Engineers Planners Surveyors Landscape Architects Environmental Scientists

MASER CONSULTING P. A.

Traffic Impact Study

416-420 Main Street

City of Beacon, Dutchess County, New York

April 28, 2020

Prepared For

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MC Project No. 20000282A

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APPENDICES

I. INTRODUCTION

A. PROJECT DESCRIPTION AND LOCATION

(Figure No. 1)

This report has been prepared to evaluate the potential traffic and parking impacts associated with the proposed 416-420 Main Street Mixed-Use Development, which is proposed to be developed on the property located on the northeast corner of the Main Street/Schenck Avenue intersection and extended to South Street in the City of Beacon, Dutchess County, New York. The Site, which is improved by and existing one (1)-story retail building and a vacant adjoining lot, is proposed to consist of two (2) buildings totaling 16,848 sq. ft. including 14,703 sq. ft. at the front mixed-use building (fronting on Main Street) and 2,145 sq. ft. at rear building (fronting on South Street). The mixed-use building fronting on Main Street will consist of a total of 4,616 sq. ft. of first floor retail space, which will include the existing 1,675 sq. ft. Kitchen & Coffee (formerly Ella's Bellas Café) that will remain, as well as 7,872 sq. ft. of commercial office space on the second and third floors and 2,215 sq. ft. of residential space containing two (2) residential apartment units on the fourth floor. The rear lot building will consist of a 2,145 sq. ft. residential live/work building that will contain one (1) residential unit. The Site will provide limited parking facilities with one (1) driveway connection to Schenck Avenue for two (2) off-street parking spaces that will be provided for use by the residential tenants in the mixed-use building while a second driveway connection will be provided to South Street for use by the residential building to the rear of the Site, which will also provide two (2) off-street parking spaces.

A Design Year of 2025 has been utilized in completing the traffic analysis in order to evaluate future traffic conditions associated with this proposed development.

B. SCOPE OF STUDY

This study has been prepared to identify current and future traffic operating conditions on the surrounding roadway network and to assess the potential traffic impacts of the proposed 416-420 Main Street Mixed-Use Development. Existing and future parking conditions were also evaluated.

All available traffic count data for the study area intersections were obtained from previous reports prepared by our office. These data were supplemented with new traffic counts collected by representatives of Maser Consulting, P.A. These data were also compared to count data obtained from the New York State Department of Transportation (NYSDOT). Together these data were utilized to establish the Year 2020 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site.

The Year 2020 Existing Traffic Volumes were then projected to the 2025 Design Year to take into account background traffic growth. In addition, traffic for other specific potential or approved developments in the area were estimated and then added to the Projected Traffic Volumes to obtain the Year 2025 No-Build Traffic Volumes.

Estimates were then made of the potential traffic that the proposed development would generate during each of the peak hours (see Section III-C for further discussion). The resulting site generated traffic volumes were then added to the roadway system and combined with the Year 2020 No-Build Traffic Volumes resulting in the Year 2020 Build Traffic Volumes.

The Existing, No-Build and Build Traffic Volumes were then compared to roadway capacities based on the procedures from the Highway Capacity Manual to determine existing and future Levels of Service and operating conditions. Recommendations for improvements were made where necessary to serve the existing and/or future traffic volumes.

In addition to the traffic analysis summarized above, a detailed parking analysis has also been conducted, which identifies the current available parking supply in the vicinity of the site based on observations of the occupied and available parking spaces during weekday and weekend peak periods. The available parking supply was then compared to the required parking spaces as determined by the City of Beacon Zoning Code parking requirements.

II. EXISTING ROADWAY AND TRAFFIC DESCRIPTIONS

A. DESCRIPTION OF EXISTING ROADWAYS

(Figure No. 1)

As shown on Figure No. 1, the proposed 416-420 Main Street Mixed-Use Development will be accessed from Main Street, Schenck Avenue and South Street. One driveway connection will be provided to Schenck Avenue for parking to be provided for the building with Main Street frontage while a second driveway connection will be provided to South Street for use by the residential building to the rear of the Site. The following is a brief description of the roadways located within the study area. In addition, Section III-F provides a further description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service and any recommended improvements for each of the study area intersections. Appendix "D" contains copies of the capacity analyses which indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. Main Street

Main Street is a City street that consists of one lane in each direction and traverses in a northwest/southeast direction between NYS Route 9D and Churchill Street. Beyond Churchill Street, Main Street continues in a more northeasterly direction. Northwest of Fishkill Avenue, the roadway is classified as an Urban Major Collector, southeast of Fishkill Avenue it is classified as a local roadway. In the vicinity of the site, the roadway intersects with Schenck Avenue at an unsignalized "T" shaped intersection as well as with Fishkill Avenue/Teller Avenue (NYS Route 52) at a signalized full movement intersection. Sidewalks are provided on both sides of the street and striped pedestrian crossings are provided at the Schenck Avenue intersection. Signalized pedestrian crossings are provided at the Fishkill Avenue/Teller Avenue intersection. Parking is permitted on both sides of Main Street for its entire length with the parking limited to two-hour parking between 9AM and 5PM seven days a week. Main Street has a City Speed Limit of 30 MPH northeast of Fishkill Avenue, while the speed limit southwest of Fishkill Avenue is 25 MPH.

2. Schenck Avenue

Schenck Avenue is a local City street that consists of one lane in each direction and traverses in a north/south direction. Within the study area, the roadway intersects with Main Street and South Street at two unsignalized "T" shaped intersections. Sidewalks and on-street parking, with no parking restrictions, are provided on both sides of the roadway between Main Street and Van Nydeck Avenue. South of Van Nydeck Avenue a sidewalk is only provided on the west side of the roadway.

3. Fishkill Avenue/Teller Avenue (NYS Route 52)

Fishkill Avenue and Teller Avenue are classified as Urban Minor Arterials. These roadways are also known as NYS Route 52 but are owned and maintained by the City. Fishkill Avenue and Teller Avenue each consist of one lane in each direction and traverse in a generally north/south direction. The roadway intersects Main Street at a full movement signalized intersection. Sidewalks are provided on both sides of the roadway to the north and south of Main Street. On street parking is not permitted along Teller Avenue, while limited on street parking is permitted along the east side of Fishkill Avenue. Fishkill Avenue and Teller Avenue each have a posted City Speed Limit of 30 MPH.

B. YEAR 2019 EXISTING TRAFFIC VOLUMES

(Figures No. 2, 3 and 4)

Manual traffic counts were collected by representatives of Maser Consulting, P.A. on Tuesday February 4, 2020 for the AM and PM Peak Hours and Saturday February 1, 2020 for the Saturday Midday Peak Hour to determine the existing traffic volume conditions at the study area intersections. These traffic counts were then compared to traffic volume data from previous traffic studies conducted by our office and to traffic volume data available from the New York State Department of Transportation (NYSDOT) for the Fishkill Avenue/Teller Avenue (NYS Route 52) Corridor. Based on this information, the Year 2020 Existing Traffic Volumes were established for the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours at the following study area intersections.

- Fishkill Avenue/Teller Avenue (NYS Route 52) and Main Street
- Main Street and Schenck Avenue

Based upon a review of the traffic counts, the peak hours were generally identified as follows:

- Weekday Peak AM Hour 8:30 AM – 9:30 AM
- Weekday Peak PM Hour 3:45 PM – 4:45 PM
- Saturday Peak Hour 12:00 PM – 1:00 PM

The resulting Year 2020 Existing Traffic Volumes are shown on Figures No. 2, 3 and 4 for the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours, respectively.

III. EVALUATION OF FUTURE TRAFFIC CONDITIONS

A. YEAR 2025 NO-BUILD TRAFFIC VOLUMES

(Figure No. 5 through 13)

The Year 2020 Existing Traffic Volumes were increased by a growth factor of 2.0% per year to account for general background growth resulting in the Year 2025 Projected Traffic Volumes, which are shown on Figures No. 5, 6 and 7 for each of the Peak Hours. In addition, traffic associated with the proposed 13 Creek Drive Development was also accounted for. The resulting Other Development traffic volumes associated with that development are shown on Figures No. 8, 9 and 10 for each of the peak hours. These volumes were added to the 2025 Projected Traffic Volumes resulting in the Year 2025 No-Build Traffic Volumes, which are shown on Figures No. 11, 12 and 13 for the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours, respectively.

B. SITE GENERATED TRAFFIC VOLUMES

(Table No. 1)

Estimates of the amount of traffic to be generated by the proposed residential development during each of the peak hours were developed based on information published by the Institute of Transportation Engineers (ITE) as contained in the report entitled "Trip Generation", 10th Edition, 2017, based on Land Use Category – 820 – Retail, 710 – Office Building and 220 – Multifamily Home and 210 – Single Family Home. Table No. 1 summarizes the trip generation rates and corresponding site generated traffic volumes for the Weekday Peak AM, Weekday Peak PM and Saturday Hours.

It should be noted that the Kitchen & Coffee use (formerly Ella's Bellas Café), which consists of 1,675 sq. ft. is an existing operating use that will be incorporated into the overall development but will remain upon completion. Traffic associated with this use has been captured in the existing traffic volume counts identified above, therefore no additional traffic generation associated with this use has been accounted for in the analysis.

In addition, the rear lot which is currently zoned PB – Business Off-Street, may be rezoned into to the T-Transitional Zone in the near future. Under this zoning, even if the proposed single-family home artist/live work space was be modified to two (2) artist live-work units, it is expected that this would result in similar traffic generation to the single live-work space and therefore no separate analysis has been conducted for this condition.

C. ARRIVAL/DEPARTURE DISTRIBUTIONS

(Figures No. 14 and 15)

It was necessary to establish arrival and departure distributions to assign the site generated traffic volumes to the surrounding roadway network. Based on a review of the Existing Traffic Volumes and the expected travel patterns on the surrounding roadway network, the distributions were identified. The anticipated arrival and departure distributions are shown on Figures No. 14 and 15, respectively.

D. 2020 BUILD CONDITIONS TRAFFIC VOLUMES

(Figures No. 16 through 21)

The Site Generated Traffic Volumes were assigned to the roadway network based on the arrival and departure distributions referenced above. The resulting site generated traffic volumes for each of the study area intersections are shown on Figures No. 16, 17 and 18 for each of the peak hours, respectively. The site generated traffic volumes were then added to the Year 2025 No-Build Traffic Volumes to obtain the Year 2025 Build Traffic Volumes. The resulting Year 2025 Build Traffic Volumes are shown on Figures No. 19, 20 and 21 for the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours, respectively.

E. DESCRIPTION OF ANALYSIS PROCEDURES

It was necessary to perform capacity analyses in order to determine existing and future traffic operating conditions at the study area intersections. The following is a brief description of the analysis method utilized in this report:

- Signalized Intersection Capacity Analysis
  The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the *Highway Capacity Manual, 6th Edition*, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Levels 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.

- Unsignalized Intersection Capacity Analysis
  The unsignalized intersection capacity analysis method utilized in this report was also performed in accordance with the procedures described in the *Highway Capacity Manual, 6th Edition*. 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.

Additional information concerning signalized and unsignalized Levels of Service can be found in Appendix "C" of this report.

F. RESULTS OF ANALYSIS

(Tables No. 2AM, 2PM and 2SAT)

Capacity analyses which take into consideration appropriate truck percentages, pedestrian activity, roadway grades and other factors were performed at the study area intersections utilizing the procedures described above to determine the Levels of Service and average vehicle delays. Summarized below are a description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service as well as any recommended improvements.

Tables No. 2AM, 2PM and 2SAT, contained in Appendix "B" summarize the results of the capacity analysis for the 2020 Existing, 2025 No-Build and 2025 Build Conditions for each of the peak hours analyzed, respectively. Appendix "D" contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. Fishkill Avenue/Teller Avenue (NYS Route 52) and Main Street
   Fishkill Avenue/Teller Avenue and Main Street intersect at a full movement signalized intersection. Each of the approaches to the intersection consist of a single lane and signalized pedestrian crosswalks are provided on all four intersection approaches. "Right Turns on Red" are also prohibited on all four approaches. On-street parking is also provided on each of the Main Street intersection approaches as well as the east side of Fishkill Avenue within approximately 250 ft. of the intersection.

Capacity analysis was conducted for this intersection utilizing the 2020 Existing, 2025 No-Build and 2025 Build Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "B" during each of the peak hours and will remain under all analysis conditions (existing, no-build and build).

2. Main Street and Schenck Avenue

Main Street and Schenck Avenue intersect at a "T" shaped unsignalized intersection. Main Street consists of one lane in each direction and on-street parallel parking is provided on both sides of the street. Schenck Avenue also consists of one lane in each direction and is controlled by a "Stop" sign approaching the intersection. On-street parallel parking is provided on the west side of Schenck Avenue only. Painted pedestrian crosswalks are provided on the eastbound and southbound approaches to the intersection.

Capacity analysis was conducted for this intersection utilizing the 2020 Existing, 2025 No-Build and 2025 Build Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "B" or better during all time periods and that this level of service will be maintained under future No-Build and Build conditions.

IV. PARKING ANALYSIS

A. EXISTING PARKING CONDITIONS

(Figure 1P, Tables P-1, P-2, P-3)

Manual parking counts of the available and occupied parking spaces were collected by representatives of Maser Consulting, P.A. for all on-street and off-street public parking spaces found within 500± ft. of the proposed project Site location, in order to identify the existing parking conditions in the area. These parking counts included the following areas, which are also identified on Figure 1P contained in Appendix "A":

- Main Street between Tioronda Avenue & Veterans Place (On-Street)
- Van Nydeck Avenue between Tioronda Avenue & Fishkill Avenue (On-Street)
- Schenck Avenue between Main Street & North Street (On-Street)
- South Street between Schenck Avenue & Locust Place (On-Street)
- North Street between Schenck Avenue & North Street (On-Street)
- Main Street/Van Nydeck Street Public Lot (70 Spaces Off-Street)
- Van Nydeck Street Public Lot (23 Spaces Off-Street)
- Veterans Place/Henry Street Public Lot (70 Spaces Off-Street)

Figure No. 1P also provides a summary of the parking restrictions for the study area including in the off-street public parking lots and all area roadways listed above with on-street parking provided.

The parking counts were conducted on Wednesday February 5th, 2020 during the AM (7AM-9AM), Midday (11AM-2PM) and PM (3:30PM-7PM) peak periods, on Saturday February 8th, 2020 between 11:00 AM and 2:30 PM and Sunday February 9th, 202 between 11:00 AM and 2:00 PM.

The parking counts are summarized in Tables P-1, P-2 and P-3, contained in Appendix "B", for the Weekday, Saturday and Sunday parking counts respectively. The tables identify the total parking spaces, the total occupied spaces and the total available (unoccupied) spaces within the studied area. The parking count data indicates that during the Weekday periods there are in excess of 125 available (unoccupied) parking spaces within the 500± ft. study area, while during the Saturday and Sunday peak periods there are as few as 30 available parking spaces in the vicinity of the site.

B. FUTURE PARKING CONDITIONS

The parking requirements for the proposed development based on the City of Beacon Code as identified in Section 223-26.F and 223-41.18.G.(2) were reviewed in order to determine the required parking supply for the development. The below summarizes the required City Code parking supply ratios and the equivalent required number of parking spaces for each use within the proposed development. Note that the below parking requirements does not account for the parking required for the existing Kitchen & Coffee (formerly Ella's Bellas Café) since this is an existing use and any parking currently associated with this use is already accounted for in the parking counts discussed above.

SUMMARY OF OFF-STREET PARKING REQUIREMENTS PER CITY OF BEACON CITY CODE		
USE	**REQUIRED PARKING RATIO**	**REQUIRED PARKING SPACES**
MIXED-USE BUILDING FRONTING MAIN STREET (CMS – CENTRAL MAIN STREET ZONING DISTRICT)		
NEW RETAIL (2,941 SQ.FT.)	2 SPACE/1,000 SQ. FT.	6 SPACES
OFFICE (7,872 SQ.FT.)	2 SPACE/1,000 SQ. FT.	16 SPACES
APARTMENTS (2 UNITS)	1 SPACE/DWELLING UNIT	2 SPACES
REAR LOT BUILDING (PB- BUSINESS OFF-STREET ZONING DISTRICT)		
RESIDENTIAL (1 UNIT)	2 SPACES/DWELLING UNIT	2 SPACES
	TOTAL	**26 SPACES**

The proposed development will be provided a total of four (4) off-street parking spaces, two (2) spaces for the use of the mixed-use building's 4th floor residential units and two (2) spaces for the rear residential building. No designated parking will be provided for the retail or commercial office space in the mixed-use building. The rear lot building will be provided with two (2) off-street parking spaces in the driveway for the one (1) live/work unit. The remaining of the required 22 parking spaces would have to be accommodated by public parking, both on-street and in City of Beacon Public Parking lots in the area. In addition, as part of the proposed development, the Applicant proposes to stripe new on-street parking spaces along the east side of Schenck Avenue between Main Street and South Street and along both sides of South Street in the vicinity of the Site in order better define

parking in this area. Furthermore, the elimination of one (1) of the two (2) existing curb cuts to the subject property from Schenck Avenue will provide for an additional parking space along the east side of Schenck Avenue.

As indicated previously, during a typical weekday, greater than 125 parking spaces were found to be available within 500 ft. of the proposed development, which would more than accommodate the required parking that is not captured by the on-site parking provided. During the Weekend (Saturday & Sunday) peak parking periods, as few as 30 parking spaces were found to be available within 500 ft. of the proposed development. However, on Saturday and Sunday the second and third floor office uses are anticipated to be closed and/or have very limited activity. In fact, based on Institute of Transportation Engineers (ITE) data contained in their publication entitled Parking Generation Manual, 5th Edition, an office use of this size can be expected to generate a peak parking demand of between 2 (based on average parking rate) and 6 vehicles (based on 85th percentile parking rate) on a Saturday. Using the ITE parking data for a Saturday, the development would require 16 total parking spaces on Saturday and a similar total would be required on Sunday. Including the four (4) parking spaces provided on-site the net parking demand on the weekend would be approximately 12 spaces, which can be accommodated by the available public parking in the vicinity of the site.

In addition to the above, per Section 223-26C(6) of the City Code *"…the Planning Board may approve the joint use of parking spaces by two or more establishments on the same lot or on contiguous lots, the total capacity of which is less than the sum of the spaces required for each, provided that said Board finds that the capacity to be provided will substantially meet the intent of this article by reason of variation in the probable time of maximum use by patrons or employees at such establishments and provided that such approval of such joint use shall be automatically terminated upon a change of use at any such establishment."* Shared on-street parking can be expected to occur within 500 ft. of the Site between the proposed project and other uses along Main Street where patrons may park along the Main Street area to visit multiple properties/uses in the same trip and/or spaces occupied by residential tenants during the nighttime hours may be available for use by retail and commercial patrons during the daytime hours. While shared parking may occur as indicated, no credit for this has been accounted for in the parking analysis discussed above.

Finally, it should also be noted that as indicate in the City Code Section 223-41.18.G.(3) the CMS Zone parking requires identified in Section 223-41.18.G.(2) may be modified by the Planning, in its discretion, based on information provided demonstrating one or more of the following.

(a) That the projected operational characteristics of the proposed use require a different amount of parking.
(b) That adequate shared parking, contractually obligated for the duration of the proposed use, is available within 500 feet of the site and within the CMS or PB Districts.
(c) That the applicant has provided sufficient bicycle parking to reduce anticipated vehicular travel demand.
(d) That there is sufficient public parking available within 800 feet of the site and within the CMS or PB Districts to meet foreseeable parking needs of the proposed use and surrounding uses for the duration of the proposed use.
(e) That the applicant will voluntarily dedicate land for public parking on site or will acquire land by purchase or long-term lease (for the duration of the proposed use) within 800 feet of the site and within the CMS or PB Districts and voluntarily dedicate such land to the City for public parking.
(f) That a professional parking study of the proposed use and the surrounding area demonstrates that a different amount of parking would be appropriate for the use in its particular location and/or that existing and/or proposed off-site parking is sufficient.

The information presented herein demonstrates that items (b), (d), (e) and (f) are met for this development. The Applicant is also proposing to provide two (2) sets of bicycle racks at the rear of the front lot building for public use, which satisfies item (c) as well.

C. OTHER PARKING RELATED CONSIDERATIONS

1. Off-Street Loading – No separate off-street loading space is provided as part of the proposed development. Per City Code Section 233-26H.2.(a) and (b) no off-street loading spaces are required for retail buildings with a gross floor of less than 5,000 sq. ft. and for office establishments of less than 10,000 sq. ft.

2. Rear Lot Zoning – As previously indicated the rear lot is currently zoned PB – Business Off-Street but may be rezoned to the T-Transitional Zone in the future by the City. Under this zoning, even if the proposed single-family artist live/work space was modified to one (1) artist live-work unit with two bedrooms, the unit would require the same number of parking spaces (two (2) spaces - 1 space per dwelling unit + 1/4 for

each bedroom + 1/2 for the live/work space) as the apartment unit, which results in the same parking conclusions as discussed above.

3. Schenck Avenue One-Way – Schenck Avenue is currently a two-way roadway with on-street parking on both sides of the roadway. Between Main Street and South Street, the roadway has an approximate width of 26 ft. curb-to-curb. Assuming a 7 ft. parking lane on each side of the street this leaves an approximately 12 ft. travel lane between parked vehicles to accommodate two-way traffic. While hourly volumes on this road are relatively low, less than 70 cars per hour, the City could consider making this roadway a one-way roadway from Main Street to South Street. This would result in southbound traffic traveling towards Main Street being redirected to other local roadways, but it is not anticipated that this would result in any significant traffic impacts. Appropriate signing would be necessary at the Main Street/Schenck Avenue and Schenck Avenue/South Street intersections would be required to accommodate this modification. A modification to one-way flow on this portion of Schenck Avenue would better accommodate the existing two-sided parking.

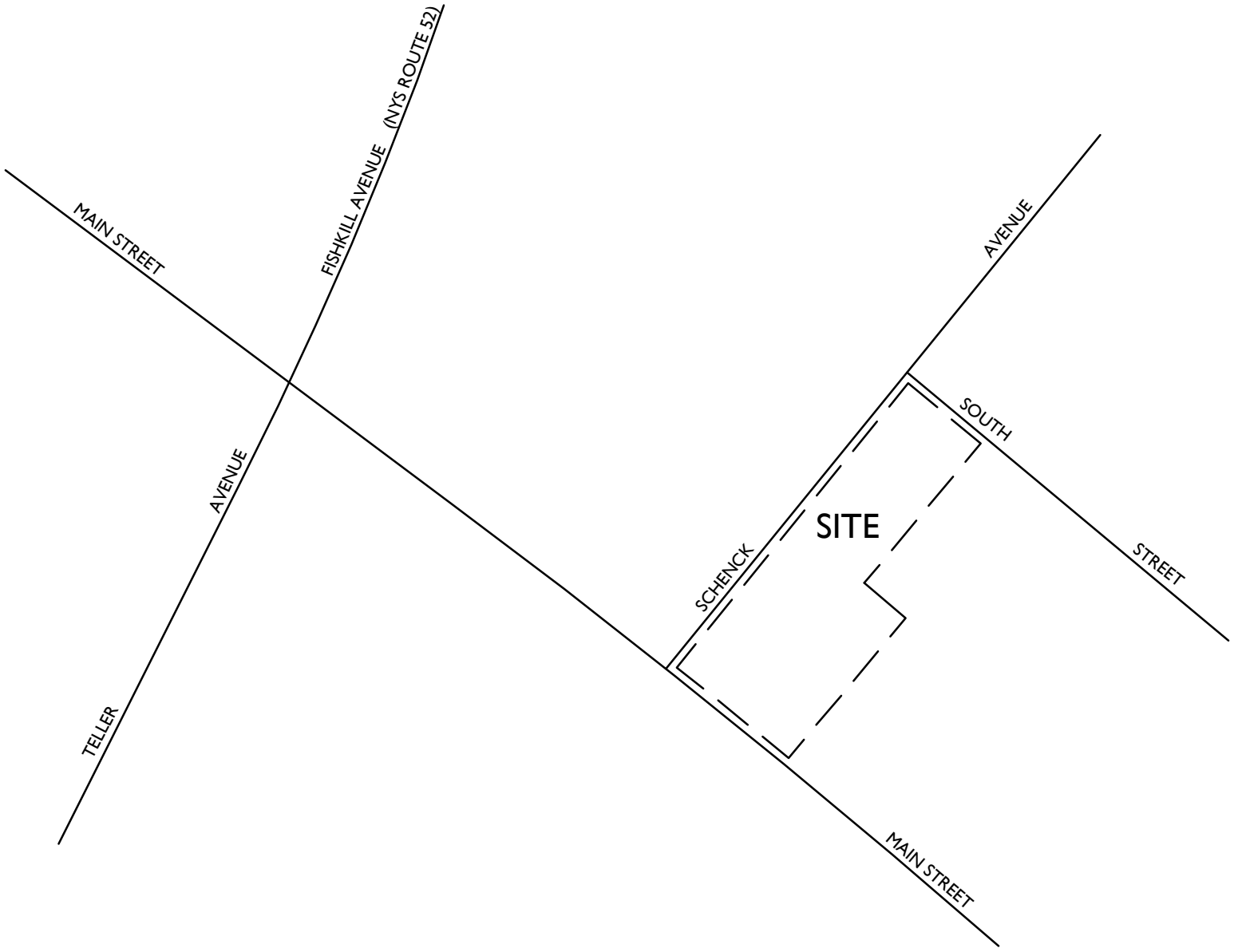
V. SUMMARY AND CONCLUSION

Based on the above analysis, similar Levels of Service and delays will be experienced at the area intersections under the future No-Build and future Build Conditions. Thus, the traffic associated with the proposed 416-420 Main Street Mixed-Use Development is not expected to cause any significant impact in overall operation. Furthermore, based on the observations of the existing available parking in the vicinity of the Site as well as the analysis of the required parking demand of the development, the parking needs for the proposed development can be accommodated by the public parking in the vicinity of the Site during both Weekday and Weekend peak parking periods.

416 – 420 MAIN STREET

APPENDIX A

FIGURES



NOTE: LINE DIAGRAM NOT TO SCALE

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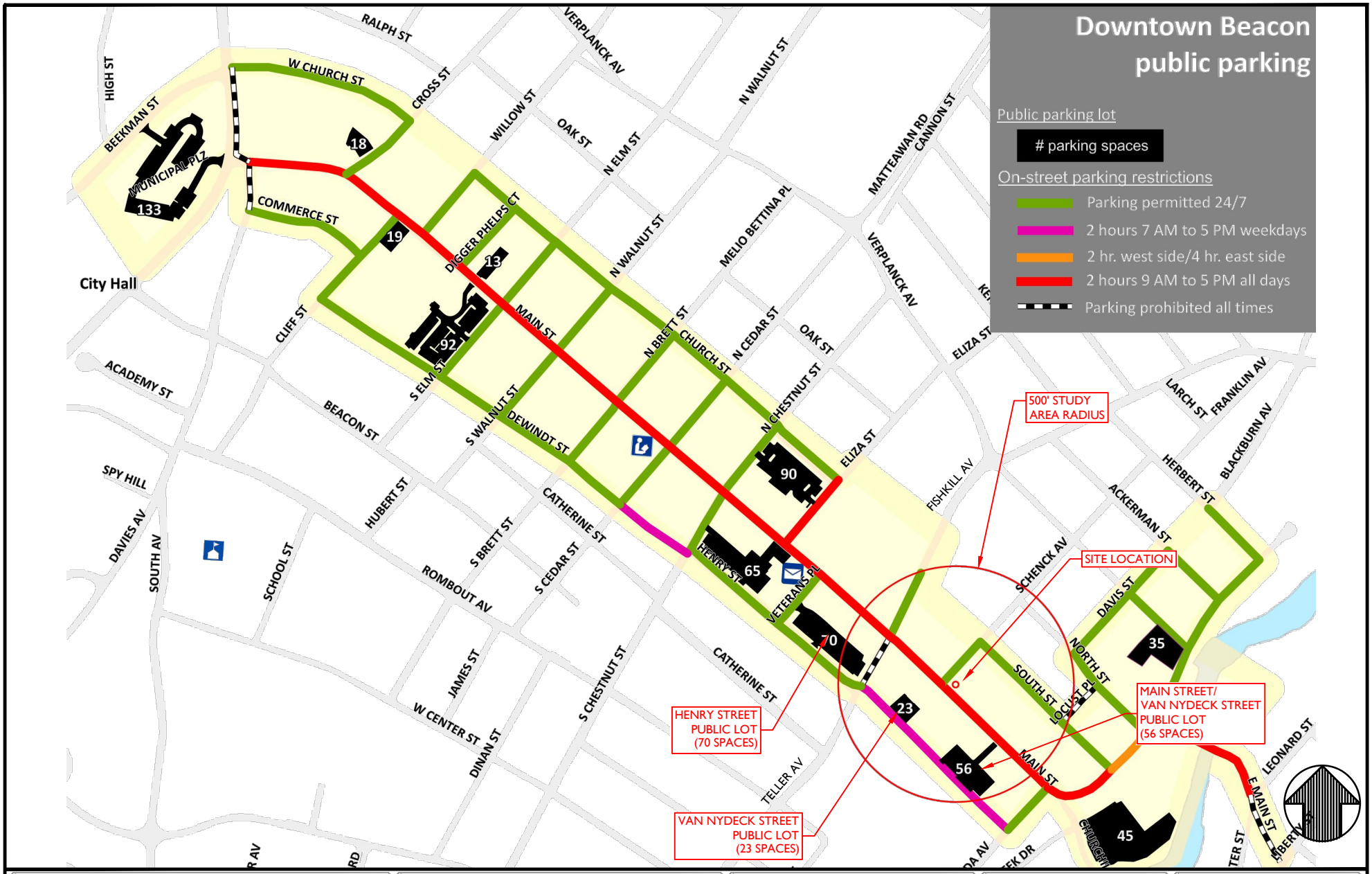
AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER: 20000282A

DRAWING NAME: 200213RH_FIGURE

SHEET TITLE: SITE LOCATION MAP

SHEET NUMBER: 1



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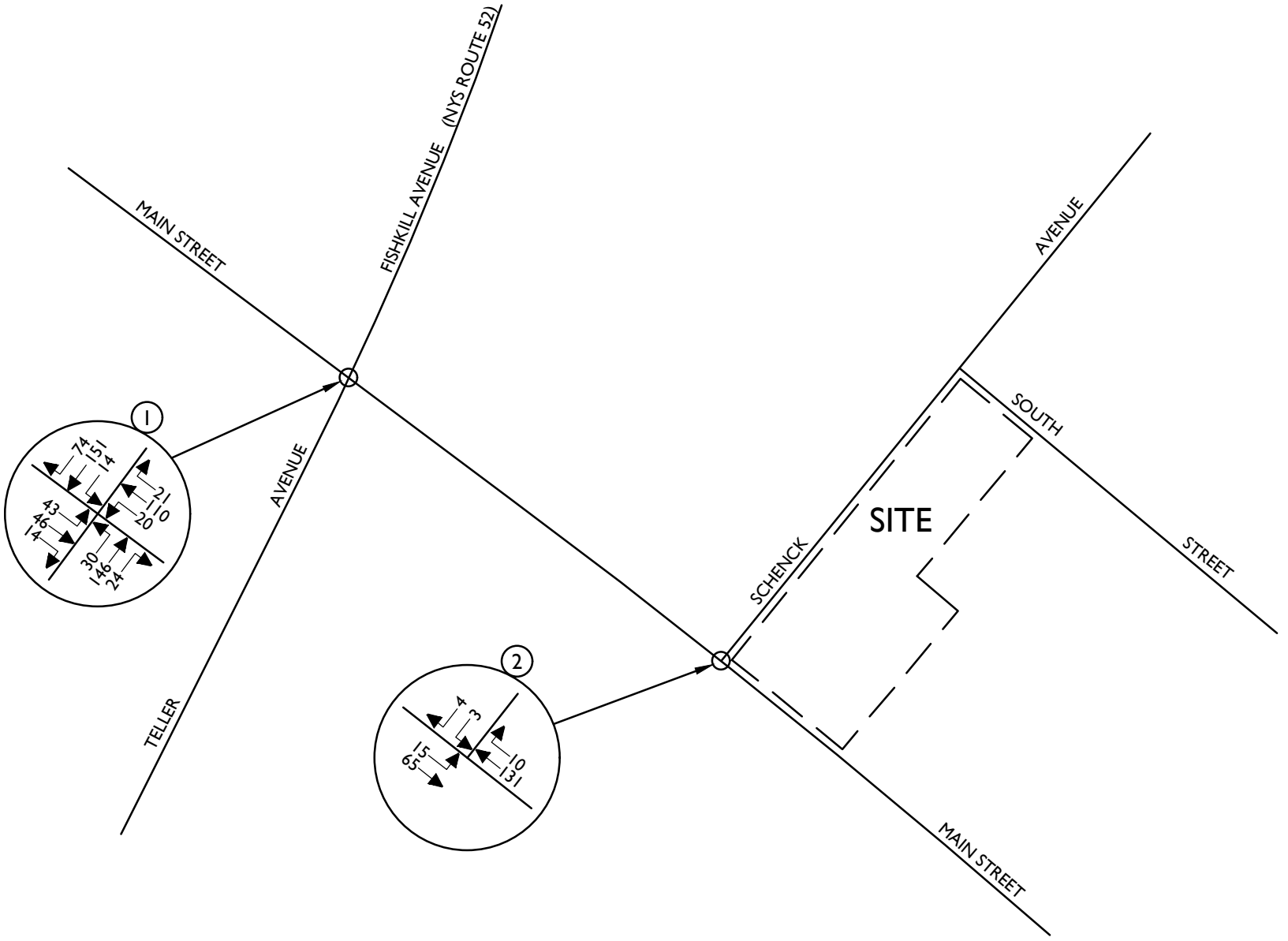

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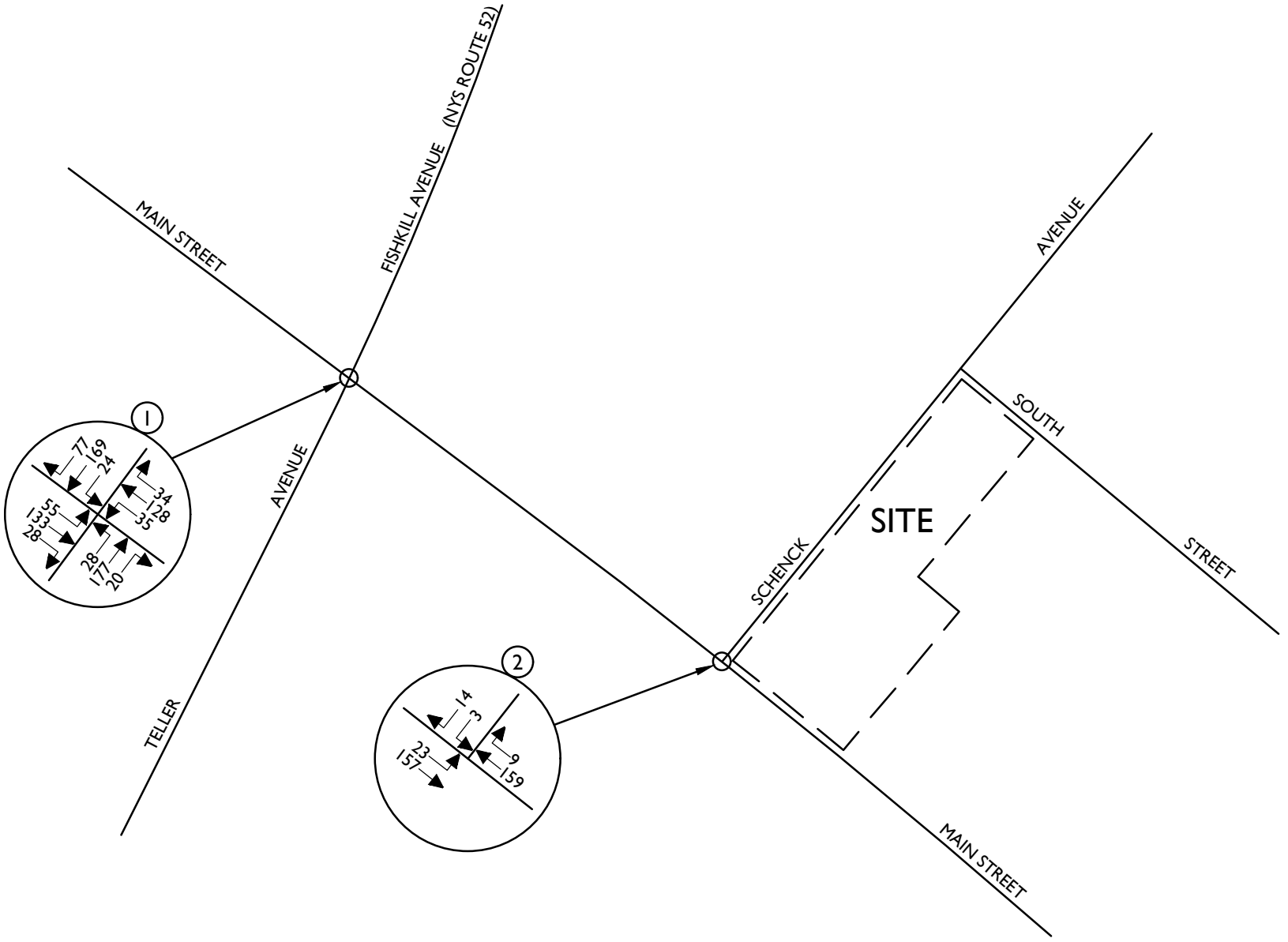
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
2020 EXISTING TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
2



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AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
2020 EXISTING TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
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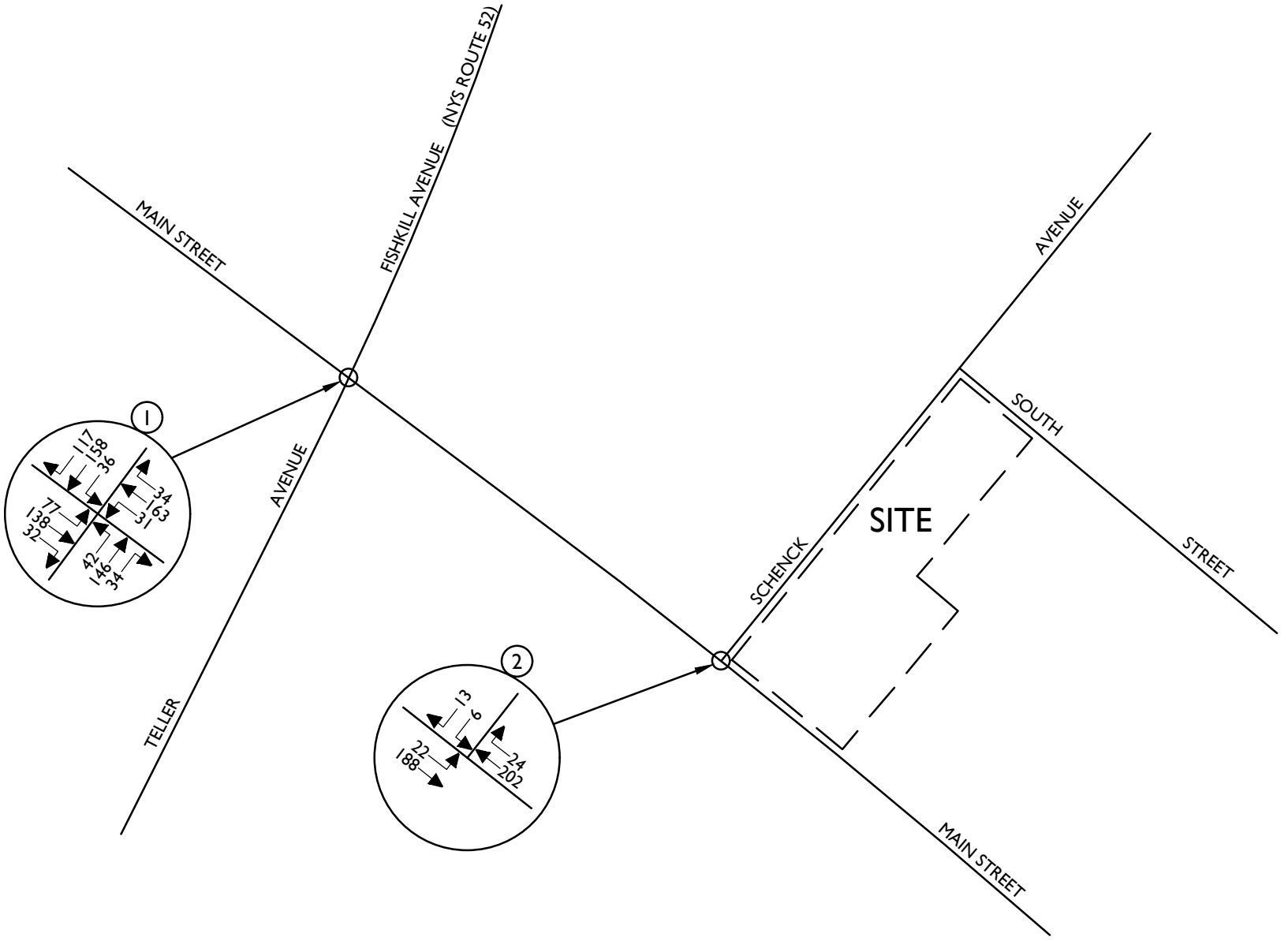

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AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
2020 EXISTING TRAFFIC VOLUMES
WEEKEND PEAK SAT HOUR

SHEET NUMBER:
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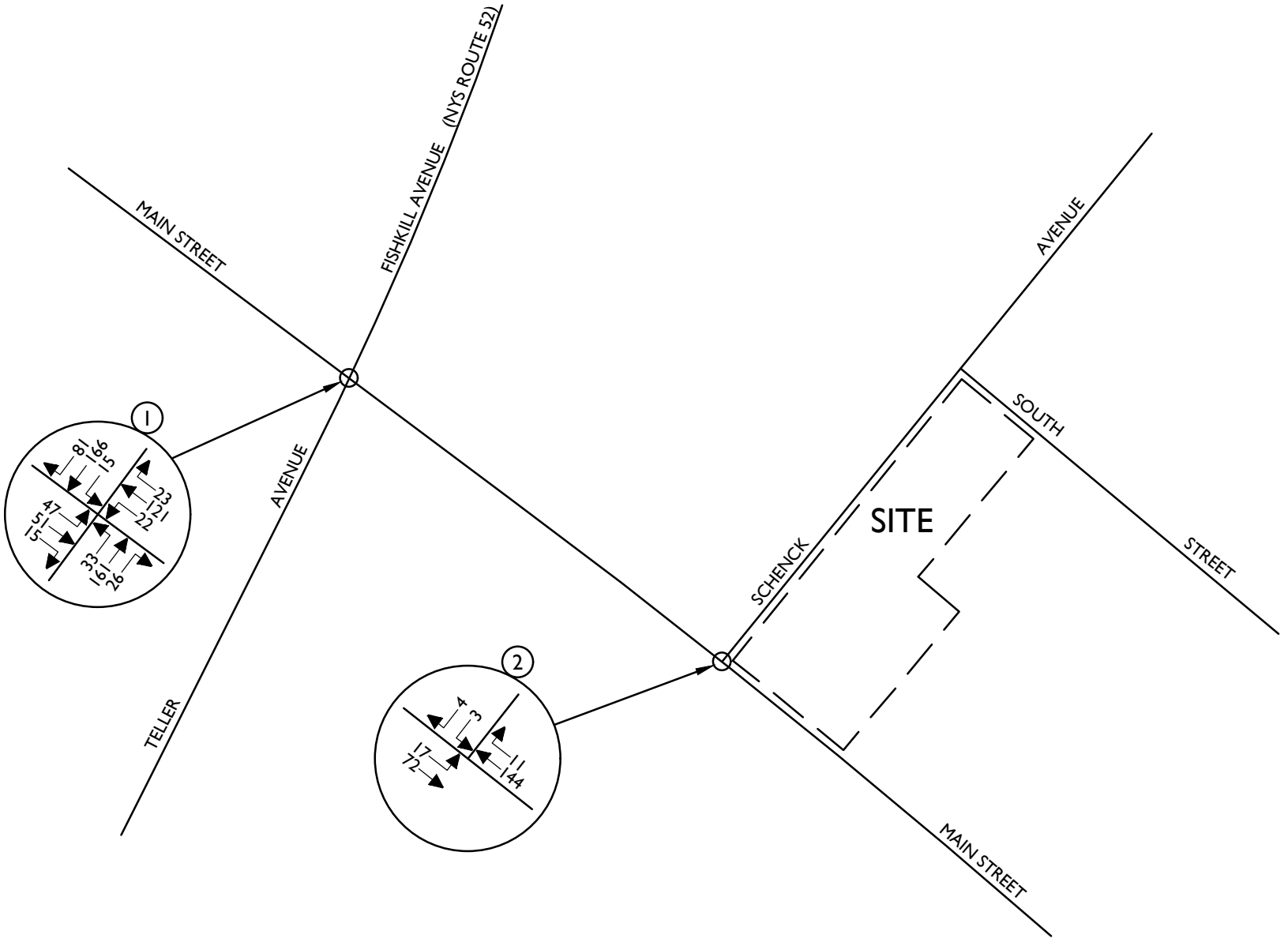

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PROJECT NUMBER: 20000282A
DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
2025 PROJECTED
TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
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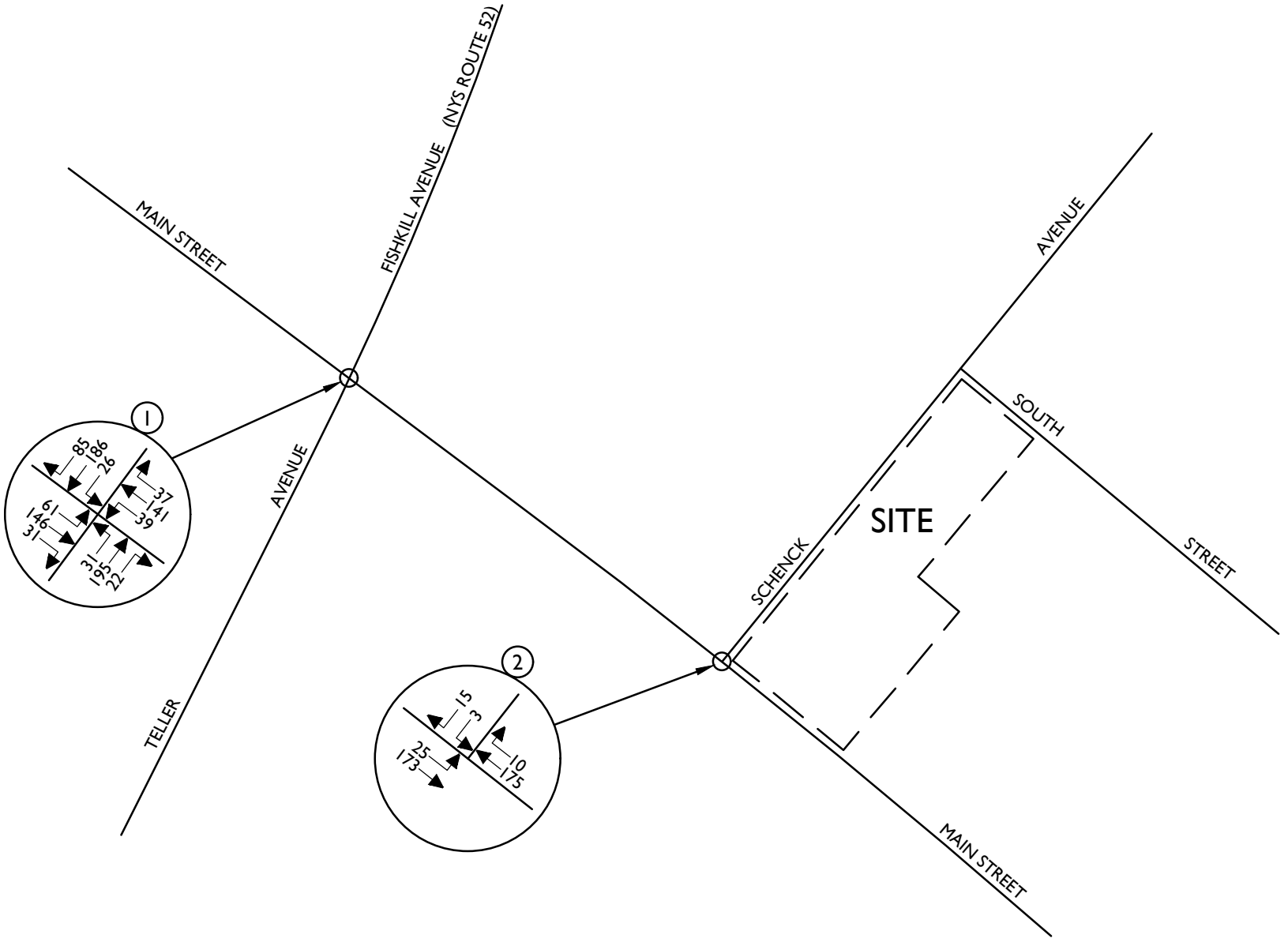

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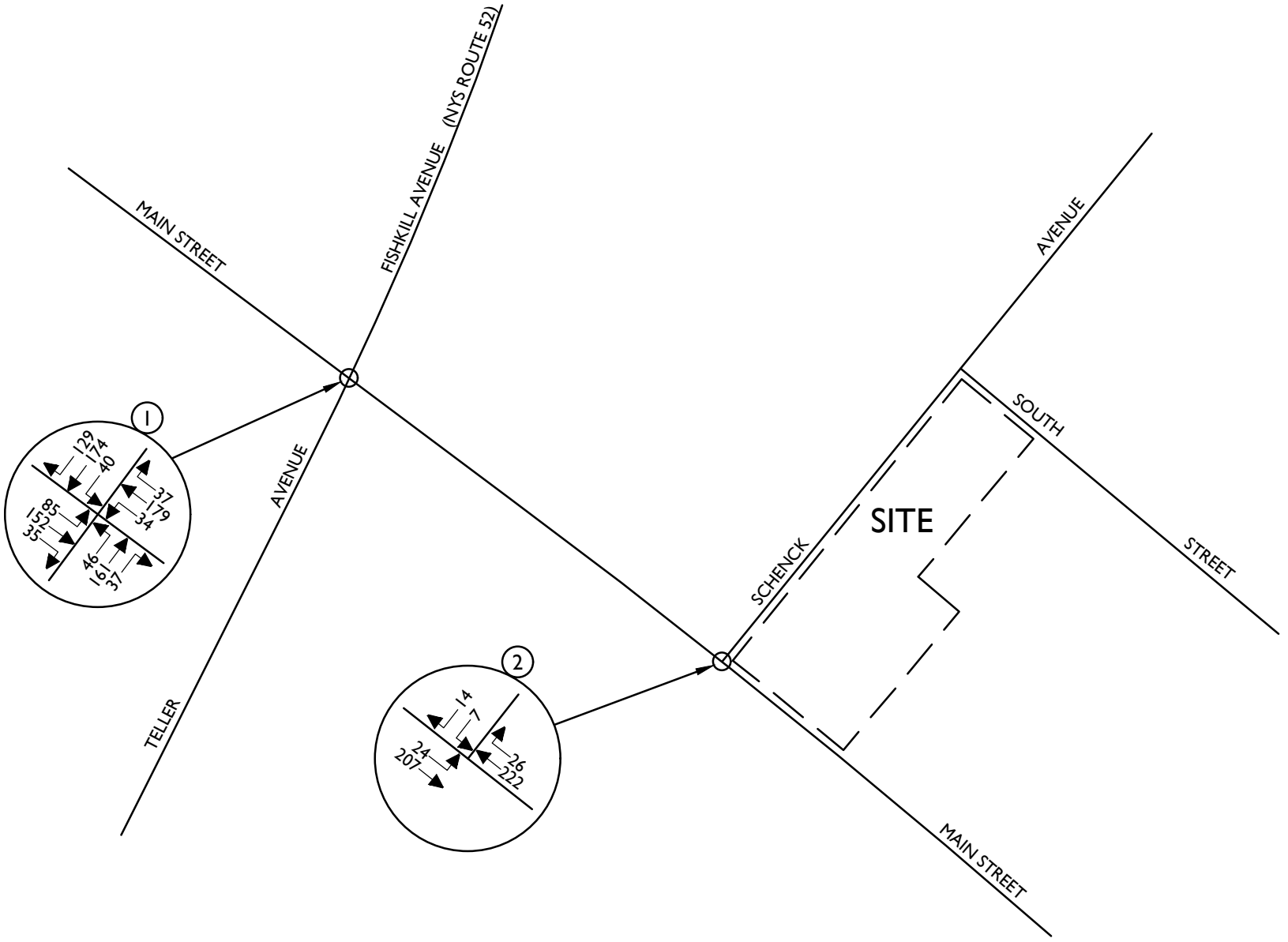
PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
2025 PROJECTED
TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
6



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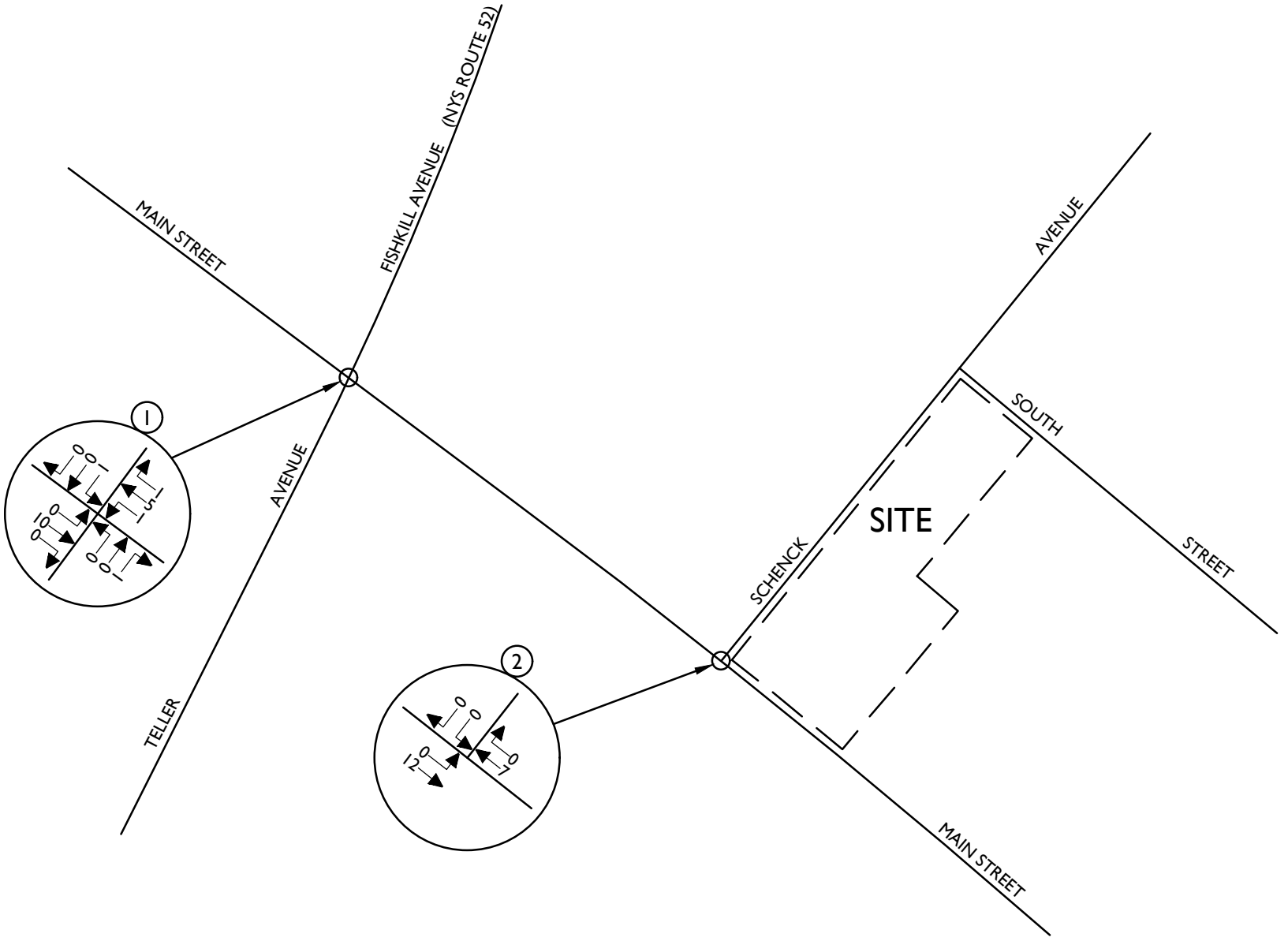
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER:	DRAWING NAME:
20000282A	200428RGD_FIGURE

SHEET TITLE:
2025 PROJECTED
TRAFFIC VOLUMES
WEEKEND PEAK SAT HOUR

SHEET NUMBER:
7



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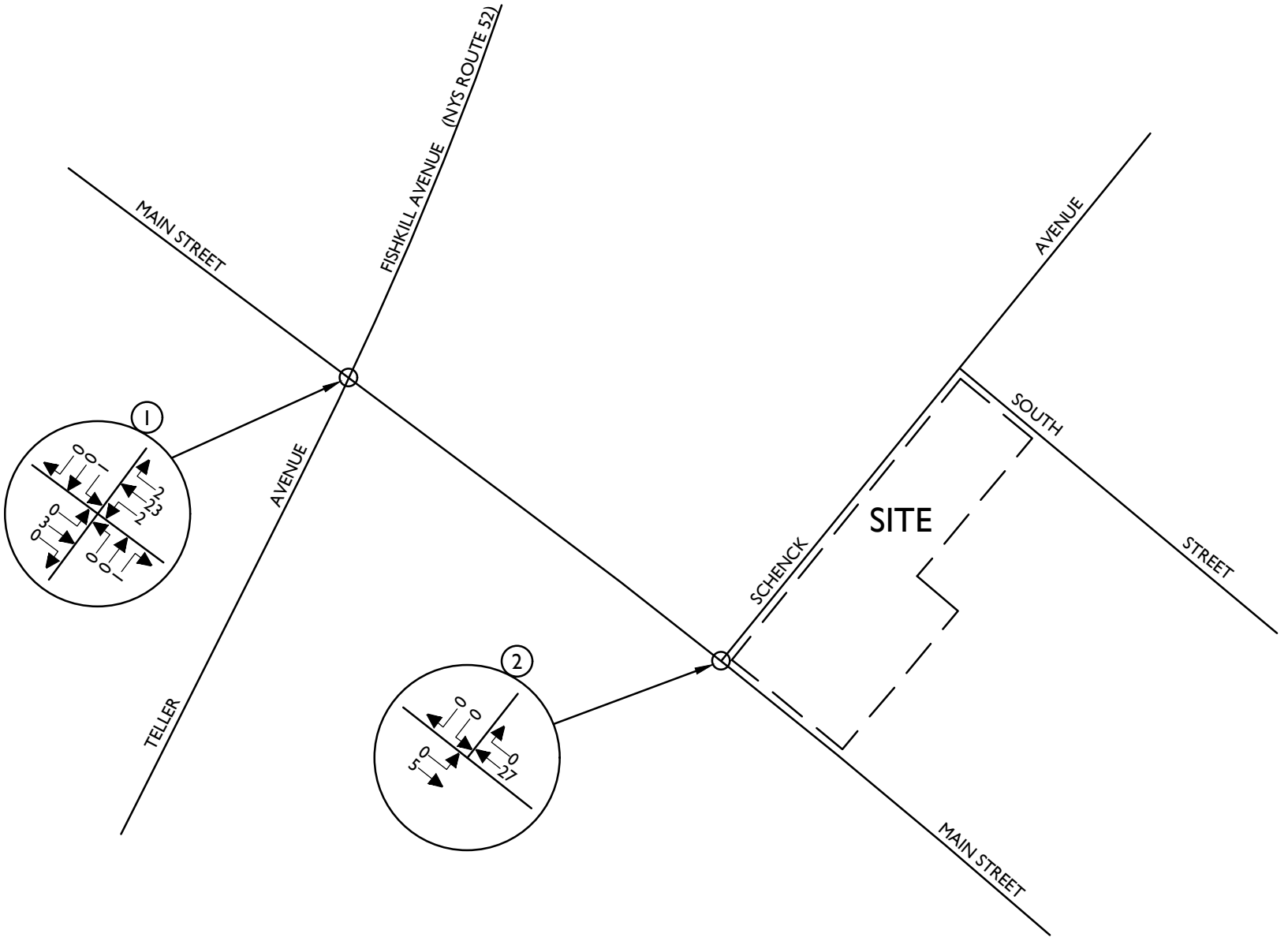
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
OTHER DEVELOPMENT
TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
8



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PROJECT NUMBER: 20000282A

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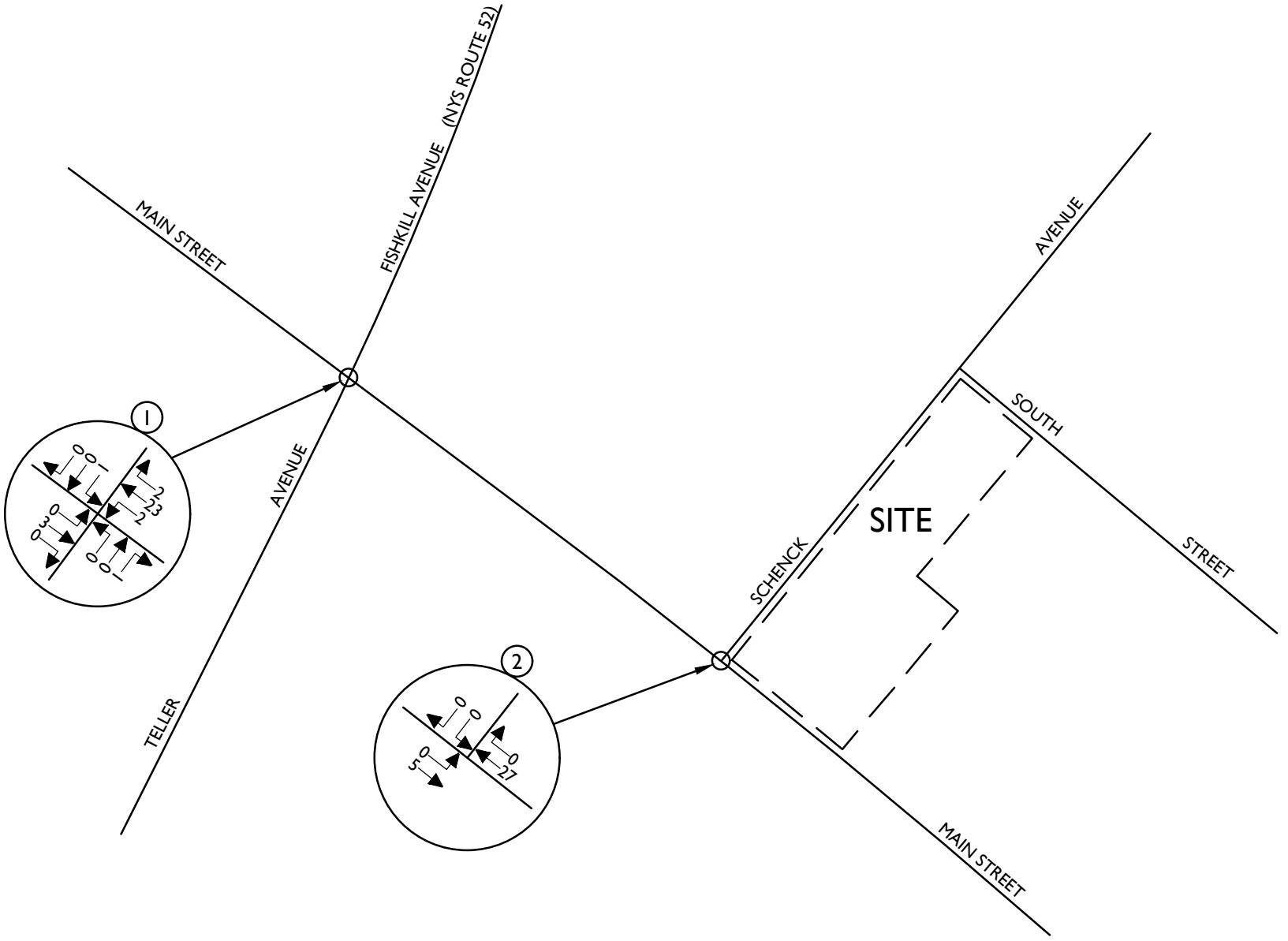
SHEET TITLE:
OTHER DEVELOPMENT
TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
9



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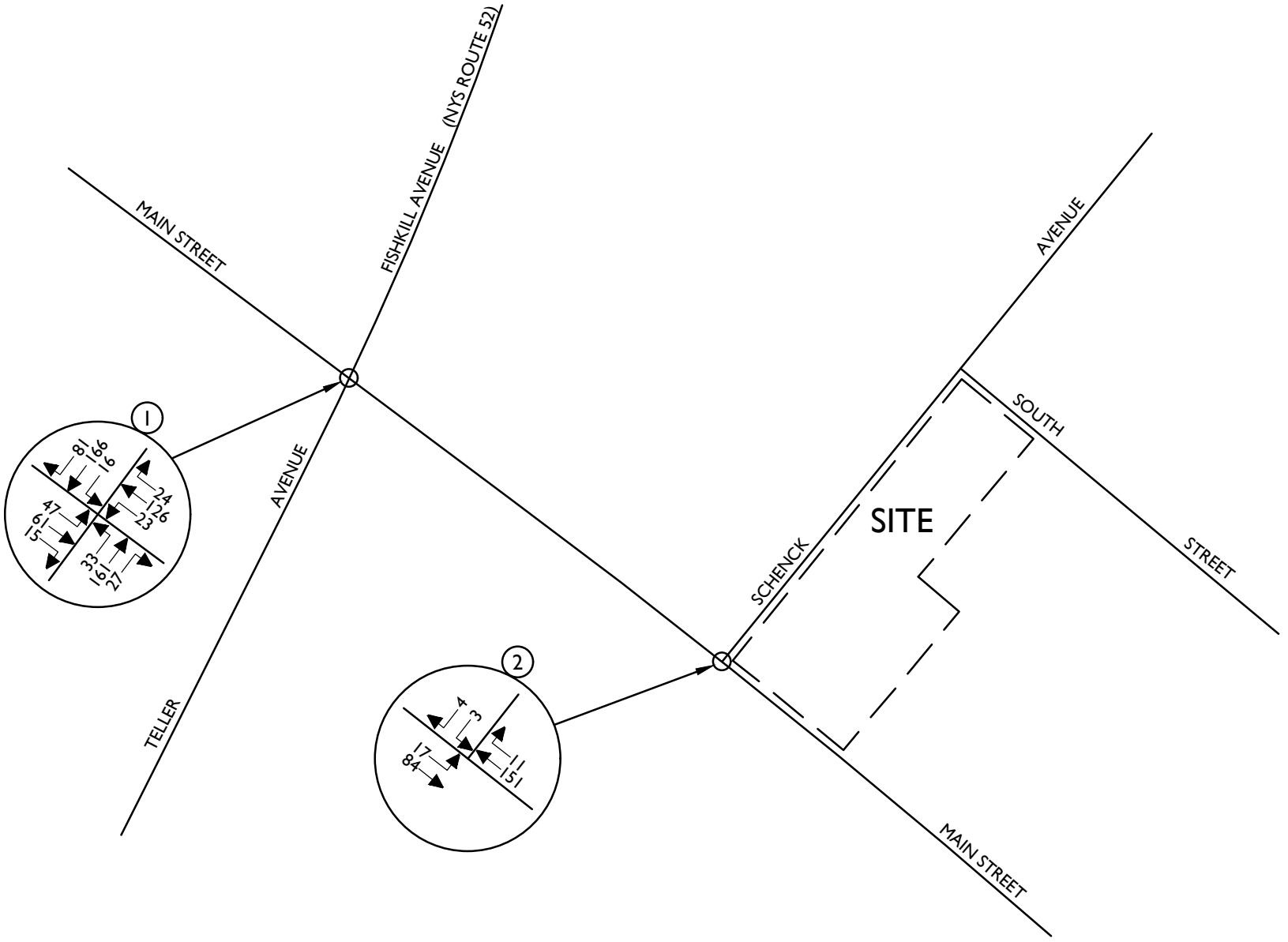
PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
OTHER DEVELOPMENT
TRAFFIC VOLUMES
WEEKEND PEAK SAT HOUR

SHEET NUMBER:
10



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PROJECT NUMBER: 20000282A
DRAWING NAME: 200428RGD_FIGURE

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WEEKDAY PEAK AM HOUR

SHEET NUMBER:
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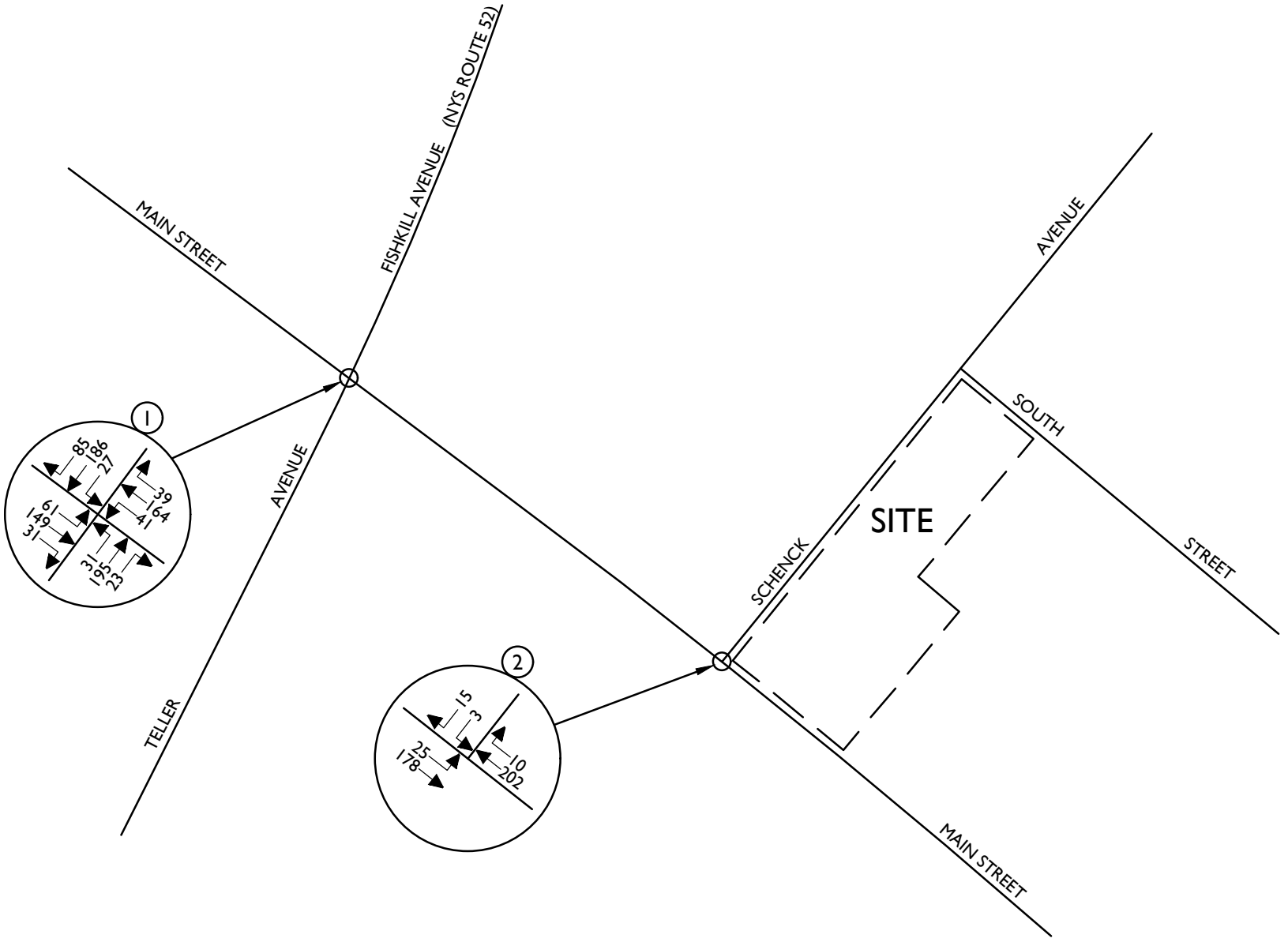

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PROJECT NUMBER: 20000282A

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WEEKDAY PEAK PM HOUR

SHEET NUMBER:
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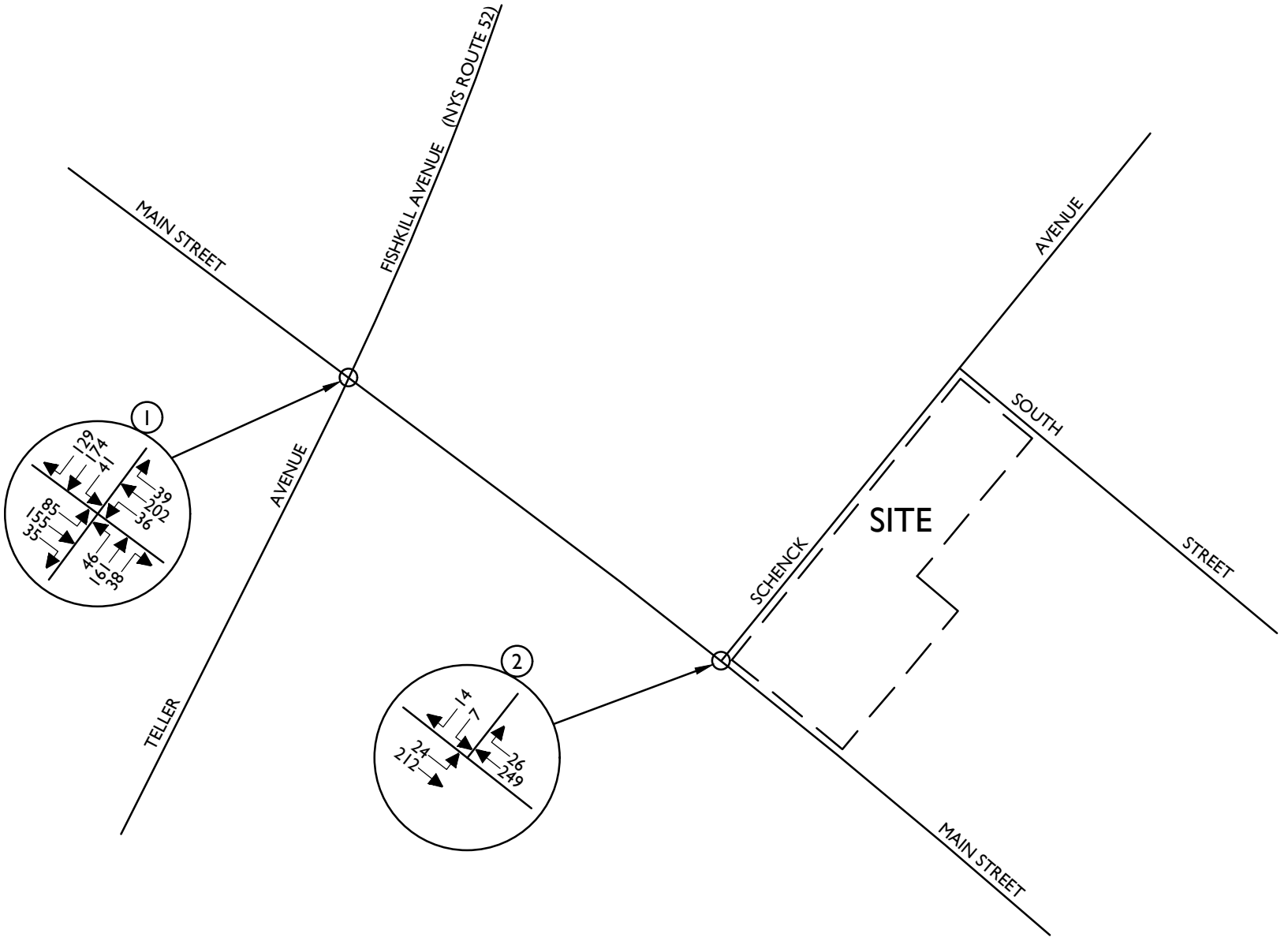

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TRAFFIC IMPACT STUDY

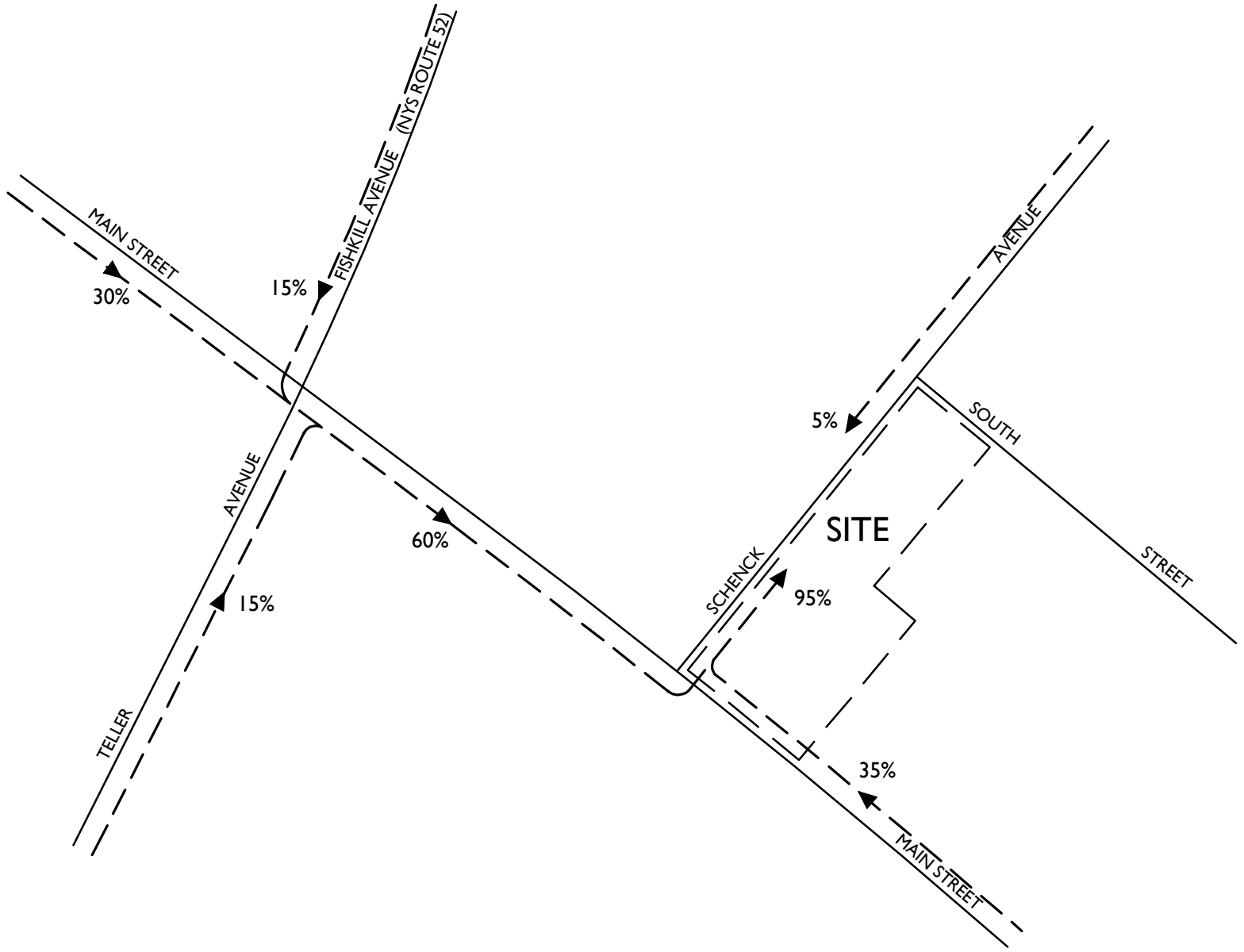
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
2025 NO-BUILD TRAFFIC VOLUMES
WEEKEND PEAK SAT HOUR

SHEET NUMBER:
13



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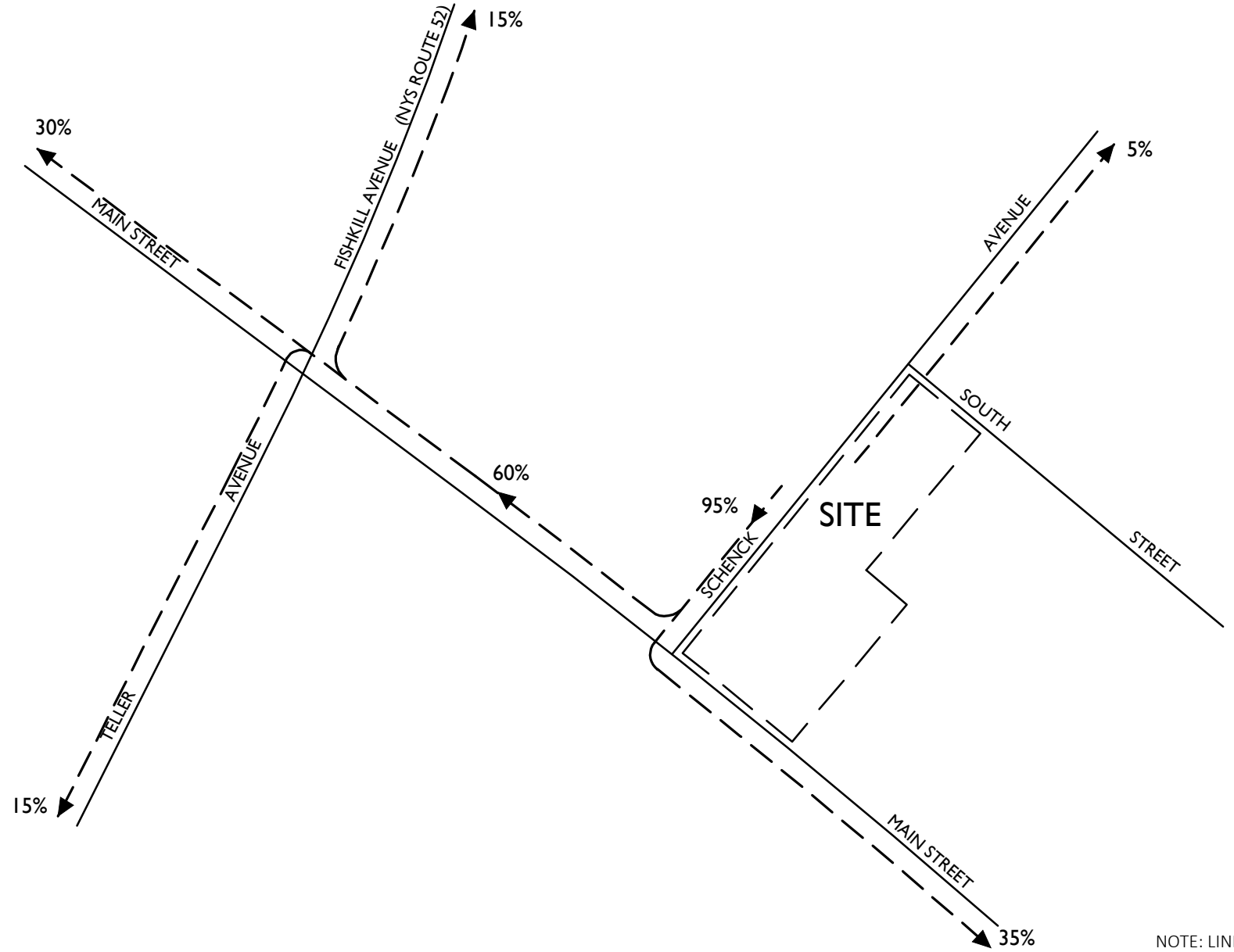
AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
ARRIVAL DISTRIBUTION
(ALL VALUES ARE EXPRESSED AS %)

SHEET NUMBER:
14



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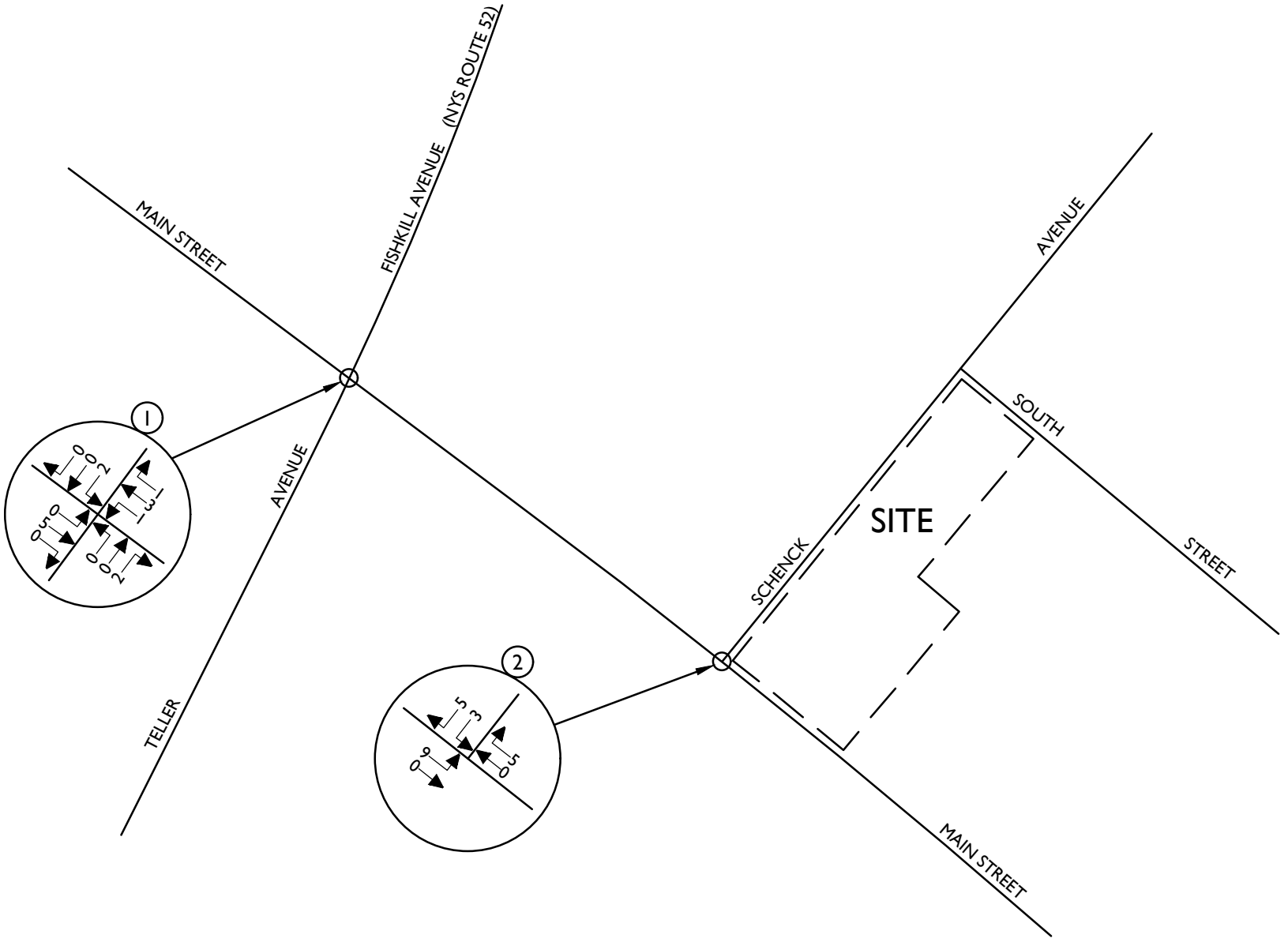
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER:	DRAWING NAME:
20000282A	200428RGD_FIGURE

SHEET TITLE:
DEPARTURE DISTRIBUTION
(ALL VALUES ARE EXPRESSED AS %)

SHEET NUMBER:
15



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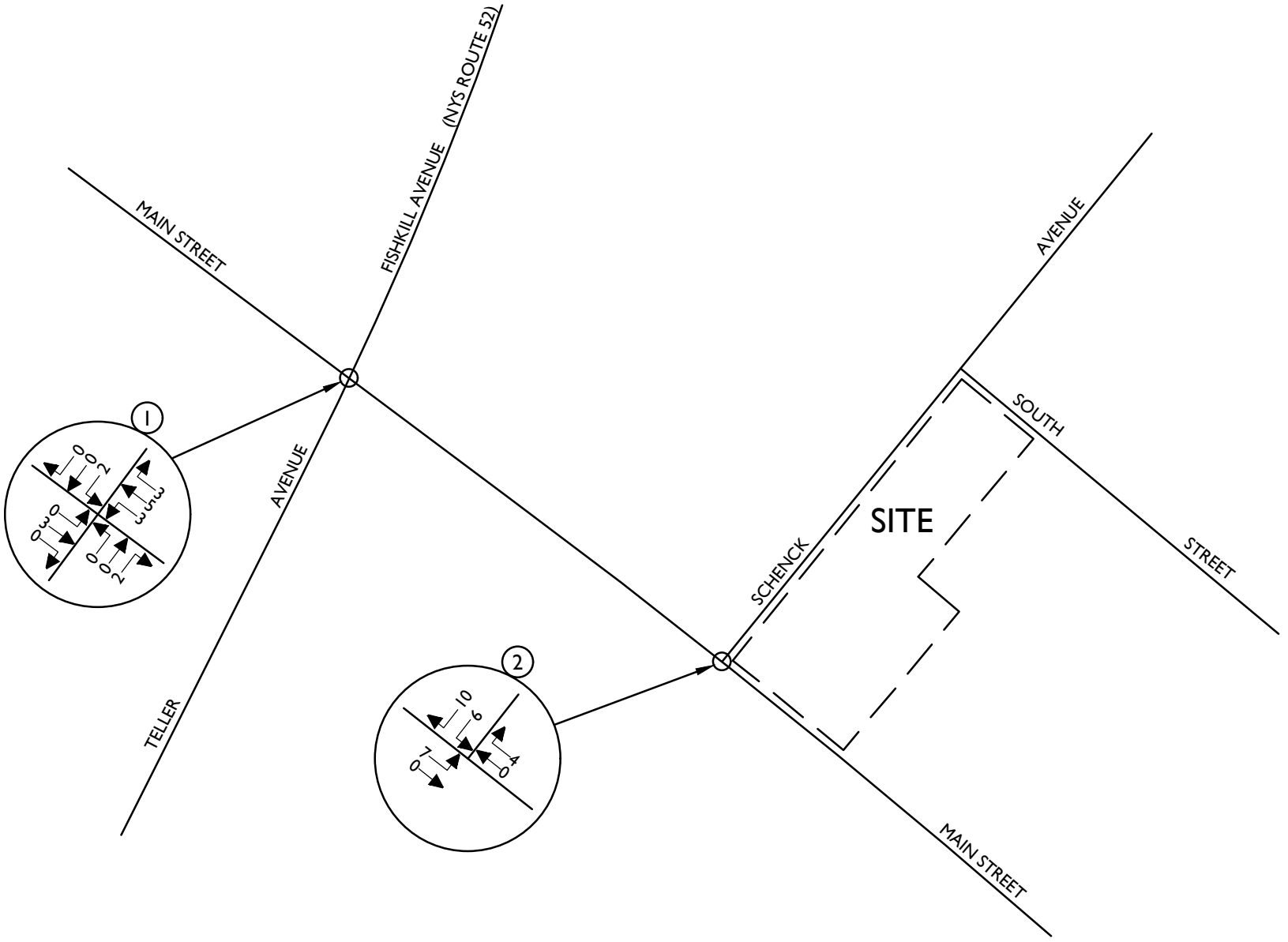
AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
SITE GENERATED
TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER: 16



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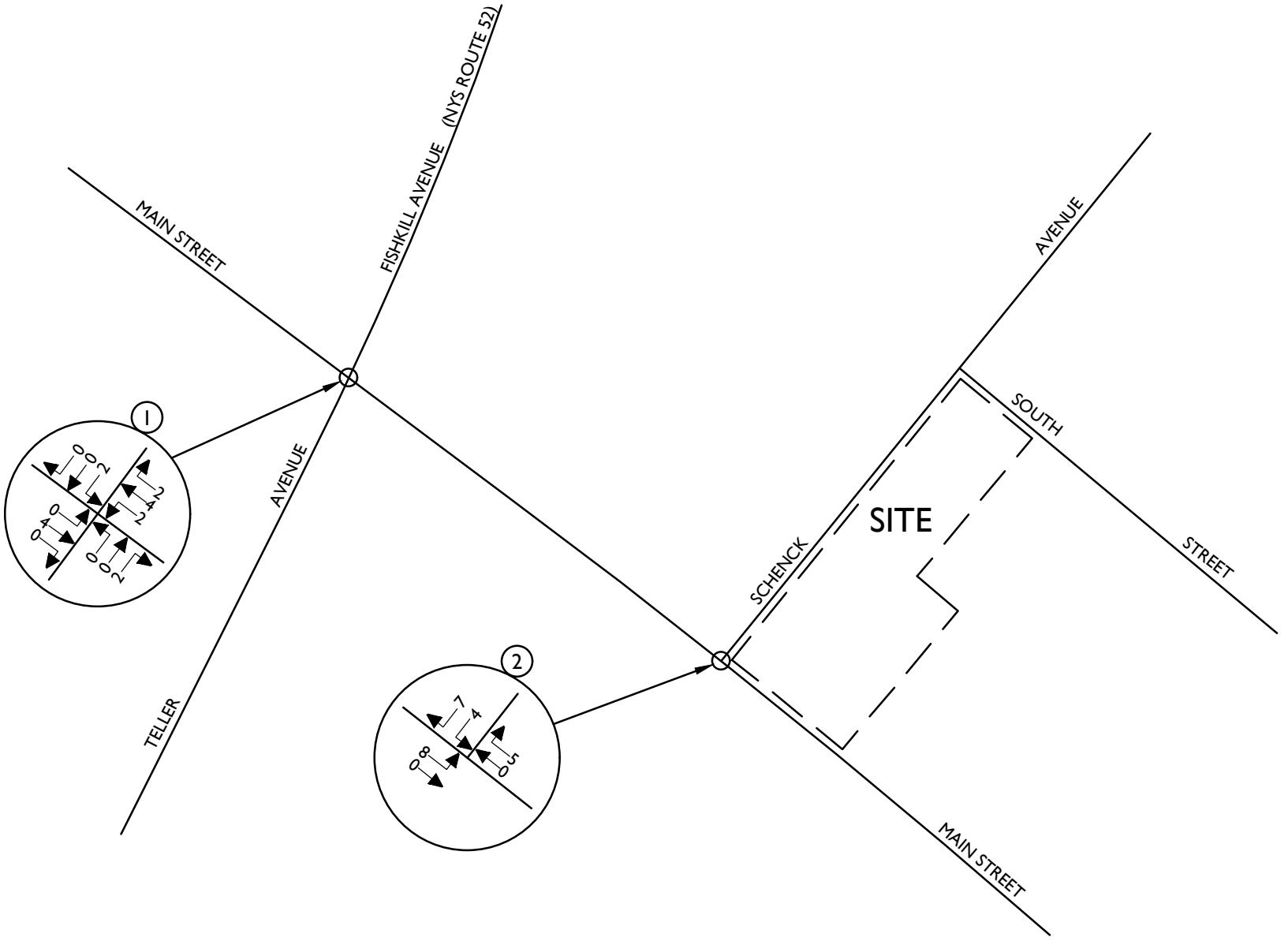
PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
SITE GENERATED
TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
17



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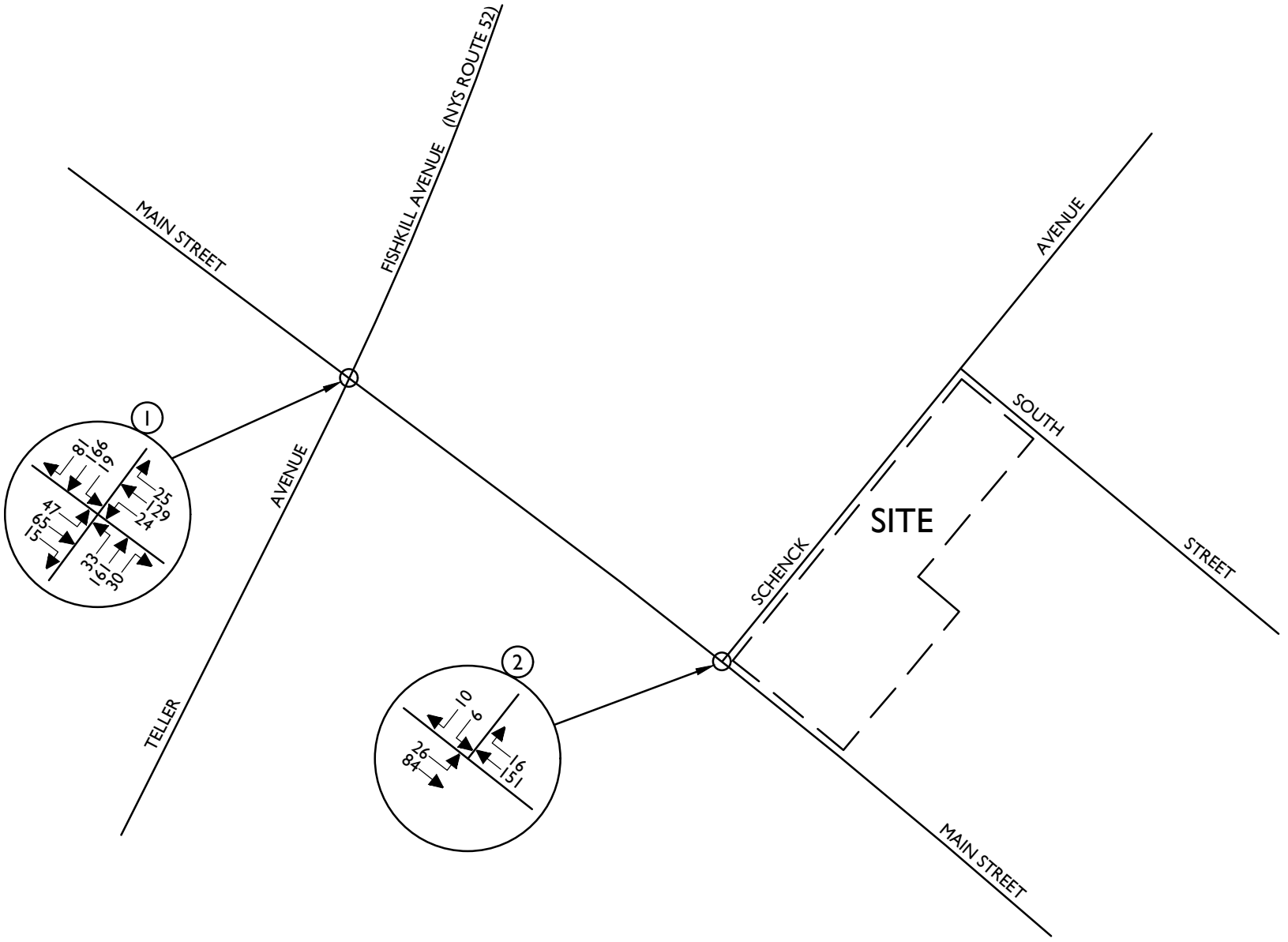
PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
SITE GENERATED
TRAFFIC VOLUMES
WEEKEND PEAK SAT HOUR

SHEET NUMBER:
18



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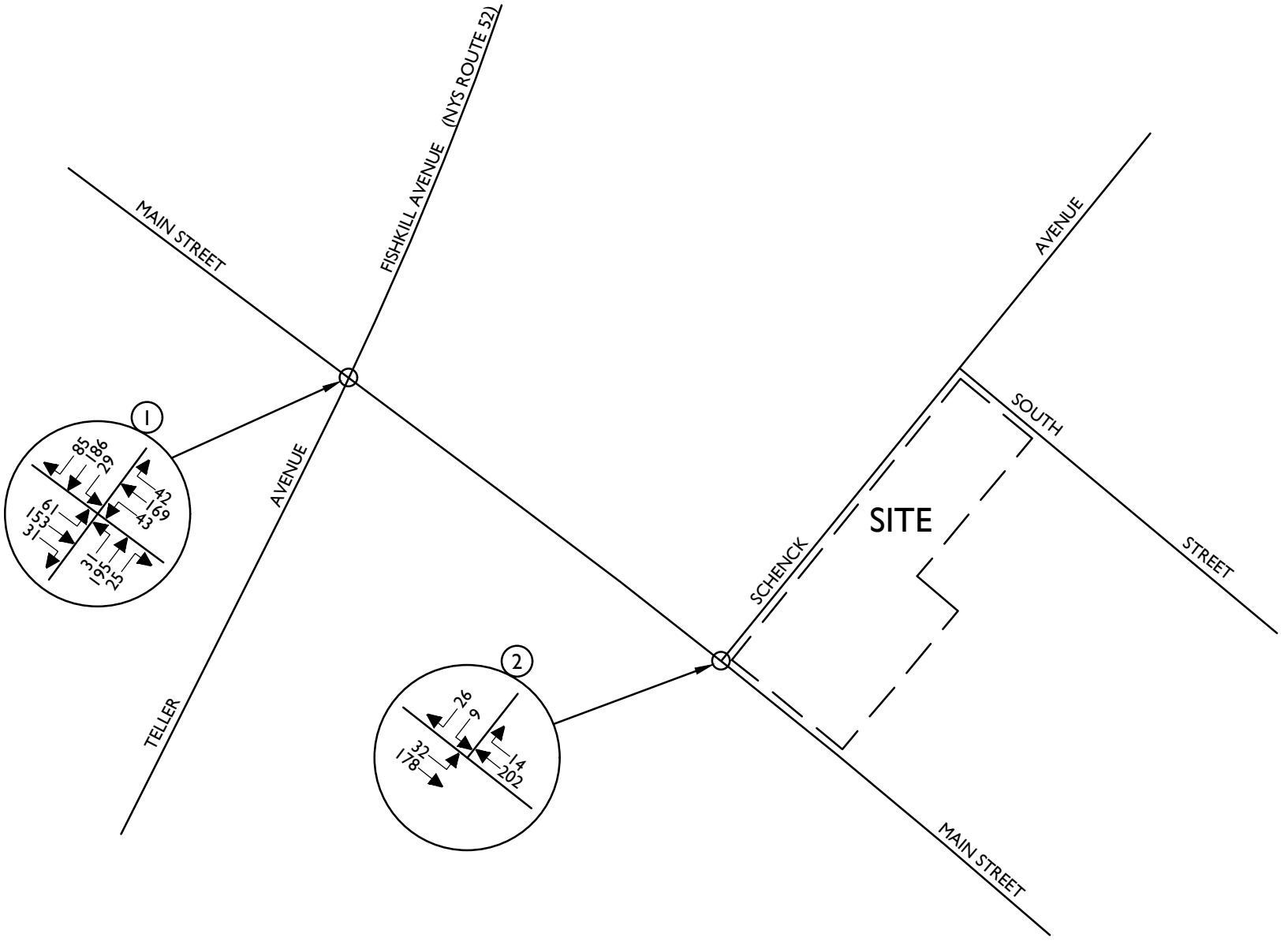
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
2025 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
19



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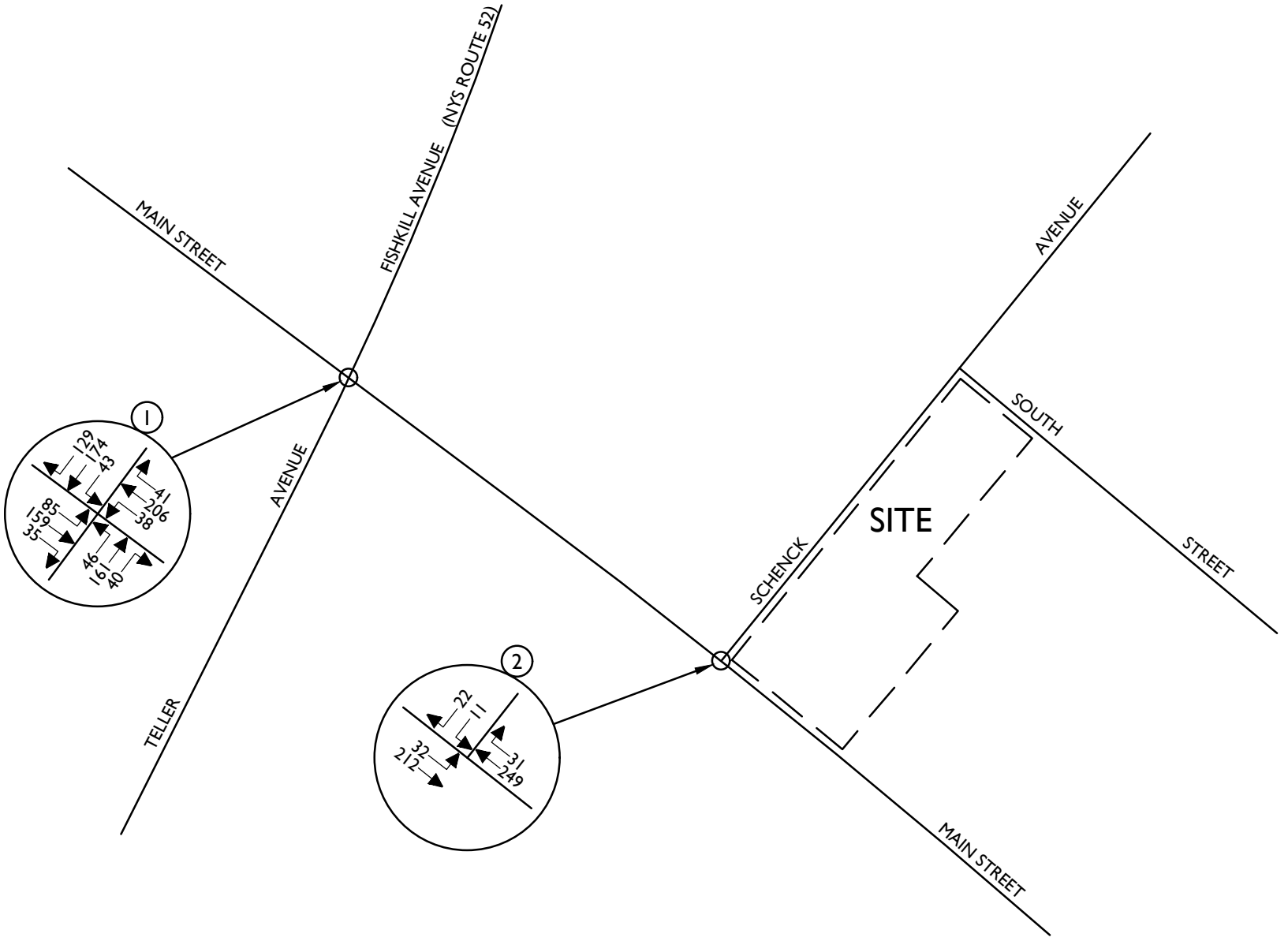
PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
2025 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
20



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AS SHOWN	4/28/20	R.H.	R.D.

PROJECT NUMBER: 20000282A

DRAWING NAME: 200428RGD_FIGURE

SHEET TITLE:
2025 BUILD TRAFFIC VOLUMES
WEEKEND PEAK SAT HOUR

SHEET NUMBER:
21

416 – 420 MAIN STREET

APPENDIX B

TABLES

TABLE NO. 1

HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED SITE GENERATED TRAFFIC VOLUMES

416-420 MAIN STREET CITY OF BEACON, NEW YORK	ENTRY		EXIT	
	HTGR[1]	VOLUME	HTGR[1]	VOLUME
NEW RETAIL[2] (2,941 S.F.)				
PEAK AM HOUR	1.70	5	1.36	4
PEAK PM HOUR	2.04	6	2.04	6
SATURDAY PEAK HOUR	2.38	7	2.04	6
OFFICE (7,872 S.F.)				
PEAK AM HOUR	1.02	8	0.13	1
PEAK PM HOUR	0.13	1	1.14	9
SATURDAY PEAK HOUR	0.25	2	0.25	2
APARTMENTS 4TH FLOOR RESIDENTIAL (2 DWELLING UNITS)				
PEAK AM HOUR	0.50	1	1.00	2
PEAK PM HOUR	1.00	2	0.50	1
SATURDAY PEAK HOUR	1.00	2	1.00	2
APARTMENTS REAR LOT RESIDENTIAL (1 DWELLING UNITS)				
PEAK AM HOUR	0.50	1	1.00	2
PEAK PM HOUR	1.00	2	0.50	1
SATURDAY PEAK HOUR	1.00	2	1.00	2
TOTAL				
PEAK AM HOUR	-	15	-	9
PEAK PM HOUR	-	11	-	17
SATURDAY PEAK HOUR	-	13	-	12

NOTES:

1) THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 10TH EDITION, 2017. ITE LAND USE CODE - 820 - SHOPPING CENTER, ITE LAND USE CODE - 710 - OFFICE BUILDING, ITE LAND USE CODE - 220 - MULTIFAMILY HOME, AND ITE LAND USE CODE - 210 - SINGLE FAMILY.

2) ELLA'S BELLAS CAFÉ (1,675 S.F.) IS AN EXISTING USE THAT WILL BE INCORPORATED INTO THE PROPOSED DEVELOPMENT. TRAFFIC GENERATION ASSOCIATED WITH THIS USE IS CAPTURED IN THE EXISTING TRAFFIC VOLUME COUNTS AND THEREFORE NO NEW TRAFFIC GENERATION HAS BEEN ASSUMED FOR THIS USE. THE TOTAL RETAIL SPACE INCLUDED IN THE DEVELOPMENT WILL BE 3,618 S.F.

TABLE NO. 2 AM

LEVEL OF SERVICE SUMMARY TABLE

				2020 EXISTING			2025 NO-BUILD			2025 BUILD			CHANGE IN DELAY NO-BUILD TO BUILD
			AM	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	
1	MAIN STREET & TELLER AVENUE/ FISHKILL AVENUE	**SIGNALIZED**											
	MAIN STREET	EB	LTR	0.20	B	14.1	0.22	B	14.2	0.22	B	14.2	0.0
	MAIN STREET	WB	LTR	0.26	B	14.7	0.27	B	14.7	0.28	B	14.8	0.1
	TELLER AVENUE	NB	LTR	0.27	B	11.6	0.30	B	11.9	0.30	B	11.9	0.0
	FISHKILL AVENUE	SB	LTR	0.30	B	11.9	0.33	B	12.2	0.34	B	12.3	0.1
		OVERALL		**-**	**B**	**12.7**	**-**	**B**	**13.0**	**-**	**B**	**13.1**	0.1
2	MAIN STREET & SCHENCK AVENUE	**UNSIGNALIZED**											
	MAIN STREET	EB	LT	0.01	A	7.7	0.01	A	7.8	0.02	A	7.8	0.0
	SCHENCK AVENUE	SB	LR	0.01	A	9.8	0.01	B	10.0	0.03	B	10.2	0.2

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

TABLE NO. 2 PM

LEVEL OF SERVICE SUMMARY TABLE

				2020 EXISTING			2025 NO-BUILD			2025 BUILD			CHANGE IN DELAY NO-BUILD TO BUILD
		PM		V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	
1	MAIN STREET & TELLER AVENUE/ FISHKILL AVENUE	**SIGNALIZED**											
	MAIN STREET	EB	LTR	0.37	B	16.2	0.42	B	16.8	0.42	B	16.9	0.1
	MAIN STREET	WB	LTR	0.32	B	15.5	0.40	B	16.5	0.41	B	16.7	0.2
	TELLER AVENUE	NB	LTR	0.28	B	11.6	0.31	B	12.0	0.31	B	12.0	0.0
	FISHKILL AVENUE	SB	LTR	0.32	B	12.1	0.35	B	12.4	0.35	B	12.5	0.1
		OVERALL		**-**	**B**	**13.7**	**-**	**B**	**14.3**	**-**	**B**	**14.4**	0.1
2	MAIN STREET & SCHENCK AVENUE	**UNSIGNALIZED**											
	MAIN STREET	EB	LT	0.02	A	7.9	0.02	A	8.0	0.03	A	8.1	0.1
	SCHENCK AVENUE	SB	LR	0.03	B	10.6	0.03	B	10.9	0.07	B	11.5	0.6

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

TABLE NO. 2 SAT

LEVEL OF SERVICE SUMMARY TABLE

				2020 EXISTING			2025 NO-BUILD			2025 BUILD			CHANGE IN DELAY NO-BUILD TO BUILD
		SAT		V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	
1	MAIN STREET & TELLER AVENUE/ FISHKILL AVENUE	**SIGNALIZED**											
	MAIN STREET	EB	LTR	0.45	B	17.3	0.50	B	18.2	0.50	B	18.4	0.2
	MAIN STREET	WB	LTR	0.37	B	16.2	0.45	B	17.3	0.47	B	17.6	0.3
	TELLER AVENUE	NB	LTR	0.28	B	11.7	0.31	B	12.0	0.32	B	12.0	0.0
	FISHKILL AVENUE	SB	LTR	0.37	B	12.7	0.42	B	13.2	0.42	B	13.3	0.1
		OVERALL		**-**	**B**	**14.4**	**-**	**B**	**15.2**	**-**	**B**	**15.3**	0.1
2	MAIN STREET & SCHENCK AVENUE	**UNSIGNALIZED**											
	MAIN STREET	EB	LT	0.02	A	8.3	0.02	A	8.5	0.03	A	8.5	0.0
	SCHENCK AVENUE	SB	LR	0.04	B	12.7	0.05	B	13.4	0.08	B	13.8	0.4

NOTES:

1) THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH KEY APPROACH OF THE UNSIGNALIZED INTERSECTIONS AS WELL AS FOR EACH APPROACH AND THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS. SEE APPENDIX "C" FOR A DESCRIPTION OF THE LEVELS OF SERVICE.

TABLE P-1

SUMMARY OF BEACON PARKING SPACE UTILIZATION
WEEKDAY PEAK PARKING CONDITIONS

JOB # 20000282A
LOCATION: BEACON, NY
DAY: WEDNESDAY
DATE: 02/05/20
TIME: 7:00 AM - 9:30AM, 11:00 AM - 2:30 PM, & 3:30 PM - 7:00 PM

	PARKING AREA CAPACITY[1]								TOTAL OCCUPIED PARKING SPACES	TOTAL UNOCCUPIED PARKING SPACES
	HENRY STREET PUBLIC LOT	VAN NYDECK AVENUE PUBLIC LOT	MAIN STREET/ VAN NYDECK AVENUE PUBLIC LOT	VAN NYDECK AVENUE ON-STREET PARKING	MAIN STREET ON-STREET PARKING	SCHENCK AVENUE ON-STREET PARKING[2]	SOUTH STREET ON-STREET PARKING[2]	NORTH STREET ON-STREET PARKING[2]		
299 TOTAL PARKING SPACES	72	23	57	34	60	19	21	13		
TIME	**OCCUPIED PARKING SPACES**									
7:00 AM 7:30 AM	3	0	30	15	15	3	6	2	**74**	**225**
7:30 AM 8:00 AM	6	0	27	15	9	3	8	3	**71**	**228**
8:00 AM 8:30 AM	11	0	23	15	11	3	8	1	**72**	**227**
8:30 AM 9:00 AM	17	0	22	12	14	3	6	2	**76**	**223**
9:00 AM 9:30 AM	26	0	23	14	24	6	10	2	**105**	**194**
11:00 AM 11:30 AM	51	1	27	14	44	8	14	1	**160**	**139**
11:30 AM 12:00 PM	48	0	29	13	47	8	10	1	**156**	**143**
12:00 PM 12:30 PM	43	1	28	13	47	7	12	1	**152**	**147**
12:30 PM 1:00 PM	46	1	32	13	48	8	12	1	**161**	**138**
1:00 PM 1:30 PM	44	1	35	12	48	9	11	3	**163**	**136**
1:30 PM 2:00 PM	45	1	44	11	47	9	11	3	**171**	**128**
2:00 PM 2:30 PM	43	1	43	11	47	10	10	3	**168**	**131**
3:30 PM 4:00 PM	34	1	42	11	50	9	8	2	**157**	**142**
4:00 PM 4:30 PM	39	1	39	11	39	7	7	2	**145**	**154**
4:30 PM 5:00 PM	41	2	37	12	37	5	6	2	**142**	**157**
5:00 PM 5:30 PM	40	1	40	13	48	2	7	2	**153**	**146**
5:30 PM 6:00 PM	43	2	40	14	42	3	7	4	**155**	**144**
6:00 PM 6:30 PM	33	1	40	13	46	3	9	4	**149**	**150**
6:30 PM 7:00 PM	27	1	41	11	45	2	8	5	**140**	**159**

NOTES:

1) CAPACITY OF IDENTIFIED PARKING AREAS INCLUDING TOTAL SPACES AND OCCUPIED SPACES BY TIME INTERVAL FOR EACH AREA ARE BASED ON PARKING COUNT DATA COLLECTED BY REPRESENTATIVES OF MASER CONSULTING ON FEBRUARY 4, 2020. SEE FIGURE 1P CONTAINED IN APPENDIX A FOR FURTHER IDENTIFICATION OF PARKING AREAS AND INFORMATION ON PARKING RESTRICTIONS.

2) ON-STREET PARKING SPACES ALONG SCHENCK AVENUE, SOUTH STREET AND NORTH STREET ARE NOT STRIPED. TOTAL AVAILABLE PARKING SPACES IS AN ESTIAMTE OF THE APPOXIMATE CAPACITY ALONG EACH ROADWAY.

TABLE P-2

SUMMARY OF BEACON PARKING SPACE UTILIZATION
SATURDAY PEAK PARKING CONDITIONS

JOB # 20000282A
LOCATION: BEACON, NY
DAY: SATURDAY
DATE: 02/08/20
TIME: 11:00 AM - 2:30 PM

	PARKING AREA CAPACITY[1]								TOTAL OCCUPIED PARKING SPACES	TOTAL UNOCCUPIED PARKING SPACES
	HENRY STREET PUBLIC LOT	VAN NYDECK AVENUE PUBLIC LOT	MAIN STREET/ VAN NYDECK AVENUE PUBLIC LOT[3]	VAN NYDECK AVENUE ON-STREET PARKING	MAIN STREET ON-STREET PARKING	SCHENCK AVENUE ON-STREET PARKING[2]	SOUTH STREET ON-STREET PARKING[2]	NORTH STREET ON-STREET PARKING[2]		
299 TOTAL PARKING SPACES	72	23	57	34	60	19	21	13		
TIME	**OCCUPIED PARKING SPACES**									
11:00 AM 11:30 AM	68	2	55	23	55	10	15	6	**234**	**65**
11:30 AM 12:00 PM	64	2	57	24	56	15	17	5	**240**	**59**
12:00 PM 12:30 PM	70	2	54	30	57	16	15	4	**248**	**51**
12:30 PM 1:00 PM	72	2	56	26	59	14	16	3	**248**	**51**
1:00 PM 1:30 PM	72	6	57	31	59	17	19	4	**265**	**34**
1:30 PM 2:00 PM	72	6	57	29	57	16	18	5	**260**	**39**
2:00 PM 2:30 PM	70	5	57	29	58	14	15	3	**251**	**48**

NOTES:

1) CAPACITY OF IDENTIFIED PARKING AREAS INCLUDING TOTAL SPACES AND OCCUPIED SPACES BY TIME INTERVAL FOR EACH AREA ARE BASED ON PARKING COUNT DATA COLLECTED BY REPRESENTATIVES OF MASER CONSULTING ON FEBRUARY 4, 2020. SEE FIGURE 1P CONTAINED IN APPENDIX A FOR FURTHER IDENTIFICATION OF PARKING AREAS AND INFORMATION ON PARKING RESTRICTIONS.

2) ON-STREET PARKING SPACES ALONG SCHENCK AVENUE, SOUTH STREET AND NORTH STREET ARE NOT STRIPED. TOTAL AVAILABLE PARKING SPACES IS AN ESTIAMTE OF THE APPOXIMATE CAPACITY ALONG EACH ROADWAY.

3) THE MAIN STREET/VAN NYDECK AVENUE PUBLIC LOT WAS OBSERVED TO HAVE ADDITIONAL VEHICLES PARKED BEYOND ITS AVAILABLE CAPACITY IN UN MARKED PARKING SPACES DURING PEAK PARKING PERIODS.

TABLE P-3

SUMMARY OF BEACON PARKING SPACE UTILIZATION
SUNDAY PEAK PARKING CONDITIONS

JOB # 20000282A
LOCATION: BEACON, NY
DAY: SUNDAY
DATE: 02/09/20
TIME: 11:00 AM - 2:30 PM

	PARKING AREA CAPACITY[1]								TOTAL OCCUPIED PARKING SPACES	TOTAL UNOCCUPIED PARKING SPACES
	HENRY STREET PUBLIC LOT	VAN NYDECK AVENUE PUBLIC LOT	MAIN STREET/ VAN NYDECK AVENUE PUBLIC LOT[3]	VAN NYDECK AVENUE ON-STREET PARKING	MAIN STREET ON-STREET PARKING	SCHENCK AVENUE ON-STREET PARKING[2]	SOUTH STREET ON-STREET PARKING[2]	NORTH STREET ON-STREET PARKING[2]		
299 TOTAL PARKING SPACES	72	23	57	34	60	19	21	13		
TIME	**OCCUPIED PARKING SPACES**									
11:00 AM 11:30 AM	46	4	46	16	50	7	9	9	**187**	**112**
11:30 AM 12:00 PM	47	5	51	21	53	7	14	8	**206**	**93**
12:00 PM 12:30 PM	46	6	57	28	53	9	16	9	**224**	**75**
12:30 PM 1:00 PM	56	3	57	28	58	13	16	8	**239**	**60**
1:00 PM 1:30 PM	60	6	57	31	60	13	21	6	**254**	**45**
1:30 PM 2:00 PM	68	14	57	31	59	14	20	6	**269**	**30**
2:00 PM 2:30 PM	62	12	57	32	57	13	20	6	**259**	**40**

NOTES:

1) CAPACITY OF IDENTIFIED PARKING AREAS INCLUDING TOTAL SPACES AND OCCUPIED SPACES BY TIME INTERVAL FOR EACH AREA ARE BASED ON PARKING COUNT DATA COLLECTED BY REPRESENTATIVES OF MASER CONSULTING ON FEBRUARY 4, 2020. SEE FIGURE 1P CONTAINED IN APPENDIX A FOR FURTHER IDENTIFICATION OF PARKING AREAS AND INFORMATION ON PARKING RESTRICTIONS.

2) ON-STREET PARKING SPACES ALONG SCHENCK AVENUE, SOUTH STREET AND NORTH STREET ARE NOT STRIPED. TOTAL AVAILABLE PARKING SPACES IS AN ESTIAMTE OF THE APPOXIMATE CAPACITY ALONG EACH ROADWAY.

3) THE MAIN STREET/VAN NYDECK AVENUE PUBLIC LOT WAS OBSERVED TO HAVE ADDITIONAL VEHICLES PARKED BEYOND ITS AVAILABLE CAPACITY IN UN MARKED PARKING SPACES DURING PEAK PARKING PERIODS.

416 – 420 MAIN STREET

APPENDIX C

LEVEL OF SERVICE STANDARDS

LEVEL OF SERVICE STANDARDS

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

LOS A describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.

LOS D describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.

LOS E describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long.

LOS F describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

The Level of Service Criteria for signalized intersections are given in Exhibit 19-8 from the *Highway Capacity Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 19-8

	LOS by Volume-to-Capacity Ratio	
Control Delay (s/veh)	**v/c ≤1.0**	**v/c >1.0**
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

For approach-based and intersection wide assessments, LOS is defined solely by control delay.

LEVEL OF SERVICE CRITERIA
FOR TWO-WAY STOP-CONTROLLED (TWSC) UNSIGNALIZED INTERSECTIONS

Level of Service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. LOS is not defined for the intersection as a whole or for major-street approaches.

The Level of Service Criteria for TWSC unsignalized intersections are given in Exhibit 20-2 from the *Highway Capacity Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 20-2

	LOS by Volume-to-Capacity Ratio	
Control Delay (s/veh)	**v/c ≤1.0**	**v/c >1.0**
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

As Exhibit 20-2 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The Level of Service Criteria for unsignalized intersections are somewhat different from the criteria for signalized intersections.

LEVEL OF SERVICE CRITERIA
FOR ALL-WAY STOP-CONTROLLED (AWSC) UNSIGNALIZED INTERSECTIONS

The Levels of Service (LOS) for all-way stop-controlled (AWSC) intersections are given in Exhibit 21-8. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

The Level of Service Criteria for AWSC unsignalized intersections are given in Exhibit 21-8 from the *Highway Capacity Manual, 6th Edition* published by the Transportation Research Board.

Exhibit 21-8

	LOS by Volume-to-Capacity Ratio	
Control Delay (s/veh)	**v/c ≤1.0**	**v/c >1.0**
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

For approaches and intersection wide assessment, LOS is defined solely by control delay.

416 – 420 MAIN STREET

APPENDIX D

CAPACITY ANALYSIS

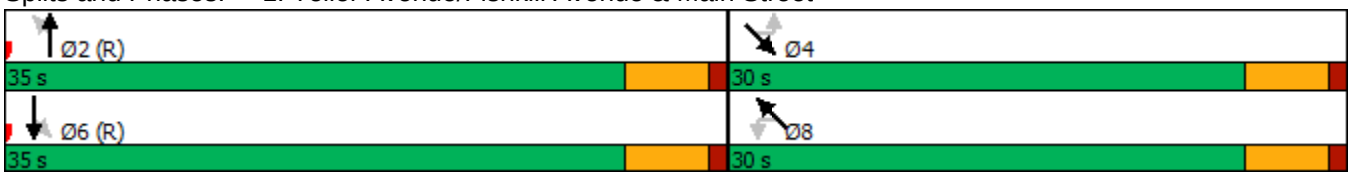
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	30	146	24	14	151	74	43	46	14	20	110	21
Future Volume (vph)	30	146	24	14	151	74	43	46	14	20	110	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	8	12	12	8	12
Grade (%)		3%			-1%			1%			-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99			0.98			0.99	
Frt		0.984			0.958			0.982			0.981	
Flt Protected		0.993			0.997			0.979			0.993	
Satd. Flow (prot)	0	1955	0	0	1921	0	0	1512	0	0	1568	0
Flt Permitted		0.930			0.979			0.840			0.959	
Satd. Flow (perm)	0	1828	0	0	1886	0	0	1279	0	0	1511	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		179			231			204			315	
Travel Time (s)		4.1			5.3			4.6			7.2	
Confl. Peds. (#/hr)	11		7	7		11	31		14	14		31
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	10%	5%	4%	2%	4%	2%	2%	4%	7%	5%	2%	2%
Parking (#/hr)									0			0
Adj. Flow (vph)	34	166	27	16	172	84	49	52	16	23	125	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	227	0	0	272	0	0	117	0	0	172	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	0.86	1.02	0.99	0.88	0.99	1.01	1.21	1.01	0.99	1.19	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	30.0	30.0		30.0	30.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	9	9		9	9		22	22		22	22	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.27			0.31			0.24			0.30	
Control Delay		11.9			12.3			15.2			15.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		11.9			12.3			15.2			15.7	
Queue Length 50th (ft)		52			64			30			46	
Queue Length 95th (ft)		91			108			62			86	
Internal Link Dist (ft)		99			151			124			235	
Turn Bay Length (ft)												
Base Capacity (vph)		843			870			491			581	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.27			0.31			0.24			0.30	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	30	146	24	14	151	74	43	46	14	20	110	21
Future Volume (veh/h)	30	146	24	14	151	74	43	46	14	20	110	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	0.97		0.96	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1773	1844	1773	1879	1954	1879	1835	1761	1835	1949	1871	1949
Adj Flow Rate, veh/h	34	166	27	16	172	84	49	52	16	23	125	24
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	2	2	2
Cap, veh/h	138	615	93	78	562	260	262	251	69	108	478	85
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	161	1333	202	41	1218	562	476	653	179	117	1243	220
Grp Volume(v), veh/h	227	0	0	272	0	0	117	0	0	172	0	0
Grp Sat Flow(s),veh/h/ln	1696	0	0	1821	0	0	1308	0	0	1580	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.0	0.0	0.0	6.1	0.0	0.0	3.3	0.0	0.0	4.7	0.0	0.0
Prop In Lane	0.15		0.12	0.06		0.31	0.42		0.14	0.13		0.14
Lane Grp Cap(c), veh/h	846	0	0	899	0	0	582	0	0	671	0	0
V/C Ratio(X)	0.27	0.00	0.00	0.30	0.00	0.00	0.20	0.00	0.00	0.26	0.00	0.00
Avail Cap(c_a), veh/h	846	0	0	899	0	0	582	0	0	671	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.8	0.0	0.0	11.1	0.0	0.0	13.3	0.0	0.0	13.8	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.9	0.0	0.0	0.8	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	2.4	0.0	0.0	1.2	0.0	0.0	1.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.6	0.0	0.0	11.9	0.0	0.0	14.1	0.0	0.0	14.7	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		227			272			117			172	
Approach Delay, s/veh		11.6			11.9			14.1			14.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.0	30.0	35.0	30.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	25.0	30.0	25.0
Max Q Clear Time (g_c+I1), s	7.0	5.3	8.1	6.7
Green Ext Time (p_c), s	0.9	0.4	1.1	0.6

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	15	65	131	10	3	4
Future Volume (vph)	15	65	131	10	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	8	12
Grade (%)		1%	1%		-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.990		0.923	
Flt Protected		0.991			0.979	
Satd. Flow (prot)	0	1806	1835	0	1495	0
Flt Permitted		0.991			0.979	
Satd. Flow (perm)	0	1806	1835	0	1495	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		315	242		417	
Travel Time (s)		7.2	5.5		9.5	
Confl. Peds. (#/hr)	34			29	29	34
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	7%	3%	2%	2%	2%	2%
Parking (#/hr)				0		0
Adj. Flow (vph)	16	71	144	11	3	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	87	155	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		8	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.16	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.8

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	15	65	131	10	3	4
Future Vol, veh/h	15	65	131	10	3	4
Conflicting Peds, #/hr	34	0	0	29	29	34
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	1	1	-	-5	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	3	2	2	2	2
Mvmt Flow	16	71	144	11	3	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	189	0	-	0	316	218
Stage 1	-	-	-	-	184	-
Stage 2	-	-	-	-	132	-
Critical Hdwy	4.17	-	-	-	5.42	5.72
Critical Hdwy Stg 1	-	-	-	-	4.42	-
Critical Hdwy Stg 2	-	-	-	-	4.42	-
Follow-up Hdwy	2.263	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1355	-	-	-	739	847
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	928	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1326	-	-	-	698	802
Mov Cap-2 Maneuver	-	-	-	-	698	-
Stage 1	-	-	-	-	861	-
Stage 2	-	-	-	-	908	-

Approach	SE	NW	SW
HCM Control Delay, s	1.5	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1326	-	754
HCM Lane V/C Ratio	-	-	0.012	-	0.01
HCM Control Delay (s)	-	-	7.7	0	9.8
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	-	0

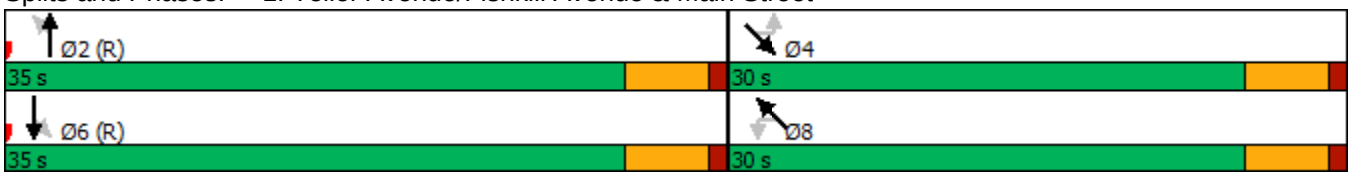
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	28	177	20	24	169	77	55	133	28	35	128	34
Future Volume (vph)	28	177	20	24	169	77	55	133	28	35	128	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	8	12	12	8	12
Grade (%)		3%			-1%			1%			-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99			0.97			0.97	
Frt		0.988			0.961			0.983			0.977	
Flt Protected		0.994			0.996			0.987			0.991	
Satd. Flow (prot)	0	1971	0	0	1929	0	0	1543	0	0	1544	0
Flt Permitted		0.943			0.964			0.879			0.920	
Satd. Flow (perm)	0	1868	0	0	1866	0	0	1352	0	0	1423	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		179			231			204			315	
Travel Time (s)		4.1			5.3			4.6			7.2	
Confl. Peds. (#/hr)	9		7	7		9	61		39	39		61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	6%	5%	2%	4%	2%	2%	2%	2%	3%	2%	3%
Parking (#/hr)									0			0
Adj. Flow (vph)	29	186	21	25	178	81	58	140	29	37	135	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	236	0	0	284	0	0	227	0	0	208	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	0.86	1.02	0.99	0.88	0.99	1.01	1.21	1.01	0.99	1.19	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	30.0	30.0		30.0	30.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	8	8		8	8		50	50		50	50	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.27			0.33			0.44			0.38	
Control Delay		11.9			12.5			18.1			17.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		11.9			12.5			18.1			17.0	
Queue Length 50th (ft)		55			67			64			58	
Queue Length 95th (ft)		97			117			120			108	
Internal Link Dist (ft)		99			151			124			235	
Turn Bay Length (ft)												
Base Capacity (vph)		862			861			520			547	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.27			0.33			0.44			0.38	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	28	177	20	24	169	77	55	133	28	35	128	34
Future Volume (veh/h)	28	177	20	24	169	77	55	133	28	35	128	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	0.95		0.92	0.95		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1758	1828	1758	1879	1954	1879	1864	1790	1864	1949	1871	1949
Adj Flow Rate, veh/h	29	186	21	25	178	81	58	140	29	37	135	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	2	2	2	2	2	2
Cap, veh/h	118	666	71	95	563	238	172	366	69	131	413	100
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	121	1444	153	75	1219	516	267	952	178	171	1073	260
Grp Volume(v), veh/h	236	0	0	284	0	0	227	0	0	208	0	0
Grp Sat Flow(s),veh/h/ln	1717	0	0	1810	0	0	1397	0	0	1504	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	6.3	0.0	0.0	7.0	0.0	0.0	6.0	0.0	0.0
Prop In Lane	0.12		0.09	0.09		0.29	0.26		0.13	0.18		0.17
Lane Grp Cap(c), veh/h	855	0	0	896	0	0	607	0	0	644	0	0
V/C Ratio(X)	0.28	0.00	0.00	0.32	0.00	0.00	0.37	0.00	0.00	0.32	0.00	0.00
Avail Cap(c_a), veh/h	855	0	0	896	0	0	607	0	0	644	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.8	0.0	0.0	11.1	0.0	0.0	14.4	0.0	0.0	14.1	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.9	0.0	0.0	1.8	0.0	0.0	1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.6	0.0	0.0	12.1	0.0	0.0	16.2	0.0	0.0	15.5	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		236			284			227			208	
Approach Delay, s/veh		11.6			12.1			16.2			15.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.0	30.0	35.0	30.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	25.0	30.0	25.0
Max Q Clear Time (g_c+I1), s	7.3	9.0	8.3	8.0
Green Ext Time (p_c), s	0.9	0.8	1.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	23	157	159	9	3	14
Future Volume (vph)	23	157	159	9	3	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	8	12
Grade (%)		1%	1%		-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.993		0.886	
Flt Protected		0.994			0.992	
Satd. Flow (prot)	0	1842	1840	0	1454	0
Flt Permitted		0.994			0.992	
Satd. Flow (perm)	0	1842	1840	0	1454	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		315	242		417	
Travel Time (s)		7.2	5.5		9.5	
Confl. Peds. (#/hr)	57			48	48	57
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Parking (#/hr)				0		0
Adj. Flow (vph)	26	178	181	10	3	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	204	191	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		8	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.16	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	23	157	159	9	3	14
Future Vol, veh/h	23	157	159	9	3	14
Conflicting Peds, #/hr	57	0	0	48	48	57
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	1	1	-	-5	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	178	181	10	3	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	248	0	-	0	521	300
Stage 1	-	-	-	-	243	-
Stage 2	-	-	-	-	278	-
Critical Hdwy	4.12	-	-	-	5.42	5.72
Critical Hdwy Stg 1	-	-	-	-	4.42	-
Critical Hdwy Stg 2	-	-	-	-	4.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1318	-	-	-	596	771
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	831	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1270	-	-	-	541	703
Mov Cap-2 Maneuver	-	-	-	-	541	-
Stage 1	-	-	-	-	804	-
Stage 2	-	-	-	-	801	-

Approach	SE	NW	SW
HCM Control Delay, s	1	0	10.6
HCM LOS			B

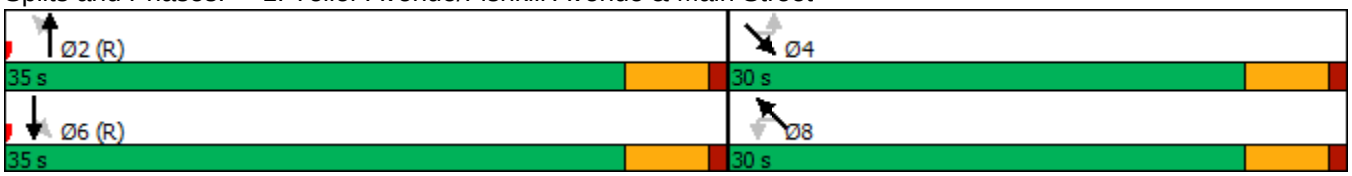
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1270	-	668
HCM Lane V/C Ratio	-	-	0.021	-	0.029
HCM Control Delay (s)	-	-	7.9	0	10.6
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.1

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	42	146	34	36	158	117	77	138	32	31	163	34
Future Volume (vph)	42	146	34	36	158	117	77	138	32	31	163	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	8	12	12	8	12
Grade (%)		3%			-1%			1%			-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.98			0.95			0.96	
Frt		0.979			0.949			0.983			0.980	
Flt Protected		0.991			0.994			0.985			0.993	
Satd. Flow (prot)	0	2005	0	0	1902	0	0	1527	0	0	1536	0
Flt Permitted		0.894			0.947			0.845			0.934	
Satd. Flow (perm)	0	1801	0	0	1808	0	0	1269	0	0	1429	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		179			231			204			315	
Travel Time (s)		4.1			5.3			4.6			7.2	
Confl. Peds. (#/hr)	25		15	15		25	106		83	83		106
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	7%	2%	2%
Parking (#/hr)									0			0
Adj. Flow (vph)	45	155	36	38	168	124	82	147	34	33	173	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	236	0	0	330	0	0	263	0	0	242	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	0.86	1.02	0.99	0.88	0.99	1.01	1.21	1.01	0.99	1.19	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	30.0	30.0		30.0	30.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	20	20		20	20		55	55		55	55	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.28			0.40			0.54			0.44	
Control Delay		12.0			13.3			20.6			18.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.0			13.3			20.6			18.0	
Queue Length 50th (ft)		55			81			79			69	
Queue Length 95th (ft)		98			138			146			126	
Internal Link Dist (ft)		99			151			124			235	
Turn Bay Length (ft)												
Base Capacity (vph)		831			834			488			549	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.28			0.40			0.54			0.44	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	42	146	34	36	158	117	77	138	32	31	163	34
Future Volume (veh/h)	42	146	34	36	158	117	77	138	32	31	163	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.97	0.92		0.86	0.92		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1817	1890	1817	1909	1986	1909	1864	1790	1864	1949	1871	1949
Adj Flow Rate, veh/h	45	155	36	38	168	124	82	147	34	33	173	36
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	550	118	114	459	308	201	320	67	107	454	87
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	224	1191	255	113	995	667	334	833	173	115	1180	226
Grp Volume(v), veh/h	236	0	0	330	0	0	263	0	0	242	0	0
Grp Sat Flow(s),veh/h/ln	1670	0	0	1776	0	0	1341	0	0	1521	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.2	0.0	0.0	7.7	0.0	0.0	8.5	0.0	0.0	7.1	0.0	0.0
Prop In Lane	0.19		0.15	0.12		0.38	0.31		0.13	0.14		0.15
Lane Grp Cap(c), veh/h	837	0	0	881	0	0	588	0	0	648	0	0
V/C Ratio(X)	0.28	0.00	0.00	0.37	0.00	0.00	0.45	0.00	0.00	0.37	0.00	0.00
Avail Cap(c_a), veh/h	837	0	0	881	0	0	588	0	0	648	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.8	0.0	0.0	11.5	0.0	0.0	14.9	0.0	0.0	14.5	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.2	0.0	0.0	2.4	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	2.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.7	0.0	0.0	12.7	0.0	0.0	17.3	0.0	0.0	16.2	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		236			330			263			242	
Approach Delay, s/veh		11.7			12.7			17.3			16.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.0	30.0	35.0	30.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	25.0	30.0	25.0
Max Q Clear Time (g_c+I1), s	7.2	10.5	9.7	9.1
Green Ext Time (p_c), s	0.9	1.0	1.4	0.8

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	22	188	202	24	6	13
Future Volume (vph)	22	188	202	24	6	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	8	12
Grade (%)		1%	1%		-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.986		0.905	
Flt Protected		0.995			0.985	
Satd. Flow (prot)	0	1844	1827	0	1475	0
Flt Permitted		0.995			0.985	
Satd. Flow (perm)	0	1844	1827	0	1475	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		315	242		417	
Travel Time (s)		7.2	5.5		9.5	
Confl. Peds. (#/hr)	113			104	104	113
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Parking (#/hr)				0		0
Adj. Flow (vph)	24	202	217	26	6	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	226	243	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		8	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.16	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	22	188	202	24	6	13
Future Vol, veh/h	22	188	202	24	6	13
Conflicting Peds, #/hr	113	0	0	104	104	113
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	1	1	-	-5	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	202	217	26	6	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	356	0	-	0	697	456
Stage 1	-	-	-	-	343	-
Stage 2	-	-	-	-	354	-
Critical Hdwy	4.12	-	-	-	5.42	5.72
Critical Hdwy Stg 1	-	-	-	-	4.42	-
Critical Hdwy Stg 2	-	-	-	-	4.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1203	-	-	-	494	644
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	784	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1117	-	-	-	415	533
Mov Cap-2 Maneuver	-	-	-	-	415	-
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	728	-

Approach	SE	NW	SW
HCM Control Delay, s	0.9	0	12.7
HCM LOS			B

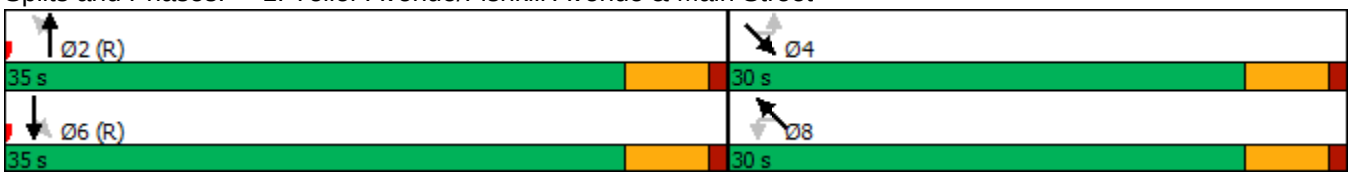
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1117	-	489
HCM Lane V/C Ratio	-	-	0.021	-	0.042
HCM Control Delay (s)	-	-	8.3	0	12.7
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.1

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	33	161	27	16	166	81	47	61	15	23	126	24
Future Volume (vph)	33	161	27	16	166	81	47	61	15	23	126	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	8	12	12	8	12
Grade (%)		3%			-1%			1%			-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99			0.98			0.99	
Frt		0.983			0.958			0.983			0.981	
Flt Protected		0.993			0.997			0.981			0.993	
Satd. Flow (prot)	0	1953	0	0	1921	0	0	1366	0	0	1411	0
Flt Permitted		0.923			0.977			0.840			0.955	
Satd. Flow (perm)	0	1812	0	0	1882	0	0	1155	0	0	1354	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		179			231			204			315	
Travel Time (s)		4.1			5.3			4.6			7.2	
Confl. Peds. (#/hr)	11		7	7		11	31		14	14		31
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	10%	5%	4%	2%	4%	2%	2%	4%	7%	5%	2%	2%
Parking (#/hr)								0			0	
Adj. Flow (vph)	38	183	31	18	189	92	53	69	17	26	143	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	252	0	0	299	0	0	139	0	0	196	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	0.86	1.02	0.99	0.88	0.99	1.01	1.38	1.01	0.99	1.35	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	30.0	30.0		30.0	30.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	9	9		9	9		22	22		22	22	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.30			0.34			0.31			0.38	
Control Delay		12.2			12.6			16.5			17.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.2			12.6			16.5			17.1	
Queue Length 50th (ft)		59			72			37			54	
Queue Length 95th (ft)		101			119			75			100	
Internal Link Dist (ft)		99			151			124			235	
Turn Bay Length (ft)												
Base Capacity (vph)		836			868			444			520	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.30			0.34			0.31			0.38	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	33	161	27	16	166	81	47	61	15	23	126	24
Future Volume (veh/h)	33	161	27	16	166	81	47	61	15	23	126	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	0.97		0.96	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1773	1844	1773	1879	1954	1879	1835	1761	1835	1949	1871	1949
Adj Flow Rate, veh/h	38	183	31	18	189	92	53	69	17	26	143	27
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	2	2	2
Cap, veh/h	138	609	96	79	561	258	259	313	69	112	533	93
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	161	1319	208	44	1215	560	475	813	180	128	1385	242
Grp Volume(v), veh/h	252	0	0	299	0	0	139	0	0	196	0	0
Grp Sat Flow(s),veh/h/ln	1688	0	0	1819	0	0	1468	0	0	1755	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.7	0.0	0.0	6.8	0.0	0.0	3.5	0.0	0.0	4.8	0.0	0.0
Prop In Lane	0.15		0.12	0.06		0.31	0.38		0.12	0.13		0.14
Lane Grp Cap(c), veh/h	843	0	0	898	0	0	641	0	0	738	0	0
V/C Ratio(X)	0.30	0.00	0.00	0.33	0.00	0.00	0.22	0.00	0.00	0.27	0.00	0.00
Avail Cap(c_a), veh/h	843	0	0	898	0	0	641	0	0	738	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.0	0.0	0.0	11.2	0.0	0.0	13.4	0.0	0.0	13.8	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.0	0.0	0.0	0.8	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	2.7	0.0	0.0	1.4	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.9	0.0	0.0	12.2	0.0	0.0	14.2	0.0	0.0	14.7	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		252			299			139			196	
Approach Delay, s/veh		11.9			12.2			14.2			14.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.0	30.0	35.0	30.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	25.0	30.0	25.0
Max Q Clear Time (g_c+I1), s	7.7	5.5	8.8	6.8
Green Ext Time (p_c), s	1.0	0.5	1.2	0.7

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	17	84	151	11	3	4
Future Volume (vph)	17	84	151	11	3	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	8	12
Grade (%)		1%	1%		-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.991		0.923	
Flt Protected		0.992			0.979	
Satd. Flow (prot)	0	1809	1837	0	1495	0
Flt Permitted		0.992			0.979	
Satd. Flow (perm)	0	1809	1837	0	1495	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		315	242		417	
Travel Time (s)		7.2	5.5		9.5	
Confl. Peds. (#/hr)	34			29	29	34
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	7%	3%	2%	2%	2%	2%
Parking (#/hr)				0		0
Adj. Flow (vph)	19	92	166	12	3	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	111	178	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		8	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.16	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	17	84	151	11	3	4
Future Vol, veh/h	17	84	151	11	3	4
Conflicting Peds, #/hr	34	0	0	29	29	34
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	1	1	-	-5	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	3	2	2	2	2
Mvmt Flow	19	92	166	12	3	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	212	0	-	0	365	240
Stage 1	-	-	-	-	206	-
Stage 2	-	-	-	-	159	-
Critical Hdwy	4.17	-	-	-	5.42	5.72
Critical Hdwy Stg 1	-	-	-	-	4.42	-
Critical Hdwy Stg 2	-	-	-	-	4.42	-
Follow-up Hdwy	2.263	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1329	-	-	-	702	826
Stage 1	-	-	-	-	877	-
Stage 2	-	-	-	-	909	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1300	-	-	-	661	782
Mov Cap-2 Maneuver	-	-	-	-	661	-
Stage 1	-	-	-	-	845	-
Stage 2	-	-	-	-	889	-

Approach	SE	NW	SW
HCM Control Delay, s	1.3	0	10
HCM LOS			B

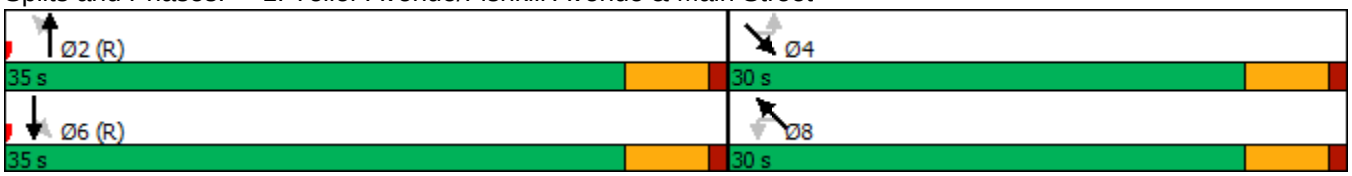
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1300	-	725
HCM Lane V/C Ratio	-	-	0.014	-	0.011
HCM Control Delay (s)	-	-	7.8	0	10
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0	-	0

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	31	195	23	27	186	85	61	149	31	41	164	39
Future Volume (vph)	31	195	23	27	186	85	61	149	31	41	164	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	8	12	12	8	12
Grade (%)		3%			-1%			1%			-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99			0.98			0.98	
Frt		0.988			0.962			0.982			0.978	
Flt Protected		0.994			0.996			0.988			0.992	
Satd. Flow (prot)	0	1971	0	0	1931	0	0	1543	0	0	1550	0
Flt Permitted		0.936			0.960			0.864			0.915	
Satd. Flow (perm)	0	1854	0	0	1860	0	0	1330	0	0	1421	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		179			231			204			315	
Travel Time (s)		4.1			5.3			4.6			7.2	
Confl. Peds. (#/hr)	9		7	7		9	61		39	39		61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	6%	5%	2%	4%	2%	2%	2%	2%	3%	2%	3%
Parking (#/hr)									0			0
Adj. Flow (vph)	33	205	24	28	196	89	64	157	33	43	173	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	262	0	0	313	0	0	254	0	0	257	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	0.86	1.02	0.99	0.88	0.99	1.01	1.21	1.01	0.99	1.19	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	30.0	30.0		30.0	30.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	8	8		8	8		50	50		50	50	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.31			0.36			0.50			0.47	
Control Delay		12.2			12.9			19.4			18.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.2			12.9			19.4			18.6	
Queue Length 50th (ft)		61			76			74			74	
Queue Length 95th (ft)		107			129			137			135	
Internal Link Dist (ft)		99			151			124			235	
Turn Bay Length (ft)												
Base Capacity (vph)		855			858			511			546	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.31			0.36			0.50			0.47	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	31	195	23	27	186	85	61	149	31	41	164	39
Future Volume (veh/h)	31	195	23	27	186	85	61	149	31	41	164	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	0.95		0.92	0.95		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1758	1828	1758	1879	1954	1879	1864	1790	1864	1949	1871	1949
Adj Flow Rate, veh/h	33	205	24	28	196	89	64	157	33	43	173	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	2	2	2	2	2	2
Cap, veh/h	120	659	72	96	561	237	170	368	70	125	429	93
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	124	1428	157	78	1215	514	263	957	182	157	1116	242
Grp Volume(v), veh/h	262	0	0	313	0	0	254	0	0	257	0	0
Grp Sat Flow(s),veh/h/ln	1709	0	0	1807	0	0	1402	0	0	1514	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.0	0.0	0.0	7.1	0.0	0.0	7.8	0.0	0.0	7.6	0.0	0.0
Prop In Lane	0.13		0.09	0.09		0.28	0.25		0.13	0.17		0.16
Lane Grp Cap(c), veh/h	851	0	0	894	0	0	609	0	0	647	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.35	0.00	0.00	0.42	0.00	0.00	0.40	0.00	0.00
Avail Cap(c_a), veh/h	851	0	0	894	0	0	609	0	0	647	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.0	0.0	0.0	11.3	0.0	0.0	14.7	0.0	0.0	14.6	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.1	0.0	0.0	2.1	0.0	0.0	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	2.8	0.0	0.0	2.8	0.0	0.0	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	0.0	12.4	0.0	0.0	16.8	0.0	0.0	16.5	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		262			313			254			257	
Approach Delay, s/veh		12.0			12.4			16.8			16.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.0	30.0	35.0	30.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	25.0	30.0	25.0
Max Q Clear Time (g_c+I1), s	8.0	9.8	9.1	9.6
Green Ext Time (p_c), s	1.0	0.9	1.2	0.9

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	25	178	202	10	3	15
Future Volume (vph)	25	178	202	10	3	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	8	12
Grade (%)		1%	1%		-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.994		0.885	
Flt Protected		0.994			0.993	
Satd. Flow (prot)	0	1842	1842	0	1454	0
Flt Permitted		0.994			0.993	
Satd. Flow (perm)	0	1842	1842	0	1454	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		315	242		417	
Travel Time (s)		7.2	5.5		9.5	
Confl. Peds. (#/hr)	57			48	48	57
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Parking (#/hr)				0		0
Adj. Flow (vph)	28	202	230	11	3	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	230	241	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		8	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.16	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	25	178	202	10	3	15
Future Vol, veh/h	25	178	202	10	3	15
Conflicting Peds, #/hr	57	0	0	48	48	57
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	1	1	-	-5	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	202	230	11	3	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	298	0	-	0	599	350
Stage 1	-	-	-	-	293	-
Stage 2	-	-	-	-	306	-
Critical Hdwy	4.12	-	-	-	5.42	5.72
Critical Hdwy Stg 1	-	-	-	-	4.42	-
Critical Hdwy Stg 2	-	-	-	-	4.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1263	-	-	-	549	728
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	813	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1217	-	-	-	497	664
Mov Cap-2 Maneuver	-	-	-	-	497	-
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	784	-

Approach	SE	NW	SW
HCM Control Delay, s	1	0	10.9
HCM LOS			B

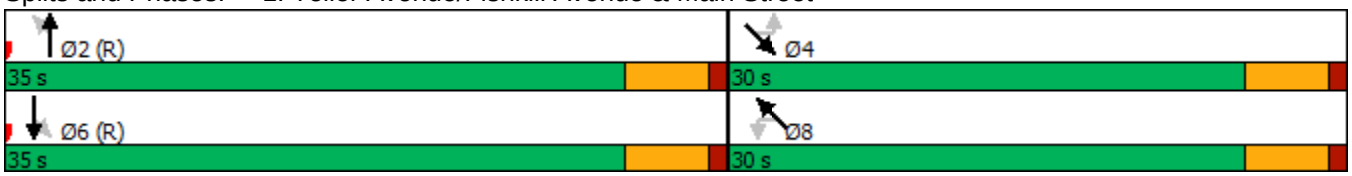
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1217	-	629
HCM Lane V/C Ratio	-	-	0.023	-	0.033
HCM Control Delay (s)	-	-	8	0	10.9
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.1

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	46	161	38	41	174	129	85	155	35	36	202	39
Future Volume (vph)	46	161	38	41	174	129	85	155	35	36	202	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	8	12	12	8	12
Grade (%)		3%			-1%			1%			-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.98			0.95			0.97	
Frt		0.979			0.949			0.983			0.981	
Flt Protected		0.991			0.994			0.985			0.994	
Satd. Flow (prot)	0	2005	0	0	1902	0	0	1528	0	0	1542	0
Flt Permitted		0.885			0.939			0.825			0.930	
Satd. Flow (perm)	0	1783	0	0	1793	0	0	1244	0	0	1428	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		179			231			204			315	
Travel Time (s)		4.1			5.3			4.6			7.2	
Confl. Peds. (#/hr)	25		15	15		25	106		83	83		106
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	7%	2%	2%
Parking (#/hr)									0			0
Adj. Flow (vph)	49	171	40	44	185	137	90	165	37	38	215	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	260	0	0	366	0	0	292	0	0	294	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	0.86	1.02	0.99	0.88	0.99	1.01	1.21	1.01	0.99	1.19	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	30.0	30.0		30.0	30.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	20	20		20	20		55	55		55	55	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.32			0.44			0.61			0.54	
Control Delay		12.4			14.0			22.8			19.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.4			14.0			22.8			19.9	
Queue Length 50th (ft)		61			93			90			87	
Queue Length 95th (ft)		107			155			167			157	
Internal Link Dist (ft)		99			151			124			235	
Turn Bay Length (ft)												
Base Capacity (vph)		822			827			478			549	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.32			0.44			0.61			0.54	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	46	161	38	41	174	129	85	155	35	36	202	39
Future Volume (veh/h)	46	161	38	41	174	129	85	155	35	36	202	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.97	0.93		0.86	0.93		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1817	1890	1817	1909	1986	1909	1864	1790	1864	1949	1871	1949
Adj Flow Rate, veh/h	49	171	40	44	185	137	90	165	37	38	215	41
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	550	118	118	454	306	199	323	65	104	464	82
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	219	1191	256	122	984	662	328	841	170	109	1206	213
Grp Volume(v), veh/h	260	0	0	366	0	0	292	0	0	294	0	0
Grp Sat Flow(s),veh/h/ln	1667	0	0	1769	0	0	1338	0	0	1528	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.8	0.0	0.0	8.7	0.0	0.0	9.9	0.0	0.0	9.0	0.0	0.0
Prop In Lane	0.19		0.15	0.12		0.37	0.31		0.13	0.13		0.14
Lane Grp Cap(c), veh/h	835	0	0	878	0	0	587	0	0	650	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.42	0.00	0.00	0.50	0.00	0.00	0.45	0.00	0.00
Avail Cap(c_a), veh/h	835	0	0	878	0	0	587	0	0	650	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.0	0.0	0.0	11.8	0.0	0.0	15.2	0.0	0.0	15.1	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.5	0.0	0.0	3.0	0.0	0.0	2.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	0.0	13.2	0.0	0.0	18.2	0.0	0.0	17.3	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		260			366			292			294	
Approach Delay, s/veh		12.0			13.2			18.2			17.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.0	30.0	35.0	30.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	25.0	30.0	25.0
Max Q Clear Time (g_c+I1), s	7.8	11.9	10.7	11.0
Green Ext Time (p_c), s	1.0	1.1	1.5	1.0

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	24	212	249	26	7	14
Future Volume (vph)	24	212	249	26	7	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	8	12
Grade (%)		1%	1%		-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.987		0.912	
Flt Protected		0.995			0.983	
Satd. Flow (prot)	0	1844	1829	0	1483	0
Flt Permitted		0.995			0.983	
Satd. Flow (perm)	0	1844	1829	0	1483	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		315	242		417	
Travel Time (s)		7.2	5.5		9.5	
Confl. Peds. (#/hr)	113			104	104	113
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Parking (#/hr)				0		0
Adj. Flow (vph)	26	228	268	28	8	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	254	296	0	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		8	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.16	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	24	212	249	26	7	14
Future Vol, veh/h	24	212	249	26	7	14
Conflicting Peds, #/hr	113	0	0	104	104	113
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	1	1	-	-5	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	228	268	28	8	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	409	0	-	0	779	508
Stage 1	-	-	-	-	395	-
Stage 2	-	-	-	-	384	-
Critical Hdwy	4.12	-	-	-	5.42	5.72
Critical Hdwy Stg 1	-	-	-	-	4.42	-
Critical Hdwy Stg 2	-	-	-	-	4.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1150	-	-	-	452	606
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	766	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1067	-	-	-	378	502
Mov Cap-2 Maneuver	-	-	-	-	378	-
Stage 1	-	-	-	-	685	-
Stage 2	-	-	-	-	711	-

Approach	SE	NW	SW
HCM Control Delay, s	0.9	0	13.4
HCM LOS			B

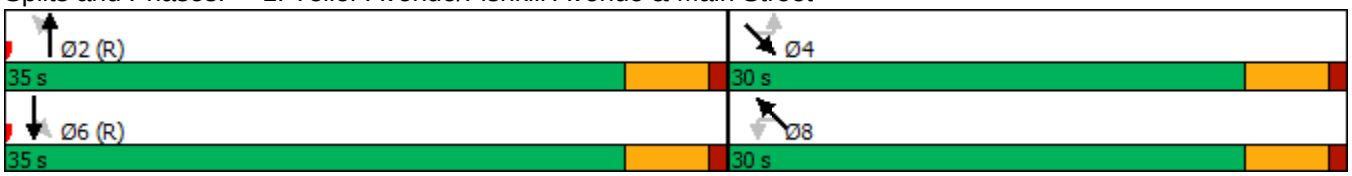
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1067	-	453
HCM Lane V/C Ratio	-	-	0.024	-	0.05
HCM Control Delay (s)	-	-	8.5	0	13.4
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.2

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	33	161	30	19	166	81	47	65	15	25	129	26
Future Volume (vph)	33	161	30	19	166	81	47	65	15	25	129	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	8	12	12	8	12
Grade (%)		3%			-1%			1%			-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99			0.98			0.99	
Frt		0.982			0.959			0.984			0.980	
Flt Protected		0.993			0.996			0.982			0.993	
Satd. Flow (prot)	0	1951	0	0	1922	0	0	1369	0	0	1409	0
Flt Permitted		0.923			0.970			0.842			0.952	
Satd. Flow (perm)	0	1810	0	0	1871	0	0	1160	0	0	1348	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		179			231			204			315	
Travel Time (s)		4.1			5.3			4.6			7.2	
Confl. Peds. (#/hr)	11		7	7		11	31		14	14		31
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	10%	5%	4%	2%	4%	2%	2%	4%	7%	5%	2%	2%
Parking (#/hr)								0			0	
Adj. Flow (vph)	38	183	34	22	189	92	53	74	17	28	147	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	0	0	303	0	0	144	0	0	205	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	0.86	1.02	0.99	0.88	0.99	1.01	1.38	1.01	0.99	1.35	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	30.0	30.0		30.0	30.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	9	9		9	9		22	22		22	22	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.31			0.35			0.32			0.40	
Control Delay		12.2			12.7			16.6			17.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.2			12.7			16.6			17.4	
Queue Length 50th (ft)		60			73			39			57	
Queue Length 95th (ft)		102			121			78			105	
Internal Link Dist (ft)		99			151			124			235	
Turn Bay Length (ft)												
Base Capacity (vph)		835			863			446			518	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.31			0.35			0.32			0.40	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	33	161	30	19	166	81	47	65	15	25	129	26
Future Volume (veh/h)	33	161	30	19	166	81	47	65	15	25	129	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	0.97		0.96	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1773	1844	1773	1879	1954	1879	1835	1761	1835	1949	1871	1949
Adj Flow Rate, veh/h	38	183	34	22	189	92	53	74	17	28	147	30
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	2	2	2
Cap, veh/h	137	602	104	86	556	254	251	325	67	114	522	98
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	158	1304	225	58	1204	550	457	845	174	134	1358	256
Grp Volume(v), veh/h	255	0	0	303	0	0	144	0	0	205	0	0
Grp Sat Flow(s),veh/h/ln	1687	0	0	1812	0	0	1476	0	0	1748	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.8	0.0	0.0	6.9	0.0	0.0	3.7	0.0	0.0	5.1	0.0	0.0
Prop In Lane	0.15		0.13	0.07		0.30	0.37		0.12	0.14		0.15
Lane Grp Cap(c), veh/h	842	0	0	896	0	0	643	0	0	735	0	0
V/C Ratio(X)	0.30	0.00	0.00	0.34	0.00	0.00	0.22	0.00	0.00	0.28	0.00	0.00
Avail Cap(c_a), veh/h	842	0	0	896	0	0	643	0	0	735	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.0	0.0	0.0	11.3	0.0	0.0	13.4	0.0	0.0	13.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.0	0.0	0.0	0.8	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	2.7	0.0	0.0	1.4	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.9	0.0	0.0	12.3	0.0	0.0	14.2	0.0	0.0	14.8	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		255			303			144			205	
Approach Delay, s/veh		11.9			12.3			14.2			14.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.0	30.0	35.0	30.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	25.0	30.0	25.0
Max Q Clear Time (g_c+I1), s	7.8	5.7	8.9	7.1
Green Ext Time (p_c), s	1.0	0.5	1.2	0.7

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	26	84	151	17	7	10
Future Volume (vph)	26	84	151	17	7	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	8	12
Grade (%)		1%	1%		-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.986		0.922	
Flt Protected		0.988			0.979	
Satd. Flow (prot)	0	1797	1827	0	1494	0
Flt Permitted		0.988			0.979	
Satd. Flow (perm)	0	1797	1827	0	1494	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		315	242		417	
Travel Time (s)		7.2	5.5		9.5	
Confl. Peds. (#/hr)	34			29	29	34
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	7%	3%	2%	2%	2%	2%
Parking (#/hr)				0		0
Adj. Flow (vph)	29	92	166	19	8	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	121	185	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		8	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.16	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.3

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	26	84	151	17	7	10
Future Vol, veh/h	26	84	151	17	7	10
Conflicting Peds, #/hr	34	0	0	29	29	34
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	1	1	-	-5	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	7	3	2	2	2	2
Mvmt Flow	29	92	166	19	8	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	219	0	-	0	389	244
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	179	-
Critical Hdwy	4.17	-	-	-	5.42	5.72
Critical Hdwy Stg 1	-	-	-	-	4.42	-
Critical Hdwy Stg 2	-	-	-	-	4.42	-
Follow-up Hdwy	2.263	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1321	-	-	-	685	822
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1292	-	-	-	640	778
Mov Cap-2 Maneuver	-	-	-	-	640	-
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	875	-

Approach	SE	NW	SW
HCM Control Delay, s	1.9	0	10.2
HCM LOS			B

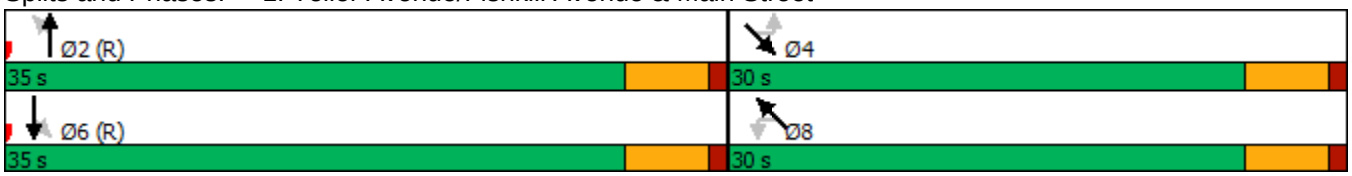
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1292	-	715
HCM Lane V/C Ratio	-	-	0.022	-	0.026
HCM Control Delay (s)	-	-	7.8	0	10.2
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.1

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	31	195	25	29	186	85	61	153	31	43	169	42
Future Volume (vph)	31	195	25	29	186	85	61	153	31	43	169	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	8	12	12	8	12
Grade (%)		3%			-1%			1%			-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99			0.98			0.98	
Frt		0.987			0.962			0.983			0.978	
Flt Protected		0.994			0.995			0.988			0.992	
Satd. Flow (prot)	0	1968	0	0	1929	0	0	1545	0	0	1549	0
Flt Permitted		0.936			0.954			0.864			0.913	
Satd. Flow (perm)	0	1852	0	0	1849	0	0	1332	0	0	1417	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		179			231			204			315	
Travel Time (s)		4.1			5.3			4.6			7.2	
Confl. Peds. (#/hr)	9		7	7		9	61		39	39		61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	6%	5%	2%	4%	2%	2%	2%	2%	3%	2%	3%
Parking (#/hr)									0			0
Adj. Flow (vph)	33	205	26	31	196	89	64	161	33	45	178	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	264	0	0	316	0	0	258	0	0	267	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	0.86	1.02	0.99	0.88	0.99	1.01	1.21	1.01	0.99	1.19	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	30.0	30.0		30.0	30.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	8	8		8	8		50	50		50	50	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.31			0.37			0.50			0.49	
Control Delay		12.3			13.0			19.5			19.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.3			13.0			19.5			19.0	
Queue Length 50th (ft)		62			77			76			78	
Queue Length 95th (ft)		109			131			140			141	
Internal Link Dist (ft)		99			151			124			235	
Turn Bay Length (ft)												
Base Capacity (vph)		854			853			512			545	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.31			0.37			0.50			0.49	

Intersection Summary	
Area Type:	Other
Cycle Length: 65	
Actuated Cycle Length: 65	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	31	195	25	29	186	85	61	153	31	43	169	42
Future Volume (veh/h)	31	195	25	29	186	85	61	153	31	43	169	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	0.96		0.92	0.95		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1758	1828	1758	1879	1954	1879	1864	1790	1864	1949	1871	1949
Adj Flow Rate, veh/h	33	205	26	31	196	89	64	161	33	45	178	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	2	2	2	2	2	2
Cap, veh/h	119	654	78	102	556	234	168	372	69	126	424	96
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	123	1417	168	89	1205	507	258	968	180	158	1103	249
Grp Volume(v), veh/h	264	0	0	316	0	0	258	0	0	267	0	0
Grp Sat Flow(s),veh/h/ln	1708	0	0	1801	0	0	1406	0	0	1511	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.0	0.0	0.0	7.2	0.0	0.0	7.9	0.0	0.0	8.0	0.0	0.0
Prop In Lane	0.12		0.10	0.10		0.28	0.25		0.13	0.17		0.16
Lane Grp Cap(c), veh/h	851	0	0	892	0	0	610	0	0	646	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.35	0.00	0.00	0.42	0.00	0.00	0.41	0.00	0.00
Avail Cap(c_a), veh/h	851	0	0	892	0	0	610	0	0	646	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.0	0.0	0.0	11.4	0.0	0.0	14.8	0.0	0.0	14.8	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.1	0.0	0.0	2.1	0.0	0.0	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	2.9	0.0	0.0	2.9	0.0	0.0	3.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	0.0	12.5	0.0	0.0	16.9	0.0	0.0	16.7	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		264			316			258			267	
Approach Delay, s/veh		12.0			12.5			16.9			16.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.0	30.0	35.0	30.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	25.0	30.0	25.0
Max Q Clear Time (g_c+I1), s	8.0	9.9	9.2	10.0
Green Ext Time (p_c), s	1.0	0.9	1.3	0.9

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	33	178	202	14	10	26
Future Volume (vph)	33	178	202	14	10	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	8	12
Grade (%)		1%	1%		-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.991		0.901	
Flt Protected		0.992			0.987	
Satd. Flow (prot)	0	1839	1837	0	1472	0
Flt Permitted		0.992			0.987	
Satd. Flow (perm)	0	1839	1837	0	1472	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		315	242		417	
Travel Time (s)		7.2	5.5		9.5	
Confl. Peds. (#/hr)	57			48	48	57
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Parking (#/hr)				0		0
Adj. Flow (vph)	38	202	230	16	11	30
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	240	246	0	41	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		8	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.16	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	33	178	202	14	10	26
Future Vol, veh/h	33	178	202	14	10	26
Conflicting Peds, #/hr	57	0	0	48	48	57
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	1	1	-	-5	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	202	230	16	11	30

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	303	0	-	0	621	352
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	326	-
Critical Hdwy	4.12	-	-	-	5.42	5.72
Critical Hdwy Stg 1	-	-	-	-	4.42	-
Critical Hdwy Stg 2	-	-	-	-	4.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1258	-	-	-	536	726
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	801	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1212	-	-	-	481	662
Mov Cap-2 Maneuver	-	-	-	-	481	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	772	-

Approach	SE	NW	SW
HCM Control Delay, s	1.3	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1212	-	599
HCM Lane V/C Ratio	-	-	0.031	-	0.068
HCM Control Delay (s)	-	-	8.1	0	11.5
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.2

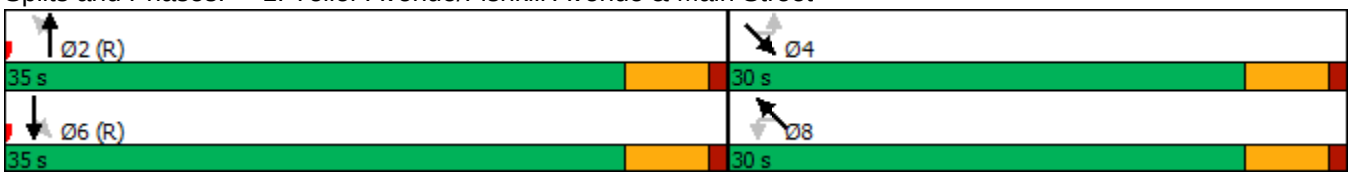
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	46	161	41	43	174	129	85	159	35	38	206	41
Future Volume (vph)	46	161	41	43	174	129	85	159	35	38	206	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	15	12	12	8	12	12	8	12
Grade (%)		3%			-1%			1%			-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.98			0.96			0.97	
Frt		0.977			0.950			0.983			0.980	
Flt Protected		0.991			0.994			0.985			0.993	
Satd. Flow (prot)	0	1999	0	0	1904	0	0	1528	0	0	1537	0
Flt Permitted		0.886			0.935			0.822			0.927	
Satd. Flow (perm)	0	1781	0	0	1788	0	0	1241	0	0	1421	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		179			231			204			315	
Travel Time (s)		4.1			5.3			4.6			7.2	
Confl. Peds. (#/hr)	25		15	15		25	106		83	83		106
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	7%	2%	2%
Parking (#/hr)									0			0
Adj. Flow (vph)	49	171	44	46	185	137	90	169	37	40	219	44
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	264	0	0	368	0	0	296	0	0	303	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.02	0.86	1.02	0.99	0.88	0.99	1.01	1.21	1.01	0.99	1.19	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Minimum Split (s)	27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		30.0	30.0	
Total Split (%)	53.8%	53.8%		53.8%	53.8%		46.2%	46.2%		46.2%	46.2%	
Maximum Green (s)	30.0	30.0		30.0	30.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	20	20		20	20		55	55		55	55	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio		0.32			0.45			0.62			0.55	
Control Delay		12.4			14.0			23.1			20.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.4			14.0			23.1			20.4	
Queue Length 50th (ft)		62			93			92			91	
Queue Length 95th (ft)		110			157			170			163	
Internal Link Dist (ft)		99			151			124			235	
Turn Bay Length (ft)												
Base Capacity (vph)		822			825			477			546	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.32			0.45			0.62			0.55	

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed

Splits and Phases: 1: Teller Avenue/Fishkill Avenue & Main Street



Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	46	161	41	43	174	129	85	159	35	38	206	41
Future Volume (veh/h)	46	161	41	43	174	129	85	159	35	38	206	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.97	0.93		0.86	0.93		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00	0.90
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1817	1890	1817	1909	1986	1909	1864	1790	1864	1949	1871	1949
Adj Flow Rate, veh/h	49	171	44	46	185	137	90	169	37	40	219	44
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	542	128	122	452	303	196	326	64	106	457	85
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	215	1173	278	129	979	657	322	849	167	113	1187	221
Grp Volume(v), veh/h	264	0	0	368	0	0	296	0	0	303	0	0
Grp Sat Flow(s),veh/h/ln	1666	0	0	1765	0	0	1338	0	0	1521	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.9	0.0	0.0	8.8	0.0	0.0	10.1	0.0	0.0	9.4	0.0	0.0
Prop In Lane	0.19		0.17	0.12		0.37	0.30		0.12	0.13		0.15
Lane Grp Cap(c), veh/h	834	0	0	877	0	0	587	0	0	648	0	0
V/C Ratio(X)	0.32	0.00	0.00	0.42	0.00	0.00	0.50	0.00	0.00	0.47	0.00	0.00
Avail Cap(c_a), veh/h	834	0	0	877	0	0	587	0	0	648	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.0	0.0	0.0	11.8	0.0	0.0	15.3	0.0	0.0	15.2	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.5	0.0	0.0	3.1	0.0	0.0	2.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0	3.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	0.0	13.3	0.0	0.0	18.4	0.0	0.0	17.6	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		264			368			296			303	
Approach Delay, s/veh		12.0			13.3			18.4			17.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.0	30.0	35.0	30.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	25.0	30.0	25.0
Max Q Clear Time (g_c+I1), s	7.9	12.1	10.8	11.4
Green Ext Time (p_c), s	1.1	1.1	1.5	1.0

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	33	212	249	31	11	22
Future Volume (vph)	33	212	249	31	11	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	8	12
Grade (%)		1%	1%		-5%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.985		0.910	
Flt Protected		0.993			0.984	
Satd. Flow (prot)	0	1840	1826	0	1482	0
Flt Permitted		0.993			0.984	
Satd. Flow (perm)	0	1840	1826	0	1482	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		315	242		417	
Travel Time (s)		7.2	5.5		9.5	
Confl. Peds. (#/hr)	113			104	104	113
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Parking (#/hr)				0		0
Adj. Flow (vph)	35	228	268	33	12	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	263	301	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		8	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.16	0.97
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.3

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	33	212	249	31	11	22
Future Vol, veh/h	33	212	249	31	11	22
Conflicting Peds, #/hr	113	0	0	104	104	113
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	1	1	-	-5	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	228	268	33	12	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	414	0	-	0	800	511
Stage 1	-	-	-	-	398	-
Stage 2	-	-	-	-	402	-
Critical Hdwy	4.12	-	-	-	5.42	5.72
Critical Hdwy Stg 1	-	-	-	-	4.42	-
Critical Hdwy Stg 2	-	-	-	-	4.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1145	-	-	-	442	604
Stage 1	-	-	-	-	758	-
Stage 2	-	-	-	-	755	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1063	-	-	-	366	500
Mov Cap-2 Maneuver	-	-	-	-	366	-
Stage 1	-	-	-	-	677	-
Stage 2	-	-	-	-	701	-

Approach	SE	NW	SW
HCM Control Delay, s	1.1	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1063	-	446
HCM Lane V/C Ratio	-	-	0.033	-	0.08
HCM Control Delay (s)	-	-	8.5	0	13.8
HCM Lane LOS	-	-	A	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.3