

KWH Enterprise, LLC
277 Reservoir Avenue, Suite 1101
Meriden, CT 06451
Phone: (203) 807-5482
Cell: (203) 606-3525
Fax: (203) 440-0788
kermit.hua@kwhenterprise.com

May 23, 2022

Mr. Joseph P. Ouellette
Executive Director
Office of the State Traffic Administration
Connecticut Department of Transportation
P.O. Box 317546
Newington, CT 06131-7546

Reference: Village Apartments, Uncasville-Montville, CT 06382

Dear Mr. Ouellette:

Attached please find an Administrative Decision application for Village Apartments in Uncasville-Montville.

Please feel free to contact me if you need additional information.

Sincerely,

KWH Enterprise, LLC

A handwritten signature in black ink that reads "Kermit Hua". The signature is written in a cursive style.

Kermit Hua, PE, PTOE
Principal
kermit.hua@kwhenterprise.com
Cell: (203) 606-3525

Cc: Ronald K. McDaniel, Jr., Mayor of Montville





STATE OF CONNECTICUT
 OFFICE OF THE STATE TRAFFIC ADMINISTRATION
 DEPARTMENT OF TRANSPORTATION
 2800 BERLIN TURNPIKE, P.O. BOX 317546
 NEWINGTON, CT 06131-7546
 Email: DOT.OSTA@ct.gov



**MAJOR TRAFFIC GENERATOR
 ADMINISTRATIVE DECISION REQUEST/CHECKLIST**

(To be used where no State highway or State railroad right-of-way mitigation/safety measures are proposed)

Date: 05/23/2022

(PLEASE FILL OUT COMPLETELY)

DEVELOPMENT INFORMATION

Name of Facility: Village Apartments
 Location (complete street address; if none, provide map/block/lot information): 232 Rt. 32, 82 Jerome Rd., 15 Jerome Ave.
 Town and Zip Code: Uncasville-Montville, CT 06382
 Proposed Gross Floor Area (GSF) and Land Use of Expansion: 199,107 SF in three new buildings with 160 apartment units
 Proposed GSF and Land Use of Land Use Change (i.e. xx retail to xx office, etc.): N/A

Total Gross Floor Area Categorized By Land Use: 246,309 SF in five buildings with 214 apartment units
 Existing Parking Spaces 101 Parking Spaces Added by Expansion/Land Use Change: +255
 Total Parking Spaces: 356 Number Designated Handicapped: 10

LAND OWNER INFORMATION

Corporate Name*: Village Apartments LLC and Connecticut Multifamily Equities II, LLC
 Contact for Written Correspondence: Tomas Haendler
 Address: 320 Post Road, Suite 115
 Town, State & Zip Code: Darien, CT. 06820
 Phone: 917-873-2827
 Land Owner's E-Mail: tommy@silverheightsdev.com

CONSULTANT INFORMATION

Firm: KWH Enterprise, LLC
 Name: Kermit Hua, PE, PTOE
 Address: 277 Reservoir Avenue, Suite 1101
 Town, State and Zip Code: Meriden, CT 06451
 Phone: (203) 807-5482
 E-Mail: kermit.hua@kwhenterprise.com

*** As noted in the municipal land records. If there is more than one land owner, a separate form shall be provided for each.**

ADMINISTRATIVE DECISION SUBMISSION GUIDELINES

- All of the information listed below shall be submitted for the review of new major traffic generators that do not substantially affect the State highway system or a railroad crossing within the State railroad right-of-way (i.e. mitigation or safety measures regarding State highways or a railroad crossing within the State railroad right-of-way are not necessary to accommodate traffic generated by the new major traffic generator).
- The information is also required for the review of proposed expansions or land use changes to existing major traffic generators that predate the Office of the State Traffic Administration (OSTA) certification process and those that were previously certified that do not substantially affect the state highway system.
- The OSTA considers all lots created from the subdivision of a single larger lot as being used for a single development purpose and thus the subdivision will be subject to OSTA regulation under 14-311c if the sum of the full build development on all the lots will equal or exceed the OSTA MTG square footage or parking triggers. If P&Z approval is not granted for a full build development, then the municipal planner must be consulted to determine what a reasonable full build out is for the vacant lots. In lieu of P&Z approval for the vacant lots, the municipal planner will need to confirm that what is submitted to OSTA represents a reasonable full build. The traffic impact study must be based on this full build for the subdivision.

If improvements or changes to the State highway system or a railroad crossing within the State railroad right-of-way are being proposed to mitigate the impact of the traffic associated with a new major traffic generator or a proposed expansion or land use change to an existing major traffic generator then the development will be considered to have a substantial impact on the state highway system. **DO NOT USE THIS CHECKLIST.** Formal OSTA action will be required and a major traffic generator certificate application and the information on its associated checklist must be submitted.

One (1) paper copy of the information checked-off below shall be submitted to the OSTA, with an additional set of the information forwarded by the developer to the Local Traffic Authority of each involved municipality. One (1) electronic copy of the information deemed appropriate to the development shall also be submitted to the "DOT OSTA Major Traffic Generator Submission" SharePoint page. All required information shall be electronically submitted in .pdf format and in the original data files for the traffic and drainage analysis, following the OSTA filing naming conventions provided at the end of the document.

Consultant engineers may request access to the SharePoint page by e-mailing DOT.OSTA@ct.gov.

The request will not be considered complete and the review of the proposed development will not begin until all of the applicable information is received.



I. Site Plan:

An overall site plan showing the entire OSTA certifiable area, including the Administrative Decision (AD) review area uniquely identified as such, shall be provided, sized to fit on a single 2' x 3' plan sheet, that identifies:

- All buildings (including gross floor area and land use for each);
- Parking spaces;
- Property lines;
- Internal connections to abutting properties;
- Names of all property owners (including the abutting property owners);
- The complete street address(es) for all properties within the certifiable area. If street address information is not available, show map / block / lot information. An aerial photograph may be used; and,
- Intersection Sight Distances (ISD) that will be provided and maintained for any existing and proposed drives onto a State highway that were not part of a previous OSTA certificate or AD. The ISD shall be shown directly on the drives out to its full extent or listed in a tabular format.

The entire OSTA certifiable area shall include all parcels whose traffic must use the review development's access drive(s) and shall be distinguishable by a distinct peripheral property line with the call out "OSTA Certifiable Area". Refer to the OSTA website to view sample overall site plans.



If any State highway driveway ISD encroaches on property not owned by the AD developer, provide written confirmation from the adjacent property owner that they are willing to grant the easement. The AD will contain a stipulation that no building or foundation permit shall be granted until the sightline easement has been granted.



II. Site Location Plan - showing State highways and major intersecting municipal roads in the vicinity of the site.



III. Traffic Information – Contact the CTDOT Trip Analysis Section at (860) 594-2025 with any questions regarding trip generation or distribution. The amount of traffic information required will be based on the expected number of new trips associated with the development / expansion / land use change.



If 50 or fewer new trips, submit only information noted in Item D-1 below.



If more than 50 but less than 100 new trips, submit all information noted under Item C below as well as the information noted in Item D-1 and D-2 for all site driveways.



If approximately 100 or more new trips, or 50 or more new trips to an individual intersection left turn movement, then submit all information noted under Items A through G below for site access driveways and any other intersections where approximately 100 or more new trips are being added, or 50 or more new trips to an individual intersection left turn movement.

A. Existing Traffic Volumes

- 1. Flow diagrams showing the appropriate existing peak hour traffic volumes for the proposed development, inclusive of all site drives. Diagrams must indicate date of submission and date of existing traffic count.
- 2. Identify the hours of the day, day of week and how the peak hours were determined in relation to the proposed development.
 - The weekday morning / afternoon and weekend midday peak hours are the most typical time periods analyzed. Depending on the type of proposed development, all or some combination of these hours will be required. In some cases, the peak hour of the generator may be needed (e.g. movie theater – evenings, school – dismissal peak).
 - Approach volumes must be totaled and checked for accuracy before submission. Traffic volumes between intersections shall be balanced or an explanation for the break in traffic flow provided.
 - Areas experiencing a significant recreational peak (i.e. theaters, sporting events, concerts, etc.) shall be counted during the peak season. When this is not possible, traffic volumes may be seasonally adjusted to reflect the heaviest peak hour volume.

B. Background Traffic

- 1. Identify other developments, including those previously approved by the OSTA, or pending, but not yet operational and include their volume in the background traffic.
- 2. Identify any annual growth or seasonal adjustment factors used and justify their selection.
- 3. Provide flow diagrams showing the appropriate background peak hour traffic volumes for the proposed development as determined in the existing condition. Diagrams must indicate date of submission and date of background traffic. Background traffic flow diagrams must be consistent with existing traffic diagrams.
 - Approach volumes must be totaled and checked for accuracy before submission. Traffic volumes between intersections shall be balanced or an explanation for the break in traffic flow provided.
 - If there are overlapping intersections with a recent, previously approved MTG, the combined traffic figures from the prior MTG shall be used as base traffic for the new project.

C. Trip Distribution

- 1. Provide flow diagrams showing the percent distribution of generated traffic, by direction, for each major road leading to the area and at all access points. Diagrams must include date of submission. Flow diagrams shall be consistent with the peak hours analyzed in the existing and background traffic conditions.
- 2. Provide a description of the methodology used to develop the trip distribution. Any differences in the approach and departure distribution shall be explained.

D. Site Generated Traffic / Combined Traffic Volumes

- 1. Submit a narrative regarding logic used for the trip generation.
- 2. Provide flow diagrams for the applicable peak hour(s) for the generated traffic volumes.
- 3. Provide flow diagrams for the applicable peak hour(s) for the combined traffic volumes (the sum of the background and generated traffic volumes). Diagrams must include date of submission and date of combined traffic.
 - In most cases, trip generation data derived from the latest ITE Trip Generation Report will be acceptable. Approved CTDOT studies are currently utilized to derive trip generation data for super food stores and Dunkin’ Donuts locations. Other studies will be taken into consideration but will be subject to approval.
 - Out parcels contained within retail developments shall utilize the most specific land use code available via ITE or other acceptable study data. For restaurants, indicate whether it is a fast-food or sit-down service and if a drive-up window is proposed.
 - Trip generation shall reflect a successful day, not abnormally high-peak periods such as holiday weekends.
 - For retail developments, Friday afternoon and Saturday midday peak are required study periods. For apartments, condominiums, hotels and motels, the number of 1-, 2- and 3-bedroom units, and the square foot area of each type of unit shall be noted. For hotels and motels, list the number of rooms.

E. Capacity Analysis, including all Synchro (Trafficware) files, input data, supportive computation sheets and/or charts shall be submitted. The format for the submitted analysis shall be in accordance with Transportation Research Board's Highway Capacity Manual (HCM 2016). Inquiries about the format of the analysis may be directed to the Division of Traffic Engineering at DOT.TrafficEngineering@ct.gov. Analysis should be provided for intersections, interchanges, or expressways for the following time periods and traffic conditions:

- 1. Background Traffic and Combined Traffic – Analyze same peak hours as shown in the traffic flow diagrams.
- 2. Morning and afternoon peak hour of the generator, if different than the morning and afternoon peak hour of the adjacent highway.

F. Storage / Queue Analysis - The submission of a storage and / or queue analysis supporting the background and combined traffic capacity analysis provided under Sections III-E.1 and III-E.2 is usually necessary under the following conditions:

- 1. When exclusive turning lanes exist, there is potential through lane blockage of turn lane or visa verse.
- 2. When there is a potential for vehicular backups affecting operation of nearby intersections, major drives and / or nearby rail crossings.
- 3. When there is limited stopping sight distance on a signalized approach.
- 4. Off-ramp approaches to signalized intersections.
- 5. Other conditions may be identified during the review by the engineer which would require a storage / queue analysis.

G. Supply UConn Crash Data Repository and/or local police department information on the latest available three years of crash experience. A narrative for all existing site drives and off-site impacted locations on State highways, identifying any potential crash patterns, is required. A table of data or collision diagram may be used to show the crash history.

IV. Drainage Requirements

For developments not previously certified, that do not have frontage on a state highway or state railroad, no drainage information will be required.

For those that do have frontage on a state highway, the amount of drainage information required will be based on an assessment of the drainage impact to the state highway system associated with the development / expansion / land use change. See attached form "*OSTA Administrative Decision Request - Drainage*" to determine if this project will qualify for an exemption of drainage information or if further drainage information as shown below will be required.

- A. Drainage Report - A well-documented Drainage Report will facilitate the drainage review process. Failure to provide the Drainage Report will delay the review and approval process until the document is received. Inquiries regarding submissions may be directed to the Division of Bridges - Hydraulics and Drainage, (860) 594-3241.
- 1. Locate the MTG site on an 8.5" x 11" excerpt of a USGS topographic quadrangle map (Scale 1:24,000). Indicate the quadrangle name and number on this plan.
- 2. Locate the MTG site on the relevant portion of the FEMA Flood Insurance Rate Map (FIRM) and Floodway Map. Indicate the panel number, scale and effective date of the map(s).

A. Drainage Report (cont.)

3. A detailed narrative specifically relating the proposed drainage design to existing State drainage facilities, (roadways, railroads, etc.), describing any potential impacts consequent to the proposed construction is required. The narrative must contain a definitive conclusion on whether there is any drainage impact to State facilities. The narrative should also include a discussion of existing and proposed drainage patterns.
- It is desirable to maintain the existing drainage patterns. Diversions of storm runoff to State drainage facilities are generally not acceptable unless appropriate drainage rights are obtained from all affected downstream owners.
4. Contour plans depicting tributary drainage areas both within and, where applicable, beyond the MTG boundaries are required.
- In some cases, the entire MTG site may drain away from the State transportation facility. In this instance, the report narrative identified in Item No. 3 above should so indicate. This will negate the requirement for drainage design computations; however, contour plans are still needed to verify the drainage patterns.
5. Submit drainage layout and details of existing and proposed storm sewer as well as hydraulic structure designs and their relationships to any adjacent State drainage facilities. All proposed outlets connecting or discharging to State maintained facilities must be clearly indicated. Further, existing State maintained drainage facilities that are located adjacent to development property and / or are potentially affected by the proposed construction must be shown on the plans.
- Copies of "as-built" plans showing the location of these State systems are acceptable providing that the appropriate pipe sizes, type of pipe, invert elevations, drainage structure types and top of frame elevations are obtained for hydraulic computations, where required.
6. Existing and proposed drainage rights and easements of the MTG site and contiguous State properties must be identified on the plans and described in the drainage report narrative. If there are no existing drainage rights or easements recorded for the MTG or contiguous State property, the drainage report narrative must indicate same.

A. Drainage Report (cont.)

- 7. For development sites that:
 - connect or discharge to existing State drainage facilities – a., b., and c. below are required.
 - receive discharge from existing State drainage facilities – a. and b. below are required.
 - propose pavement widening on State roadways – a., b. and c. below are required.

- a. Supporting computations and electronic data files for gutter flow, storm sewer, hydraulic grade line (water surface profile) and outlet protection, as appropriate for the development.

- b. **An analysis, including computations and electronic data files for gutter flow, storm sewer, hydraulic grade line (water surface profile) and outlet protection, as appropriate for the State facilities, shall be performed to its terminus or to a distinct hydraulic control to verify its adequacy. This analysis must consider the relative times-to-peak of the site and State maintained drainage systems and is required even if a reduction in peak flows from the site itself is anticipated.**

- c. A visual inspection of the existing State drainage facilities (pipes and structures) shall be performed to verify its condition and documented. The condition of existing ditches and outlets of the State drainage systems shall also be field inspected to verify their stability, need for cleaning, and to ensure no erosion or sediment problems exist.

- 8. Design plans and computations (including electronic data files) for any proposed storm water detention (above or below grade), retention or infiltration facilities. These plans must indicate sizes, dimensions, elevations and construction materials for the facility and its proposed outlet. At a minimum, design requirements must meet the standards set forth in the Department's Drainage Manual.
 - Emergency overflows shall not be directed towards State infrastructures.
 - Where failure of these facilities could impact adjoining State systems or structures, an Inspection / Maintenance plan must be prepared by the developer. This plan, together with any formal agreements or related documents, are normally filed in the municipal land records.

- 9. Indicate the location and type of any features included in the proposed drainage design to treat storm runoff and thereby enhance storm water quality. Treatment shall be accomplished prior to discharging to State drainage systems.

A. Drainage Report (cont.)

- 10. For sites which contain regulated floodplain or floodway areas as defined by the relevant Flood Insurance Study documents, within their boundaries, the applicant must depict the limits of same on the development site plan(s). Additionally, any proposed encroachments within these regulated areas must be evaluated, at least in a qualitative sense, for potential impacts upon upstream or downstream State facilities. Ultimately, a detailed hydraulic evaluation of floodplain or floodway encroachments may be required.

V. Planning and / or Zoning Approval

- Provide a copy of local Planning and/or Zoning approval and date received, or documentation that it is not required. **If the Planning and/or Zoning approval does not specify the size of the development, land use and parking which has been approved, or does not reference a site plan with the same information, then written confirmation (e-mail will suffice) from the Planning and/or Zoning Office will also be required, specifically indicating what has been approved.**

- If approval is required, the municipality must be in receipt of an appropriate application prior to the submission of the AD request to the OSTA. If the approval has not been granted, a statement indicating the anticipated schedule for obtaining Planning and/or Zoning approval must be supplied. Upon approval, a copy thereof must be submitted (e-mail will suffice).
Town Planning and Zoning approval for this project is expected by the end of May 2022.

VI. Local Traffic Authority Concurrence

- Written confirmation from the Local Traffic Authority indicating concurrence with the assessment of no substantial impact to the state highway system contingent on the Department's agreement with said assessment must be provided (e-mail will suffice).

**OFFICE OF THE STATE TRAFFIC ADMINISTRATION (OSTA)
ADMINISTRATIVE DECISION REQUEST - DRAINAGE**

Name of Facility	Town	State Route(s)
Village Apartments	Uncasville-Montville	Route 32

Location (complete street address; if none, provide map/block/lot information)

15 Jerome Ave, 82 Jerome Road and 232 Route 32

Stormwater Runoff (at least one of the following must be checked to qualify):

- The proposed project will not increase impervious area at the site.
- Stormwater runoff from the site does not drain nor is directed to State property or State owned/maintained drainage facilities.

Diversions (the following must be checked to qualify):

- Proposed drainage patterns on the site are maintained as closely as possible to the existing site conditions. No diversion of stormwater or stream flow is proposed that will potentially affect State or private property.

State Drainage System Modifications (the following must be checked to qualify):

- There are no new connections or modifications to State owned/ maintained drainage systems.
- There are no modifications to the development drainage system that a State drainage connects or discharges to.

Drainage Rights/Easements (Check all that apply. Response will be used to determine if new/additional ROW is required.):

- State drainage facilities are not located on the subject site.
- Runoff from any adjacent State highway or railroad facility does not discharge onto the subject site.
- Existing and/or proposed site drainage does not connect to a State owned/maintained drainage facility.
- Existing site drainage connects to a State owned/ maintained drainage facility. A record of the connection exists / does not exist at the DOT District office.
- Land records were searched and no State drainage rights/ easements were found for the subject site.
- A State "drainage right of way" or "easement" is recorded on the land records for the property.

Description of State drainage right of way or easement (type & location)

- The proposed project will not affect an existing State drainage right of way or easement on the subject property.

Flood History (the following must be checked to qualify):

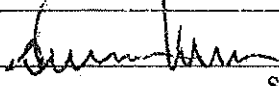
- The subject site does not have a history of flooding or known drainage problems. The applicant has consulted with the municipality and the DOT District Drainage office regarding any flood history or known drainage problems at the site. Copies of the meeting/telephone reports are attached. Letter provided by the Mayor of Montville

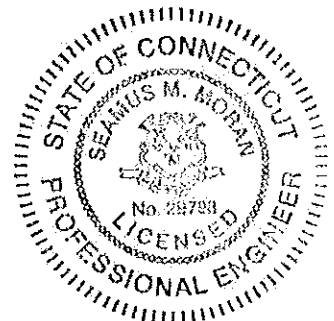
Other Approvals

Has the drainage design and stormwater management for the project been approved at the local level? Yes No

Professional Engineer Certification

I have conducted a site investigation and reviewed the proposed project plans relative to the information required for this document. Based on my review and reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, I hereby certify that the information provided on this document is complete and true.

Name	PE Number
Seamus Moran	0029798
	5/16/22
Signature	Date



Affix P.E. Stamp Here

TOWN OF MONTVILLE

Office of the Mayor

310 Norwich-New London Turnpike
Uncasville, Connecticut 06382



March 11, 2022

Mr. Kermit Hua, P.E., PTOE
KWH Enterprises, LLC
277 Reservoir Avenue, Suite 1101
Meriden, Connecticut 06451

Re: OSTA Administrative Decision Request
15 Jerome Avenue and 82 Jerome Road, Montville, Connecticut

Dear Mr. Hua:

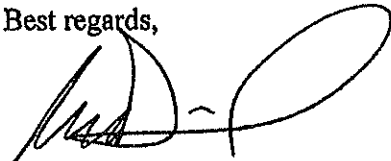
I have reviewed the site development plan for the proposed expansion of the Village Apartments located at 15 Jerome Avenue, 82 Jerome Road and 232 Route 32 in Montville, Connecticut entitled "Site Development Plan Village Apartments -- Phase 3 New Multifamily Apartment Buildings 15 Jerome Avenue, 82 Jerome Road and 232 Route 32, Uncasville-Montville, Connecticut Date: March 11, 2021 Revised: November 15, 2021 Property Owner/Applicant: Village Apartments LLC & Connecticut Multifamily Equities II, LLC 1099 North Street, White Plains, New York 10605" consisting of Sheets 1 of 13 to 13 of 13, prepared by Loureiro Engineering Associates, Inc. to determine whether or not the proposed expansion of the Village Apartments will have any effect on traffic on either Jerome Avenue or Jerome Road. It should also be noted that while the project has access to Connecticut Route 32, the project plans limit ingress from Route 32 to the project site and egress from the project site to Route 32 to emergency vehicles only.

In my capacity as Local Traffic Authority for the Town of Montville, Connecticut, I concur with the assessment that the impact on traffic does not appear to be substantial as the addition of a new access drive on Jerome Avenue will provide better site access than the existing access at 82 Jerome Road which is located in close proximity to the intersection of Jerome Road and Jerome Avenue. My concurrence is contingent upon the review and concurrence of the Department of Transportation.

After consultation with the property owner, I am not aware of any flood history or known drainage problems affecting the properties at 15 Jerome Avenue, 82 Jerome Road and 232 Route 32 in Montville, Connecticut

Feel free to contact me with any questions or concerns.

Best regards,

A handwritten signature in black ink, appearing to read 'Ronald McDaniel', with a large, stylized flourish extending to the right.

Ronald McDaniel
Mayor of Montville

cc: Elizabeth Burdick, Town Planner

Kermit Hua

From: Miller, Norman <Norman.Miller@ct.gov>
Sent: Monday, December 13, 2021 2:26 PM
To: Benjamin J. Miller
Cc: Brigham, Gary E.; Seamus M. Moran
Subject: RE: OSTA - Administrative Decision Request

Good afternoon,

The closest state highway to the site is Route 32, and there is no flooding history or drainage problems in that area of Route 32.

Please let me know if you need any further information.

Norman Miller, PE
CTDOT District 2 Drainage Engineer
171 Salem Turnpike
Norwich, CT 06360
860-823-3243 - office
860-503-9423 - cell
Norman.miller@ct.gov

From: Benjamin J. Miller <BJMiller@loureiro.com>
Sent: Monday, December 13, 2021 9:44 AM
To: Miller, Norman <Norman.Miller@ct.gov>
Cc: Brigham, Gary E. <Gary.Brigham@ct.gov>; Seamus M. Moran <smmoran@loureiro.com>
Subject: RE: OSTA - Administrative Decision Request

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Good morning Norman,

Thank you for the quick response. Attached is a PDF of the site location map along with the survey and latest site layout plan.

Please let me know if I can provide anything else that would help with your determination.

Thanks,

Benjamin Miller, EIT
Project Engineer
Loureiro Engineering Associates, Inc. | An Employee Owned Company
779 South Main Street, Manchester, NH 03102 | D: 603.621.5718

From: Miller, Norman [<mailto:Norman.Miller@ct.gov>]
Sent: Monday, December 13, 2021 7:30 AM
To: Benjamin J. Miller
Cc: Brigham, Gary E.
Subject: FW: OSTA - Administrative Decision Request

Good morning,

I am the District 2 Drainage Engineer and can address this requirement. I just need to have a better idea of where this proposed development is.

Please send a map with the proposed location on it to help me determine if there are any drainage problems with any state highways in that area.

Norman Miller, PE
CTDOT District 2 Drainage Engineer
171 Salem Turnpike
Norwich, CT 06360
860-823-3243 - office
860-503-9423 – cell
Norman.miller@ct.gov

From: Brigham, Gary E. <Gary.Brigham@ct.gov>
Sent: Monday, December 13, 2021 7:21 AM
To: Miller, Norman <Norman.Miller@ct.gov>
Subject: FW: OSTA - Administrative Decision Request

Gary Brigham
Transportation District Service Agent 2
District II
Phone: 860.823.3114
Email: Gary.brigham@ct.gov

171 Salem Turnpike
Norwich, CT 06360

From: Benjamin J. Miller <BJMiller@loureiro.com>
Sent: Friday, December 10, 2021 10:23 AM
To: Brigham, Gary E. <Gary.Brigham@ct.gov>
Cc: Seamus M. Moran <smmoran@loureiro.com>; Clinton S. Brown <cbsbrown@loureiro.com>
Subject: OSTA - Administrative Decision Request

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Hi Gary,

We are in the process of preparing an OSTA application for Administrative Decision Request and need to get in touch with someone from the District II Drainage office regarding the site history of known flooding or drainage problems to satisfy the highlighted requirement on the attached application form.

The application is for a proposed development in Uncasville-Montville for new multi-family apartment buildings that requires OSTA approval due to the number of proposed parking spaces.

Do you know who would be the correct person to contact about the history of flooding and drainage problems in order to satisfy this requirement?

Thank you for your help.

Sincerely,

Benjamin Miller, EIT

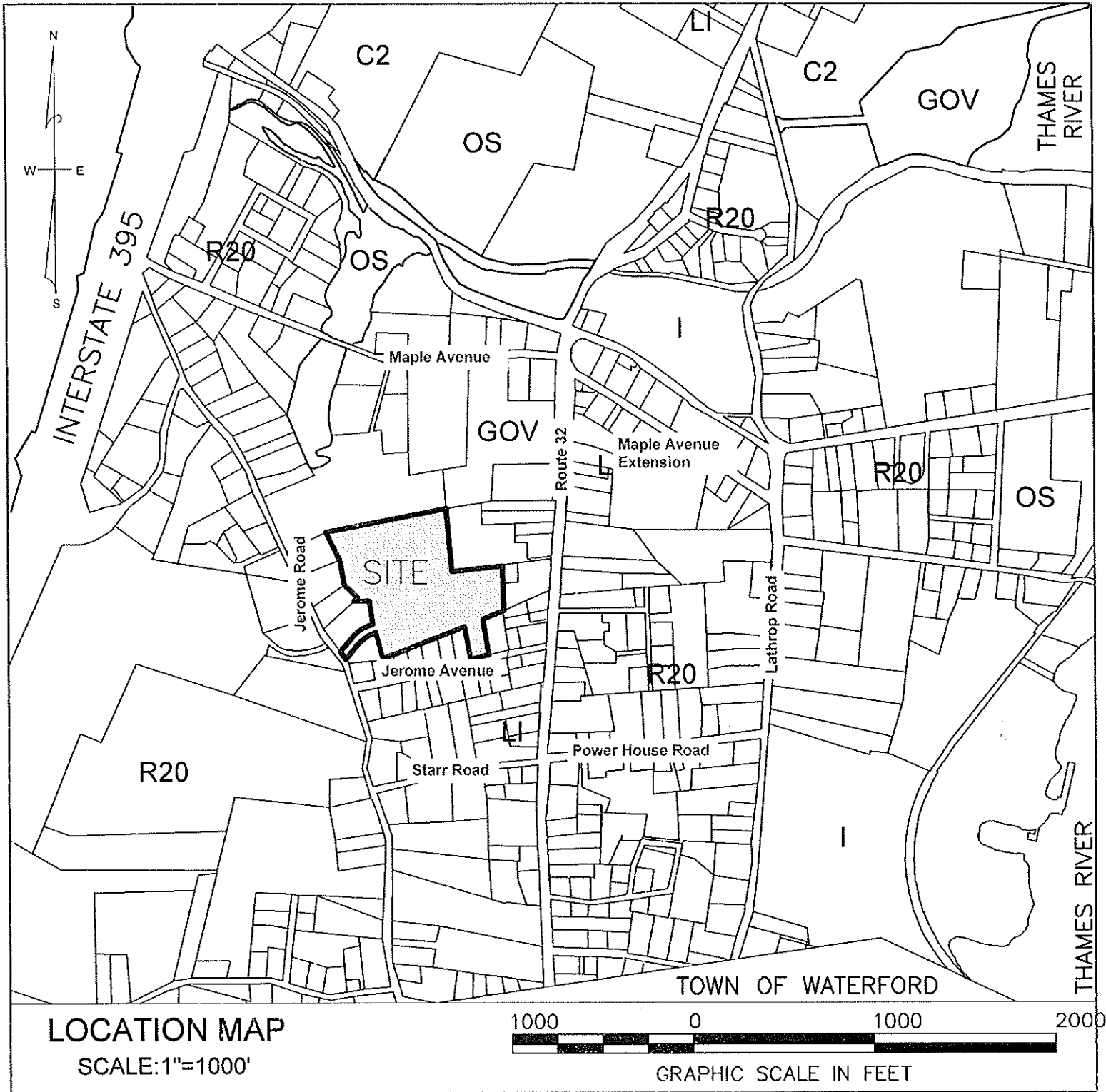
Project Engineer

Loureiro Engineering Associates, Inc. | An Employee Owned Company

779 South Main Street, Manchester, NH 03102 | D: 603.621.5718

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Trip Generation Narrative, Flow Diagrams, and Traffic Impact Study
Village Apartments
Uncasville-Montville, CT 06382
May 23, 2022

C1.

Table 1 shows the trip distribution for the new site trips, which is also illustrated in Figure 1.

Table 1 Trip Distribution

To / From Route	Entry/Exit
North: Route 32 via Jerome Avenue	40%
South: Route 32 via Jerome Avenue	50%
North: Jerome Road	5%
South: Jerome Road	5%
Total	100%

C2.

The distribution is based on the assumption that most of the trips will use Route 32 and match the existing directional splits between the two approaches of Route 32. Only a small percentage of the site trips will use the driveway on Jerome Road.

D1.

New site trips for the 160 new apartments were estimated using data for Land Use (LU) 221, Multifamily Housing (Mid-Rise) from *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE). The pages of the manual for the three peak hours are attached.

Table 2 Trip Generation

Proposed Use, Multifamily Housing (Mid-Rise) (LU 221) (160 New Units)			
	Entry	Exit	Entry & Exit
Weekday AM peak hour of adjacent street	14	45	59
Weekday PM peak hour of adjacent street	38	24	62
Saturday midday peak hour of adjacent street	32	30	62

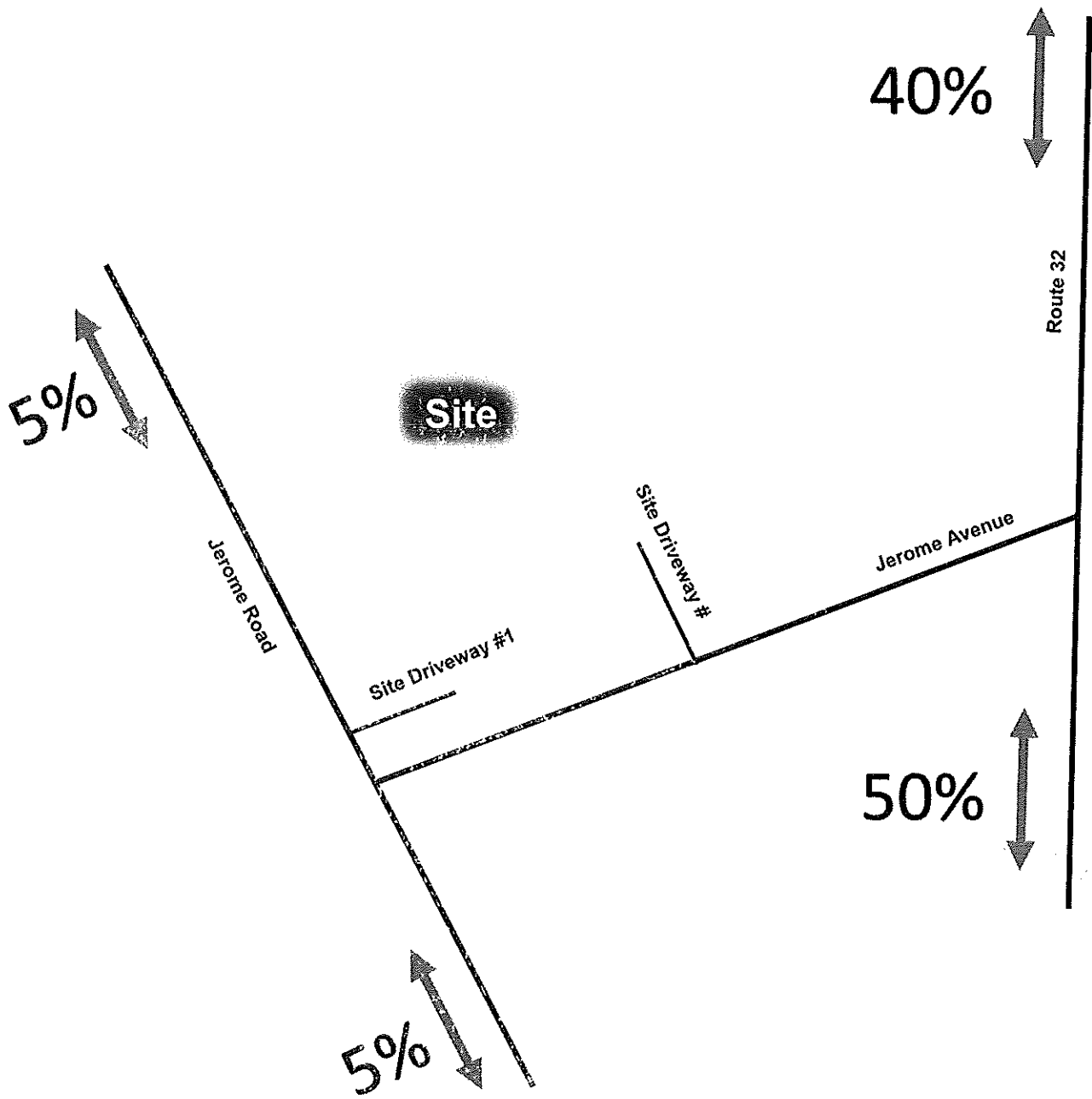
D2.

The flow diagrams for the peak hour trips are included in Figures 2, 3, and 4.

Traffic Impact

The two site driveways will be located on two low-volume local roads, Jerome Road and Jerome Avenue. Short delays can be expected for exit and entry traffic at the two driveways because of the low on-street volumes.

Majority of the trips will then travel on the two-lane Route 32. Pre-pandemic 2017 counts on Route 32 at the Waterford town line (attached) show two-way peak volume of 923 vehicles between 4:00 PM and 5:00 PM. April 2020 counts at the same location indicate directional splits of 57 percent for the northbound traffic and 43 percent for the southbound traffic during this hour. When these splits are applied to the 2017 volumes, the higher northbound volume during this peak hour was approximately 526 vehicles per hour ($923 \times 57\%$), below typical traffic capacity for a travel lane on a two-lane roadway. Therefore, the peak-hour traffic impact of the development will likely be adequately accommodated by the two adjacent local roads and Route 32.



Date of submission: May 23, 2022



Figure 1 Trip Distribution

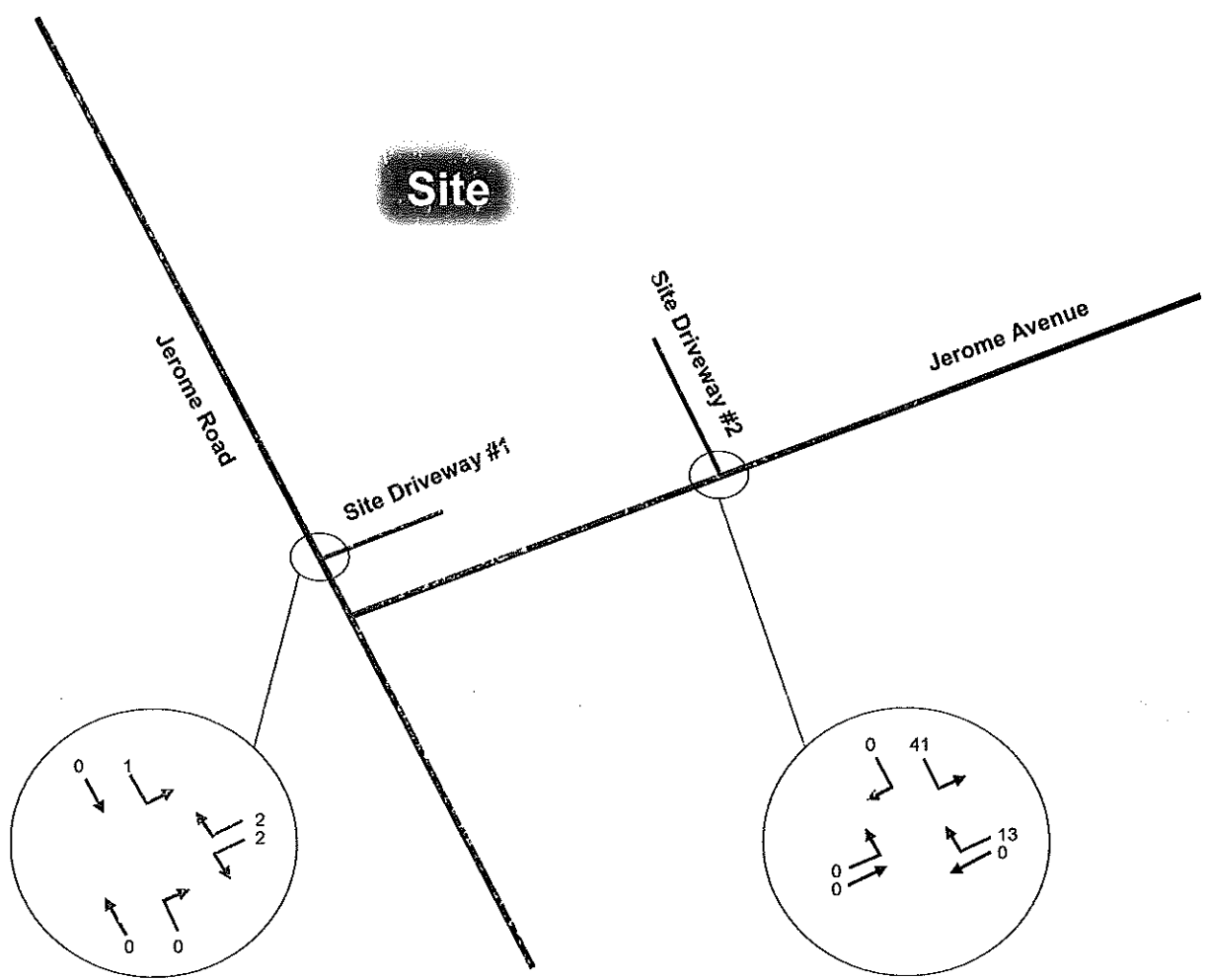


Figure 2 Site Trips
Weekday Morning Peak Hour of Adjacent Streets

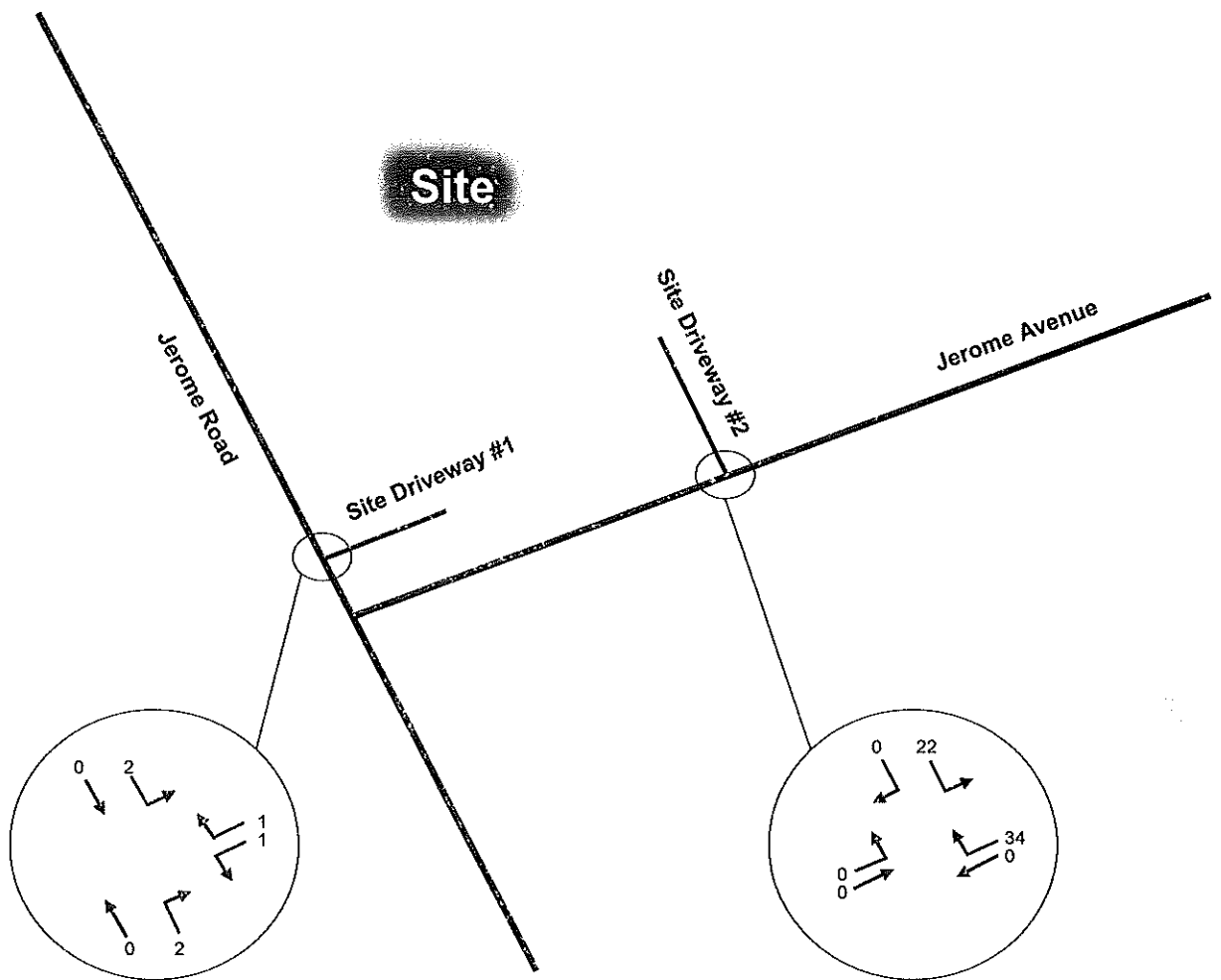


Figure 3 Site Trips
Weekday Afternoon Peak Hour of Adjacent Streets

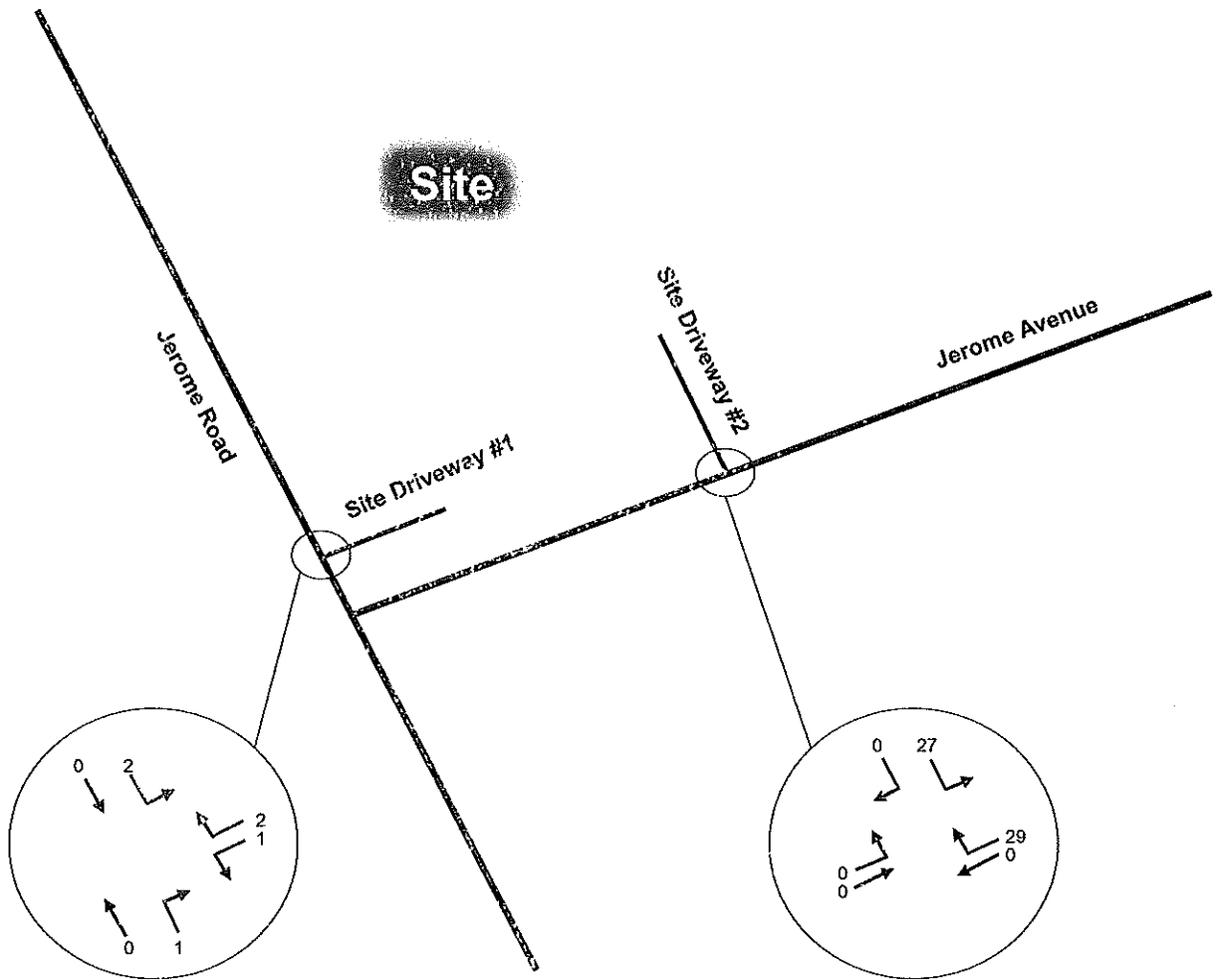


Figure 4 Site Trips
Saturday Midday Peak Hour of Adjacent Streets

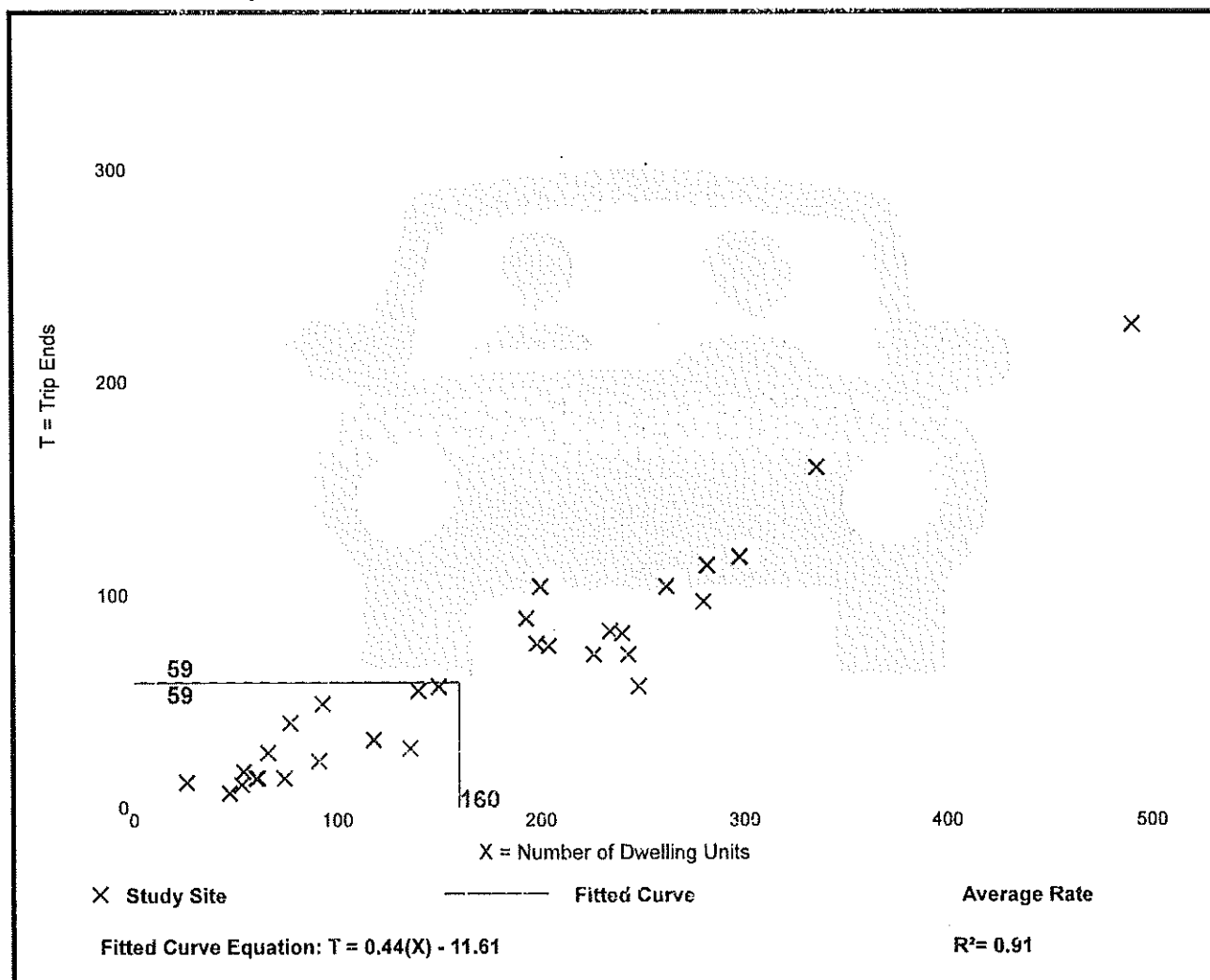
Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 30
 Avg. Num. of Dwelling Units: 173
 Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



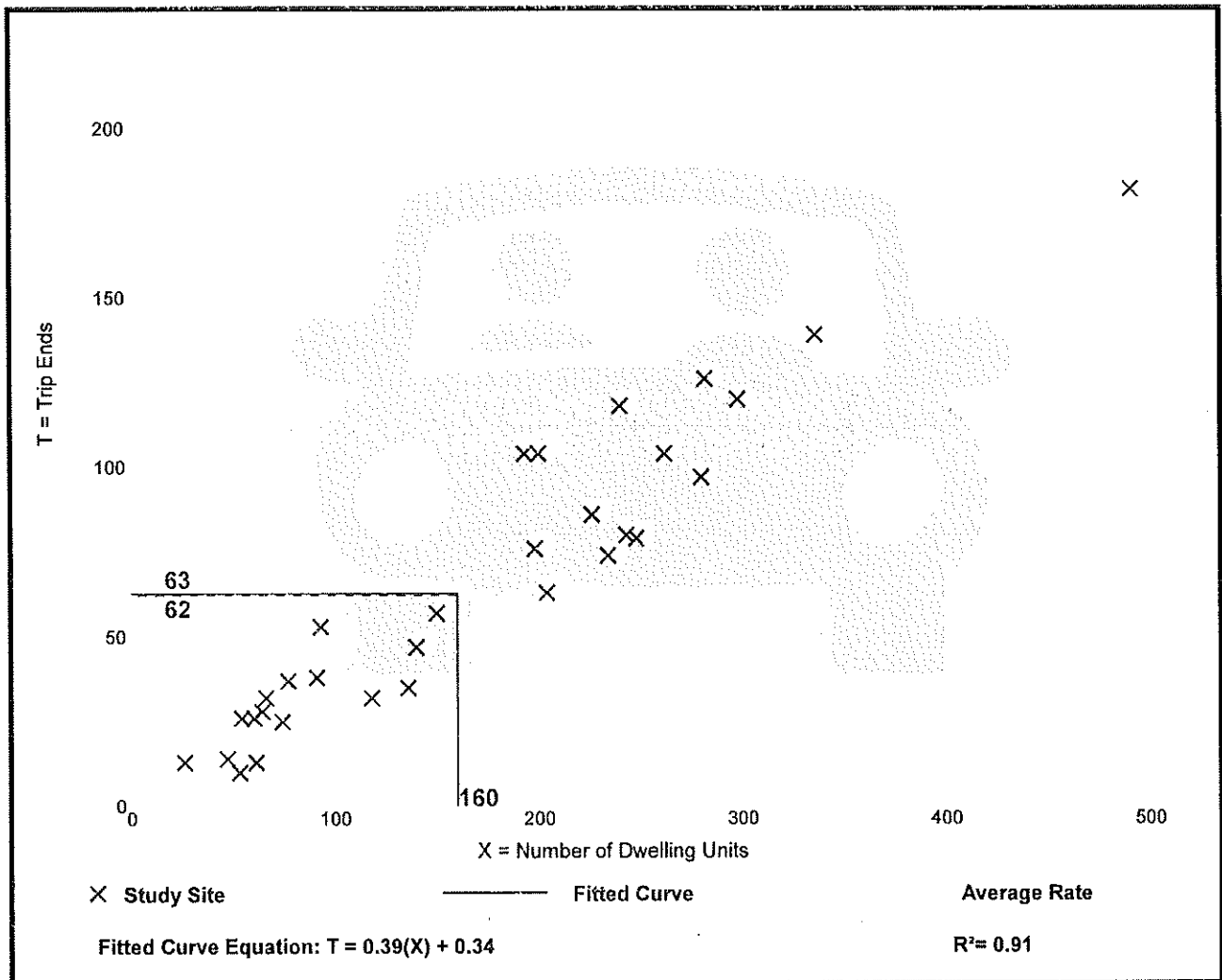
Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 31
 Avg. Num. of Dwelling Units: 169
 Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Saturday, Peak Hour of Generator

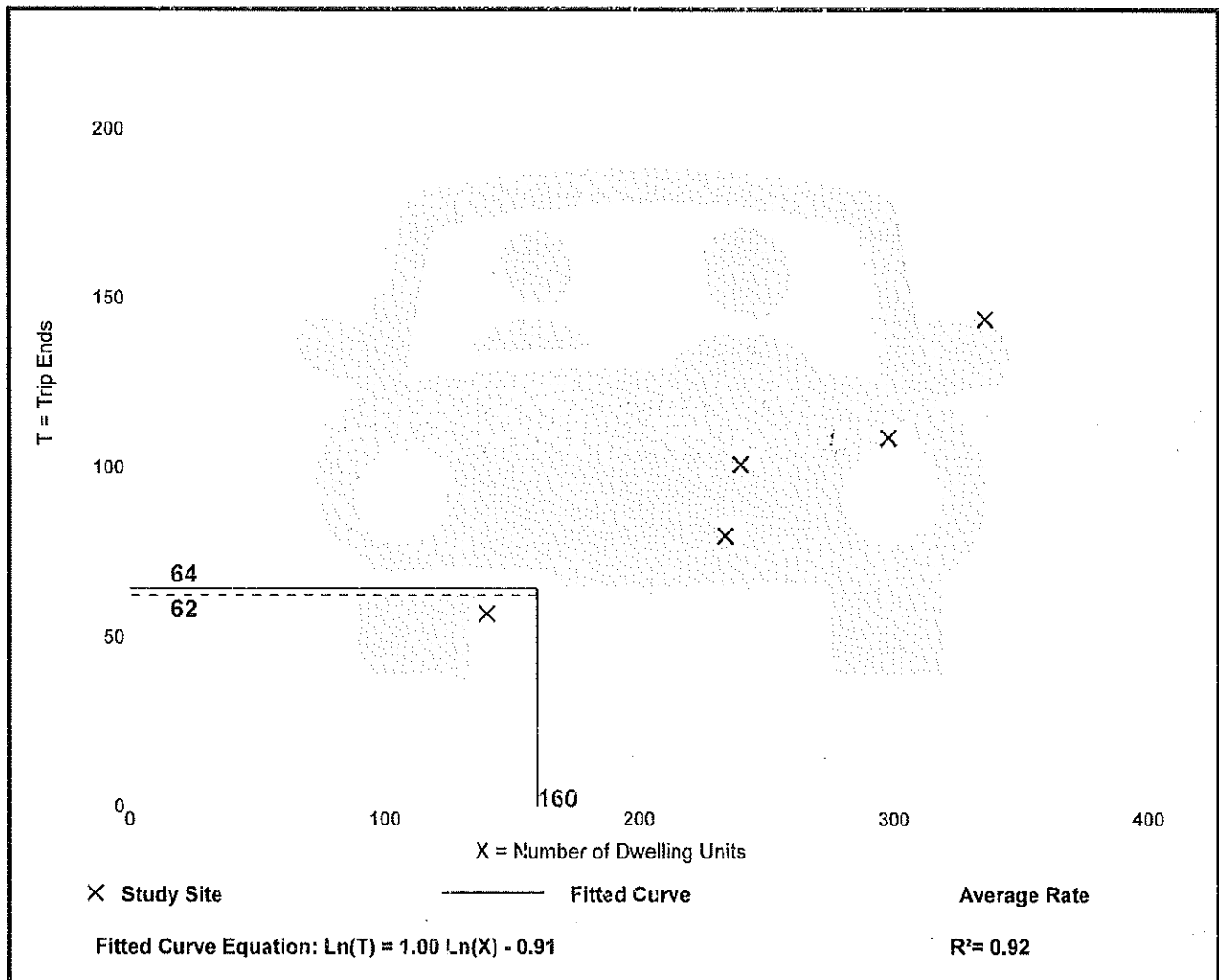
Setting/Location: General Urban/Suburban
Number of Studies: 5
Avg. Num. of Dwelling Units: 250
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.34 - 0.43	0.04

Data Plot and Equation

Caution – Small Sample Size



Status: OK

MONT-127 - North & South

Route 32 - 4.88 mi At Waterford TL

Town.....	Montville		07-Feb
Station.....	127		Tue
Location.....	41.426543,-72.110216	12:00am	48
2015-Minor Arterial	4.....2015-Urban	01:00am	19
Start Report.....	07-Feb-2017 12:00AM	02:00am	28
End Report.....	07-Feb-2017 11:00PM	03:00am	24
Axle Correction Factor.....	None	04:00am	100
Annual Road ADT.....	9100	05:00am	268
24-Hour Count...	8883 * G4 (1.02) = 9060.7	06:00am	373
UnRounded AADT.....	9060.7 / 1 = 9060.7	07:00am	741
OK 2020 Wed 08-Apr4500	08:00am	611
OK 2017 Tue 07-Feb -this report-9100	09:00am	491
OK 2008 Mon 07-Apr9400	10:00am	459
		11:00am	519
		12:00pm	516
		01:00pm	515
		02:00pm	676
		03:00pm	708
		04:00pm	923
		05:00pm	573
		06:00pm	387
		07:00pm	269
		08:00pm	226
		09:00pm	198
		10:00pm	110
		11:00pm	101
		Totals	8883