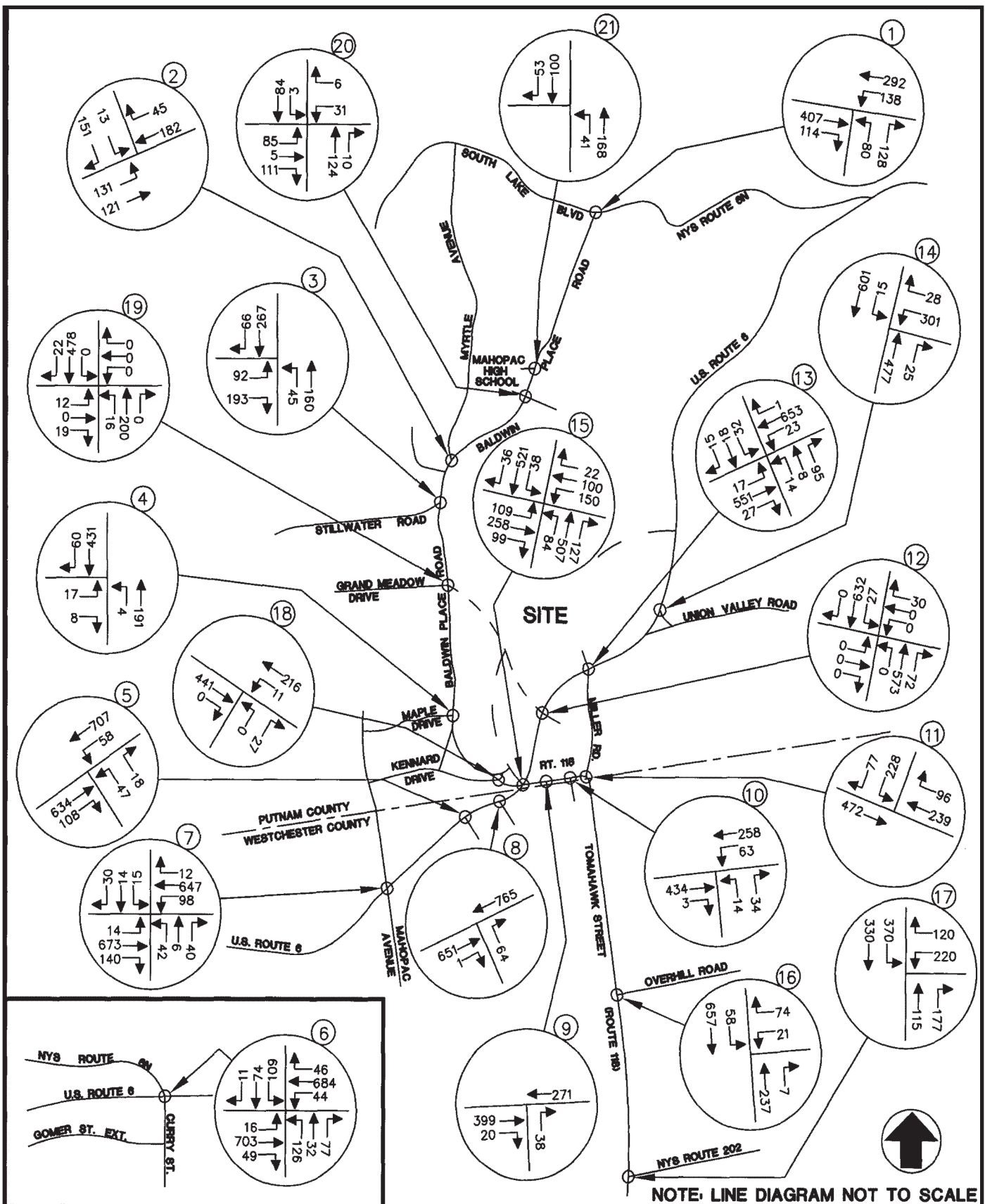
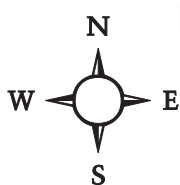


Figure 3.7-11: 2016 No-Build Traffic Volumes Weekday Peak AM Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



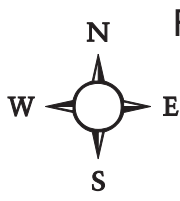
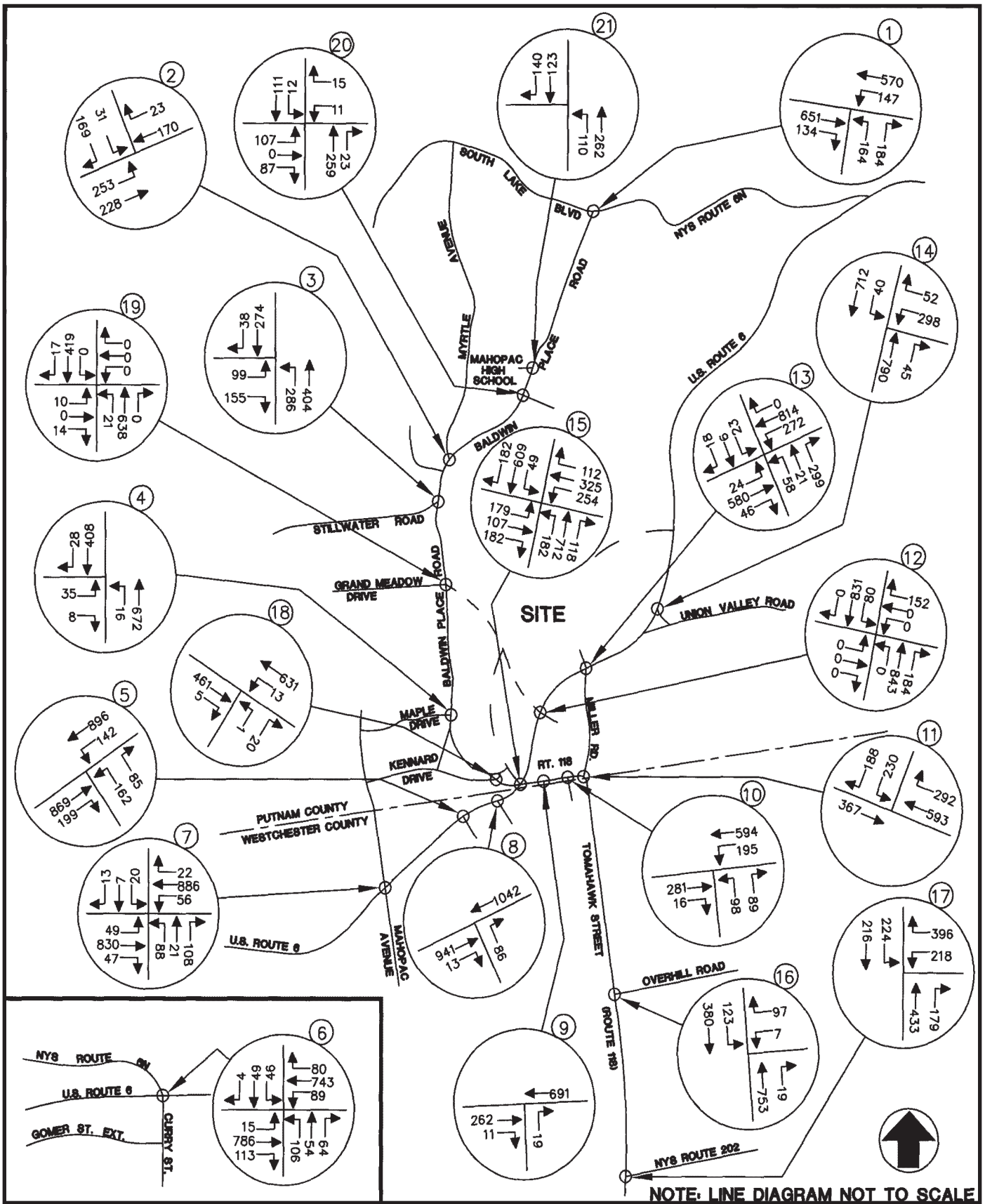


Figure 3.7-12: 2016 No-Build Traffic Volumes Weekday Peak PM Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009

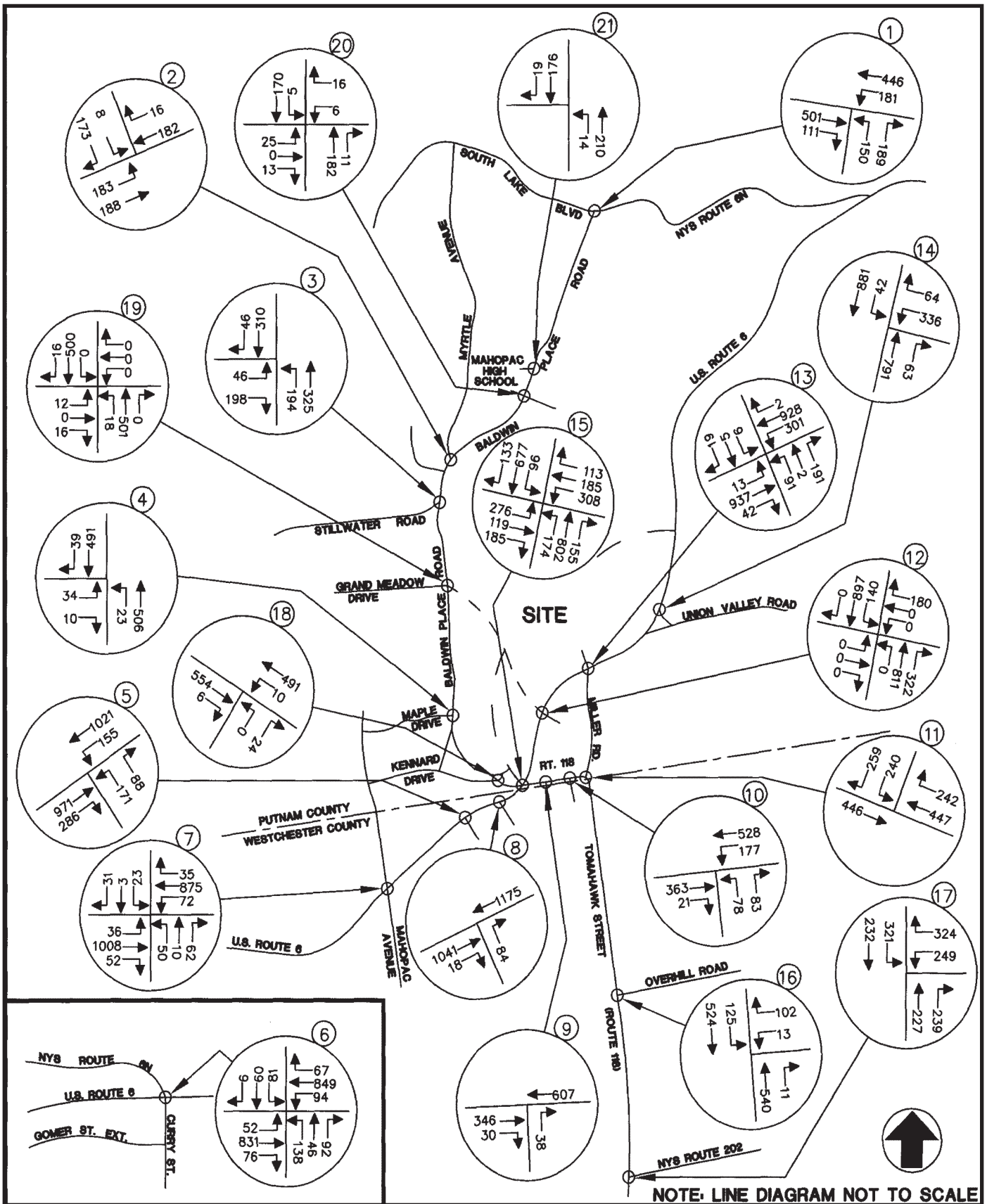
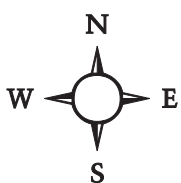


Figure 3.7-13: 2016 No-Build Traffic Volumes Saturday Peak Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



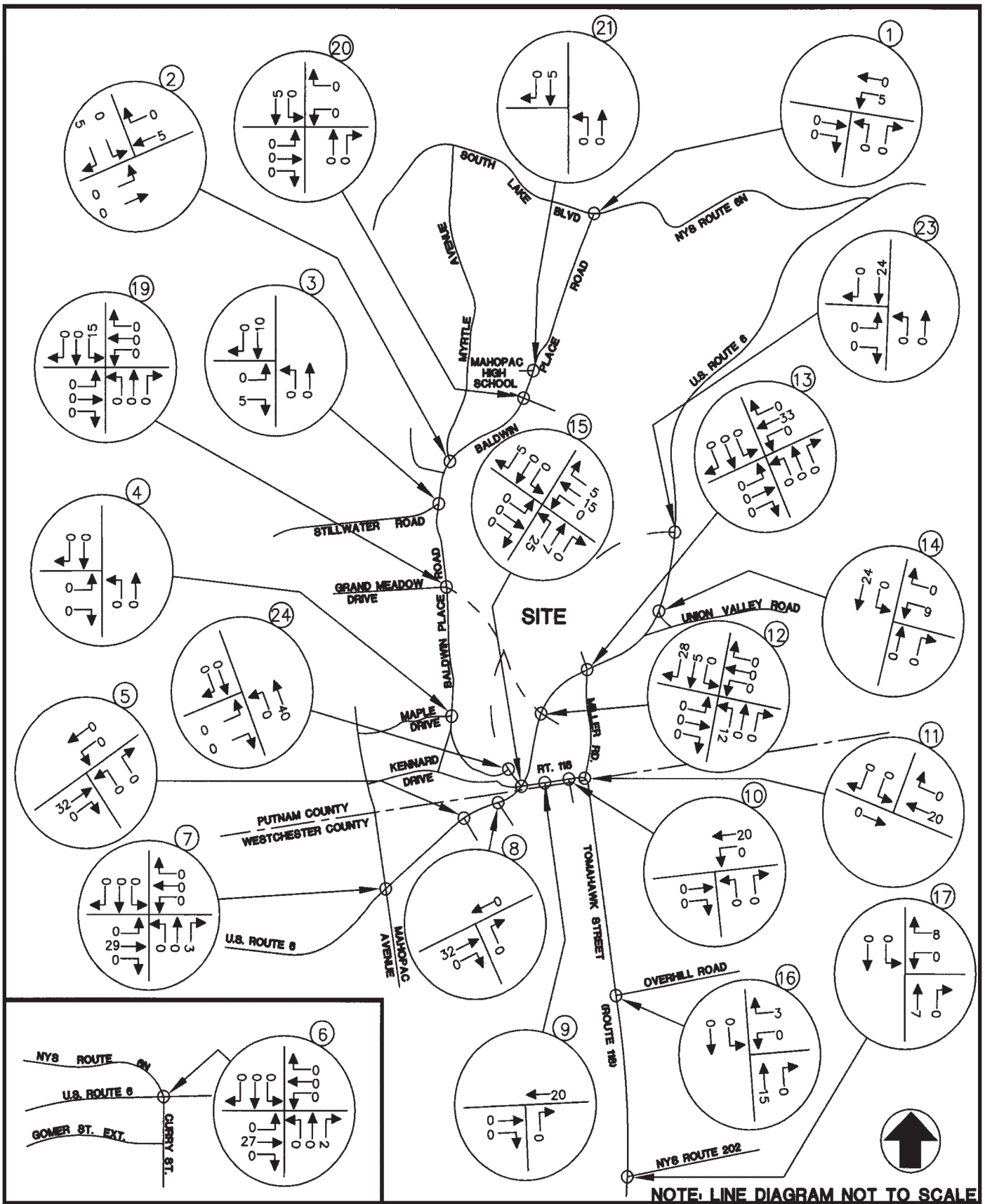


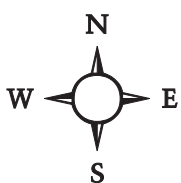
Figure 3.7-14: Arrival Distribution Office/Retail Land Uses

Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: July, 2008



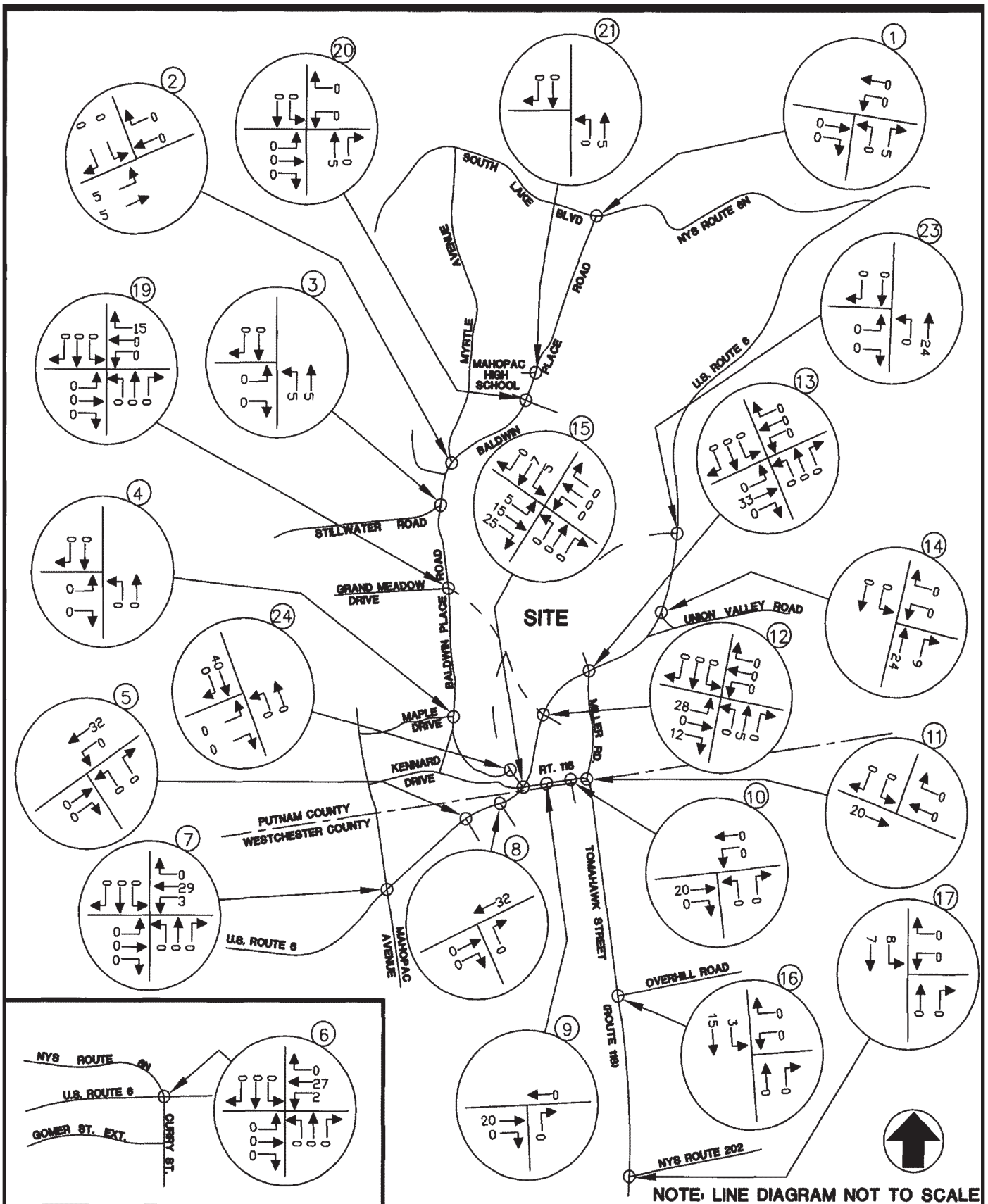


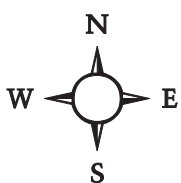
Figure 3.7-15: Departure Distribution Office/Retail Land Uses

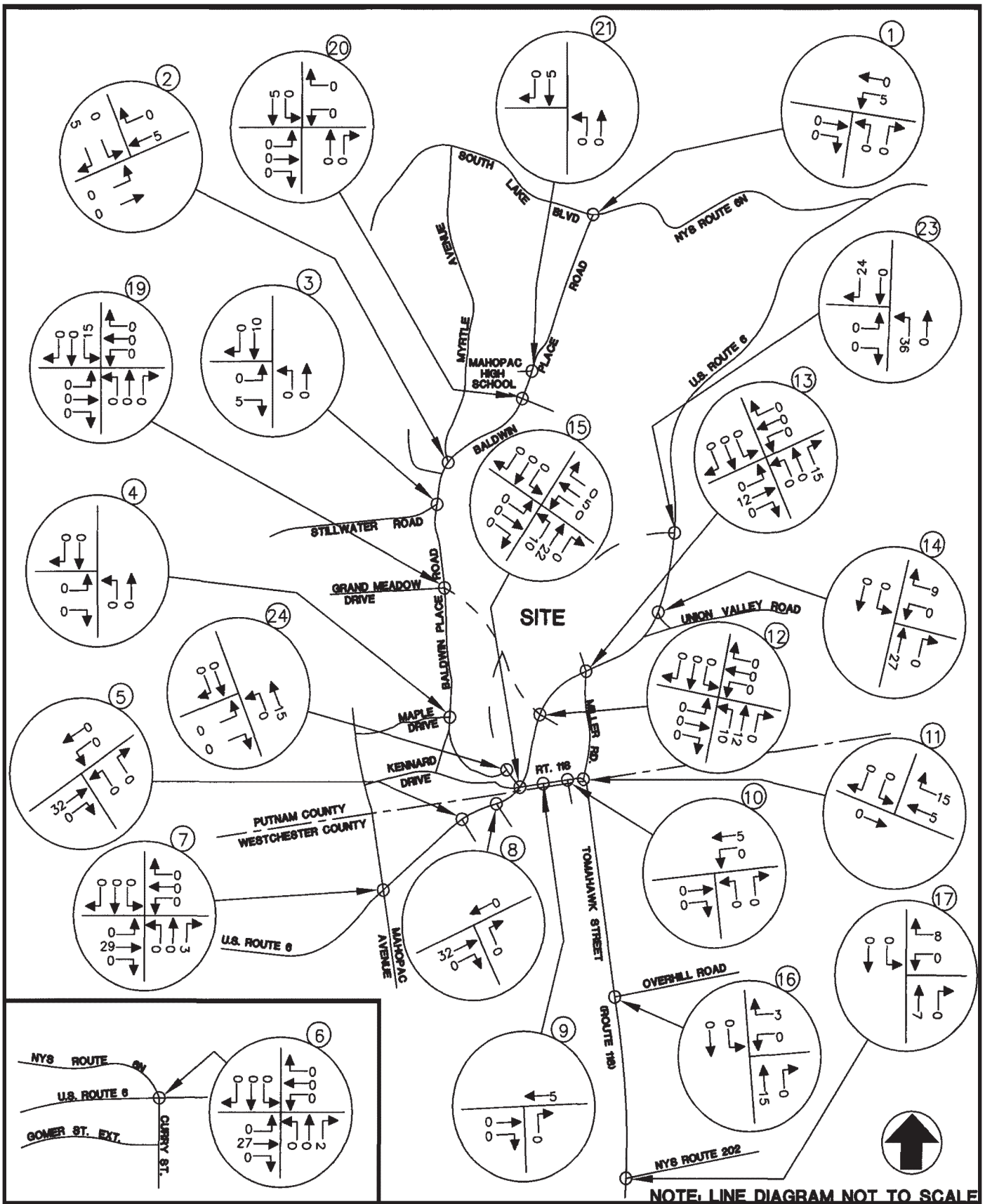
Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009





NOTE: LINE DIAGRAM NOT TO SCALE

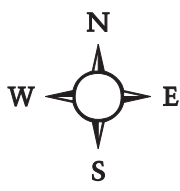
Figure 3.7-16: Arrival Distribution Residential Land Uses

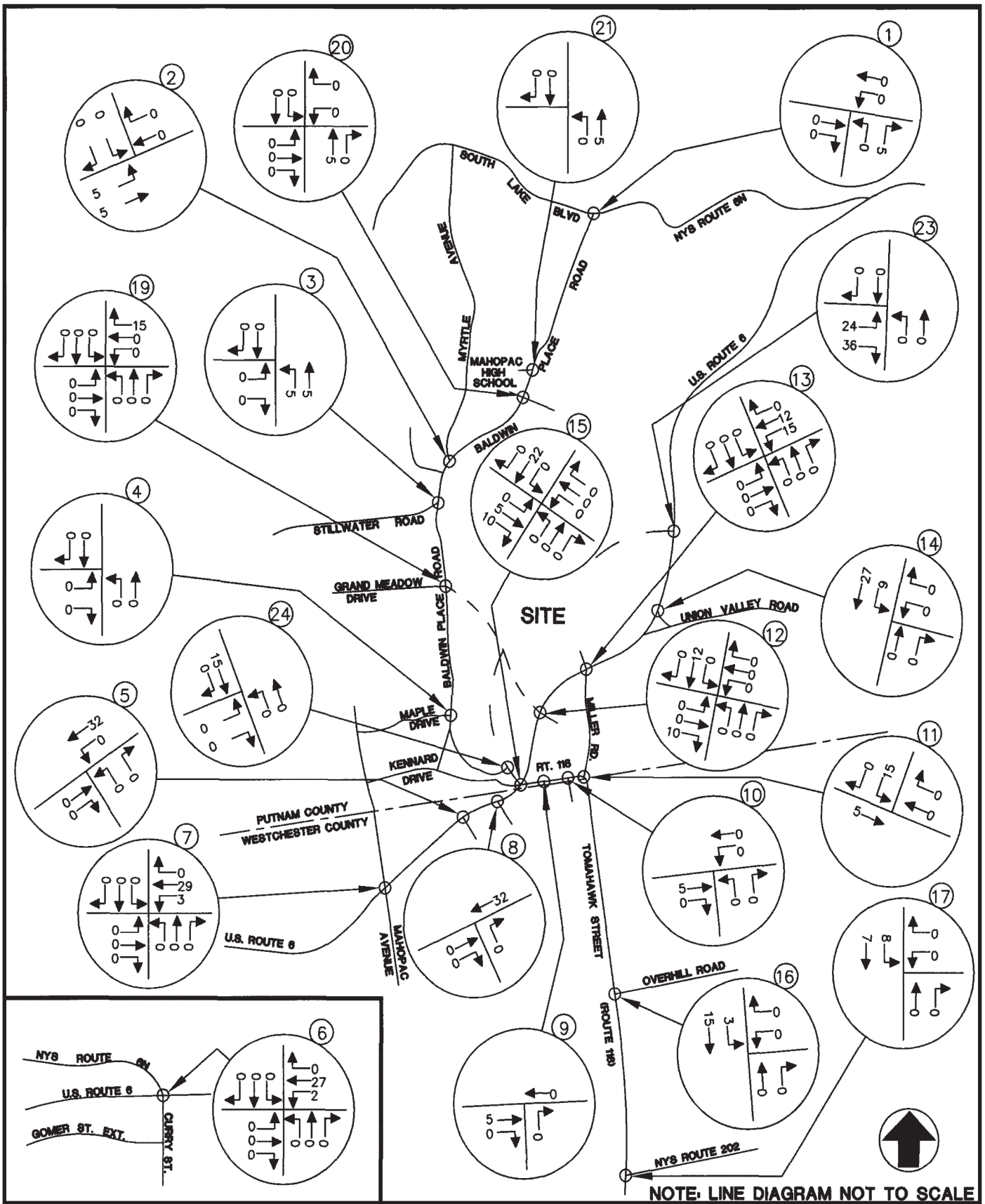
Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

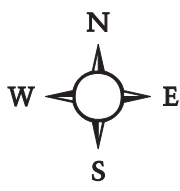
Date: January, 2009





NOTE: LINE DIAGRAM NOT TO SCALE

Figure 3.7-17: Departure Distribution Residential Land Uses
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



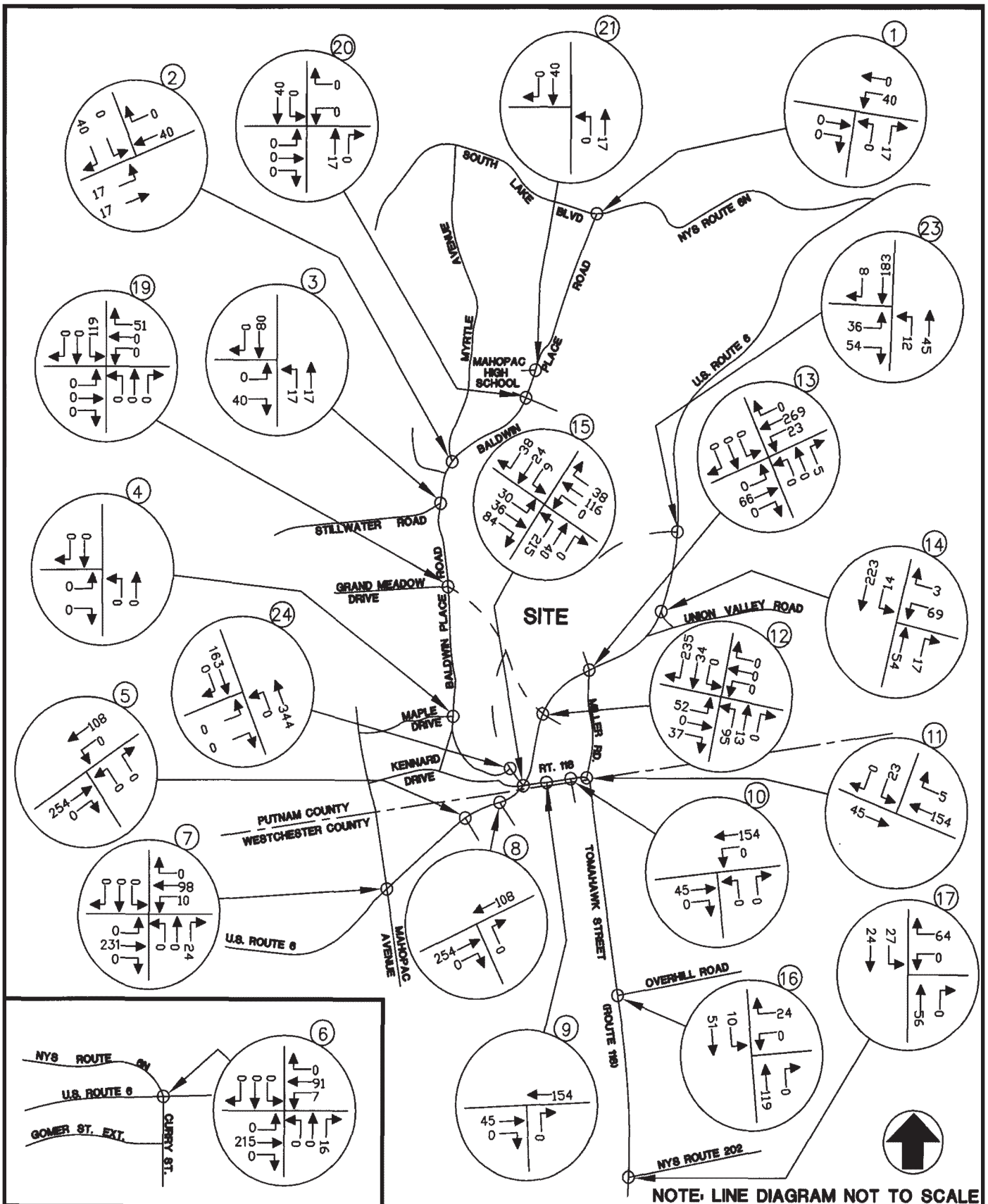
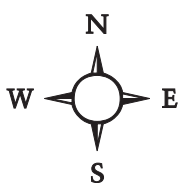


Figure 3.7-18: Total Site Generated Traffic Volumes
Weekday Peak AM Hour
Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009



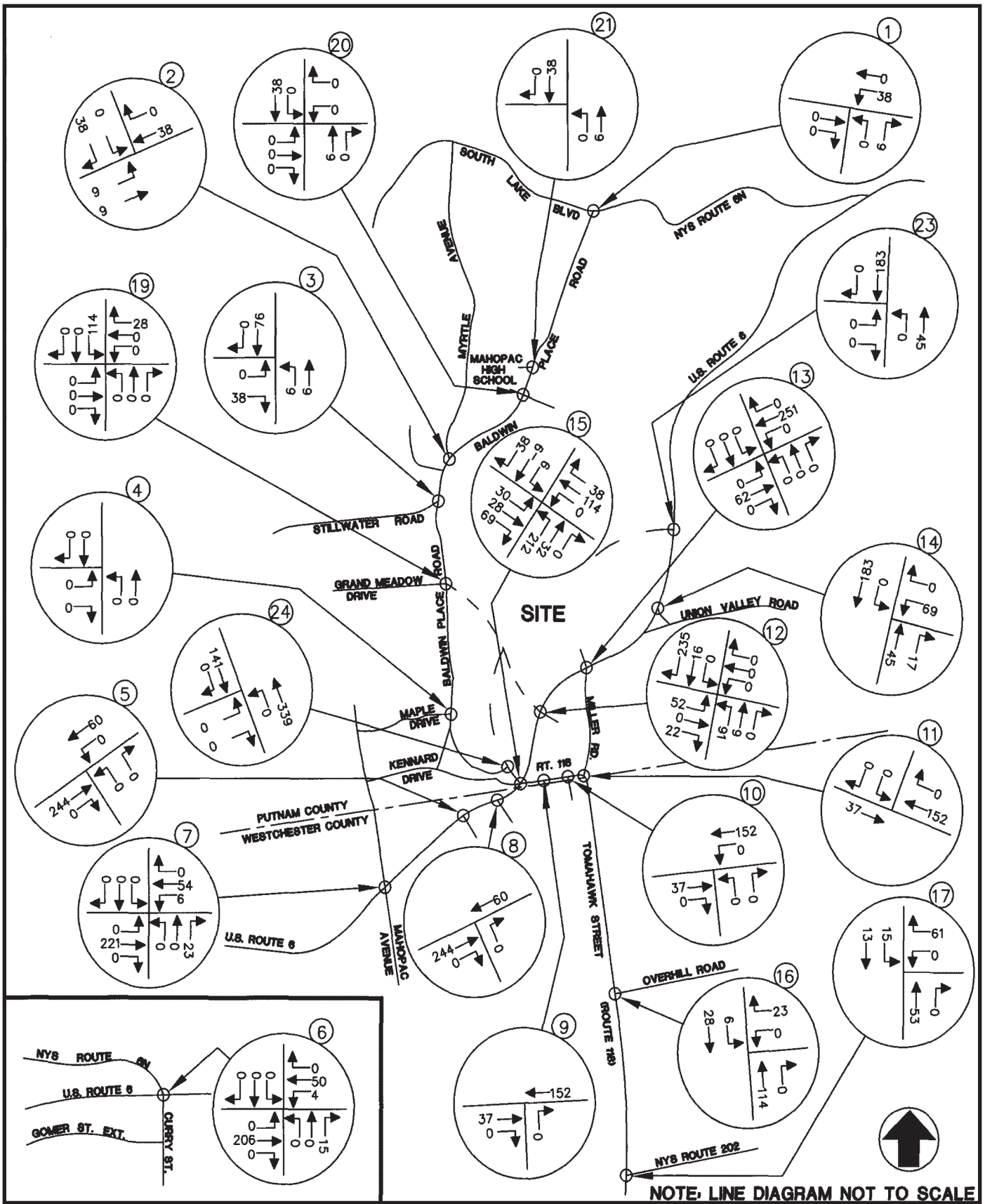
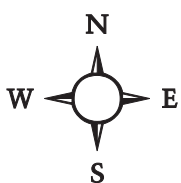


Figure 3.7-18A: Site Generated Traffic Volumes Office/Retail
 Land Uses Weekday Peak AM Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



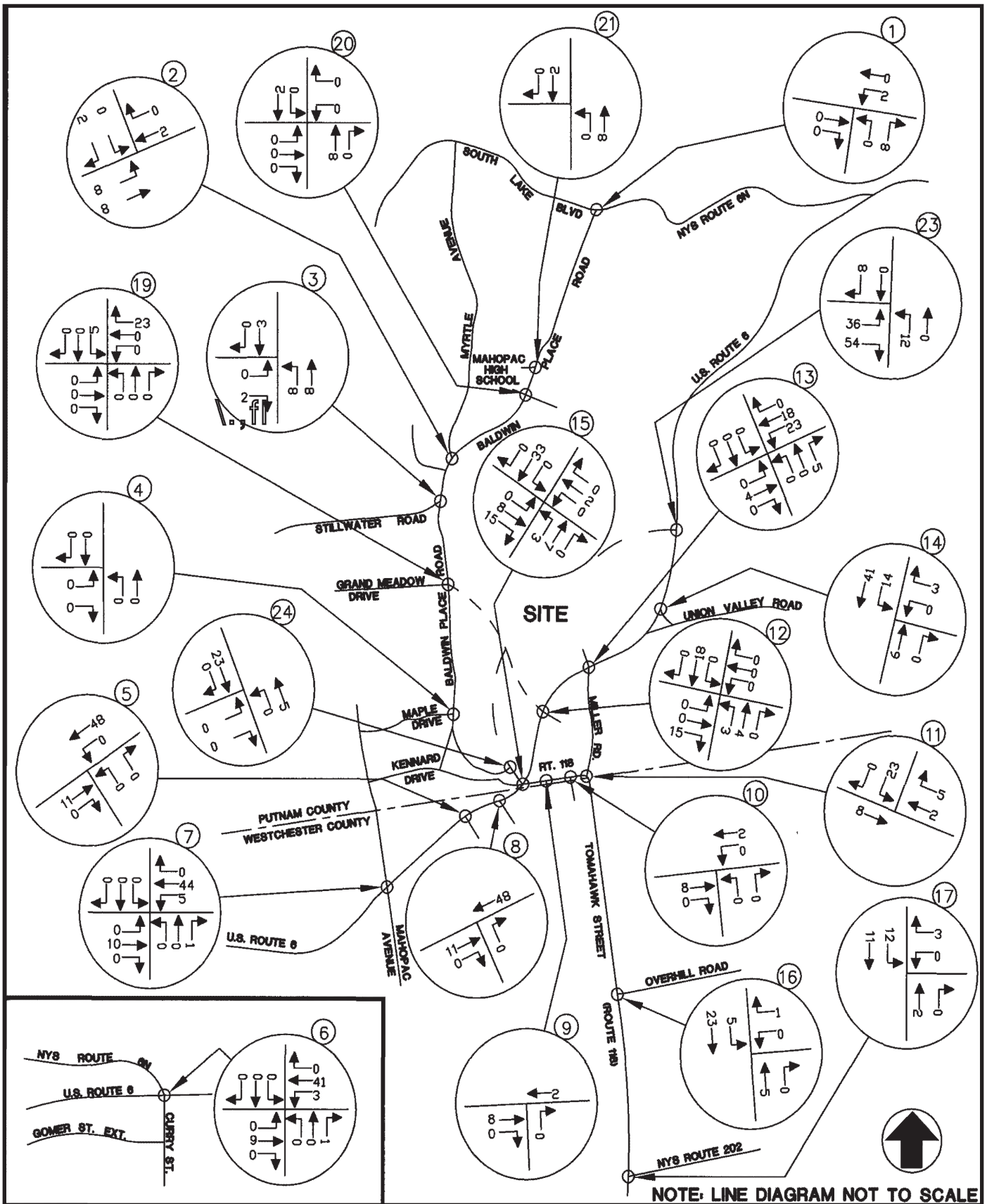
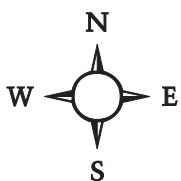


Figure 3.7-18B: Site Generated Traffic Volumes Residential Land Uses Weekday Peak AM Hour Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009



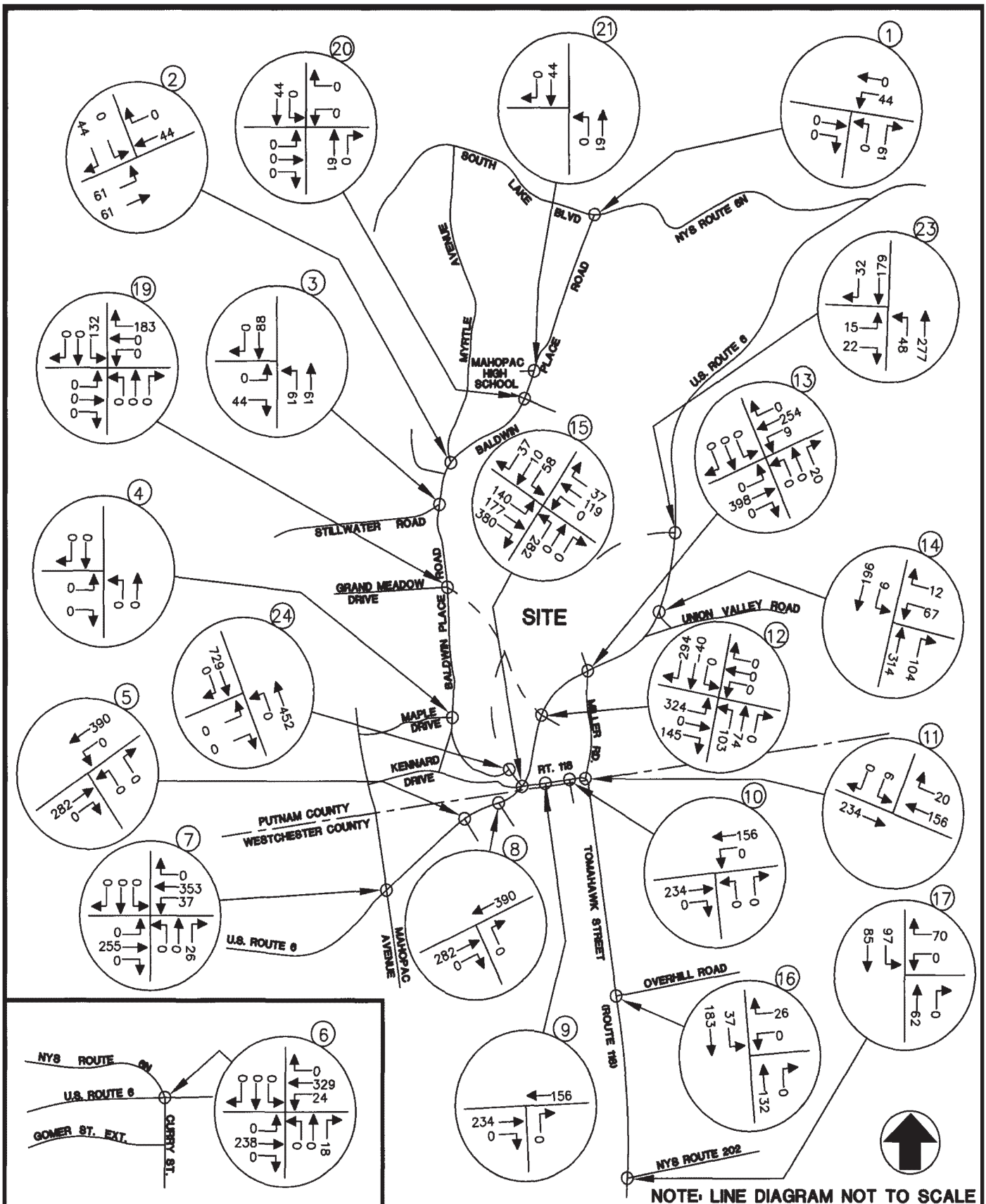
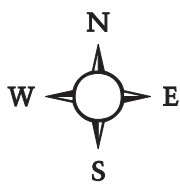


Figure 3.7-19: Total Site Generated Traffic Volumes
 Weekday Peak PM Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



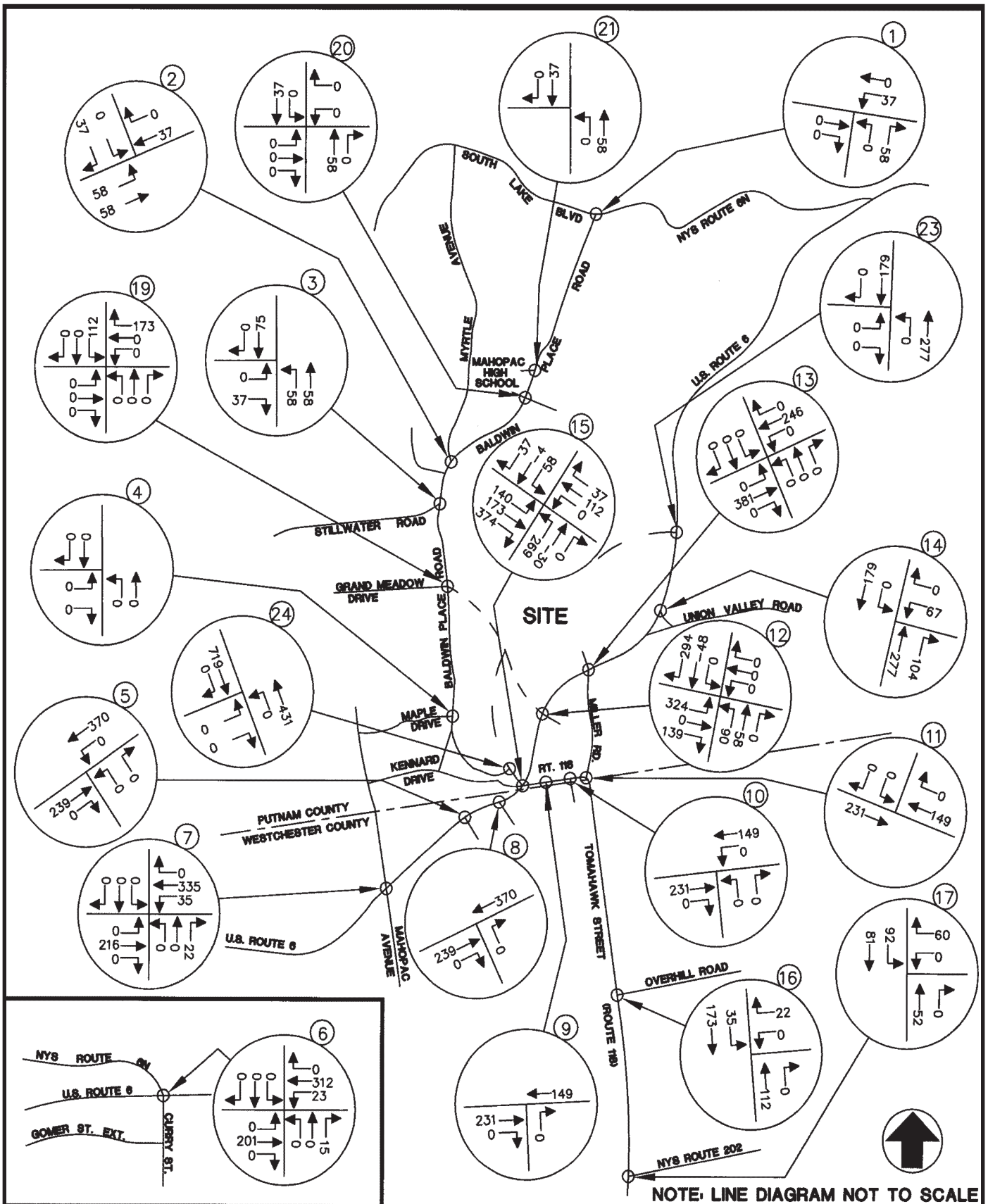
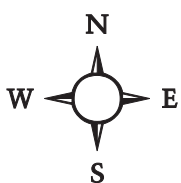
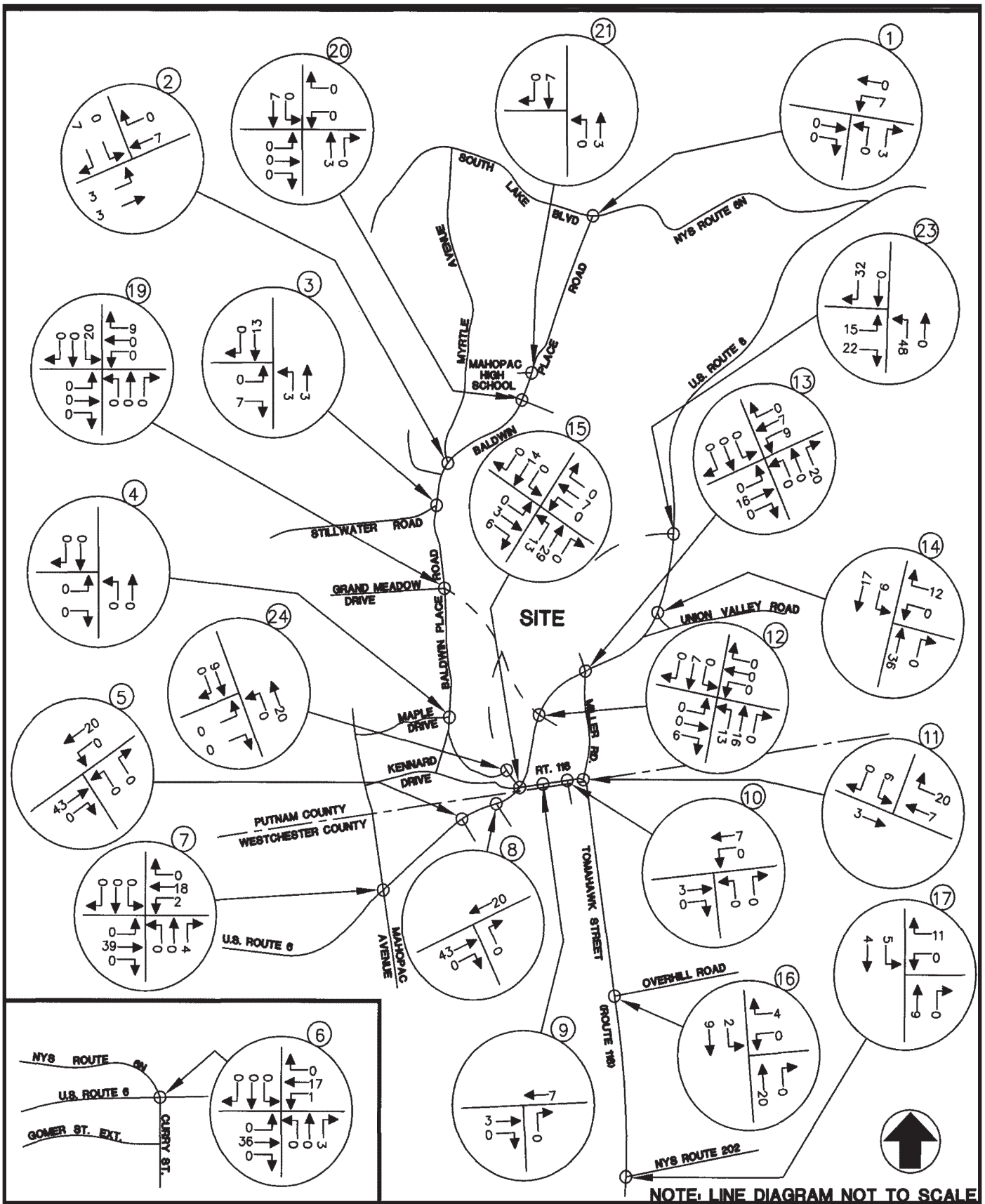


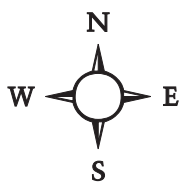
Figure 3.7-19A: Site Generated Traffic Volumes Office/Retail
 Land Uses Weekday Peak PM Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009





NOTE: LINE DIAGRAM NOT TO SCALE

Figure 3.7-19B: Site Generated Traffic Volumes Residential Land Uses Weekday Peak PM Hour Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



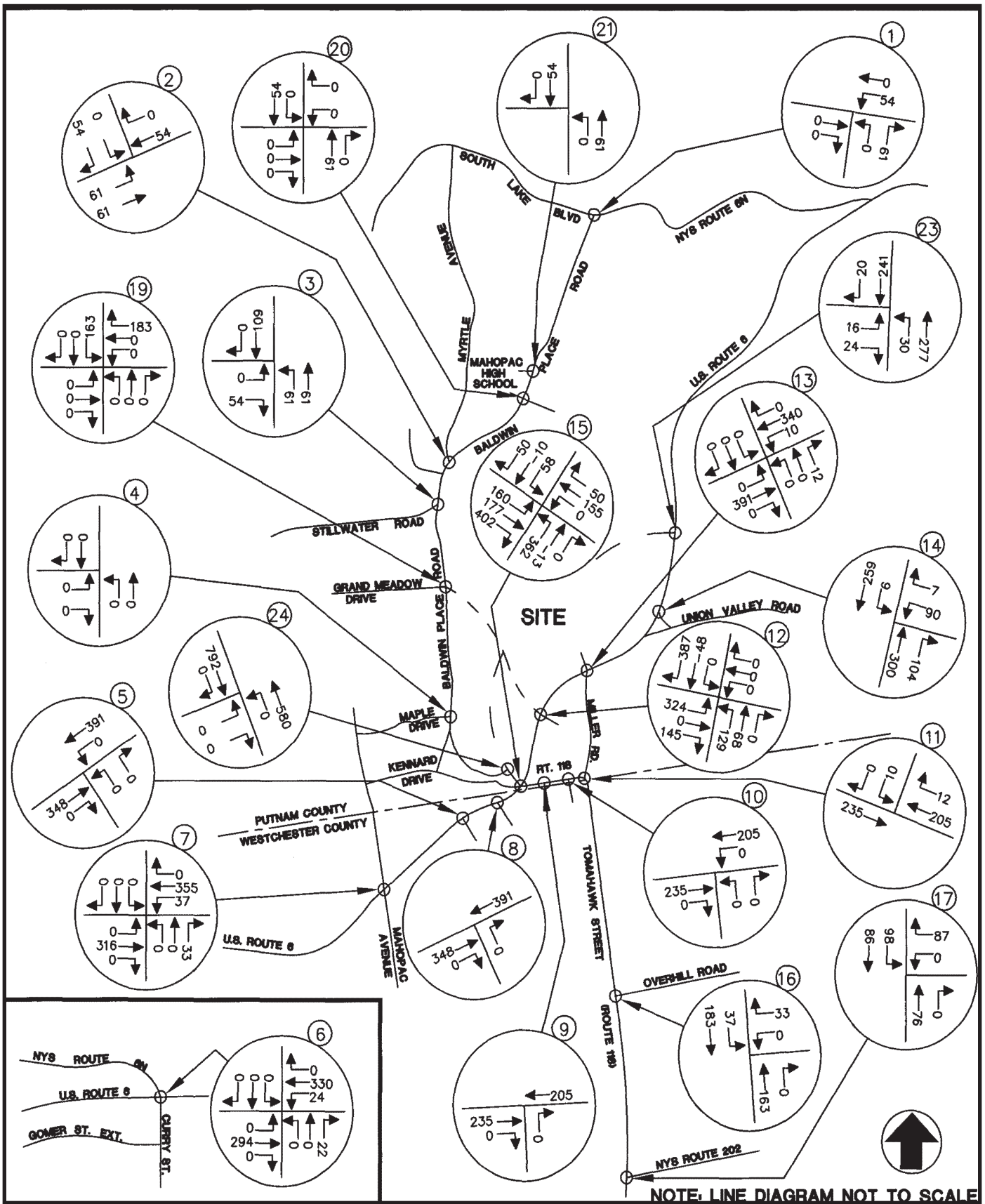
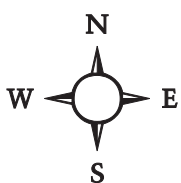


Figure 3.7-20: Total Site Generated Traffic Volumes
Saturday Peak Hour
Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009



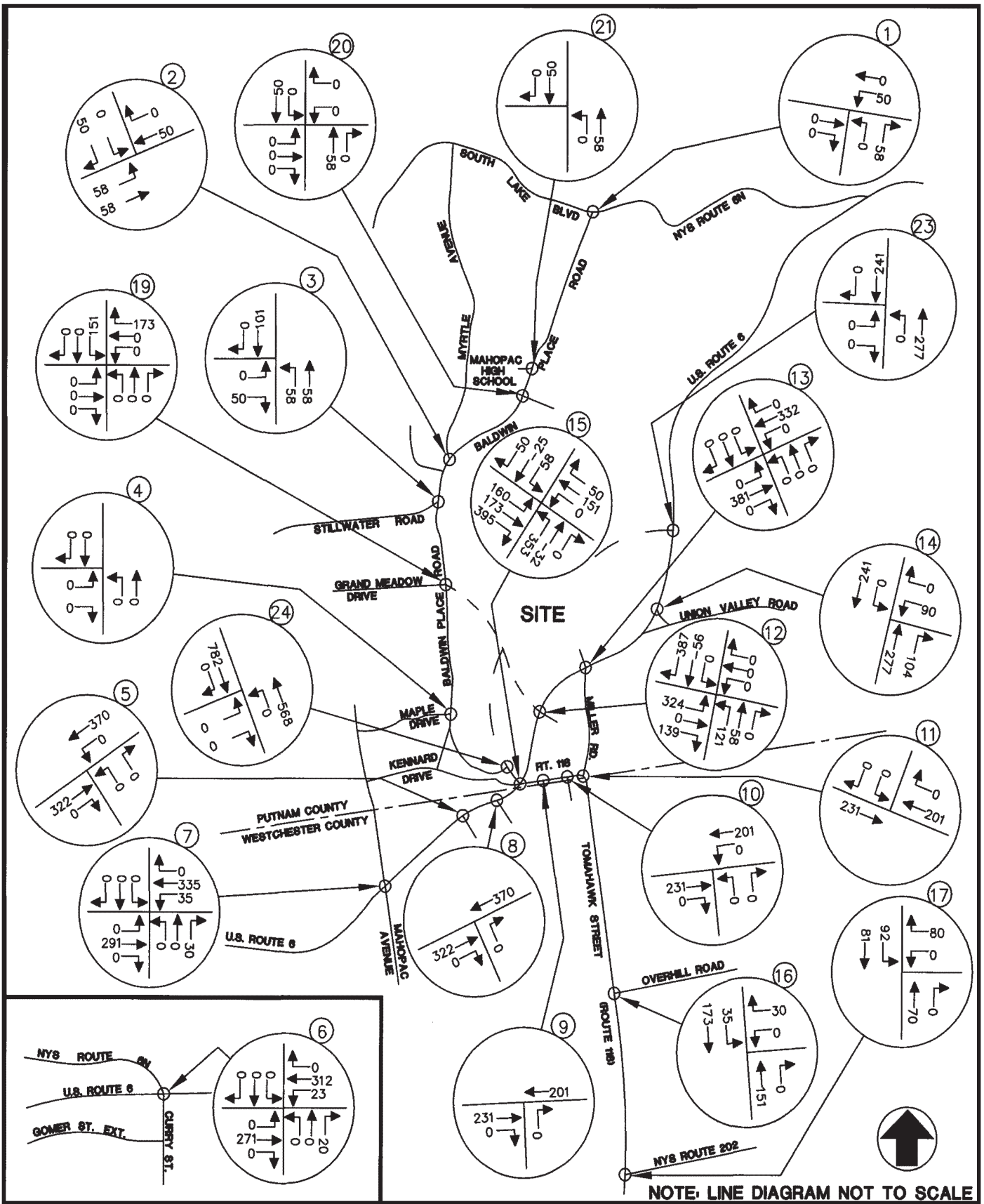
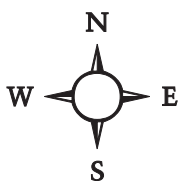


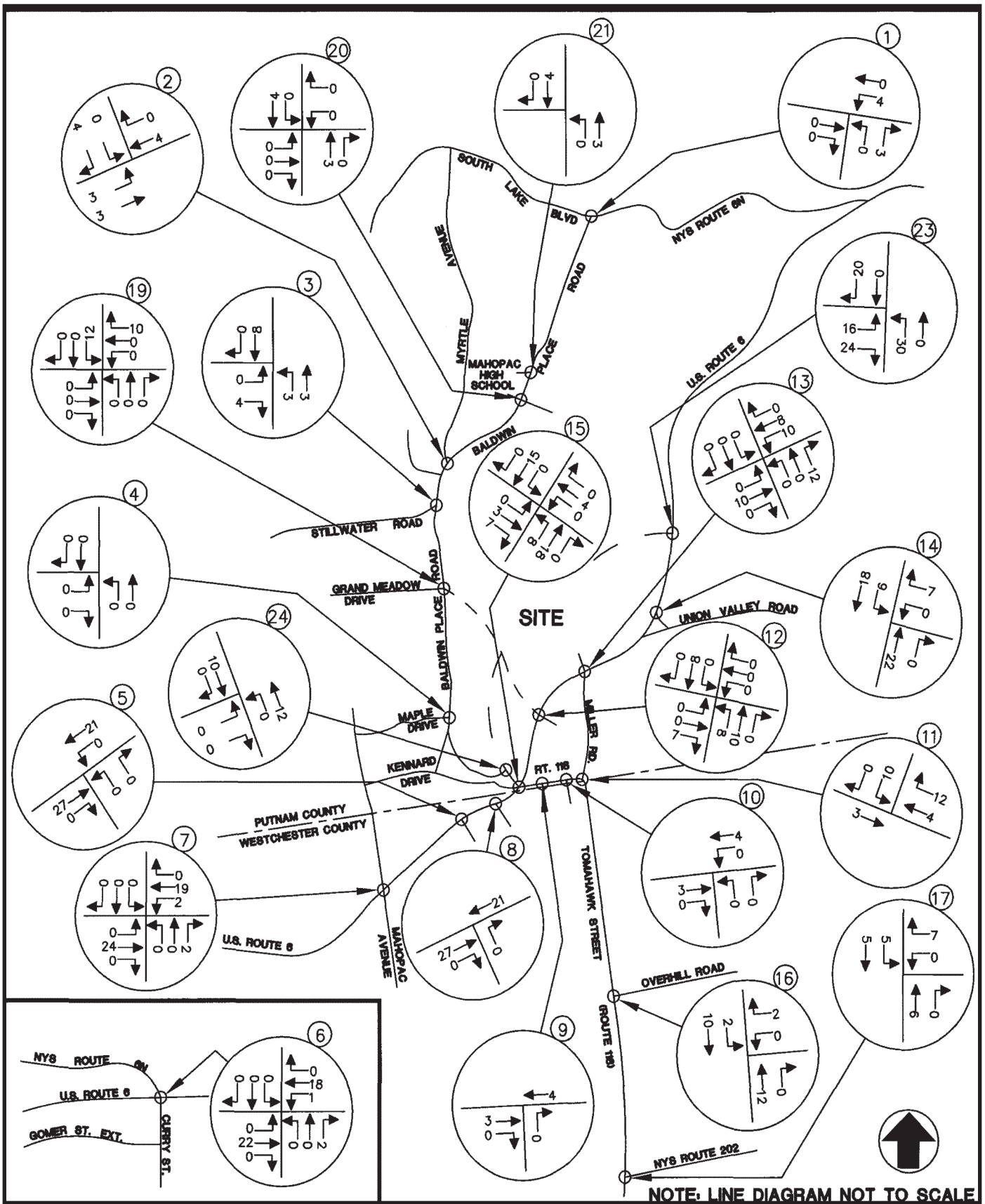
Figure 3.7-20A: Site Generated Traffic Volumes Office/Retail
Land Uses Saturday Peak Hour
Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009

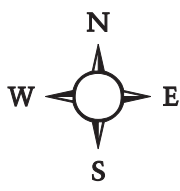




NOTE: LINE DIAGRAM NOT TO SCALE

Figure 3.7-20B: Site Generated Traffic Volumes Residential Land Uses Saturday Peak Hour Union Place

Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009



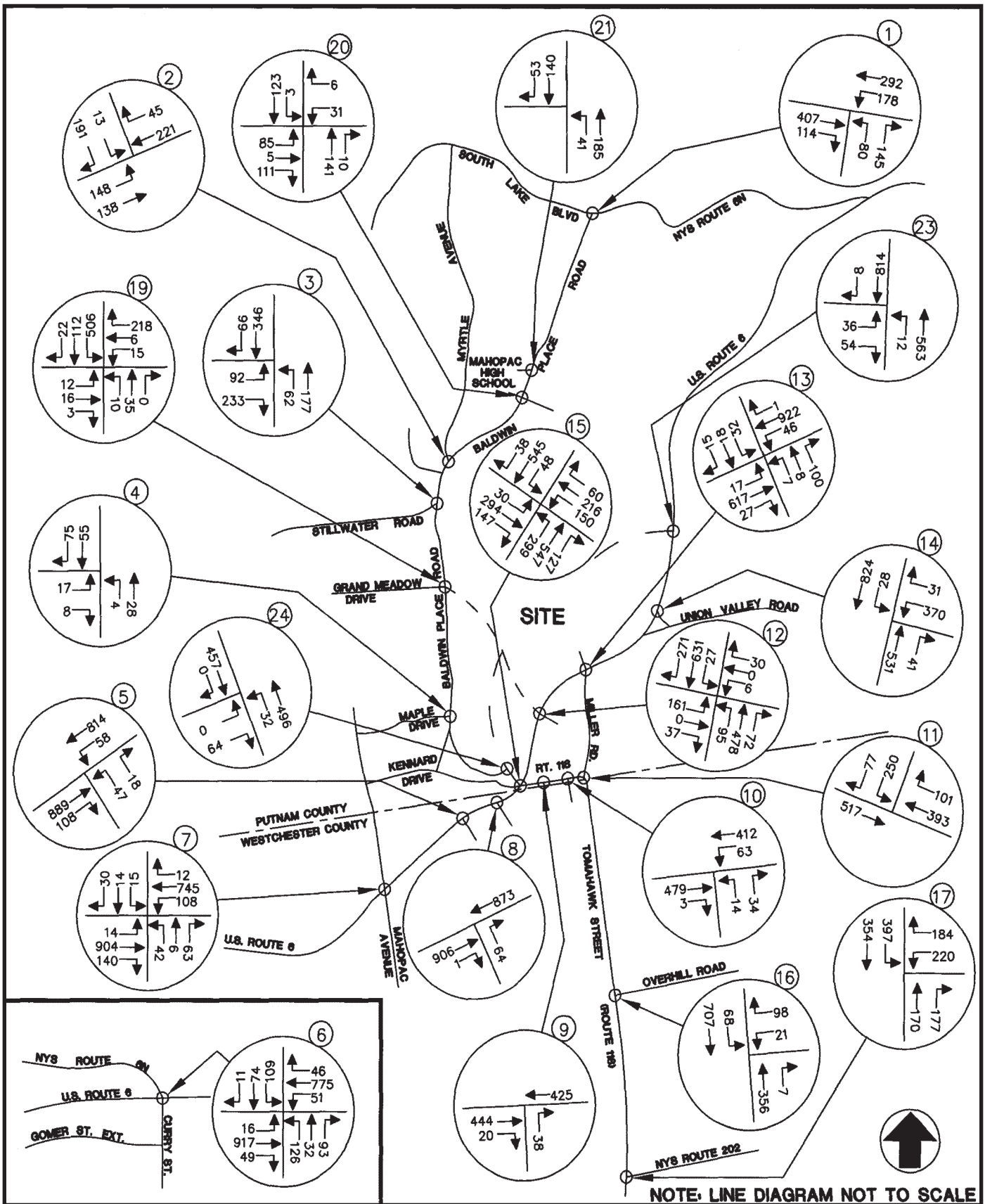
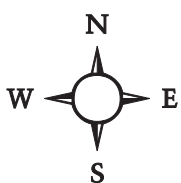
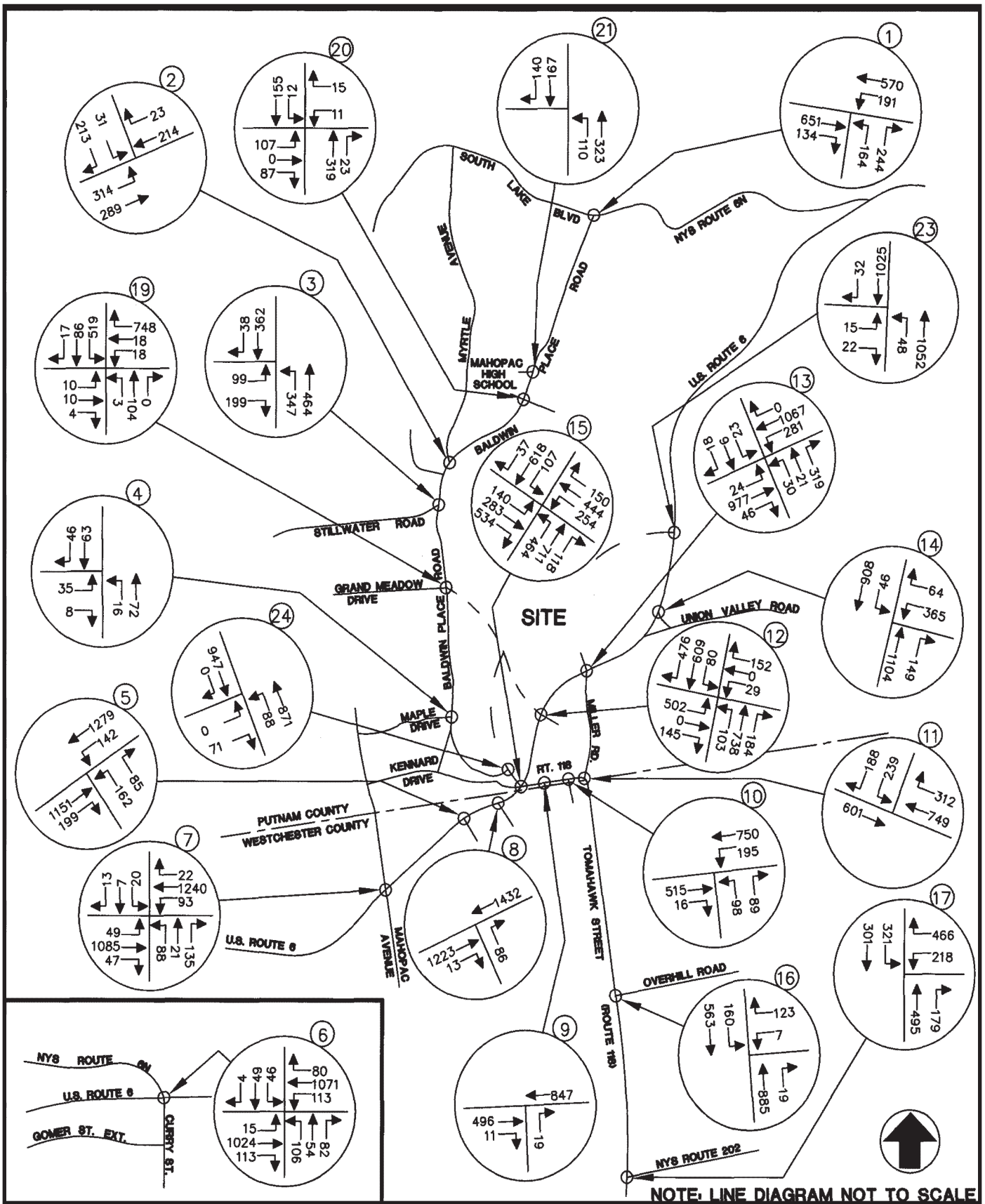


Figure 3.7-21: 2016 Build Traffic Volumes Weekday Peak AM Hour
 Union Place
 Town of Carmel, Putnam County, New York
 Source: John Collins Engineers, P.C.
 Date: January, 2009





NOTE: LINE DIAGRAM NOT TO SCALE



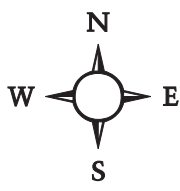
Figure 3.7-22: 2016 Build Traffic Volumes Weekday Peak PM Hour

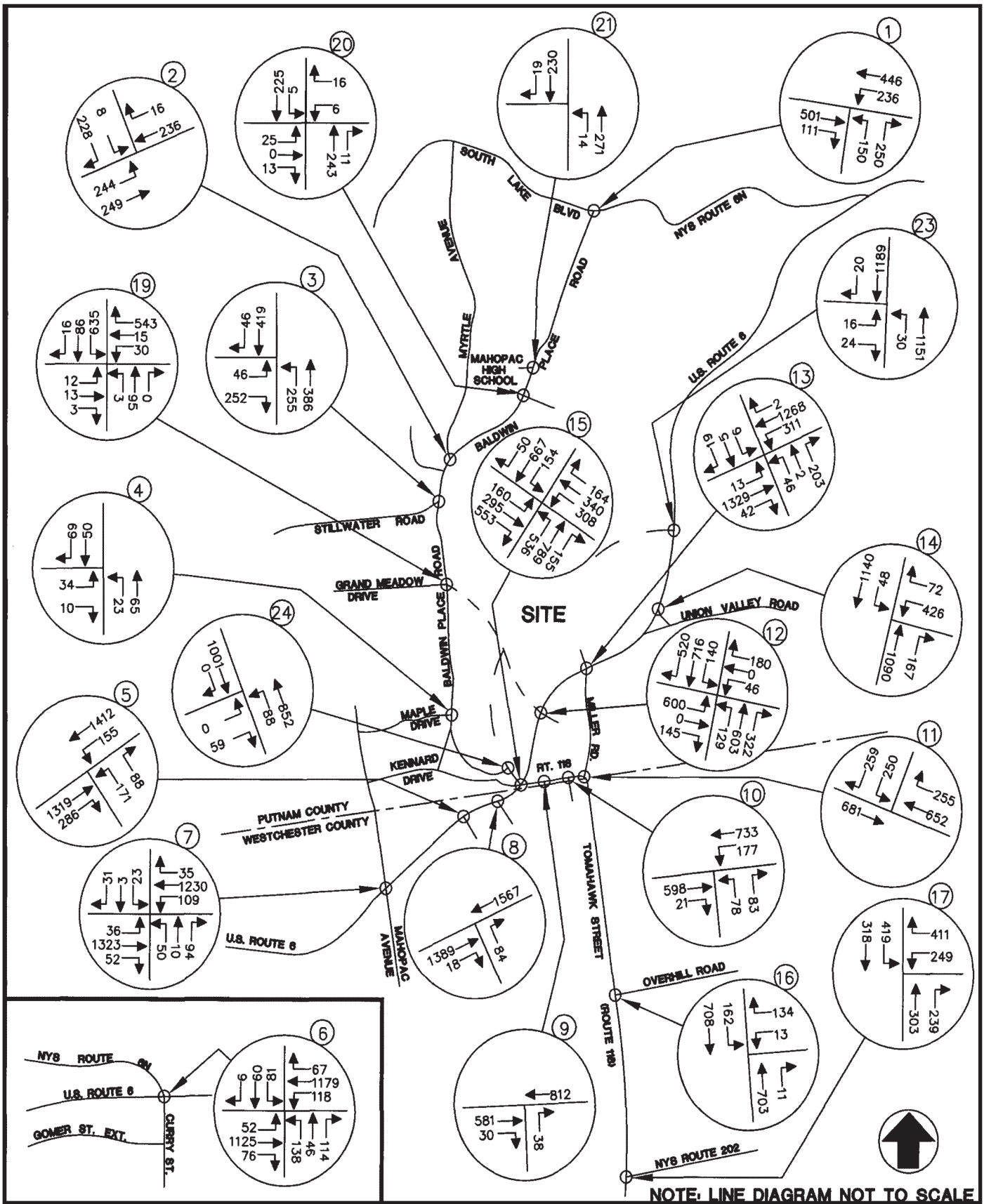
Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009





NOTE: LINE DIAGRAM NOT TO SCALE

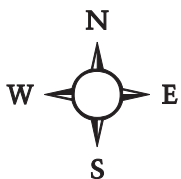
Figure 3.7-23: 2016 Build Traffic Volumes Saturday Peak Hour

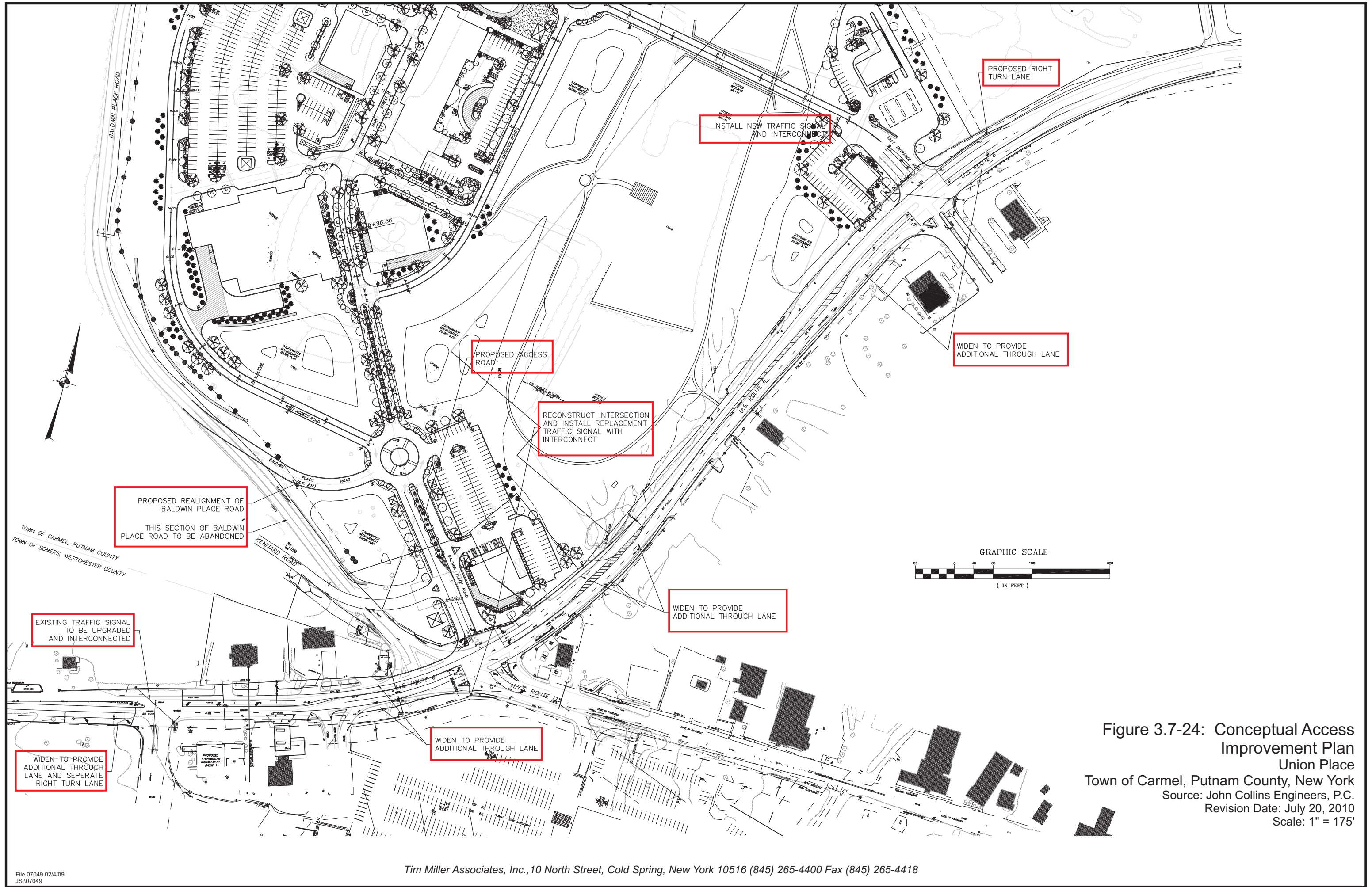
Union Place

Town of Carmel, Putnam County, New York

Source: John Collins Engineers, P.C.

Date: January, 2009





PROPOSED REALIGNMENT OF BALDWIN PLACE ROAD
THIS SECTION OF BALDWIN PLACE ROAD TO BE ABANDONED

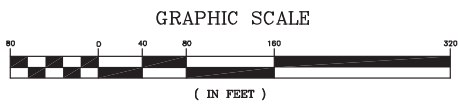
INSTALL NEW TRAFFIC SIGNAL AND INTERCONNECTS

PROPOSED RIGHT TURN LANE

WIDEN TO PROVIDE ADDITIONAL THROUGH LANE

PROPOSED ACCESS ROAD

RECONSTRUCT INTERSECTION AND INSTALL REPLACEMENT TRAFFIC SIGNAL WITH INTERCONNECT



WIDEN TO PROVIDE ADDITIONAL THROUGH LANE

EXISTING TRAFFIC SIGNAL TO BE UPGRADED AND INTERCONNECTED

WIDEN TO PROVIDE ADDITIONAL THROUGH LANE

WIDEN TO PROVIDE ADDITIONAL THROUGH LANE AND SEPERATE RIGHT TURN LANE

Figure 3.7-24: Conceptual Access Improvement Plan
Union Place
Town of Carmel, Putnam County, New York
Source: John Collins Engineers, P.C.
Revision Date: July 20, 2010
Scale: 1" = 175'