

Application of Barrett Hill Associates, LLC
for Zoning Text Change
to Town of Southeast Town Board

EXPANDED ENVIRONMENTAL ASSESSMENT

SEQR Full Environmental Assessment Form (EAF) and Supplemental Studies

"Barrett Hill"
Mount Ebo Lot 6
41 Mount Ebo Road North,
Town of Southeast, Putnam County, New York

PROJECT PARTICIPANTS

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Brewster, BY 10509
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(845) 265-4400

August 4, 2015

July 1, 2016

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Table of Contents

1.0 PROJECT DESCRIPTION

2.0 FULL ENVIRONMENTAL ASSESSMENT FORM (EAF)

EAF Part 1 - Project and Setting

A. <i>Project and Sponsor Information</i>	1 of 13
B. <i>Regulatory Approvals</i>	2 of 13
C. <i>Planning and Zoning Aspects</i>	2 of 13
D. <i>Project Details</i>	
1. <i>General nature of the project</i>	3 of 13
2. <i>Project operations</i>	4 of 13
E. <i>Site and Setting of the Project</i>	
1. <i>Land use and land cover</i>	9 of 13
2. <i>Natural resources</i>	11 of 13
3. <i>Designated public resources</i>	12 of 13
F. <i>Additional Information</i>	See Part 3
G. <i>Verification - signature</i>	13 of 13

EAF Part 2 - Identification of Potential Project Impacts

1. <i>Impact on Land</i>	1 of 10
2. <i>Impact on Geological Features</i>	2 of 10
3. <i>Impact on Surface Water</i>	2 of 10
4. <i>Impact on Groundwater</i>	3 of 10
5. <i>Impact on Flooding</i>	3 of 10
6. <i>Impact on Air</i>	4 of 10
7. <i>Impact on Plants and Animals</i>	4 of 10
8. <i>Impact on Agricultural Resources</i>	5 of 10
9. <i>Impact on Aesthetic Resources</i>	6 of 10
10. <i>Impact on Historic & Archaeological Resources</i>	6 of 10
11. <i>Impact on Open Space and Recreation</i>	7 of 10
12. <i>Impact on Critical Environmental Areas</i>	7 of 10
13. <i>Impact on Transportation</i>	8 of 10
14. <i>Impact on Energy</i>	8 of 10
15. <i>Impact on Noise, Odor and Light</i>	8 of 10
16. <i>Impact on Human Health</i>	9 of 10
17. <i>Consistency with Community Plans</i>	10 of 10
18. <i>Consistency with Community Character</i>	10 of 10

EAF Part 3 - Evaluation of the Magnitude & Importance of Impacts

3.1 Impact on Land Use, Zoning and Public Policy	3.1-1
3.2 Impact on Land, Plants and Animals	3.2-1
3.3 Impact on Water Resources	3.3-1
3.4 Impact on Transportation and Energy	3.4-1
3.5 Impact on the Community	3.5-1

Appendices

- A. Petition of Barrett Hill Associates, LLC
- B. Impact on School Enrollment
- C. Peak Hour Traffic Generation Comparison

List of Figures

Figure 1:	Site Location Map
Figure 2:	Aerial of Site
Figure 3:	Conceptual Grading Plan - Amended Site Plan
Figure 4:	Grading Plan - Approved Site Plan
Figure 5	Typical Building Elevation
Figure 6	Typical Floor Plan- Module A
Figure 7	Typical Floor Plan- Module B
Figure 3.1-1:	Parcels Within OP-2 Zoning District
Figure 3.2-1:	Area of Disturbance - Approved Plan
Figure 3.2-2:	Area of Disturbance - Amended Plan
Figure 3.2-3:	Construction Completed - Approved Plan
Figure 3.2-4:	Construction Completed - Amended Plan
Figure 3.2-5:	Wetland & Buffer Limits - Approved Plan
Figure 3.2-6:	Wetland & Buffer Limits- Amended Plan

Expanded Environmental Assessment

SEQR Full Environmental Assessment Form (EAF) and Supplemental Studies

PROJECT DESCRIPTION

1.1 Project Location and Background

The Environmental Assessment Form (EAF) examines the potential environmental impacts that might be expected to result from the proposed zoning text change that would allow the construction and operation of the proposed project at what is known as Mount Ebo Lot 6, located at 41 Mount Ebo Road North, Town of Southeast, Putnam County, New York. The property is known and designated on the Tax Map of the Town of Southeast as Section 46, Block 5, Lot 2.

The applicant proposes an amendment to the Town of Southeast Zoning Code to permit the conversion of 168 senior housing units approved in 2006 as "Barrett Hill," on a 29+acre parcel in the OP-2 Zoning District, to the same number of non-age-restricted units. The floating zone and project proposed Community Benefits Agreement includes a 30-percent set-aside for Special Occupancy groups as follows-

- a. Persons with disabilities. Persons with a disability, physical disability and/or developmental disability is a person as determined by the Developmental Disabilities Regional Office (DDRO) of the NYS Office for People with Developmental Disabilities (OPWDD) and/or the State Health Department and/or Putnam County Health Department;
- b. Veterans living in Putnam County. A Veteran is defined as someone who has served in the US armed forces (Army, Navy, Air Force, Marines), been on active duty for 180 days or longer, and been honorably discharged.
- c. Active volunteer members of the Town's Fire Department;
- d. Putnam County first responders (law enforcement, fire fighters and EMS workers);
- e. Full-time employees of school districts serving the Town of Southeast;
- f. Full-time employees of the Town of Southeast, and
- g. Persons aged 55 years and older

Of these units, 34 percent (17 units total) are proposed to be set aside (for 99 years) as affordable housing units. The zoning text change would be applicable to all parcels within the OP-2 zoning districts in the Town that meet certain specified criteria including: location on a State County or Town road adjacent to a residential zone; serviced by existing centralized water, sewer and fire protection; and have a minimum lot size of 25 acres.

Following full environmental review, a site plan and special use permit were approved in 2006 for a 168-unit age-restricted residential project on the subject site, along with other approvals, and construction of that project commenced in 2007 and then halted in 2009. An amended site

plan is being developed by the applicant for the Town's review, subject to the approval of the proposed text change amendment. Since the zoning amendment is proposed in conjunction with a specific property and for a specific project, this Expanded Environmental Assessment evaluates the potential impacts of the whole action for review under SEQRA.

Figures 1 and 2 show the site location and its surroundings. A conceptual design for the amended site plan is presented in Figure 3, upon which the EAF evaluations are based. Figure 4 shows the 2006 approved plan, which when compared to Figure 3 illustrates the changes to the building footprints and changes to site circulation to accommodate the proposal. The current plan includes 8 2/3-story residential buildings, each with a footprint of approximately 11,000 square feet, and a clubhouse, compared to the approved plan with 6 3/4 story buildings each with a footprint of approximately 16,190 square feet plus a clubhouse.

The proposed unit mix is 64 1-bedroom units and 104 2-bedroom units, compared to all 2-bedroom units in the prior approved project. Like the approved plan, a clubhouse with resident amenities is proposed in the amended plan. Project amenities will include a swimming pool, athletic center, and other activity rooms within the clubhouse and outdoor spaces. Like the approved plan, the proposed project will have three access points: two off of Mount Ebo Road North and a gated emergency-only access from Old Route 22. The amended plan is being designed to conform with the requirements of the 2006 approvals as relate to stormwater management, wetlands, and other elements. In particular, the project plan will have the same impervious surface area – approximately 260,489 square feet. The amended plan will require no disturbance within at least 300 feet of the local wetland.

Barrett Hill Associates, LLC, is the project sponsor. The Town of Southeast Town Board will serve as the lead agency for this action, since the primary action will be approval of a zoning text change. Participation by the Town of Southeast Planning Board is also anticipated for the amended site plan application that will be submitted by the applicant. The project will also require approval of the Special Use permit by the Town Board, following reviews by both boards.

The EAF has been prepared in accordance with Section 8-0101 of New York State Environmental Conservation Law and the regulations promulgated by the New York State Department of Environmental Conservation thereunder which appear at 6 NYCRR Part 617 (known as the New York State Environmental Quality Review Act, "SEQRA", or "SEQR"). The SEQRA Full Environmental Assessment Form is included in this document along with supplemental studies intended to assist the lead agency and other potential regulatory agencies ("involved agencies" in a coordinate review) in making a determination whether the proposed action would likely result in any potentially significant environmental impacts. While some of the information and graphics in this document is conceptual in nature, the analyses, illustrations, and maps provided herein have been advanced in sufficient detail to assess the extent of potential environmental impacts.

EAF Parts 1, 2 and 3 have been prepared to describe the potential environmental impacts of the proposed development action. EAF Part 3 includes narratives regarding the relevant issues of concern identified in Part 2.

1.2 Change in Market Conditions

Barrett Hill Associates, LLC, is the owner of property consisting of 29.02+/- acres and located in the OP-2 Zoning District as regulated by the Zoning Code of the Town of Southeast. In October of 2006 the Town granted Covington Management, Barrett Hill's affiliate, site plan approval for the construction of 168 market rate senior housing units in six (6) separate buildings with a clubhouse and other amenities. This site plan approval, and various other approvals necessary to implement the project, have been maintained in effect since that time. Construction was started on the approved project in or about 2007, including bringing central sewer and water services to the site, but ceased in 2009. Unfortunately, due to unavailability of financing for construction of senior housing, completion of the facility as planned became infeasible.

During the same time period, there has been acknowledgement of the need for multifamily housing in Putnam County and, specifically, acknowledgment of the need for rental housing. As cited in the January 2014 report, *Housing Needs Assessment Report prepared by the Putnam County Housing Corporation*: "Putnam County is faced with limited choice and an insufficient supply of affordable and market rate rental housing." The Town of Southeast has also, historically, recognized the need for a balanced diversity of housing opportunities in its recently enacted 2014 Comprehensive Plan Update, stating: in Section 6.1, Background, the 2014 Comprehensive Plan - "Southeast has historically provided an appropriate mix of housing opportunities for all of its residents, especially first-time homebuyers, empty-nesters, and people of modest or fixed incomes. In fact, Southeast has provided a wider range of housing options and values when compared to others communities in Putnam County or to south in Westchester County. This diversity has attracted many new residents and businesses to Southeast and has enabled the Town and its economy to grow." The Comprehensive Plan then continues this approach on Page 6.2 - "The Town of Southeast seeks a balanced diversity of housing opportunities and types to meet the needs of its current and future residents. The Town seeks to maintain its existing supply of housing, including its variety of price ranges, to accommodate residents of all income groups."

A copy of The Petition, amended text change language and proposed Community Benefits Agreement are included in Appendix A of this submission.

The Modified Project

One hundred sixty-eight (168) dwelling units are proposed in eight buildings, along with a clubhouse facility, on approximately 29 acres of land. The buildings will include 64 1-bedroom, and 104 2-bedroom apartments. Recreational amenities will include a clubhouse with swimming pool, athletic center, and other activity rooms and outdoor spaces. On-site parking for 336 vehicles is proposed. The proposed area of disturbance to build the project is approximately 11.4 acres, and less than the 16.5 acres in the approved plan since the stormwater basins are substantially in place. The area of proposed impervious surfaces is approximately 260,489 square feet. Refer to Table 1-1 for a comparative tabulation of the approved and proposed plans. The stormwater conveyance system (catch basins and pipes) designed for the approved project will be modified as needed for the new layout. The stormwater management system will function in the same manner as was originally designed for the site, including utilizing two extended detention basins that have already been built on the property. The project included a

Stormwater Pollution Prevention Plan (SWPPP) which was approved by NYCDEP on October 10, 2006. The DEP Stormwater Permit remains valid. In accordance with the NYSDEC stormwater regulations, the SWPPP will be updated for the amended plan that will be consistent with the conclusions of the original SWPPP and preserve the original SWPPP approval. A typical proposed building elevation and floor plans are provided as Figures 5, 6 and 7.

In comparison, the original approved project included the following: One hundred sixty-eight (168) dwelling units in six buildings, with a clubhouse and accessory facilities. The buildings included 168 2-bedroom apartments. Recreational amenities were to include a clubhouse, conservatory and outdoor swimming pool. On-site parking for 336 vehicles was provided in the project – 50 percent of the parking was to be constructed under buildings. The approved area of disturbance to build the project was 16.5 acres and the area of approved impervious surfaces was approximately 260,489 square feet. A stormwater management system was designed as part of the SWPPP for the project which was accepted for coverage under the SPDES General Permit for Construction Activity (GP-02-01), and included two extended detention treatment basins within the project. Overall, the amended/proposed project proposal would not exceed the respective parameters of the approved project.

Barrett Hill proposes a zoning text change that would allow a multi-unit, multi-family project without an age restriction but with a mandated priority units and specified affordable housing component by special permit in the OP-2 district, thereby allowing construction of the modified project described above.

The applicant proposes to provide priority in initial marketing of 50 units (30% of the total rental units), designated as "Special Occupancy/Priority Units," and a 99 year guarantee of affordability (to the extent of 34% of the Priority Units – 17 units) for the following categories of individuals:

- i. Veterans living in the Hudson Valley;
- ii. Full-time employees of the Town of Southeast;
- iii. Full-time employees of school districts serving the Town of Southeast;
- iv. Unpaid active volunteer members of the Town's Fire Department; and
- v. Putnam County first responders (law enforcement, fire fighters and EMS workers).
- vi. Persons with Disabilities
- vii. Persons aged 55 and over

For purposes of this EAF, the US Census Bureau, American Fact Finder 2014 data for Putnam County was used to set the Median Income level to determine the rent for the project unit (subject to change due to market conditions and household income data available at the time of rental). According to that data, the Putnam County median household income is \$96,262. At 30% of 80% of that income level, the available monies for the affordable priority housing units would be \$1925 per month which would then be subject to a factor based on unit size. So, as an example, rent for an affordable priority one bedroom unit might be \$1444 and an affordable priority two bedroom unit would be \$1733. At this time, it is anticipated that the typical market rate rent for this project will be approximately \$1700 per month for a one bedroom and \$2100 for a two bedroom (plus utilities).

Development Comparison on Other OP-2 Parcels

Since the proposed zoning text change would potentially apply to all other property in the Town that is zoned OP-2, and potentially affect the development capability of that land, analysis was

undertaken to establish the potential development yield of other applicable tracts. Section 3.1 presents the development comparison on other OP-2 parcels. These estimates were then used in evaluating potential effects on traffic and the school system as described in the subsequent sections.

Zoning Compliance and Project Design

The proposed concept plan that accompanies this report (shown in Figure 3) is designed to comply with the requirements of the 2006 approvals – including site plan, special permit, water supply and wastewater collection system permits, and stormwater permit. The permitted building height for the 2006 project was 3 stories or 45 feet;¹ the proposed buildings in this concept plan will not exceed these limits. The overall area of development disturbance of the approved plan, which area was in fact cleared and regraded in the initial construction operation, was 16.5 acres; this concept plan is designed within the same development envelope on the site and, due to the initial construction, would require less disturbance now. The total area of impervious surfaces of the approved plan was 5.9 acres; this concept plan is designed not to exceed this permitted area so that the plan will utilize the stormwater basins that are now in place on the site. Upon approval of the proposed zoning text change and further development of the site plan, the SWPPP for the project will be updated to accommodate the revised plan. The area of coverage (footprint) of each of the buildings is actually reduced over 30 percent from the approved plan. The Site Data Table for the proposed concept plan is attached as Table 2

The project will utilize the privately owned and operated Mount Ebo water supply and wastewater collection systems, as in the approved project.

Project Population

The proposed project will not have an age restriction as in the approved project. The demographics of an age-restricted project typically includes smaller family units (fewer children) and often smaller size dwelling units. The population of the approved plan is projected to be 302 persons. In the proposed plan, there will be larger units and some families may typically have one or more children. The population of the proposed plan is projected to be 349 persons, including 33 school-aged children. The actual number of children attending Brewster Central Schools is expected to be lower (26 students) due to availability of private and parochial schools in the area. The local school services and facilities have been evaluated relative to the change in projected population. The addition of these students into the local school system will have minimal impact; the overall effect of the change in the population mix on the School district's budget is projected to be net positive. A summary demographic report is included in Appendix B. Refer to section 3.5 for further discussion

Access and Impact on Traffic

The proposed project will have access from NYS Route 22 via Doansburg Road and Mount Ebo Road North, as in the approved plan. The applicant has evaluated the local area traffic relative to the change in projected trip generation (a result of the change in project population by eliminating the age restriction) and no significant impact on traffic capacity operations is projected from the proposed non-age-restricted residential use. As requested by the Town Board, a new traffic study was completed in March and April 2016 and is included in Appendix C. Refer to section 3.4 for further discussion.

¹ The approved buildings were 3 floors over a parking level, up to 45 feet in height. The proposed buildings are shorter.

1.3 Approvals

This action will require the following approvals/referrals from the Town of Southeast (which would then supersede these particular prior approvals/referrals):

Town Board

- Approval of Zoning Text Change creating Floating Zone
- Mapping the "Multi-Family Work Force Housing District "Floating Zone to the Barrett Hill site
- Special Permit Approval

Planning Board

- Amended Site Plan Approval

Architectural Review Board

- Recommendations on Architectural Design (referral)

Putnam County Department of Planning

- GML §239-m Review (referral)

The approvals granted for the 2006 plan remain valid today and due to the similarities of many elements of the current proposed plan (such as keeping the proposed disturbance and impervious surface within the limits of the approved plan), most will be applicable to the revised plan. The approvals/referrals granted to the Barrett Hill Senior Housing project in 2006, and their status as relates to the 2006 site plan, are as follows:

Town of Southeast Town Board

- Special Permit Approval, granted 8/31/06 (remains valid)

Town of Southeast Planning Board

- Site Plan Approval, granted 10/23/06 (remains valid)

Town of Southeast Architectural Review Board

- Recommendations on Architectural Design, 4/18/06 (positive referral made to Town Board)

Putnam County Department of Planning

- GML §239-m Review (positive referral made from Department of Planning)

Putnam County Department of Health

- Approval of Wastewater Collection System, granted 10/4/06 (remains valid)
- Approval of Water Main Extension, granted 10/4/06 (remains valid)

Putnam County Department of Highways & Facilities

- Approval of Traffic Signal (construction is completed)

New York City Department of Environmental Protection

- Approval of SWPPP, granted 10/10/06 (remains valid)

New York State Department of Environmental Conservation

- Approval for Coverage under SPDES General Permit, granted 5/9/07 (remains valid)
- 5-Acre Waiver, granted 6/1/07 (remains valid)

New York State Department of Health

- Approval of Plans for Public Water Supply Improvement, granted 10/5/06 (remains valid)
- Approval of Backflow Prevention Device, granted 10/4/26 (remains valid)

1.4 Phasing

It is anticipated that the proposed project at Barrett Hill will be completed in in series of four phases. At this time, approximately four phases are anticipated with 2 buildings in each phase. The proposed phasing plan will be based on market conditions and may overlap as market conditions allow.

TABLE 1
Comparison of Approved and Proposed Plans-
Mount Ebo Lot 6 (Barrett Hill)

July 1 2016

	Approved Plan	Proposed Plan
Project Site	29.02 acres	same
Number of Units	168- 2 bedroom units	168 with 64 - 1 bedroom and 104 - 2 bedroom units
Number of buildings	7 including clubhouse	9 including clubhouse
Building height	4 stories/45'	7 @ 2/3 stories, 1 @ 3/4 stories, clubhouse @ 2 stories
Footprint of residential buildings	16,190+/- sf each (approx 97,000+/- sf)	11,000+/- sf each (approx 88,000+/- sf)
Number of units per building	28	20 with one building at 28
Number of Parking spaces	Required: 242 (1.2 spaces + 20%) Approved: 168 covered spaces 168 outdoor spaces 336 Total	Required: 302 (1.5 spaces /unit plus 20%) Proposed: 336 outdoor spaces
Parking location	between building and basins at south end	behind buildings on south end
Area of disturbance	16.5 acres with 5.1 acres completed	11.4 acres within already disturbed area
New Impervious Area	260,489+/- sf	same
General slope on roads and parking	2% at south end but 5-10% else where	2-5% max except north side drive for limited length. Much more walkable.
Stormwater basins	installed as approved	same
Clubhouse location	along drive	at rear of site- more private

MT. EBO LOT 6 (Barrett Hill)
Mount Ebo Road North
Southeast, NY

SITE DATA TABLE

July 1, 2016

Site Data

Tax Map #: 46.-5-2
Site Size: 29.02± Acres
Site Zone: OP-2

Zoning Data

Site Zone: OP-2
Permitted Uses: Office, Warehouse, Light Manufacturing
Special Permit Uses: Restaurant, Recreation, Hotel, Motel, Conference
Center, Senior Housing, Public Utilities,
Multi-Family Work Force Housing
District (Proposed Zoning)

Accessory Uses: General Business, Retail, Services

Minimum Lot Size: 29+/- acres Proposed Zoning)
Minimum Lot Frontage: 400'
Minimum Lot Width: 400'
Minimum Lot Depth: 400'

Building Setbacks: Front 100' *
Side 50'
Rear 50'

Parking Setbacks: Front 50' *
Side 25'
Rear 25'

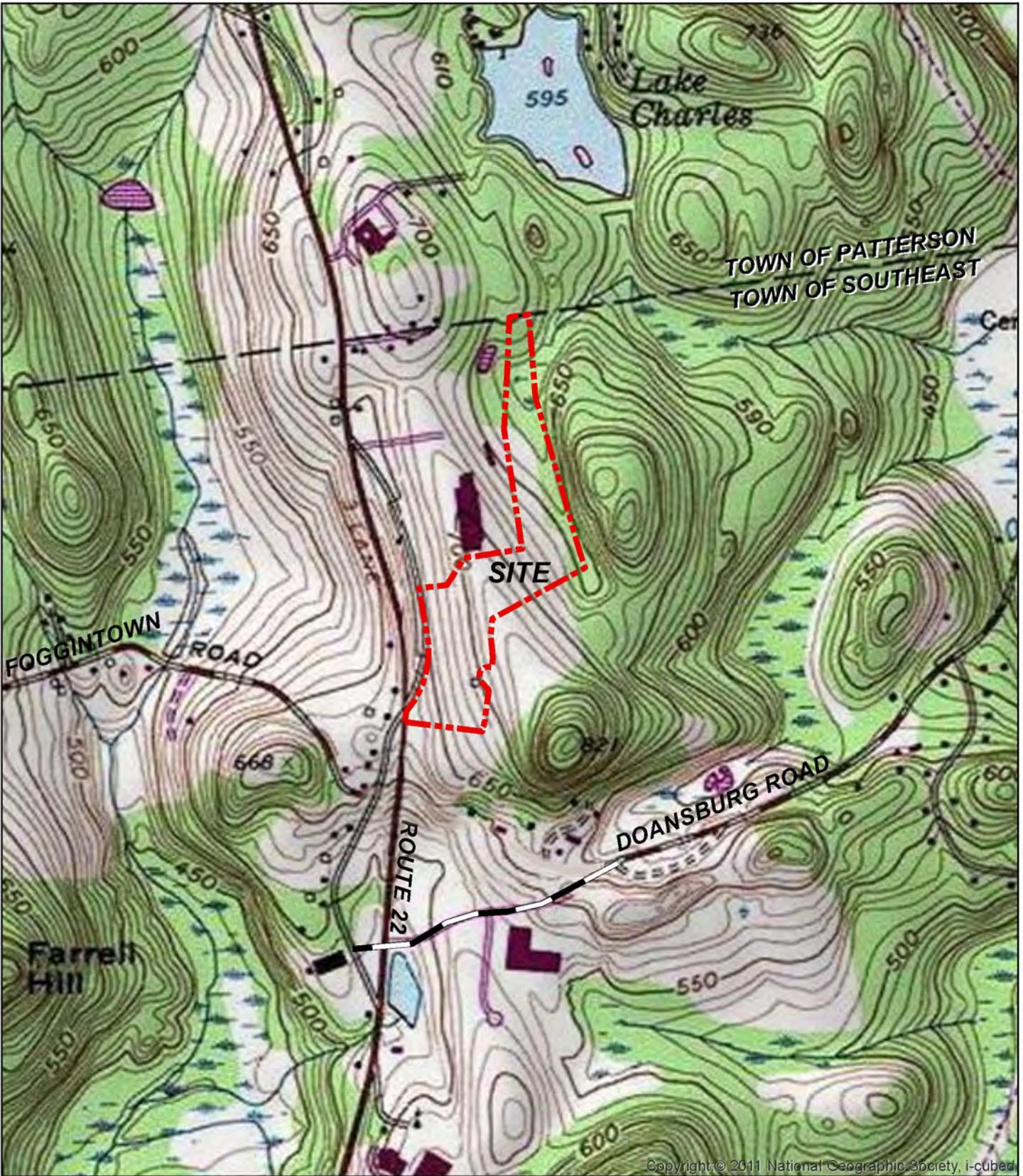
*As per Note D - reduce to 50'/25' where along a Town Road.

Maximum Building Coverage Allowed: 25%
Maximum FAR: 0.25
Minimum Open Space Required: 45%
Maximum Building Height: 3 Stories / 45'

TABLE 2

Proposed Development

Proposed Use:	Multi Unit Multi Family with Special Occupancy Component
Project Lot Size:	29.02± Acres (At least 25 acres Required for MUMF Special Permit)
Setbacks Proposed:	Same as OP-2 Zone
Number of Units Proposed:	168 Units 64 - 1 bedroom 104 - 2 bedroom
Minimum Distance Between Units:	15'
Parking Required:	1.5 spaces per unit plus 20% 168 Units x 1.5 = 252 Spaces Required plus 20% = 50 Total Parking Required - 302
Number of Spaces Proposed:	336 Spaces
Building Coverage:	7%
Proposed FAR:	0.22
Proposed Open Space:	80%
Proposed Building Height:	3 Stories / 45'
Community Facilities Proposed:	Clubhouse / Conservatory Fitness Trail Gazebo



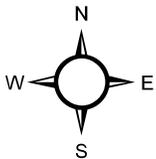
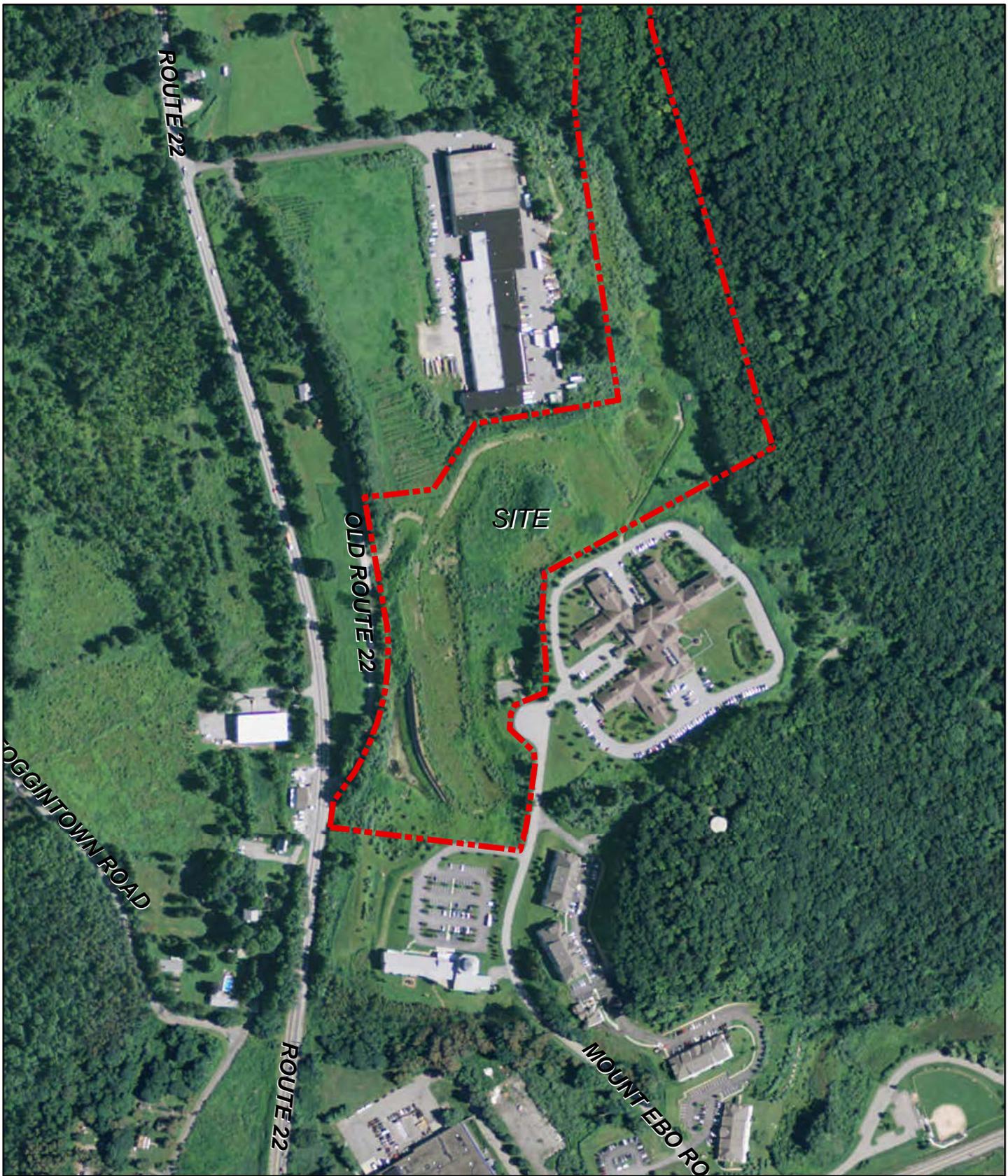
Copyright © 2011 National Geographic Society, i-cubed

Figure 1: Site Location Map
 "Barrett Hill" – Mount Ebo Lot 6
 Town of Southeast, Putnam County, NY
 Scale: 1" = 1,000'
 Base: USGS 7.5-minute Topographic Map,
 Brewster Quad



File: 15013 6/29/2015 KA

Tim Miller Associates, Inc., 10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418



File: 15013 6/29/2015 KA

Figure 2: Aerial of Site
"Barrett Hill" – Mount Ebo Lot 6
Town of Southeast, Putnam County, NY
Scale: 1" = 400'
Base: Esri Orthological Photo



REVISIONS		DESCRIPTION
NO.	DATE	
1.		
2.		

.....
 BIBBO
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 Land Planners
 100 MAIZE AVE. SUITE 201
 PLYMOUTH, NY 11774
 TEL: (845) 277-8800
 FAX: (845) 277-8810

GRADING PLAN
 BARRETT HILL
 MOUNT EBO ROAD NORTH
 TOWN OF SOUTHEAST, NY 10509

DESIGNED	T.H.
DRAWN	E.P.
CHECKED	C.W.
APPROVED	T.H.
SCALE	1" = 50'
DATE	XX-XX-XX

N/F MT.EBO JOINT VENTURES

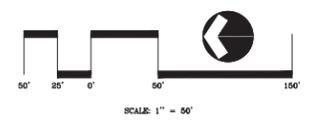
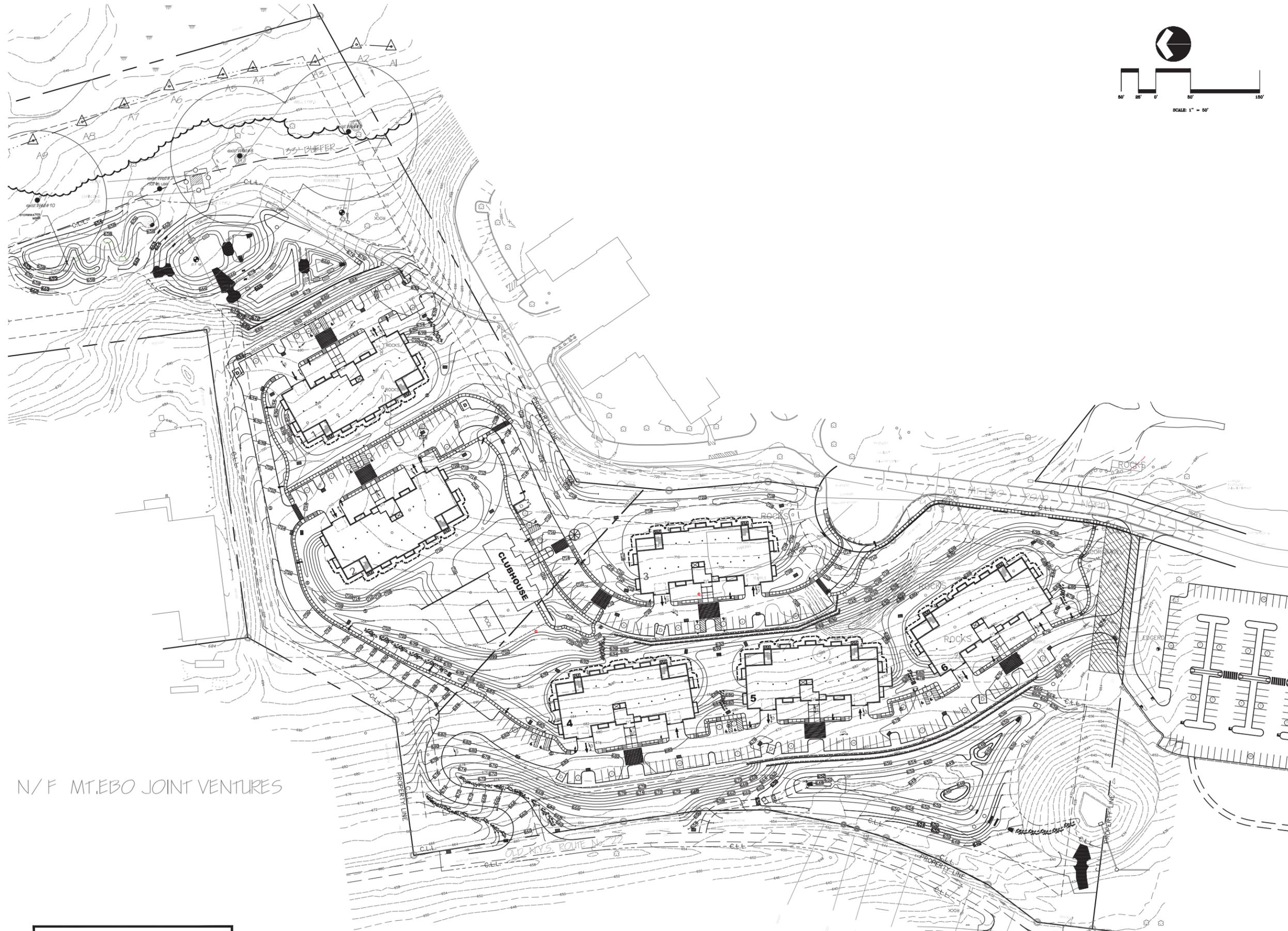


Figure 3: Conceptual Grading Plan - Amended Site Plan



PRIOR TO START OF CONSTRUCTION
CALL 1-800-962-7962 BEFORE YOU DIG!

Figure 4: Grading Plan - Approved Site Plan

NO.	DATE	BY	INVOICE NO.	COMMENTS
1.	08-18-06			TOWN BOARD
2.	09-18-06			CONSTRUCTION
3.	12-27-06			CONSTRUCTION
4.	04-20-07			CONSTRUCTION
5.	04-27-07			CONSTRUCTION

.....
BIBBO ASSOCIATES, L.L.P.
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 FORT MONMOUTH, NJ 08040
 PHONE (732) 377-8800
 FAX (732) 377-8810

LADA, P.C.
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 100 W. MAIN STREET, SUITE 200
 ROCKY HILL, CT 06067
 PHONE (860) 379-4444
 FAX (860) 379-4444

GRADING PLAN

MT. EBO CORPORATE PARK-LOT 6
 MOUNT EBO ROAD NORTH
 TOWN OF SOUTHEAST, NY 10509

DESIGNED	T.H.
DRAWN	E.P.
CHECKED	T.H.
APPROVED	
SCALE	1" = 50'
DATE	04-27-07

FIGURE 5- TYPICAL BUILDING ELEVATION



WILDER BALTER PARTNERS, LLC

BARRETT HILL

L&M DESIGN LLC
ARCHITECTURE • PLANNING • URBAN DESIGN
1000 W. MAIN ST., SUITE 1000, PHILADELPHIA, PA 19107
© COPYRIGHT 2002-2014 L&M DESIGN LLC

CONCEPT DESIGN

DATE: 03 OCTOBER 2014
SCALE: 3/16" = 1'-0"

Barrett Hill
Building
Module "A"

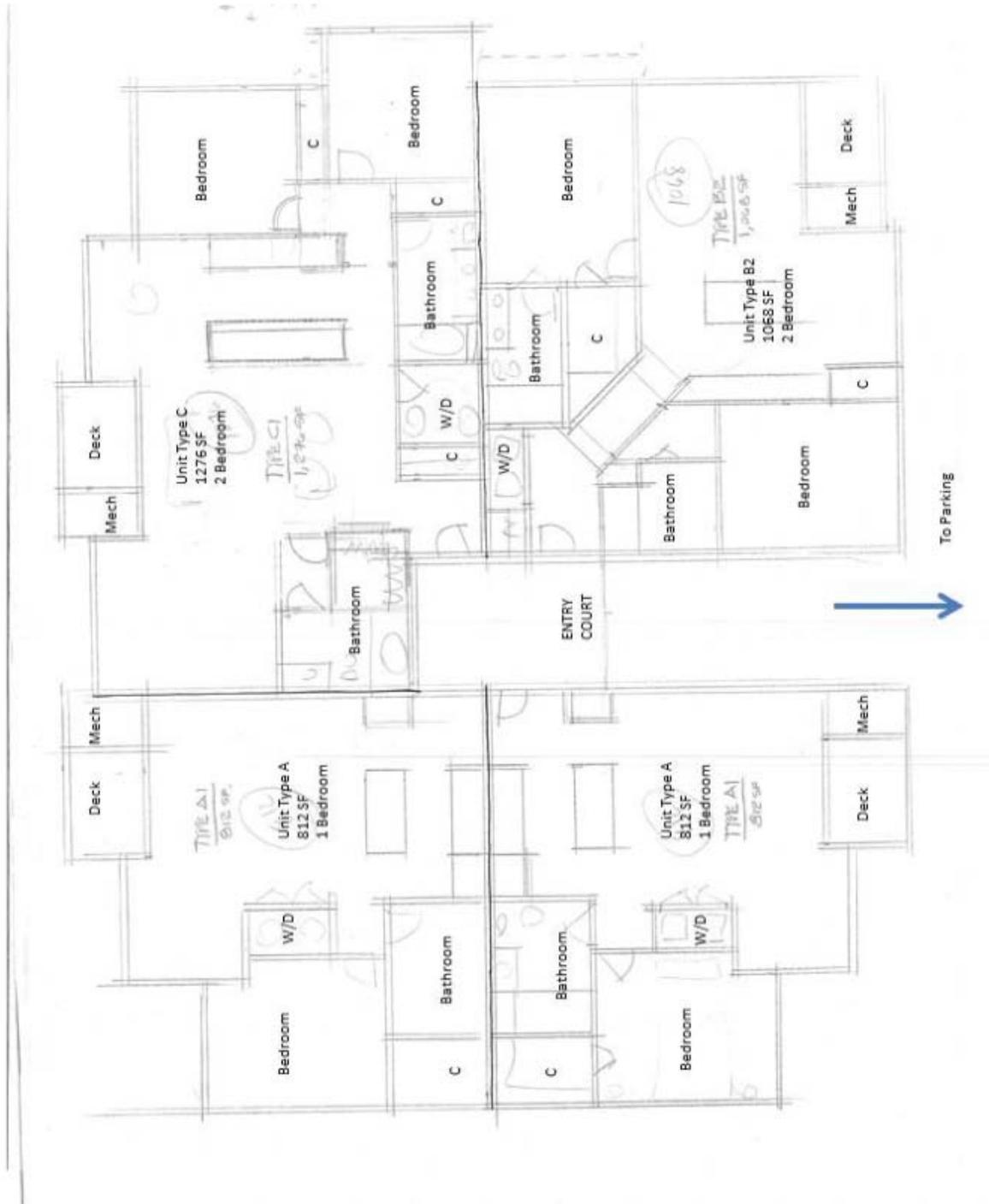


FIGURE 6- TYPICAL FLOOR PLAN – MODULE A

Revised June 9, 2016,

Barrett Hill Building Module "B"

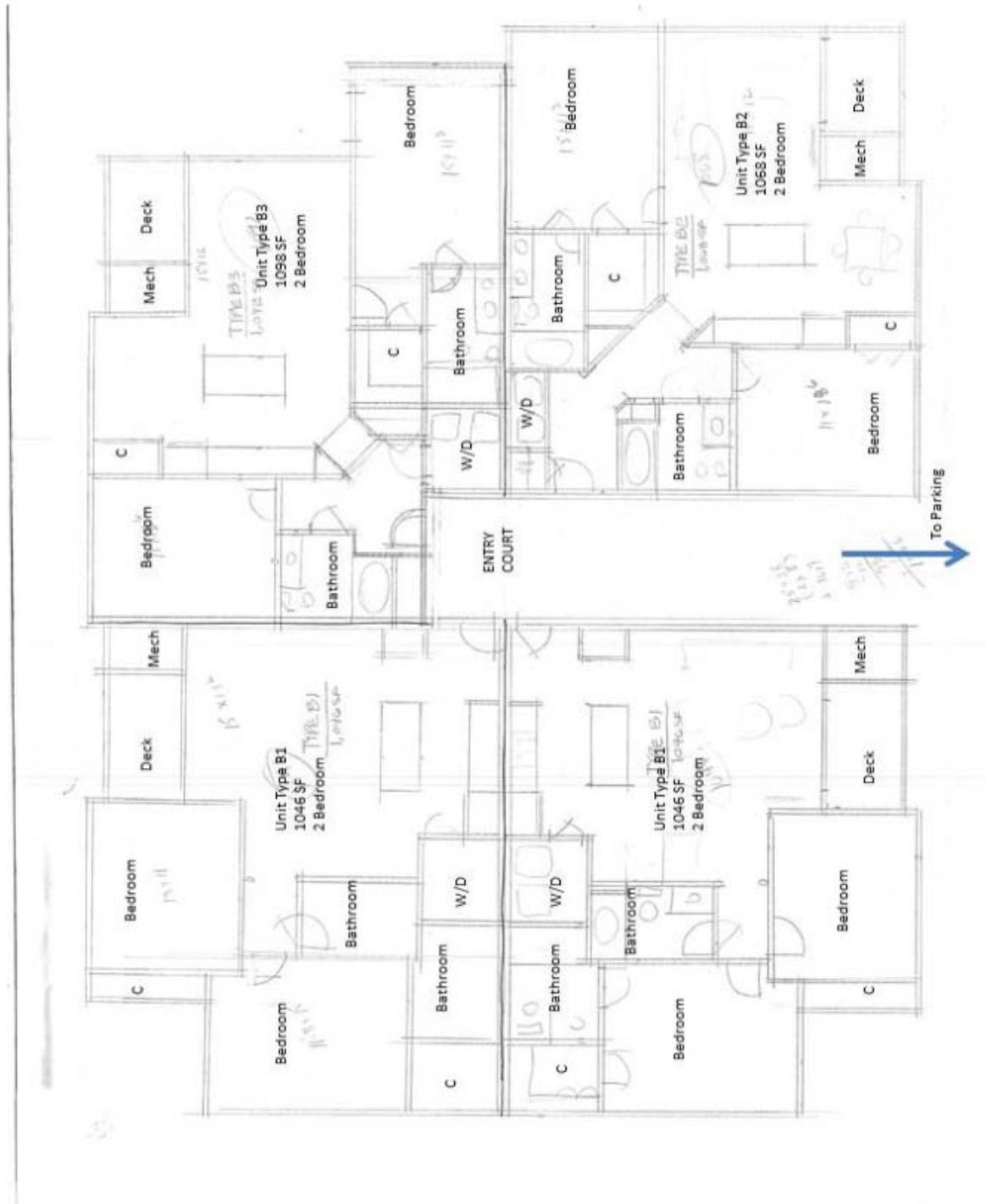


FIGURE 7- TYPICAL FLOOR PLAN- MODULE B

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either “Yes” or “No”. If the answer to the initial question is “Yes”, complete the sub-questions that follow. If the answer to the initial question is “No”, proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: Barrett Hill		
Project Location (describe, and attach a general location map): 41 Mount Ebo Road North, Town of Southeast, Putnam County, New York		
Brief Description of Proposed Action (include purpose or need): Text change to allow multifamily residential use in OP-2 zone and site plan modification to decrease unit size and reconfigure buildings for a 168 unit multifamily housing project on 29.02 acres of OP-2 land within an existing multi use Corporate Park. Project was approved for 168 units of senior housing (as a special permit use) and site work has been substantially completed. Stormwater facilities have been constructed and are fully vegetated and permits are current. Water and sewer lines have been brought to the site and all permits are current. Proposed text change will include the requirement to provide 30% of the units to be preferred to be occupied by Town employees, veterans, first responders, and persons with disabilities as defined in the proposed text amendment petition. Site Plan Amendment to reconfigure buildings and parking to reduce unit size and configuration within approved area of disturbance. No new area of disturbance proposed.		
Name of Applicant/Sponsor: Barrett Hill Associates, LLC, c/o Covington Development, LLC	Telephone: 845-279-9565	E-Mail:
Address: 322 Clock Tower Commons		
City/PO: Brewster	State: NY	Zip Code: 10509
Project Contact (if not same as sponsor; give name and title/role): Terri-Ann Hahn	Telephone: 845-279-7424	E-Mail: ladapc@snet.net
Address: LADA, P.C. Land Planners, 104 West Street		
City/PO: Simsbury	State: CT	Zip Code: 06070
Property Owner (if not same as sponsor): Same as Applicant	Telephone:	E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No or Village Board of Trustees	Text Change	
b. City, Town or Village Planning Board or Commission <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Site Plan modification	
c. City Council, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
d. Other local agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Architectural Review Board	
e. County agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Putnam County Planning, Putnam County Health Department	
f. Regional agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYCDEP	
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYSDEC	
h. Federal agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
i. Coastal Resources. <ul style="list-style-type: none"> i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/>Yes<input checked="" type="checkbox"/>No ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input type="checkbox"/>Yes<input checked="" type="checkbox"/>No iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/>Yes<input checked="" type="checkbox"/>No 		

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? YesNo

- If Yes, complete sections C, F and G.
- If No, proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? YesNo

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? YesNo

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) YesNo

If Yes, identify the plan(s):
 NYC Watershed Boundary _____

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? YesNo

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. Yes No
If Yes, what is the zoning classification(s) including any applicable overlay district?

OP-2 Zone

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

c. Is a zoning change requested as part of the proposed action? Yes No

If Yes,

i. What is the proposed new zoning for the site? Text change only for use. Proposed Site Plan is consistent with original approval -See Part 3

C.4. Existing community services.

a. In what school district is the project site located? Brewster Central School district

b. What police or other public protection forces serve the project site?
NYS Police and Putnam County Sheriff's Office

c. Which fire protection and emergency medical services serve the project site?
Brewster Fire Department

d. What parks serve the project site?
Scolpino Park and all town parks

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? multifamily residential

b. a. Total acreage of the site of the proposed action? 29.02 acres
b. Total acreage to be physically disturbed? 11.4 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 29.02 acres

c. Is the proposed action an expansion of an existing project or use? Yes No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % Units:

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? Yes No

iii. Number of lots proposed?

iv. Minimum and maximum proposed lot sizes? Minimum Maximum

e. Will proposed action be constructed in multiple phases? Yes No

i. If No, anticipated period of construction: 36 months

ii. If Yes:

- Total number of phases anticipated 1
- Anticipated commencement date of phase 1 (including demolition) Fall month 2015 year
- Anticipated completion date of final phase Dec month 2018 year

Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

Buildings will be built in a sequence of continuous construction. Site work for each area will be completed before building construction.

f. Does the project include new residential uses? Yes No
 If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	168 units approved- no change
At completion of all phases	_____	_____	_____	Total will remain 168 units

g. Does the proposed action include new non-residential construction (including expansions)? Yes No
 If Yes,

i. Total number of structures 9
 ii. Dimensions (in feet) of largest proposed structure: 45' height; 64' width; and 169' length
 iii. Approximate extent of building space to be heated or cooled: units total 235,000+/- square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? Yes No
 If Yes,

i. Purpose of the impoundment: _____
 ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: _____
 iii. If other than water, identify the type of impounded/contained liquids and their source. _____
 iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres
 v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length
 vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? Yes No
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
 If Yes:

i. What is the purpose of the excavation or dredging? Earthwork for site plan substantially completed for project
 ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
 • Volume (specify tons or cubic yards): 0
 • Over what duration of time? _____
 iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.
Earth moving associated with site plan to create building, parking, and landscape areas, Stormwater facilities already constructed and functioning.
 iv. Will there be onsite dewatering or processing of excavated materials? Yes No
 If yes, describe. _____
 v. What is the total area to be dredged or excavated? _____ Major earthwork completed to date 5 acres
 vi. What is the maximum area to be worked at any one time? 5 (DEC waiver granted) acres
 vii. What would be the maximum depth of excavation or dredging? _____ foundation depth feet
 viii. Will the excavation require blasting? Yes No
 ix. Summarize site reclamation goals and plan: _____
Earthwork for site plan only. No additional excavation or dredging required

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No
 If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:
 N/A - no wetland or Buffer area disturbance. Stormwater facilities have been constructed

iii. Will proposed action cause or result in disturbance to bottom sediments? Yes No
 If Yes, describe: _____

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No
 If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No
 If Yes:

i. Total anticipated water usage/demand per day: 32,640 gpd (7,680 gpd reduction) gallons/day

ii. Will the proposed action obtain water from an existing public water supply? Yes No
 If Yes:

- Name of district or service area: Mount Ebo Water works (Private)
- Does the existing public water supply have capacity to serve the proposal? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No
- Do existing lines serve the project site? Yes No

iii. Will line extension within an existing district be necessary to supply the project? Yes No
 If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
Water lines already extended to project
- Source(s) of supply for the district: individual drilled wells already installed on site and part of Mount Ebo system

iv. Is a new water supply district or service area proposed to be formed to serve the project site? Yes No
 If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____
Mount Ebo Water Works- already has capacity to serve project- original approval was for 40,320 gpd

vi. If water supply will be from wells (public or private), maximum pumping capacity: 154,000 gallons/minute.

d. Will the proposed action generate liquid wastes? Yes No
 If Yes:

i. Total anticipated liquid waste generation per day: 32,640 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____
sanitary waste only- approved for 40,320 gpd

iii. Will the proposed action use any existing public wastewater treatment facilities? Yes No
 If Yes:

- Name of wastewater treatment plant to be used: Mount Ebo- connections already approved- private WWTP
- Name of district: same
- Does the existing wastewater treatment plant have capacity to serve the project? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No

- Do existing sewer lines serve the project site? Yes No
- Will line extension within an existing district be necessary to serve the project? Yes No

 If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

 Water and sewer lines already extended as part of original approval _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? Yes No
 If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):
 Mount Ebo WWTP is a private system _____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? Yes No
 If Yes:

- i. How much impervious surface will the project create in relation to total size of project parcel?
 _____ Square feet or 5.92 acres (impervious surface)
 _____ Square feet or 29.02 acres (parcel size)
- ii. Describe types of new point sources. All stormwater discharges in place as approved _____
- iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?
 Stormwater facilities approved for project already constructed and functioning. Stormwater directed to on-site facilities _____
- If to surface waters, identify receiving water bodies or wetlands: _____
- Will stormwater runoff flow to adjacent properties? Yes No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? Yes No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? Yes No
 If Yes, identify:

- i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)
 construction equipment only- major earth moving already completed
- ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) _____
- iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) _____

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? Yes No
 If Yes:

- i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes No
- ii. In addition to emissions as calculated in the application, the project will generate:
 - _____ Tons/year (short tons) of Carbon Dioxide (CO₂)
 - _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
 - _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
 - _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
 - _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflouorocarbons (HFCs)
 - _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? Yes No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? Yes No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? Yes No

If Yes:

i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend
 Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____

iii. Parking spaces: Existing 336 approved Proposed 336 Net increase/decrease 0

iv. Does the proposed action include any shared use parking? Yes No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:
None
See Part 3 for additional Traffic information - Approved Plan generates 72 peak hour trips. Proposed Plan generates 110 peak hour trips.

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? Yes No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? Yes No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____
102,000 kWh Project has an existing approval- units will be smaller than originally designed

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):
Local supplier, NYSEG

iii. Will the proposed action require a new, or an upgrade to, an existing substation? Yes No

l. Hours of operation. Answer all items which apply.

<p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: <u>7am - 6pm</u> • Saturday: <u>7am - 2pm</u> • Sunday: _____ • Holidays: _____ 	<p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: <u>Residential community</u> • Saturday: _____ • Sunday: _____ • Holidays: _____
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m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? Yes No
 If yes:
 i. Provide details including sources, time of day and duration:

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes No
 Describe: _____

n.. Will the proposed action have outdoor lighting? Yes No
 If yes:
 i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:
 Downlighting for parking and roads. Nearest structure over 100' away

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes No
 Describe: _____

o. Does the proposed action have the potential to produce odors for more than one hour per day? Yes No
 If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? Yes No
 If Yes:
 i. Product(s) to be stored _____
 ii. Volume(s) _____ per unit time _____ (e.g., month, year)
 iii. Generally describe proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? Yes No
 If Yes:
 i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? Yes No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? Yes No
 If Yes:
 i. Describe any solid waste(s) to be generated during construction or operation of the facility:
 • Construction: _____ tons per _____ (unit of time)
 • Operation : _____ tons per _____ (unit of time)
 ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:
 • Construction: _____

 • Operation: _____

 iii. Proposed disposal methods/facilities for solid waste generated on-site:
 • Construction: _____

 • Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No
 If Yes:
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____
 ii. Anticipated rate of disposal/processing:
 • _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
 • _____ Tons/hour, if combustion or thermal treatment
 iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No
 If Yes:
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

 ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

 iii. Specify amount to be handled or generated _____ tons/month
 iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

 v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes No
 If Yes: provide name and location of facility: _____

 If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.
 i. Check all uses that occur on, adjoining and near the project site.
 Urban Industrial Commercial Residential (suburban) Rural (non-farm)
 Forest Agriculture Aquatic Other (specify): senior housing and nursing home
 ii. If mix of uses, generally describe:
Mount Ebo Corporate Park North consists of a synagogue, senior housing, post office, park and nursing home

b. Land uses and coverytypes on the project site.

Land use or Coverytype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	5.98 acres as approved	5.98 acres as amended	0
• Forested	0	0	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	10.02 acres as approved	10.02 acres as amended	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
• Wetlands (freshwater or tidal)	2 acres (local wetland only)	2 acres	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: <u>lawn and planting area, stormwater facilities</u>	10.52 acres as approved	10.52 acres as amended	0

c. Is the project site presently used by members of the community for public recreation? Yes No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? Yes No
If Yes,
i. Identify Facilities:
Nursing Home, senior housing

e. Does the project site contain an existing dam? Yes No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ feet
• Dam length: _____ feet
• Surface area: _____ acres
• Volume impounded: _____ gallons OR acre-feet
ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
If Yes:
i. Has the facility been formally closed? Yes No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): 340009
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):
DEC site is located at Route 312 and Route 22. The proposed site is not affected.

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ 6'+ feet

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site:

Paxton/Urban	_____	78% %
Woodbridge/Urban	_____	15 %
Palms	_____	7% %

d. What is the average depth to the water table on the project site? Average: _____ 5'+ feet

e. Drainage status of project site soils: Well Drained: _____ 78 % of site
 Moderately Well Drained: _____ 15 % of site
 Poorly Drained _____ 7 % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: _____ 40 % of site
 10-15%: _____ 40 % of site
 15% or greater: _____ 20 % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name None Classification _____
- Lakes or Ponds: Name None Classification _____
- Wetlands: Name Federal Waters, Federal Waters Approximate Size 2 acres
- Wetland No. (if regulated by DEC) local only- no disturbance

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100 year Floodplain? Yes No

k. Is the project site in the 500 year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: _____

m. Identify the predominant wildlife species that occupy or use the project site: <u>woodchuck, deermouse, cottontail rabbit</u> <u>raccoon, Eastern chipmunk,</u> <u>grey squirrel, red fox, Whitetail deer</u> <u>striped skunk</u> _____ _____	
n. Does the project site contain a designated significant natural community? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Describe the habitat/community (composition, function, and basis for designation): <u>Rich Graminoid Fen, Red Maple-Hardwood Swamp</u> <i>ii.</i> Source(s) of description or evaluation: <u>DEC web mapper only- on-site wetlands are not to be disturbed, no disturbance in Buffer Areas</u> <i>iii.</i> Extent of community/habitat: • Currently: <u>4.25, 1858.3</u> acres • Following completion of project as proposed: <u>No changes/no disturbance</u> acres • Gain or loss (indicate + or -): <u>0</u> acres	
o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Site within area of NYSDEC mapping but site has previous approvals for project and has been an active construction site.	
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, give a brief description of how the proposed action may affect that use: _____ _____	
E.3. Designated Public Resources On or Near Project Site	
a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide county plus district name/number: _____	
b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>i.</i> If Yes: acreage(s) on project site? _____ <i>ii.</i> Source(s) of soil rating(s): _____	
c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: <i>i.</i> Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature <i>ii.</i> Provide brief description of landmark, including values behind designation and approximate size/extent: _____ _____	
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: <i>i.</i> CEA name: _____ <i>ii.</i> Basis for designation: _____ <i>iii.</i> Designating agency and date: _____	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
<i>i.</i> Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District	
<i>ii.</i> Name: _____	
<i>iii.</i> Brief description of attributes on which listing is based: _____	
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
g. Have additional archaeological or historic site(s) or resources been identified on the project site?	
If Yes:	
<i>i.</i> Describe possible resource(s): _____	
<i>ii.</i> Basis for identification: _____	
h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
<i>i.</i> Identify resource: _____	
<i>ii.</i> Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____	
<i>iii.</i> Distance between project and resource: _____ miles.	
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
<i>i.</i> Identify the name of the river and its designation: _____	
<i>ii.</i> Is the activity consistent with development restrictions contained in 6NYCRR Part 666?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	

F. Additional Information

Attach any additional information which may be needed to clarify your project.

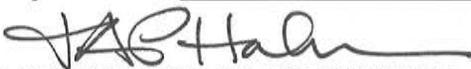
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

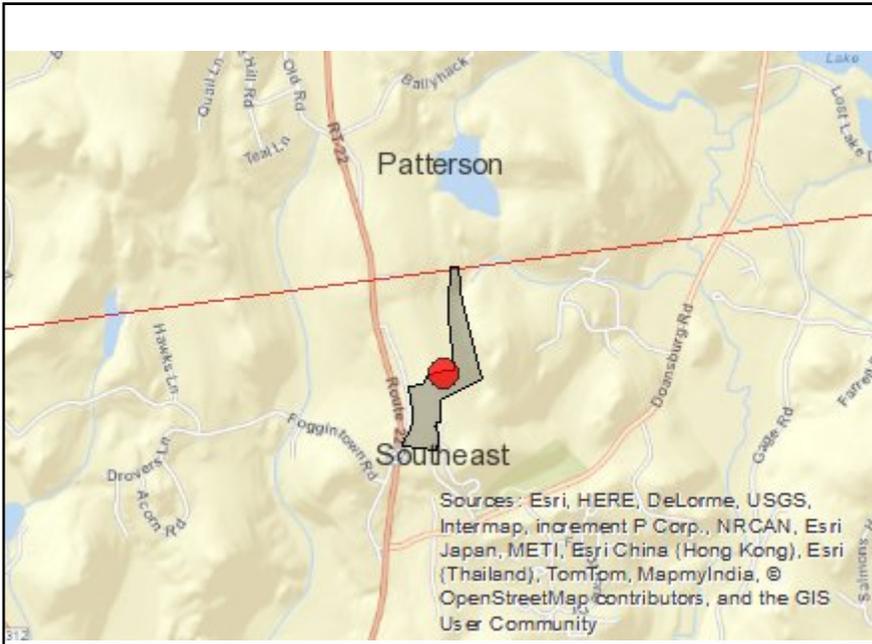
I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Barrett Hill Associates, P.C. Date May 11, 2015 updated September 8, 2015

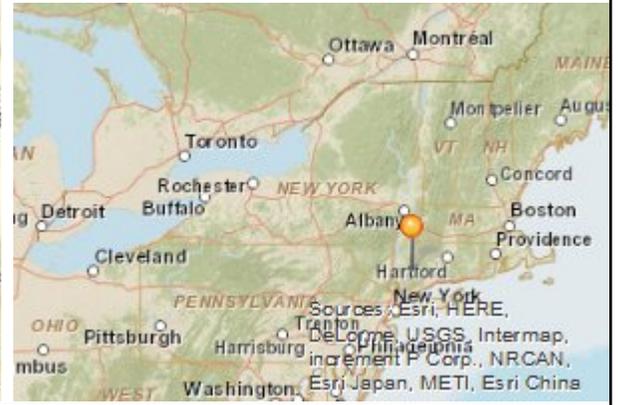
Final
July 2016

Signature  _____

Signature Terri-Ann Hahn for LADA, P.C. Land Planners Title Vice President



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYC Watershed Boundary
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	340009
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No

E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	Yes
E.2.n.i [Natural Communities - Name]	Rich Graminoid Fen, Red Maple-Hardwood Swamp
E.2.n.i [Natural Communities - Acres]	4.25, 1858.3
E.2.o. [Endangered or Threatened Species]	Yes
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National Register of Historic Places]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No

Full Environmental Assessment Form
Part 2 - Identification of Potential Project Impacts

Agency Use Only [If applicable]

Project :	
Date :	July 17, 2015 rev 3-23-16

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer “**Yes**” to a numbered question, please complete all the questions that follow in that section.
- If you answer “**No**” to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box “Moderate to large impact may occur.”
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the “whole action”.
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land			
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
<i>If “Yes”, answer questions a - j. If “No”, move on to Section 2.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet.	E2d	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: <u>Site has been substantially graded and stormwater facilities are installed, limited regrading required</u>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g)

NO

YES

If "Yes", answer questions a - c. If "No", move on to Section 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h)

NO

YES

If "Yes", answer questions a - l. If "No", move on to Section 4.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	<input checked="" type="checkbox"/>	<input type="checkbox"/>

I. Other impacts: <u>Approved Stormwater elements are installed and functioning</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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4. Impact on groundwater
 The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer.
 (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
If "Yes", answer questions a - h. If "No", move on to Section 5.

NO YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	<input type="checkbox"/>	<input type="checkbox"/>
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

5. Impact on Flooding
 The proposed action may result in development on lands subject to flooding.
 (See Part 1. E.2)
If "Yes", answer questions a - g. If "No", move on to Section 6.

NO YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may result in development in a designated floodway.	E2i	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in development within a 100 year floodplain.	E2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in development within a 500 year floodplain.	E2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	<input type="checkbox"/>	<input type="checkbox"/>
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	<input type="checkbox"/>	<input type="checkbox"/>

g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
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6. Impacts on Air			
The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) <i>If "Yes", answer questions a - f. If "No", move on to Section 7.</i>		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: i. More than 1000 tons/year of carbon dioxide (CO ₂) ii. More than 3.5 tons/year of nitrous oxide (N ₂ O) iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) iv. More than .045 tons/year of sulfur hexafluoride (SF ₆) v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions vi. 43 tons/year or more of methane	D2g D2g D2g D2g D2g D2h	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

7. Impact on Plants and Animals			
The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) <i>If "Yes", answer questions a - j. If "No", move on to Section 8.</i>		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	<input checked="" type="checkbox"/>	<input type="checkbox"/>

e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____ _____	E1b	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

8. Impact on Agricultural Resources			
The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.)		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
<i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

9. Impact on Aesthetic Resources The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) <i>If "Yes", answer questions a - g. If "No", go to Section 10.</i>				<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>		
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	<input type="checkbox"/>	<input type="checkbox"/>		
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>		
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	<input type="checkbox"/>	<input type="checkbox"/>		
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>		

10. Impact on Historic and Archeological Resources The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) <i>If "Yes", answer questions a - e. If "No", go to Section 11.</i>				<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E3e	<input type="checkbox"/>	<input type="checkbox"/>		
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	<input type="checkbox"/>	<input type="checkbox"/>		
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	<input type="checkbox"/>	<input type="checkbox"/>		

d. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
e. If any of the above (a-d) are answered “Yes”, continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	<input type="checkbox"/>	<input type="checkbox"/>
ii. The proposed action may result in the alteration of the property’s setting or integrity.	E3e, E3f, E3g, E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>

11. Impact on Open Space and Recreation The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If “Yes”, answer questions a - e. If “No”, go to Section 12.</i>				<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. The proposed action may result in an impairment of natural functions, or “ecosystem services”, provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	<input type="checkbox"/>	<input type="checkbox"/>		
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	<input type="checkbox"/>	<input type="checkbox"/>		
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	<input type="checkbox"/>	<input type="checkbox"/>		
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	<input type="checkbox"/>	<input type="checkbox"/>		
e. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>		

12. Impact on Critical Environmental Areas The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <i>If “Yes”, answer questions a - c. If “No”, go to Section 13.</i>				<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur		
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>		
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>		
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>		

13. Impact on Transportation
 The proposed action may result in a change to existing transportation systems. NO YES
 (See Part 1. D.2.j)
If "Yes", answer questions a - g. If "No", go to Section 14.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action will degrade existing transit access.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: <u>Project has approval for 168 units- Current project will not significantly impact existing traffic network.</u>		<input type="checkbox"/>	<input type="checkbox"/>

14. Impact on Energy
 The proposed action may cause an increase in the use of any form of energy. NO YES
 (See Part 1. D.2.k)
If "Yes", answer questions a - e. If "No", go to Section 15.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Other Impacts: <u>Project has approval for 168 units- proposed building square footage reduced from original approval Project square footage reduced by approximately 10%</u>		<input type="checkbox"/>	<input type="checkbox"/>

15. Impact on Noise, Odor, and Light
 The proposed action may result in an increase in noise, odors, or outdoor lighting. NO YES
 (See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in routine odors for more than one hour per day.	D2o	<input type="checkbox"/>	<input type="checkbox"/>

d. The proposed action may result in light shining onto adjoining properties.	D2n	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)
If "Yes", answer questions a - m. If "No", go to Section 17.

NO

YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	<input type="checkbox"/>	<input type="checkbox"/>
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	<input type="checkbox"/>	<input type="checkbox"/>
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	<input type="checkbox"/>	<input type="checkbox"/>
m. Other impacts: _____ _____			

17. Consistency with Community Plans The proposed action is not consistent with adopted land use plans. <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (See Part 1. C.1, C.2. and C.3.) <i>If "Yes", answer questions a - h. If "No", go to Section 18.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, E1b	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Other: <u>Proposed project requires a zoning text amendment to permit non-age restricted housing. This change would affect properties located within the OP-2 Zoning District (315+acres).</u>		<input type="checkbox"/>	<input type="checkbox"/>

18. Consistency with Community Character The proposed project is inconsistent with the existing community character. <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (See Part 1. C.2, C.3, D.2, E.3) <i>If "Yes", answer questions a - g. If "No", proceed to Part 3.</i>			
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

Full Environmental Assessment Form
Part 3 - Evaluation of the Magnitude & Importance of Project Impacts

3.0 INTRODUCTION

Part 3 of the Environmental Assessment Form (EAF) examines the potential environmental impacts that might be expected to result from the proposed zoning text change that would allow for the construction and operation of the proposed project relative to the importance of identified potential impacts (i.e., their environmental significance). The proposed project would be a modification of a prior approved project at the subject site. The EAF Part 3 narratives and the accompanying studies and exhibits provide expanded impact assessments for issues of concern that are identified in EAF Part 2 for this project proposal, or were identified by the Town for further review.

While no potentially large or significant adverse impacts to the environment have been identified to result from the proposed project, the following information supplements and supports the answers in the EAF Parts 1 and 2 by describing how the project will be designed with integral components intended to minimize or avoid potential impacts in identified areas of concern.

3.1 IMPACT ON LAND USE, ZONING AND PUBLIC POLICY

Existing Conditions – Land Use

The project site is located in a mixed-use corporate park setting in the Town of Southeast, Putnam County, New York. Immediately surrounding the property is a variety of land uses, including a synagogue, a nursing home, a senior residential development, a single family residence, lands of the Mount Ebo Water Works Company and several warehouse/industrial buildings. Also in the local vicinity is additional multi-family housing, a post office, and a Town park.

The land parcels in this area of Southeast are generally irregularly shaped, clearly the result of agricultural holdings in years past and somewhat affected by the undulating topography

Existing Conditions – Zoning

Current zoning is designated as OP-2 Office Park district, which covers an area at the northerly Town line, on the east side of NYS Route 22 and 1400 feet deep. Permitted principal uses in the OP-2 district are primarily related to office, warehouse and light manufacturing activities. Special permit uses include restaurant, recreation, hotel/motel, and high density multi-family housing in the form of senior housing.

Adjoining zoning in the local vicinity is R-60 Residence and RC Rural Commercial districts along the west side of NYS Route 22, R-160 Residence district to the east, and C-1 Commercial to the north (C-1 is in the Town of Patterson). Permitted principal uses in the R-60 district are single-family detached dwelling and government facility; special permit uses include schools, nursery school, day care, convalescent and nursing home, recreation, library, cemetery, equestrian, place of worship, farm, greenhouse, and nursery. Permitted principal uses in the RC district are office, restaurant, and recreation; special permit uses include bed & breakfast, cemetery, conference center, equestrian, farm, hotel, institution, nursery and research labs. Permitted principal uses in the R-160 district are single-family detached dwelling, farm, greenhouse, nursery, and government facility; special permit uses include schools, nursery school, convalescent and nursing home, recreation, library, cemetery, equestrian, and place of worship.

Existing Conditions – Public Policy

In 2002, the Town of Southeast added a Special Permit use to the OP-2 Zone, for Senior Housing. The Special Permit allowed the Town to approve several Senior Housing projects in Town of which one, Stonecrest was approved within Mount Ebo Corporate Park. The project site was also approved for senior housing under this Special Permit. Construction was started and all the stormwater facilities constructed but financing for an 100% senior housing project became unavailable and continues to be so at this time.

In 2014, the Town of Southeast completed its update to the Town's Comprehensive Plan. The 2014 Comprehensive Plan addresses the need for housing diversity as one of its main themes-

Section 1-3 Vision/Page 1-4 " Provide a diversity of Housing opportunities" "The Town seeks to maintain its existing supply of housing, including its variety of price ranges, to accommodate residents of all income groups..... New housing styles and type should reinforce the Town's rural qualities."

In Section 6.1, Background, the 2014 Comprehensive Plan acknowledged-

Page 6.1/6.2 “Southeast has historically provided an appropriate mix of housing opportunities for all of its residents, especially first-time homebuyers, empty-nesters, and people of modest or fixed incomes. In fact, Southeast has provided a wider range of housing options and values when compared to others communities in Putnam County or to south in Westchester County. This diversity has attracted many new residents and businesses to Southeast and has enabled the Town and its economy to grow.”

And on Page 6-2 reinforces the need for a diversity of housing options-

Page 6-2 “As such, Southeast should continue to provide a balanced housing climate with a diversity of housing options.”

The approved project relates to the need for Senior Housing which was highlighted in previous Comprehensive Plans. Senior Housing remains a need for the Town but as noted above is not the only the type of housing needed. The proposed project provides for an existing resident group that is unserved by the current housing provided in Town by providing priority waiting lists for veterans, persons with disabilities and town employees, etc. Diversity of housing is not just a function of price but whether or not you can get access to those units. This priority unit approach is unique to this project. Affordable housing units are also provided to serve this special occupancy component but that is not the main focus of this text change.

The 2014 Comprehensive Plan acknowledges the continued need in town for senior housing and includes a note of caution regarding text changes for senior housing-

Page 6-7 “Encourage provision of senior housing in appropriate locations in either residential or commercial districts. Specifically define “senior housing” to ensure that the needs of seniors are met while minimizing the potential for senior housing to revert to standard market rate multifamily housing”

Although this would seem to be appropriate in this case, the discussion in the Comprehensive Plan is directed to the change over time of a defined, approved and built senior housing project into something else as time progresses. For example, the senior housing component at Stonecrest is protected as senior housing using a 99 year arrangement with the Putnam County Housing Authority. A similar arrangement to secure the diversity of housing under the proposed text change would apply for this project as well.

The Comprehensive Plan does not include any specific recommendations for the site except that it is noted that the project site is identified in the 2014 Comprehensive Plan as vacant residential in Figure 3-4.

Proposed Conditions – Land Use

The proposed project remains similar to the approved project in its physical layout and overall use as a multifamily residential complex. See the discussion later in this chapter regarding the proposed zone text change and other eligible properties.

Proposed Conditions – Zoning

The proposed project remains similar to the approved project in its physical layout and overall use as a multifamily residential complex. See the discussion later in this chapter regarding the proposed zone text change and other eligible properties

Proposed Conditions – Public Policy

The Proposed text change addresses need for diversity of housing opportunities

The proposed zone text allows the creation of a zone and private agreements to identify and target priority special occupants whose housing requirements are not currently identified and whose needs are not being met as part of the current housing stock. The proposed text change does not exclude seniors and as such still provides for senior housing. However, the identified special occupants provide critical services within town which enhance the quality of life (Fire Department, school employees, town employees, first responders). In addition, the proposed project Community Benefit Plan also provides for persons with disabilities, a resident group with limited options in the Town of Southeast. The text change also mandates a portion of the units to meet the requirements for affordable housing. All these elements create the opportunity for a project to meet the needs of multiple and diverse groups which clearly meet the requirement of the Town's 2014 Comprehensive Plan.

The adoption of the text change can be relied upon by the Town of Southeast as a measure undertaken by the Town of Southeast, consistent with its Comprehensive Plan, to provide for multifamily multiunit rental housing in the abstract and affordable housing units as part of a comprehensive approach to provide diversity of housing and affordable/workforce housing with local priority preferences as proposed. This unique opportunity for housing diversity is a very significant benefit to the Town of Southeast.

Development Comparison on Other Eligible OP-2 Parcels

Since the proposed zoning text change would potentially apply to all other property in the Town that is zoned OP-2, and potentially affect the development capability of that land, analysis was undertaken to establish the potential development yield of other applicable tracts. This information can then be used to look at possible growth in area population (specifically the school-aged population) and growth in area traffic.

Three scenarios were evaluated: commercial yield as per the current zoning; age-restricted multi-family residential yield as per the current zoning; and, non-age-restricted multi-family residential yield per the proposed zoning.

There are a limited number of tracts in the Town of Southeast to which the proposed zoning could be applied, since it includes criteria that would limit its application within the existing OP-2 district. The revised proposed zoning text stipulates that multi-unit multi-family housing may be permitted by the Town Board in the OP-2 District, subject to the following requirements:

- A. Such site shall be accessed by a State, County, or Town road and shall be adjacent to a residential zone.
- B. Such site shall be serviced by an existing central sewage treatment plant, a central water supply and a central fire protection system.

C. Notwithstanding the minimum lot size requirements for the OP-2 District set forth in the Commercial Zoning Schedule, any site proposed for multi-unit housing shall have a minimum lot size of 25 acres within the Town of Southeast

D. The dwelling units included as part of the multi-unit multi-family housing development shall be subject to special marketing and occupancy restrictions.

When the zone text change was first discussed, the limiting area threshold was 15 acres. This has since changed to 25 acres but the original property identification was more comprehensive. Therefore, Table 3.1-2 at the end of this section lists the nine tracts by Tax Map ID that comprise 15 acres or more and various other criteria that affect their applicability to exercise the proposed zoning text. As presented in the table, Study Area I(Lands of Civetta) is presently developed (possibly underdeveloped) but this parcel is too small and does not have access to existing central sewer services, another criterion for the proposed special permit use. Study Area II(the project site) is the subject Barrett Hill parcel. Study Area III contains active water supply facilities for the Mount Ebo Corporate Park, including a well field, and thus is unavailable for development. Study Area IV (Stonecrest) encompasses an existing senior housing project that fully occupies the site and is also unavailable for development. Study Area V (Powers Fastners) houses an existing light manufacturing business which is in active use and is unavailable for development and the lot is too small. Study Area VI includes the two large, vacant parcels that has been approved for senior housing and has most of the utilities already constructed. It is a potential candidate for the proposed special permit use with respect to lot size. Study Area VII is lands of the Terravest Waterwater Treatment facility and is unavailable for other development. Study Area VIII (Ace Endico) is at present largely built out with a commercial business that are in active operation. This tract is unavailable for development under the proposed special permit use. Study Area X (Terravest Phase 2 lots 2 and 3) includes two commercially approved parcels which recently sold to Ace Endico. These lots are too small, even when combined to be eligible. Lastly, Study Area IX encompasses the remaining lot in Terravest Phase 2 which is too small to be eligible.

For the purposes of an evaluation of the potential cumulative impacts that could occur with the application of the proposed special permit use for a non-age-restricted multi-family residential project, compared to a commercial project (under the current zoning) and an age-restricted multi-family residential project under the current zoning, Study Areas II, VI are further studied in sections 3.4 and 3.5.

Study Area II is the Barrett Hill property. Study area VI is the approved senior housing complex at the Terravest Corporate Park off of Route 312. The table below lists the projected numbers of potential multi- family dwelling units and commercial square feet for each area. These estimates are then used in evaluating potential effects on traffic and the school system as described in the sections that follow.

Table 3.1-1 Estimated Development Yield				
Study Area	Tax Map ID (S-B-L)	Combined Acreage	Potential MF Dwelling Units	Potential Commercial Use (square feet)
II	46.-5-2	29.0	168 ¹	144,840 ²
VI	45.-1- 39.2 and 39.4	65.19	60 ¹	158,270 ²
Totals			228 units	303,110 sf
¹ Number approved for the parcel.				
² Number calculated based on scale of tract				

Avoidance or Minimization of Potential Impacts

Much like the special permit approval granted to the approved plan, the applicant submits that the instant application fulfills the following conditions:

- The proposed use is in such location and is of such size and character that it will be in harmony with the appropriate and orderly development of the surrounding district and will not be detrimental to the immediate site or adjacent properties;
- The location and size of the proposed use, the nature and intensity of operations involved in or conducted in connection therewith, its site layout, and its relation to access streets will be such that both pedestrian and vehicular traffic to and from the use and the assembly of persons in connection therewith will not be hazardous;
- The proposed exterior appearance of the buildings will not adversely affect the development and use of adjacent land and buildings; and
- The proposed use will not require such additional public facilities or services or create fiscal burdens upon the Town significantly greater than those which characterize uses permitted as of right.

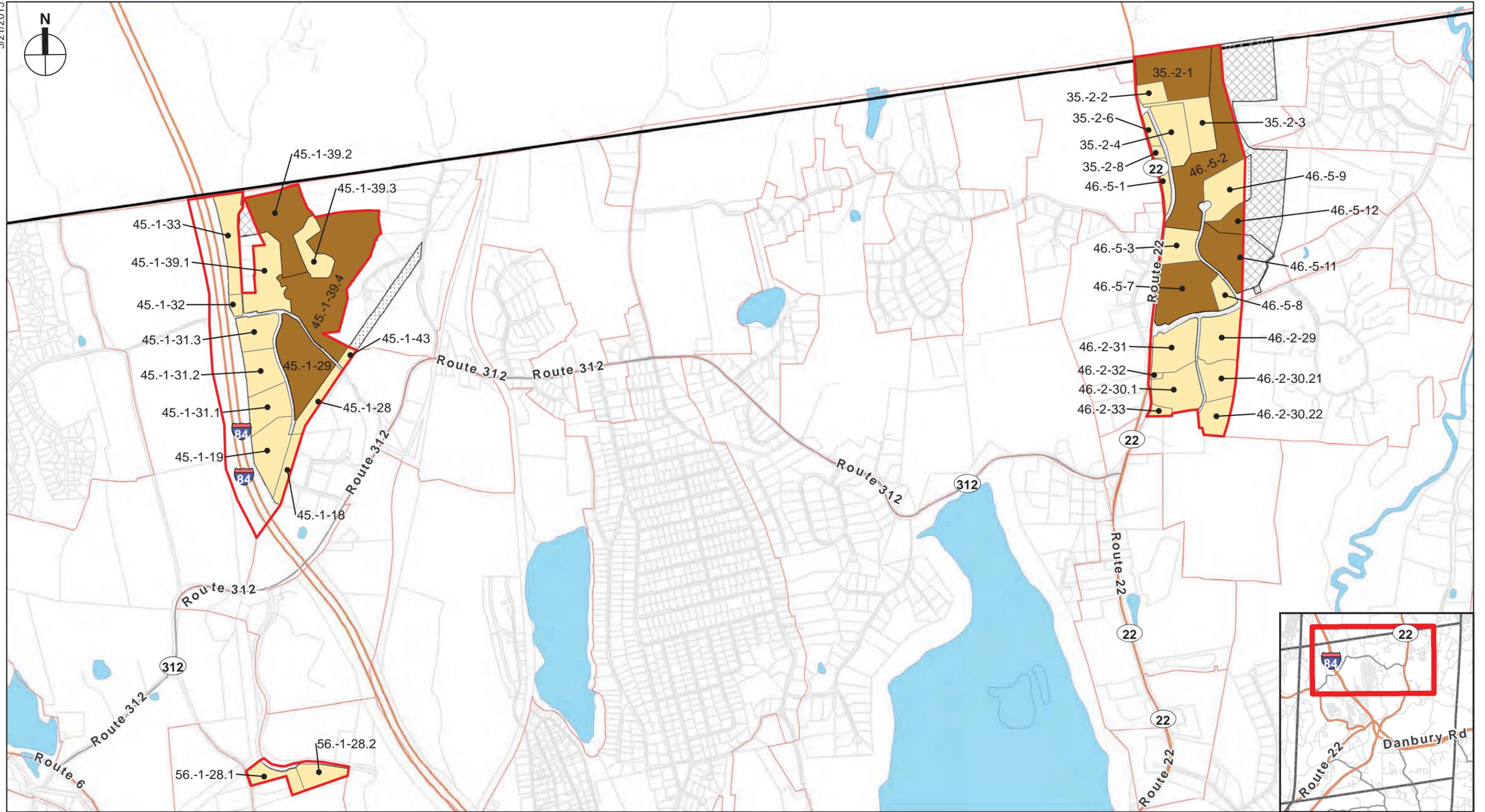
In addition, it should be noted that even though the property identified above may be eligible for the zone change, it would need to submit an application for such which would require a modification to the approved Environmental Impact statement and is subject to a thorough review by the Town Board and Planning Board.

Table 3.1-2

Developable Properties in OP-2 District and Over 15 Acres (including combined adjacent parcels)

Study Area	Tax ID	Owner	Property Address	Zoning	Acres	Land Use	Potential developable acres*	Sewer & Water Avail?	School District	Status for Evaluation	
I	35.-2-1	Civetta, et al	2-10 Mount Hope Ln	OP-2	19.29	Resl/farm use (4 existing homes)	11.57	N not in service area	Brewster Central	NOT ELIGIBLE FOR CONSIDERATION - No Sewer, Lot too small	
							(assuming its redeveloped)				
II	46.-5-2	Barrett Hill Assoc LLC	41 Mount Ebo Road N ("Mount Ebo Lot 6")	OP-2	29.02	Vacant (Approved for 168 Sr units) "Barrett Hill". Adj WWTP & stw drainage installed, indiv wells.	15.10	Y private service area	Brewster Central	To Be Evaluated	
							(actual per approved plans)				
III	46.-5-12	Mt Ebo Water Works Inc	36 Mount Ebo Road N	Split zone w portion in OP-2	46.30	Water supply facilities, private, well field	Developed	Y private service area	Brewster Central	NOT ELIGIBLE FOR CONSIDERATION - already has an active use	
IV	46.-5-11	WB Stonecrest Assoc., LLC	Stonecrest Dr	Split zone w portion in OP-2	19.29	Resl "Stonecrest Apartments"	Developed	Y private service area	Brewster Central	NOT ELIGIBLE FOR CONSIDERATION - already has an active use, Lot too small	
V	46.-5-7	Stanley Tools, formerly Power Fasteners Inc.	11 Doansburg Rd	OP-2	19.05	Developed & operating commercial site	Developed	Y private service area	Brewster Central	NOT ELIGIBLE FOR CONSIDERATION - already has an active use. Lot too small	
VI	45.-1-39.2	LAD Family Investment LLC	70 Holmes Rd	Split zone w portion in OP-2	21.99	Vacant land (Approved for 44 Sr Units) Both properties approved as "Terravest Senior Housing"	44	Y private service area	Brewster Central	To be Evaluated	
							as Senior housing				
	45.-1-39.4	LAD Family Investment LLC	55 Zimmer Road	OP-2	43.20	WWTP installed, wells installed, Stormwater installed	16				
VII	45.-1-39.3	LAD Family Investment LLC	61 Zimmer Rd	OP-2	7.44	Water supply facilities, private	Developed as WWTP			NOT ELIGIBLE FOR CONSIDERATION - Lot too small, has active use	
VIII	45.-1-29	Putnam County IDA (Ace Endico)	80 International Blvd	OP-2	19.46	Developed with multiple buildings & businesses	Developed	Y private service area	Brewster Central	NOT ELIGIBLE FOR CONSIDERATION - already has an active use, Lot too small	
IX	45.-1-31.1	LAD Family Investment LLC	91 International Blvd	OP-2	8.92	Vacant land (Approved for +16,000sf)		Y private service area	Brewster Central	NOT ELIGIBLE FOR CONSIDERATION - lot too small	
							Approved "Terravest Corp Park" office/ warehouse use Adj WWTP & stw drainage already installed, indiv wells.				
X	45.-1-31.3	Ace Endico	71 International Blvd	OP-2	7.92	Vacant land (Approved for +62,056sf)		Y private service area	Brewster Central		
	45.-1-31.2	Ace Endico	81 International Blvd	OP-2	8.77	Vacant land (Approved for +41,850sf)					
							(Combined land 16.67 acres)				

Compiled by: Tim Miller Associates, Inc. 6/29/15



- Municipal Boundary
- OP-2 Zoning District
- Zoning District Boundary
- Parcels Within OP-2 Zoning District**
 - Less Than 15 Acres
 - Greater Than 15 Acres
- Parcels Partially Within OP-2 District**
 - Less Than 15 Acres
 - Greater Than 15 Acres

0 2,000 Feet

Figure 3.1-1: Parcels Within OP-2 Zoning District

3.2 IMPACT ON LAND, PLANTS & ANIMALS

Existing Conditions - Land

The project site is located in a suburban setting in the Town of Southeast, within the east-central area of Putnam County, New York. It consists of sloping topography that falls generally from east to west in a region of undulating topography. The highest point of the property at approximately 726 feet in elevation (north of the end of Mount Ebo Road North) slopes down to the west to approximately 660 feet in elevation at Old Route 22.

Generalized topography of the site and in the surrounding area can be seen on the USGS topographic map in Figure 1, Site Location Map.

The existing slopes on the southern portion of the property (the approved development area) are substantially the result of construction -- the initial mass earthwork that was begun and then ceased for the approved project. A stormwater basin and retaining walls were built in the southwestern corner of the site, and a terrace for the building pads for several buildings was constructed above the southwest basin. Additionally, stormwater facilities (a sand filter bed, a stormwater basin and a stormwater maze), a retaining wall and a terrace for several buildings were constructed at the north end of the approved development area. These features are outlined on accompanying Figures 3.2-1 and 3.2-3.

The site is 29.02 acres in size, approximately 16.5 acres of which was cleared and regraded, and is currently partially developed (the aforementioned mass grading, stormwater facilities and retaining walls) and the vegetative cover consists largely of volunteer herbaceous and woody species. The natural soils on the site are characteristic of the region -- predominantly Paxton, Woodbridge and Palms soil types which developed on the property from glacial till parent material. The area that was subject to construction is located in the mapped Paxton and Woodbridge soils and due to the mixing of soil material in the excavation and grading process, these areas now are characteristic of Urban soils.

There are no unique or unusual geological features on the project site.

A description of the Town-regulated on-site wetland is provided in section 3.3. There are no State regulated wetlands on the site.

Existing Conditions - Plants & Animals

The project site has been subject to recent construction disturbance over the area of approved development, including clearing and mass grading, which typically results in migration of able animal species out of the construction area to nearby areas of like habitat. Prior to that disturbance the 16.5-acre development area consisted primarily of upland meadow and brushland (evidence of a prior disturbed site) and at the time of the 2005-06 environmental review, no known rare or endangered plant or animal species or significant habitat were identified at the project site. The potential for the existence of species of concern¹ on the site is considered small for these reasons.

However, the NYSDEC EAF Mapper used to generate the EAF Part 1 identifies the site as sensitive to threatened or endangered species (EAF Part 1, item E.2.o., page 12), as the site

¹ "Species of concern" is used generically in this narrative referring to any listed rare, threatened or endangered plant or animal species, or species of special concern or conservation need.

falls in the vicinity (within one-half mile) of a significant natural community mapped at NYSDEC wetland BR-14, which is off-site and to the east (based on the data in NYSDEC's Environmental Resource Mapper). This resource The project site does not contain any species of plant or animal that is listed by New York State as rare or as a species of special concern (item E.2.p., page 12).

The proposed development area of the project site does not contain any mapped significant natural community. The EAF Mapper identifies two natural communities in the vicinity of the project site (item E.2.n.i., page 12). These areas are off of the site -- rich graminoid fen of 4.25 acres, and red maple-hardwood swamp of 1858 acres, refer to the Bog Brook Unique Area, a State managed wildlife management area located west of Route 22 and a portion of the Great Swamp to the east, respectively.

Given the potential sensitivity of the site as described above, an inquiry has been sent to the NY Natural Heritage Program to ascertain whether the current State files include any more detailed records of the presence of any rare or endangered plant or animal species or significant habitat on or in the vicinity of the project site. (A response is expected in early August, which will be forwarded to the Town along with supplementary material, if appropriate, to describe any species of concern.)

The EAF Part 1 identifies some of the typical wildlife species that occupy or are expected to use the site at present (item E.2.m., page 12). These species are commonly found on previously disturbed sites and in developed areas in the region and their presence in the site area is not expected to be significantly impacted by further construction disturbance as they are able to move to nearby areas either temporarily or permanently. The extent of past site disturbance is reflected in the habitat potential and species that are expected to be observed on the parcel. The overall quality of the wildlife habitat for less common species is compromised by the presence of nearby development to the north, east and south and the Route 22 corridor to the west. The existing meadow/brushland overgrowth is not unique to Putnam County nor is this land known to support habitat for unique species.

Avoidance or Minimization of Potential Impacts

Land and Land Cover

The EAF Part 1 prepared for the current project lists the land cover types on the project site in item E.1.b. (EAF page 9). The Current Acreage column refers to acreages in the approved plan; the Acreage After Project Completion column refers to acreages in the amended plan. As described in this Part 3, the current site plan has been designed such that there will be no change in the land cover that was approved: no additional impervious surfaces; no wetland disturbance; and no change in the post-development areas of meadow, lawn and landscaped areas, including the stormwater facilities.

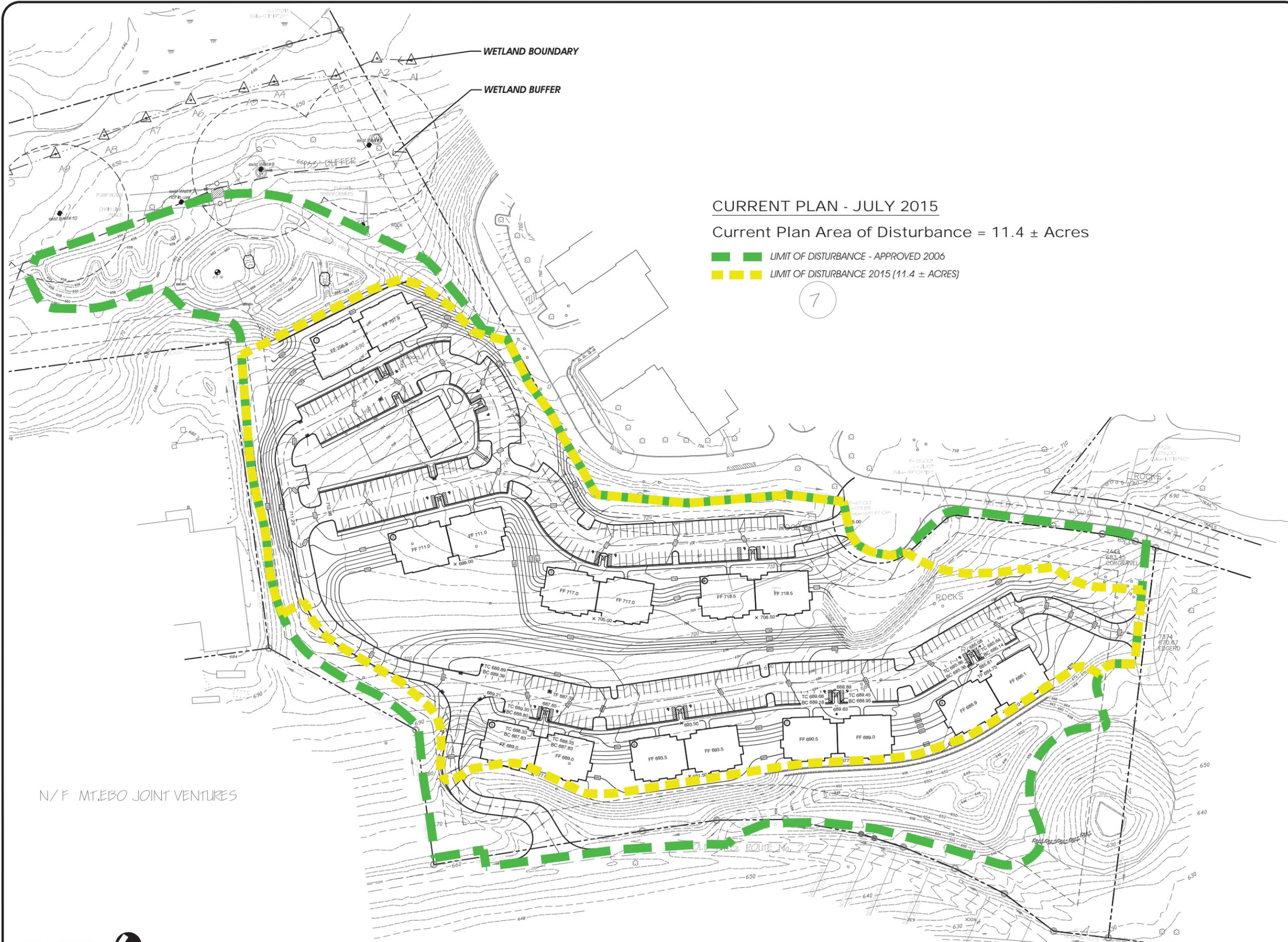
With the mass grading completed, no fill materials will need to be imported or exported to build the amended project, nor will there be any earth material processing (i.e. rock crushing) on-site.

As with the approved plan, the amended project drawings will include grading and erosion/sediment control plans and construction details along with the new architectural designs necessary to properly construct the project at this site. Appropriate site construction sequencing and implementation and maintenance of erosion controls in accordance with NYSDEC General Permit requirements can be expected to minimize adverse effects on the soils and topography.

The potential for soil erosion and downstream sedimentation will be controlled through the use of temporary soil erosion and sediment control measures designed and installed in accordance with the New York State Department of Environmental Conservation (NYSDEC) *"New York Standards and Specifications for Erosion and Sediment Control"* (latest edition), *NYCDEP Rules and Regulations*, and Town of Southeast requirements. A project-specific soil erosion and sedimentation control plan will amend the stormwater pollution prevention plan (SWPPP) for the project. Like the approved project, the areas of soil disturbance and grading to construct the amended plan will ultimately be stabilized by pavement, buildings, engineered slope stabilization if needed (such as retaining walls), and conventional landscape treatments.

Plants & Animals

The site is not known to contain areas of significant or unusual wildlife habitat, or populations of species of concern, that would be impacted by the development project. Since the predominant animal species that use the site (item E.2.m., page 12) are able to relocate, the proposed action is not anticipated to substantially interfere with their nesting/breeding, foraging, or overwintering habitat. Should the response to the inquiry sent to the NY Natural Heritage Program reveal particular species of concern at the site, the project will need to incorporate appropriate measures to avoid or minimize the project impact in strict accordance with State and Federal regulations. For example, although there has been no indication that this site may provide habitat or temporary roosting sites for the Indiana Bat or Northern Long Eared Bat, there is general concern in Putnam County regarding sites used by these species. Avoidance of impact to these species typically necessitates limiting the timing of the clearing of trees used by the species for roosting. (In this case, the project development area was entirely cleared and graded within the past ten years, so the area to be utilized by the current project is devoid of older trees that might be used by bats for roosting.)



CURRENT PLAN - JULY 2015
 Current Plan Area of Disturbance = 11.4 ± Acres

- LIMIT OF DISTURBANCE - APPROVED 2006
- LIMIT OF DISTURBANCE 2015 (11.4 ± ACRES)

7

REVISIONS	
NO.	DESCRIPTION
1	
2	

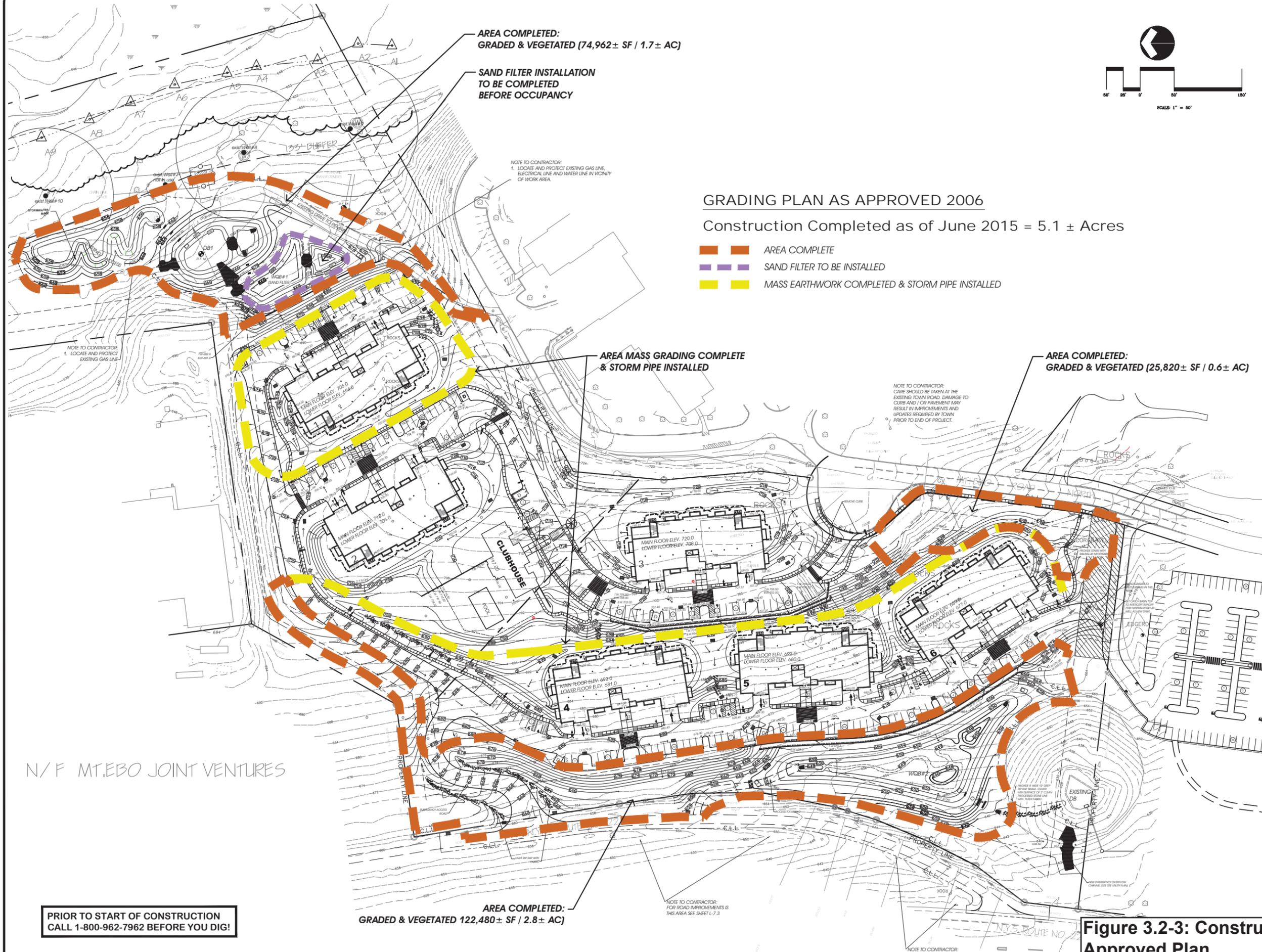
.....
RIBBO ASSOCIATES, L.L.P.
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 PRINCETON, NJ 08540
 PHONE: (609) 977-8800
 FAX: (609) 977-8810

LADA, P.C.
Land Planners
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 HIGHTSTOWN, NJ 08520
 PHONE: (609) 977-8800
 FAX: (609) 977-8810

GRADING PLAN
BARRETT HILL
MOUNT EBO ROAD NORTH
TOWN OF SOUTHEAST, NY 10509

DESIGNED	T.H.
DRAWN	E.F.
CHECKED	C.W.
APPROVED	T.H.
SCALE	1" = 50'
DATE	XX-XX-XX

Figure 3.2-2: Area of Disturbance - Amended Plan



AREA COMPLETED:
GRADED & VEGETATED (74,962± SF / 1.7± AC)

SAND FILTER INSTALLATION
TO BE COMPLETED
BEFORE OCCUPANCY

NOTE TO CONTRACTOR:
1. LOCATE AND PROTECT EXISTING GAS LINE,
ELECTRICAL LINE AND WATER LINE IN VICINITY
OF WORK AREA.

GRADING PLAN AS APPROVED 2006

Construction Completed as of June 2015 = 5.1 ± Acres

- AREA COMPLETE
- SAND FILTER TO BE INSTALLED
- MASS EARTHWORK COMPLETED & STORM PIPE INSTALLED

NOTE TO CONTRACTOR:
1. LOCATE AND PROTECT
EXISTING GAS LINE

AREA MASS GRADING COMPLETE
& STORM PIPE INSTALLED

AREA COMPLETED:
GRADED & VEGETATED (25,820± SF / 0.6± AC)

NOTE TO CONTRACTOR:
CARE SHOULD BE TAKEN AT THE
EXISTING TOWN ROAD. DAMAGE TO
CURB AND / OR PAVEMENTS MAY
RESULT IN IMPROVEMENTS AND
UPDATES REQUIRED BY TOWN
PRIOR TO END OF PROJECT.

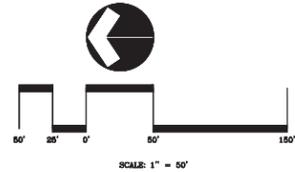
N/ F MT.EBO JOINT VENTURES

PRIOR TO START OF CONSTRUCTION
CALL 1-800-962-7962 BEFORE YOU DIG!

AREA COMPLETED:
GRADED & VEGETATED 122,480± SF / 2.8± AC)

NOTE TO CONTRACTOR:
FOR ROAD IMPROVEMENTS IS
THIS AREA SEE SHEET L-7.3

Figure 3.2-3: Construction Completed
Approved Plan



NO.	DATE	BY	DESCRIPTION
1	08-14-06	INTEGR	TOWN BOARD
2	09-18-06	INTEGR	CONSTRUCTION
3	12-27-06	INTEGR	CONSTRUCTION
4	04-20-07	INTEGR	CONSTRUCTION
5	04-27-07	INTEGR	CONSTRUCTION

.....
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PHONE: 609-527-8800
FAX: 609-527-8801

LADA, P.C.
Land Planners
100 W. MAIN ST. SUITE 200
ROCKY HILL, CT 06067
PHONE: 860-265-4444

GRADING PLAN

MT. EBO CORPORATE PARK-LOT 6
MOUNT EBO ROAD NORTH
TOWN OF SOUTHEAST, NY 10509

DESIGNED	T.H.
DRAWN	E.P.
CHECKED	T.H.
APPROVED	
SCALE	1" = 50'
DATE	01-27-06



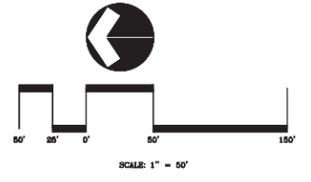
APPROVED WETLAND LIMIT

APPROVED BUFFER AREA

WETLAND LIMIT AS APPROVED 2006

APPROVED WETLAND LIMIT

APPROVED BUFFER AREA



NOTE TO CONTRACTOR:
1. LOCATE AND PROTECT EXISTING GAS LINE,
ELECTRICAL LINE AND WATER LINE IN VICINITY
OF WORK AREA.

NOTE TO CONTRACTOR:
1. LOCATE AND PROTECT
EXISTING GAS LINE.

NOTE TO CONTRACTOR:
CARE SHOULD BE TAKEN AT THE
EXISTING TOWN ROAD. DAMAGE TO
CURB AND / OR PAVEMENT MAY
RESULT IN IMPROVEMENTS AND
UPDATES REQUIRED BY TOWN
PRIOR TO END OF PROJECT.

NOTE TO CONTRACTOR:
FOR ROAD IMPROVEMENTS IN
THIS AREA SEE SHEET L-7.3

NOTE TO CONTRACTOR:

N/ F MT.EBO JOINT VENTURES

PRIOR TO START OF CONSTRUCTION
CALL 1-800-962-7962 BEFORE YOU DIG!

NO.	DATE	BY	DESCRIPTION
1.	08-14-06	INTEGR	TOWN BOARD
2.	09-18-06	TOWN BOARD	
3.	12-27-06	CONSTRUCTION	
4.	04-20-07	CONSTRUCTION	
5.	04-27-07	CONSTRUCTION	

.....
RIBBRO
ASSOCIATES, L.L.P.
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.....

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FAX: (412) 271-1111

GRADING PLAN

MT. EBO CORPORATE PARK-LOT 6
MOUNT EBO ROAD NORTH
TOWN OF SOUTHEAST, NY 10509

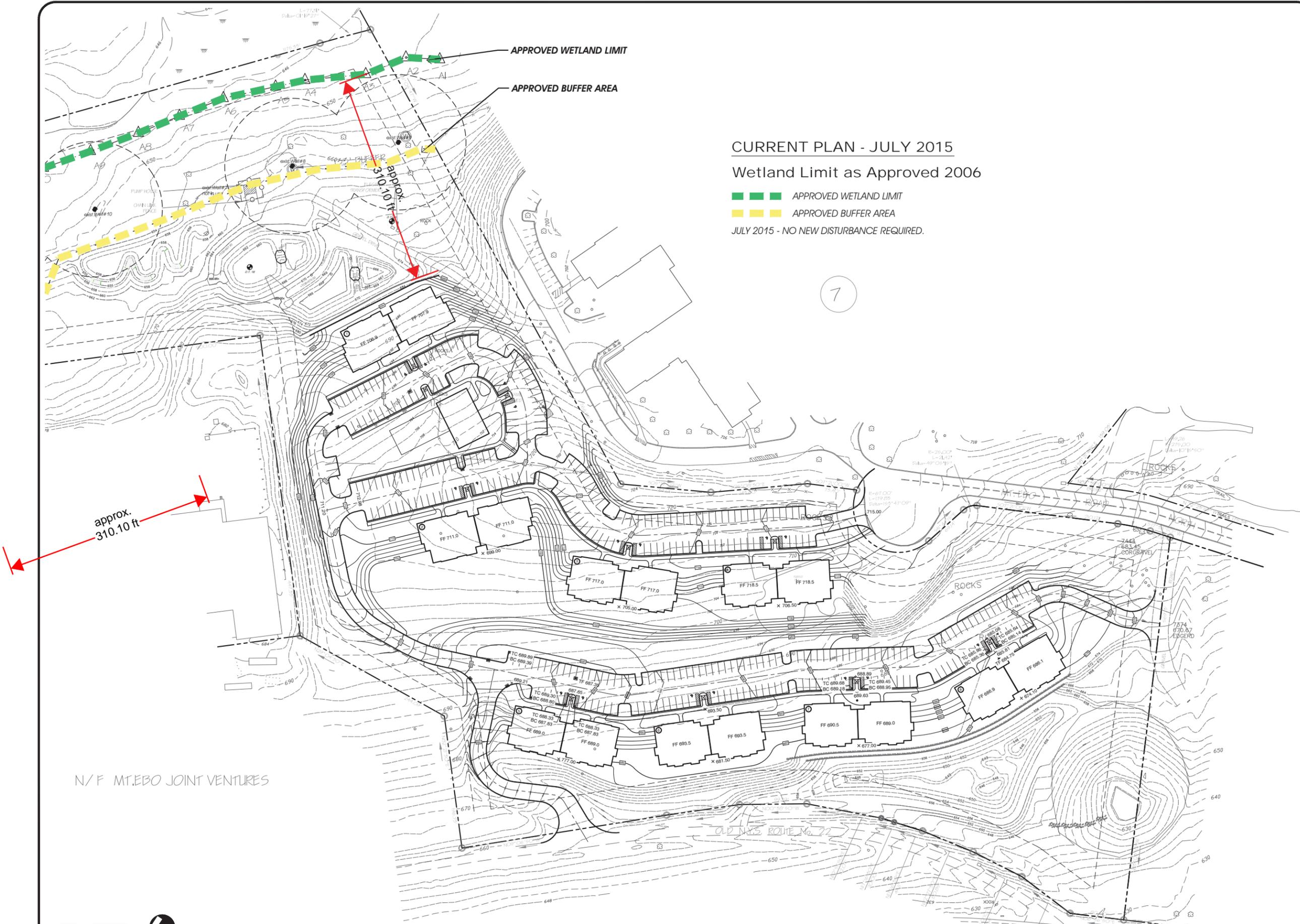
DESIGNED	T.H.
DRAWN	E.P.
CHECKED	T.H.
APPROVED	
SCALE	1" = 50'
DATE	01-27-06

Figure 3.2-5: Wetland & Buffer Limits
Approved Plan

CURRENT PLAN - JULY 2015
 Wetland Limit as Approved 2006

- APPROVED WETLAND LIMIT
 - APPROVED BUFFER AREA
- JULY 2015 - NO NEW DISTURBANCE REQUIRED.

7



REVISIONS	
NO.	DESCRIPTION
1	
2	

.....
 BIBBO
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 FAX: 609.426.4444

GRADING PLAN
 BARRETT HILL
 MOUNT EBO ROAD NORTH
 TOWN OF SOUTHEAST, NY 10509

DESIGNED	T.H.
DRAWN	E.P.
CHECKED	C.W.
APPROVED	T.H.
SCALE	1" = 50'
DATE	XX-XX-XX

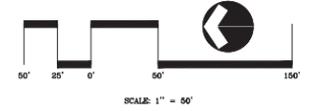


Figure 3.2-6: Wetland & Buffer Limits Amended Plan

3.3 IMPACT ON WATER RESOURCES (SURFACE WATER and EXISTING PERMITS)

Existing Conditions - Stormwater

The project site is located in a mixed-use corporate park setting. Immediately surrounding the property is a variety of land uses, including a temple to the south, two senior residential developments to the east and southeast, and an industrial supply facility to the north. Also in the local vicinity is additional multi-family housing, a post office, a Town park, and a water supply parcel. The site is bordered on the west by Old Route 22 and further to the west by Route 22 and commercial and undeveloped property. An aerial photo of the site and environs is provided as Figure 2.

The project site occupies a low north-south trending ridge with surface water drainage flowing to the west in the western portion of the site and towards the east in the eastern portion of the site. No perennial streams or watercourses are located on the site. From the bulk of the proposed development area, surface water flows via sheet flow towards the west to culverts at Old Route 22 and Route 22 and eventually flows to an unnamed tributary to the Bog Brook Reservoir. Surface water flow in the eastern and northern portions of the site flows via sheet flow towards the northeast eventually flowing through tributaries to the East Branch Croton River. The project is located within the East Branch Croton River watershed which is part of the New York City water supply system and under the jurisdiction of the New York City Department of Environmental Protection (NYCDEP).

Portions of the project site drain through the stormwater management system that was designed and built for the approved Barrett Hill project, which includes stormwater basins and a portion of the designed collection system (catch basins and piping), as further described below.

Original Approval

The residential project approved for the site in 2006 (known as “Mount Ebo Lot 6 Site Plan”) included a stormwater management plan. The Stormwater Pollution Prevention Plan (SWPPP) approved by the NYCDEP for the project provided the plan for managing site drainage, stormwater treatment facilities, and erosion control methods.

The SWPPP was reviewed by the Town, the NYCDEP and the New York Department of Environmental Conservation (NYSDEC) during the SEQRA review process. On October 10, 2006, NYCDEP approved the SWPPP. On May 9, 2007, the NYSDEC determined the SWPPP (last revised April 27, 2007) “acceptable for coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-02-01).” The approved stormwater management plan meets the requirements for water quality controls shown in Table 1 of the SWPPP.

The approved project consisted of two design points – Design Point 1 on the east side drained toward the north and Design Point 2 on the west side drained toward and connected to the detention basin which straddles the property line and is shared with the Temple Beth El site to the south. These two watershed areas were designed to capture and treat the stormwater for the proposed project to meet the requirements of the Town, NYCDEP and NYSDEC. Overall, the approved plan required 16.5 acres of disturbance (see Figure 3.2-1).

Subsequent to approvals, construction was commenced and approximately 80 percent of the rough grading of the site was completed, including complete construction of the two perimeter stormwater basins which are now fully vegetated. Areas of the site that have been graded are shown in Figure 3.2-3. Within each subwatershed of the site, Design Point 1 had ± 1.89 acres of impervious surface and Design Point 2 had ± 4.09 acres of impervious surface for a total impervious coverage of ± 5.98 acres or $\pm 260,489$ square feet.

The subwatershed for Design Point 1 is ± 4.79 acres in size and includes three stormwater practices -- a sand filter, a micropool extended detention pond (P-1) and a vegetated swale. The detention pond and the vegetated swale have been installed and are fully vegetated. The sand filter area has been graded but installation of the sand filter medium is part of the last phase of construction. The subwatershed for Design Point 2 is ± 10.28 acres in size and includes the detention pond that serves both this project and the temple and a micropool extended detention pond (P-1). Both these basins have been installed and pipes extended into the site. These stormwater management facilities are fully vegetated and functioning properly.

The majority of the approved area of disturbance has been rough graded. The proposed modified project has been designed to be constructed entirely within the area approved by the Town, NYCDEP and NYSDEC for the original project. The limits of disturbance for the current project, which encompass 11.4 acres, are shown in Figure 3.2-2.

A Notice of Intent (NOI) was filed prior to the beginning of construction and is still active for the project. In accordance with the stormwater General Permit requirements, the site was fully stabilized and vegetated when the construction went inactive. In accordance with the NYSDEC permit, a letter to reactivate the project under the original approval is required when construction is planned to resume.

Existing Conditions - Wetlands

The 2006 approved plan identified a Town-regulated wetland along the eastern boundary and a regulated buffer. (See Figure 3.2-5) The wetland occupies a relatively narrow natural drainage channel defined by the upland slopes on either side and drains off-site toward the north. Overland flow provides hydrology to this isolated wetland. The wetland is not regulated by the NYSDEC, nor by the US Army Corps of Engineers.

The wetland was flagged and the 133' buffer was calculated using the "additional buffer requirements" defined in the Town's Wetland Regulations. The project was designed to protect the wetlands and there was no wetland or buffer disturbance required for the project. The closest construction to the wetland was for the stormwater facilities and utilities outside the buffer area on the east side of the project. These facilities have been installed and no new disturbance of this portion of the site will be required other than some landscape planting and the installation of the sand filter media (see Figure 3.2-3).

The stormwater basins at the northern and southern side of the project and utility connections on the eastern portion of the site have been installed and will be used in the amended project. Given that the wetland was flagged some years ago, the site conditions were recently reviewed and determined to be substantially unchanged, since the topography of the area was not disturbed nor has the general hydrology of the area changed since the original approval. The wetland was found to still occupy the center of the narrow channel along the eastern property line. (For these reasons the original wetland boundary line is unquestionably still usable for the

purpose of identifying the sensitive resource without need (or expense) to redelineate and resurvey the wetland boundary.)

The current Town wetland regulations define a 133' protective buffer from the edge of the wetland. In this case, there will be no new disturbance of any land within approximately 250 feet of the wetland boundary to implement the amended plan. (Compare Figure 3.2-5 to Figure 3.2-6). No new soil disturbance of the permanent stormwater practices already constructed in this portion of the site (below elevation 670 on the plan) will be required other than the installation of the sand filter and some landscape planting.

Avoidance or Minimization of Potential Impacts

The currently proposed amended site plan will work entirely within the original area of disturbance so there is no additional area of disturbance required to implement the current plan. With the stormwater management basins already in place, the reduced area of site disturbance to implement the amended plan will be 11.4 acres. In addition, the project is being designed to use the same drainage areas to each design point and the total area of impervious surfaces will not exceed that of the approved SWPPP. In accordance with the NYSDEC stormwater regulations, the SWPPP will be updated for the amended plan that will validate the conclusions of the original SWPPP and preserve the original SWPPP approval.

There will be no new disturbance of any land within approximately 250 feet of the wetland boundary to implement the amended plan.

3.5 IMPACT ON THE COMMUNITY

Community Services & Fiscal Resources

The subject parcel is located in the following special districts: Brewster Central School District and Southeast Fire District.

Population

Demographic multipliers published by the Rutgers University Center for Urban Policy Research (CUPR) are used to project the future population of the Barrett Hill project. As shown in Table 3.5-1, based upon the location and bedroom count of the proposed development, a multiplier of 1.67 persons per one bedroom unit and 2.31 to 2.51 persons per two bedroom unit has been used to project a population of 349 persons for the Barrett Hill general population project that is proposed. By comparison, a multiplier of 1.8 seniors per unit yields a projected population of 302 senior citizens in the approved project. As a result of the revised zoning, a conservative projection yields a modest increase in the general population: 47 persons, of which 33 are projected to be school age children of which 26 will attend public school.

**Table 3.5-1
Population Projections
Barrett Hill**

General Population Rental Units							
Unit Type	Number of Units	Population Multiplier	Project Population	School Age Children Multiplier	School Age Population	School Age Children in Public School Multiplier	Public School Population
1 Bedroom below market rate	7	1.67	12	0.3	2	0.27	2
1 Bedroom over \$1,100 per month	57	1.67	95	0.08	5	0.07	4
2 Bedroom below market rate	10	2.51	25	0.51	5	0.45	5
2 Bedroom over \$1,100 per month	94	2.31	217	0.23	22	0.16	15
TOTAL	168		349		33		26
Senior Housing For Sale Units							
2 Bedroom over \$1,100 per month	168	1.8	302	0.00	0.00	0.00	0
TOTAL	168		302		0		0
Increase from Rezoning	0		47				26

Source: Rutgers University Center for Urban Policy Research, June 2006.

It is anticipated that a number of the Barrett Hill residents will be existing Town residents who move to Barrett Hill. Additionally, as discussed above, the proposed project is offering priority rental of 50 units (30 percent of the project) to local preference groups. It is anticipated that a

notable number of future residents of this project (conservatively on the order of 50 percent) may currently live in Southeast and thus their school aged children may currently attend the Brewster District schools. In a similar multi-family non-age-restricted project known as Bridleside, recently built by Wilder Balter Partners in the Town of North Salem, of the 75 families with 18 school-aged children who now reside there, 10 children already attended the North Salem schools, four (4) children attend school outside the district, two (2) attend private schools, one (1) attends Green Chimneys and one (1) is home schooled. As a result the analysis presented herein conservatively overstates the effect of the school-aged population in the current project proposal.

A demographic report was commissioned by the applicant that evaluates the local school services and facilities relative to the projected change in population. The demographic report is included in Appendix B. The report identifies the appropriate demographic multipliers to estimate the number of school age children based upon unit type and pricing. The report concludes there will not be a significant impact to the Brewster Schools as a result of the proposed project. This report uses a slightly different mix of units from the current proposal so the number in this section of the report is considered to be correct.

With the same number of dwelling units proposed in the current project proposal as was approved in 2006, the change in resident population mix would have little effect on community services, except perhaps on the cost of services of the local school district and on the Town's recreational facilities. The possible effects on these services are further discussed below.

Fiscal Impacts - Schools

The project site is served by the Brewster Central School District. The District includes one K-2 elementary school, one intermediate School (grades 3, 4 and 5), one middle school (grades 6, 7 and 8), and one high school.

According to information provided by the School District, enrollments have been moderately decreasing over the past 5 years. As of October 2014, 3,236 students were enrolled in the District. Table 3.5-2 below summarizes the 2014-2015 grade distributions and enrollments of the various schools within the District:

Table 3.5-2 Brewster Central School District (2014-2015 School Year)		
School	Grades Served	2014 Enrollment
JFK Elementary School	K-2	640
CV Starr Intermediate School	3-5	642
Henry Wells Middle School	6-8	725
Brewster High School	9-12	1163
Out of District Placement		66
TOTAL		3,236
Brewster Central Schools Business Office; June 2015.		

As referenced earlier, demographic multipliers for school-age children in common configurations of standard housing types in the Northeast region published by the Rutgers University CUPR, project that 0.08 to 0.16 school age children per household would be generated by a one-bedroom rental apartment and 0.23 to 0.49 school age children would reside in a two-bedroom rental apartment. Based upon these multipliers, approximately 33 students are

projected to reside in the Barrett Hill development. It should be noted that these multipliers are consistent with the 0.24 students per unit who are living in the Bridleside project discussed above. Of the 33 school age children, 26 are anticipated to attend public school.

The budget for the 2014-2015 school year for the Brewster Central School District totaled approximately \$87,877,891, of which 68,913,753 is directly related to programming costs. The portion of the budget to be raised through taxation is \$66,573,791 - approximately 76 percent of the budget is met through the property tax levy. With a current enrollment of 3,236 students, per-student programming costs are estimated to be \$21,228. Thus, the cost per student to be raised through property taxes is approximately \$16,185 per student. Projected costs to the school district would be \$420,810 annually based on an estimated 26 students that would be generated by the project.

Based on 2014-2015 tax rates for the Brewster Central School District, the approved 168-unit senior project would be projected to generate \$657,534 in annual property tax revenues to the school district. With no children the district would incur no cost of services from the senior project.

By comparison, the proposed Barrett Hill general population project will generate \$657,558 in annual property tax revenues to the school district. This is \$236,748 more revenue than the projected cost to service the project. Thus, the overall effect of the change in the project population mix on the district's budget is projected to be a smaller benefit but net positive.

Construction is projected to take up to 36 months, or three school years. The growth in student population is also expected to be distributed throughout the grade levels, resulting in an average of approximately 0.8 students per grade per year until project completion. The multi-year phasing and distribution of students will allow for the additional students to be integrated into the local schools with minimal impact.

Alternative Zoning Scenarios

Table 3.5-3 below provides a tabulation of the fiscal impact on the school district from the projected maximum yield for the Barrett Hill site under three scenarios. As discussed in section 3.1, three development scenarios were evaluated under the OP-2 zoning: commercial yield (as per the current zoning); age-restricted multi-family residential yield as per the current zoning; and, non-age-restricted multi-family residential yield per the proposed zoning. (See also Table 3.1-2.)

As can be seen in the table below, the future assessed value of the proposed non-age-restricted housing is similar to the future assessed value of the age-restricted housing and is 37 percent higher than the commercial development that could be accommodated on this site. Thus the proposed non-age-restricted housing will result in virtually no change to tax revenue to the Town, County and School District and an increase compared to the commercial alternative.

The non-age-restricted proposal also includes affordable housing opportunities and gives priority to the Town of Southeast veterans, Town employees and others as specified for a portion of the project. These accommodations are not provided by the approved age-restricted option.

Table 3.5-3 Alternative Zoning Yields for Community Impact Comparisons Barrett Hill Site			
Area of Concern	Commercial Yield per the current OP-2 Zoning	Age-Restricted Residential per the current OP-2 Zoning	Non-Age-Restricted Residential per the proposed OP-2 Zoning
Land Use			
Square Foot Commercial Use	144,840	0	0
Multi-Family Dwelling Units	0	168	168
Affordable Residential Units	0	0	17
Priority Set Aside Residential Units	0	0	50
Community Resources			
Population	0	302	349
Public School Children	0	0	26
Assessed Value	\$16,390,350	\$22,503,600	\$22,504,419
School Taxes Generated *	\$478,911	\$657,534	\$657,558
Costs to the School District	\$0.00	\$0.00	\$420,810
Net Tax Benefit	\$478,911	\$657,534	\$236,748
Source: Tim Miller Associates, Inc., 2015.			
* Based on 2014-2015 tax rates for the Brewster Central School District.			

Community Recreation

The Town of Southeast has six municipal parks to serve the needs of its 18,404 residents. According to the Town of Southeast Comprehensive Plan, the Town owns over 200 acres of parkland. With the additional population from the Barrett Hill project, this equates to approximately 10.7 acres per 1,000 population. This is above the planning standards set forth by the National Parks and Recreation Association which recommends that 5 to 8 acres of parkland be provided per 1,000 population.

Scolpino Park at 115 Doansburg Road, a 45 acre park with a pond, athletic fields, playground and picnic tables, is located within a half mile of the Barrett Hill site. Barrett Hill is located within approximately 5 miles of each of the other five municipal parks, which are primarily geared towards active recreation such as playing fields, swimming, tennis courts, baseball fields and basketball courts.

The Putnam County Veterans Memorial Park is an additional 200 acres of parkland, located approximately 8 miles from the Barrett Hill site. The park provides access to passive recreation opportunities and Veterans memorials, as well as facilities to go for a swim or play a game of horseshoes, in addition to spending time on the large playground or fishing off the floating dock. The upper park also hosts community events and fairs.

Clarence Fahnestock State Park is a 14,086 acre park covering land in Putnam and Dutchess counties, with hiking trails, Canopus Lake beach, picnic areas, scenic campgrounds, and abundant opportunities for boating, fishing, and birding. The park is also home to the Taconic Outdoor Education Center which provides high quality environmental programming and Fahnestock Winter Park which includes 15 kilometers of groomed trails for cross country skiing and snowshoeing.

According to the US 2010 Census, there are 3,729 school age children living in the Town of Southeast. The addition of 32 school age children represents growth of less than one percent of this segment of the population.

Table 3.5-4 provides a list of parkland within the Town of Southeast and other major parkland in the County.

Table 3.5-4 Parkland in Town of Southeast and Putnam County			
Southeast Municipal Parks	Acres	Other Major Parkland In County	Acres
Wells Park and Camp	10	Fahnestock State Park	14,086
Markel Memorial Park	10	Putnam County Veteran Memorial Park	200
Tonetta Lake Town Park	19		
Castle Park	6		
Douglas J. Scolpino Park	46		
Volunteer Park	15		
Passive recreation	94		
Source: Town of Southeast Comprehensive Plan, 2014			

Cumulative Effect on Community Services

Development Comparison on Other OP-2 Parcels

Since the proposed zoning text change would potentially apply to all other property in the Town that is zoned OP-2, and potentially affect the development capability of that land, the potential development yield of other applicable tracts was evaluated as discussed in section 3.1. The table below identifies development potential of these lands either as multifamily dwelling units or as square feet of commercial use. It should be noted that the development potential listed in each column represents a maximum development scenario. Each parcel would likely be developed with either all residential or all commercial; if some combination were to be proposed, each component would be appropriately reduced.

Development of the three sites which meet the specified criteria in the proposed change to the OP-2 zoning could result in a maximum of 228 units of multifamily housing, including the proposed Barrett Hill development. The potential maximum square footage of commercial use allowed under the OP-2 zoning would total approximately 303,110 square feet.

Table 3.5-5 Cumulative Development Potential Estimated Development Yield				
Study Area	Tax Map ID (S-B-L)	Combined Acreage	Potential MF Dwelling Units	Potential Commercial Use (square feet)
II	46.-5-2	29.0	168 ¹	144,840 ²
IV	45.-1- 39.2 and 39.4	65.1	60 ¹	158,270 ²
Totals		72.2	228 units	303,110 sf
¹ Number approved for the parcel. ² Number calculated based on scale of tract				

The proposed zone change would allow the Town to issue a special permit to allow the development of multi-family housing without an age restriction under specific criteria as discussed earlier. Table 3.5-6 below demonstrates that as a result of this change the population could grow by an additional 56 persons including up to 37 school age children. Compared to the overall Town population of 18,404 this increase represents approximately half of one percent and is not considered significant. As discussed earlier, the Town's population includes 3,729 children between the ages of 5 and 19, and as shown in Table 3.5-2 there are 3,236 students enrolled in the Brewster School District.

**Table 3.5-6
Cumulative Development
Potential
Population Projections**

General Population Rental/Sale Units

Unit Type	Number of Units	Population Multiplier	Project Population	School Age Children Multiplier	School Age Population	School Age Children in Public School Multiplier	Public School Population
1 Bedroom below market rate	7	1.67	12	0.3	2	0.27	2
1 Bedroom over \$1,100 per month	57	1.67	95	0.08	5	0.07	4
2 Bedroom below market rate	10	2.51	25	0.51	5	0.45	5
2 Bedroom over \$1,100 per month	94	2.31	217	0.23	22	0.16	15
3 Bedroom SF over \$194,000	60	2.95	177	0.58	35	0.5	30
TOTAL	228		526		69		56

Senior Housing For Sale Units

2 Bedroom over \$1,100 per month	168	1.8	302	0.00	0.00	0.00	0
3 bedroom SF over \$194,500	60	2.95	177	0.00	0.0	0.00	0
TOTAL	228		470		0		0

Increase from Rezoning	0		56				56
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Source: Rutgers University Center for Urban Policy Research, June 2006.

With maximum development of the two applicable study areas with non-age-restricted multi-family residential development, the addition of up to 56 students would represent district population growth of approximately two percent, assuming all of these persons would be new to the district. In this cumulative development scenario, the growth in student population would be distributed throughout the grade levels and over a multi-year period. The distribution of

students, assuming a three year buildout, would allow for the additional students to be integrated into the local schools at an average of approximately 1.8 students per grade per year for three years.

Assessment of the relative taxes for the projected cumulative development is shown in Table 3.5-7 for comparison purposes. As can be seen in Table 3.5-7, the future assessed value and the resulting school taxes generated from the proposed non-age-restricted housing is virtually the same as the future assessed value and taxes generated from the age-restricted housing and is approximately \$38,000 higher than the projected commercial development. Thus the proposed non-age-restricted housing will result in virtually no change to tax revenue to the Town, County and School District and an increase compared to the commercial alternative.

The non-age-restricted text change proposed also requires affordable housing and gives priority to the Town of Southeast veterans, Town employees and others as specified, for a portion of the project. These accommodations are not required for housing restricted to senior citizens.

Table 3.5-7 Cumulative Development Potential Community Impact Comparisons			
Area of Concern	Commercial Yield per the current OP-2 Zoning	Age-Restricted Residential per the current OP-2 Zoning	Non-Age-Restricted Residential per the proposed OP-2 Zoning
Land Use			
Combined Acreage	84.2	84.2	84.2
Multi-Family Dwelling Units	0	228	228
Square Foot Commercial Use	303,110sf	0	0
Development			
Total Residential Units	0	228	228
Affordable Residential Units	0	0	36
Priority Set Aside Residential Units	0	0	74
Community Resources			
Population	0	470	526
School-age Children	0	0	56
School Taxes Generated *	\$1,002,227	\$892,368	\$909,335
Costs to the School District	\$0.00	\$0.00	\$906,360
Net Tax Benefit	\$1,002,227	\$892,368	\$2,975
Source: Tim Miller Associates, Inc., 2015.			
* Based on 2014-2015 tax rates for the Brewster Central School District.			

Assuming full multi-family residential development of the three study areas under existing zoning, age-restricted development would be projected to generate \$1,002,227 in annual property tax revenues to the school district. With no children the district would incur no cost of services from this development.

By comparison, non-age-restricted development of the two projected to generate \$903,040 in annual property tax revenues to the school district. This increase in value is due to the single family homes at Terravest which increase in value under this scenario. The proposed project would be effective tax neutral to the school district. As part of the Town Board review, the proposed one includes language to limit unit size to a maximum of 2 bedrooms, this will significantly reduce the number of schoolchildren potentially generated by the Terravest property.

Sanitary Sewage and Potable Water*Original Approval*

According to the Engineer's Report on the Water and Wastewater Facilities for Lot #6 of Mount Ebo Corporate Park prepared by Bibbo Associates and approved by NYCDEP and the Putnam County Health Department, the approved project consisting of 168 2-bedroom units was to be connected via existing pipes in Mount Ebo Road North to the existing Mount Ebo Wastewater Treatment Plant (WWTP) and the Mount Ebo Water Works potable water supply.

The project was projected to generate the following sewer flows:

168 2-bedroom units x 300 gallons per day (gpd) =	50,400 gpd
Water savings fixtures credit @ 20% =	<u>-10,080 gpd</u>
Approved Design Flow =	40,320 gpd

The site plans were approved with connection to the existing sewer line and those lines were extended into the property for the western area of approved buildings.

Potable water usage was calculated to be the same and the wells in place or approved to be drilled at the time were anticipated to provide the same amount. The report noted that actual water usage at the Stonecrest Senior Housing project was significantly below the design flow.

The existing Mount Ebo WWTP is approved for 160,000 gpd. The design flow requirements for the approved project plus other existing buildings in the corporate park was anticipated to be 116,220 gpd, well below the capacity of the WWTP. Similarly, the existing Mount Ebo Water Works wells had an approved capacity of 154,080 gpd and the design flows are calculated to be 133,753 gpd.

Proposed Project

The proposed project reduces the size of the proposed units. The proposed mix of units is:

64 1-bedroom units	64 x 150 gpd =	9,600 gpd
104 2-bedroom units	104 x 300 gpd =	31,200 gpd
Water savings fixtures credit @ 20% =		<u>-8,160 gpd</u>
Projected Design Flow =		32,640 gpd

The proposed project will generate approximately 19 percent less sewer flow and water usage.

Avoidance or Minimization of Potential Impacts

The applicant requests an amendment to the Zoning Code of the Town of Southeast to allow multi-unit, multi-family rental housing for the general population as a Special Permit use for properties in the OP-2 zone that satisfy certain criteria, as detailed in the proposed text change. The projected population increase from cumulative development as a result of this change is approximately 103 persons, of which 47 are attributable to the Barrett Hill project. This change would permit up to 71 additional students to live in the Town of Southeast and the Brewster Central School District, of which 32 are attributable to Barrett Hill.

Growth in student population from new housing can be expected to be distributed throughout the grade levels and over a multi-year period. The multi-year phasing and distribution of students will allow for the additional students to be integrated into the local schools with minimal impact. The non-age-restricted development is projected to generate more revenue than the projected cost to the school district to service this housing. Thus, the overall effect of the change in the population mix on the School district's budget is projected to be net positive.

The Town of Southeast has some 200 acres of municipal parks to serve the needs of its residents. After including the projected population from cumulative multi-family residential non-age-restricted development of the three study areas including the Barrett Hill project, there will be 10.4 acres of parkland per 1,000 population. This is well above the planning standards set forth by the National Parks and Recreation Association which recommends that 5 to 8 acres of parkland be provided per 1,000 population.

The proposed project will generate approximately 19 percent less sewer flow and water usage than has been approved for the project.

Appendix A

Petition of Barrett Hill Associates, LLC

----- x
In the Matter of the Petition of
Barrett Hill Associates, LLC,
Pursuant to Chapter 138, Article XV, §§138.91 –
138.93 of the Code of the Town of Southeast

AMENDED PETITION

----- x
Barrett Hill Associates, LLC (hereinafter “Petitioner”), as and for its Petition to the
Town Board of the Town of Southeast, respectfully states as follows:

FIRST: Petitioner Barrett Hill Associates, LLC is the owner of the real property located within the territorial boundaries of the Town of Southeast and located on Mount Ebo Road North and known and described as Mount Ebo Lot 6 (hereinafter referred to as “the Property”). The Property is further known and described as Tax Map Number 46.-5-2 on the Tax Map of the Town of Southeast, is located in the OP-2 Zoning District, and consists of approximately 29 acres. It is presently approved for the construction of 168 senior housing units in 6 separate buildings with a clubhouse and accessory medical offices.

SECOND: As set forth above, the Property is already approved for the construction of 168 senior housing units. Petitioner desires, however, to construct 168 housing units which would not be restricted to occupancy by seniors, but which, if approved by the Town Board, would include 30% special housing marketing priority to the following designated groups: persons with disabilities, veterans living in Putnam County from the Hudson Valley area, active volunteer members of the Town’s Fire Department, Putnam County First Responders, full-time employees of school districts serving the Town of

Southeast, full-time employees of the Town of Southeast and persons aged 55 years and older.

THIRD: Attached hereto and made part hereof as Exhibit A is a copy of a proposed text change for the OP-2 Zoning District entitled “Multi-Family Work Force Housing District”. It is the Petitioner’s intention to construct multi-unit multi-family rental housing on this site which can be accommodated only by the adoption of a text change such as that set forth in Exhibit A. The adoption of this text change would facilitate construction of housing alternatives which would fulfill a pressing need. Further, by voluntarily providing for priority marketing and for preference for persons with disabilities, persons aged 55 years and older and for persons whose contributions to the Town of Southeast and to the greater community are beyond question, it is respectfully submitted that the proposal presents benefits which similarly are beyond question.

FOURTH: Attached hereto and made part hereof as Exhibit B is a copy of the Zoning Map of the Town of Southeast with the portions zoned as OP-2 zoning highlighted. As can be seen, the OP-2 Zoning District is limited in size as compared to the vastness of the Town of Southeast. As can also be seen by reference to Exhibit A, the applicant is proposing further significant restrictions limiting the eligibility of properties to be authorized by the text change. Multi-family Work Force Housing is proposed to be limited to the OP-2 Zoning District. In addition, such eligibility requires a minimum lot size of 25 acres; that the proposed development shall be served by State, County or Town road and be adjacent to a residential zone; and served by a central sewage treatment plant, a central water supply, and a central fire protection system. By reason of the foregoing, the number of properties to

which the text change could be applicable as proposed is similarly limited although the Town Board could modify these parameters on its own motion if it so desires.

FIFTH: The Town Law of the State of New York provides authorization for towns to adopt procedures for the amendment of zoning codes which can be amended by majority vote of the Town Board following a public hearing.

WHEREFORE, Petitioner requests that the Town Board of the Town of Southeast, following compliance with the procedures set forth in the Town Code as hereinabove referenced, refer this Petition to the Putnam County Planning Department for its review and recommendation, and to thereafter hold a public hearing thereon and grant Petitioner's Petition and adopt the text change to the OP-2 Zoning District requested and as set forth in Exhibit A attached hereto together with such other, further and different relief consistent therewith that the Town Board might grant.

Respectfully submitted,

Sworn to me on this _____
day of July, 2016

Notary Public

EXHIBIT A

Floating Zone Option

Multifamily Work Force Housing District.

A. Purpose and intent. A multifamily workforce housing district is hereby established in order to provide suitable opportunities within the Town for the development of housing designed to satisfy the needs of households maintained by the disabled, the young, the elderly, and families earning less than 80% of the county's annual median income. The district is intended to provide for the construction of multifamily housing on sites determined to be appropriate based on criteria established herein which are designed to promote the public health, safety and general welfare and to develop housing which is responsive to a variety of special needs of present and future residents of the Town. To help assure the achievement of this goal with proper protection for existing and future neighboring development and infrastructure, the multifamily work force housing district shall be established on a floating-zone basis, subject to approval by the Town Board and in accordance with an approved preliminary development concept plan, as described and defined herein.

B. Definitions.

PRIORITY UNIT – A single family or multifamily housing unit that is marketed to and occupied by a household meeting the eligibility requirements defined by the particular project, including but not limited to households within a preference group which may include but are not limited to residents and/or workers in the Town of Southeast who are members of the fire and police force, veterans residing in Putnam County, persons with disabilities, etc.

AFFORDABLE PRIORITY UNIT – A Priority Unit which is subject to a 99 year restriction limiting the sale or rental price initially and upon resale or re-rental at a price to be determined for the particular project.

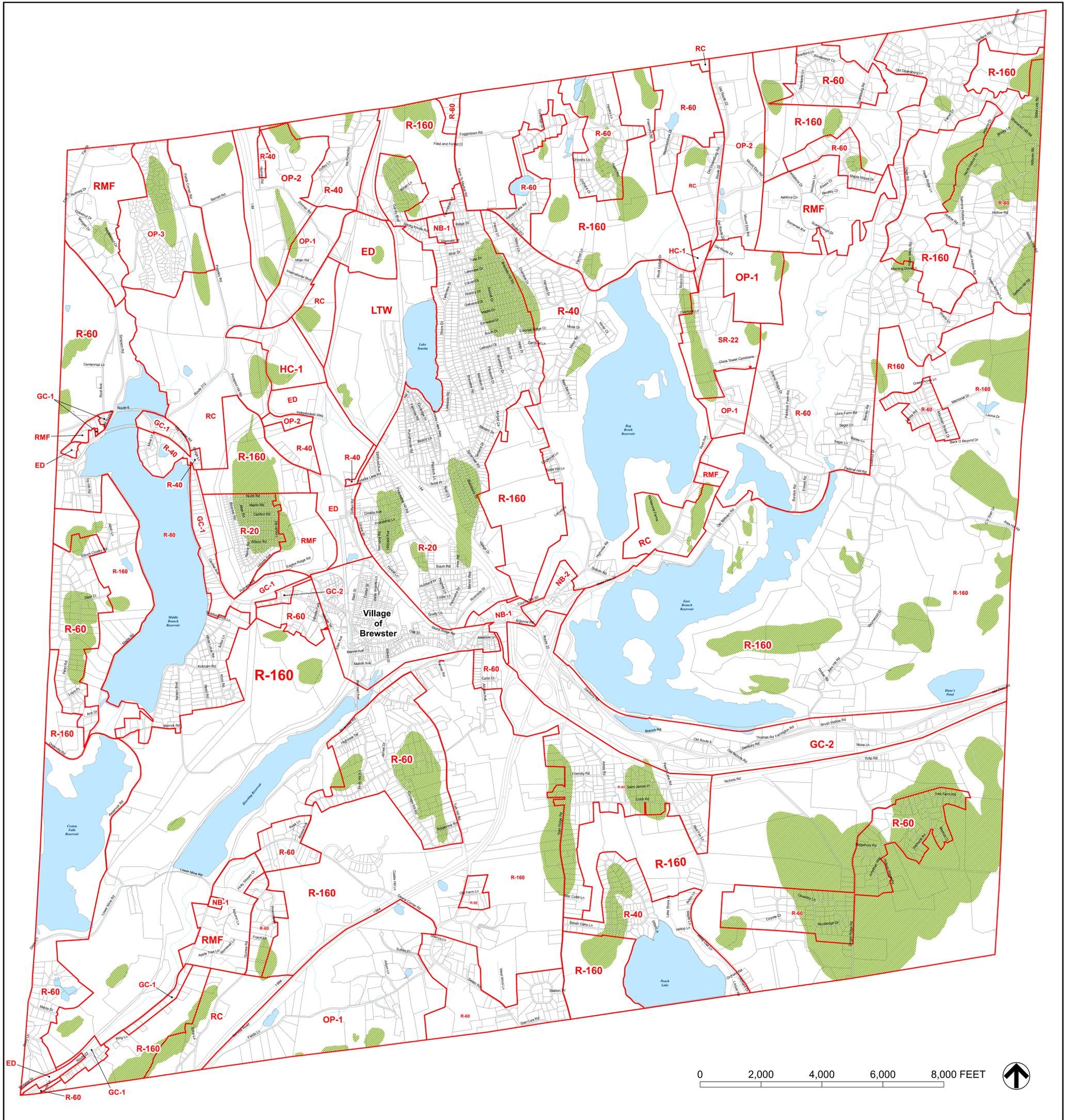
QUALIFYING AFFORDABLE HOUSEHOLD – A household in which the total household income is equal to or less than 80% of Putnam County Household Income as published by the United States Census Bureau from time to time or as adjusted consistent with increases in the CPI during interim periods, and in which at least one member of the household is a member of one or more of the preference groups identified for the particular project.

- C. Eligible property. Any site proposed to be included in the Multifamily Work Force Housing District shall be in the OP2 District and shall meet the following site eligibility requirements, all of which shall be met on the effective date of the Zoning Map amendment:
1. Such site shall be accessed by a State, County, or Town road and shall be adjacent to a residential zone;
 2. Such site shall be serviced by an existing central sewage treatment plant, central water supply and central fire protection system;
 3. Notwithstanding the minimum lot size requirements for the OP-2 District set forth in the Commercial Zoning Schedule, such site shall have a minimum lot size of 25 acres.
- D. Permitted uses. The following uses shall be permitted in the Multifamily Work Force Housing District, subject to the following restrictions:
1. Multifamily residential housing, subject to the issuance of a special permit from the Town Board and site plan approval from the Planning Board.
 2. Single family dwellings (attached or detached), subject to the issuance of a special permit from the Town Board and site plan approval from the Planning Board.
- E. Special permit standards. The issuance of a special permit for single family or multifamily residential housing shall be subject to the following standards:
1. A minimum of 30% of the project units shall be designated as Priority Units for occupancy by eligible households.
 2. A minimum of 34% of the priority units, set forth in E.(1), shall be designed as Affordable Priority Units.
- F. Dimensional and bulk standards.
1. The yard, setback, floor area ratio and building coverage standards of the OP-2 Zoning District shall apply.

2. A minimum of 1.5 off-street parking spaces per dwelling unit shall be required, plus twenty (20) percent for visitor parking.
- G. Development standards. All single family and multifamily residential development in the Multifamily Work Force District shall comply with the following standards:
1. Physical integration. Units designated as Priority Units shall be designed to be integrated into the overall project so as not to be immediately identifiable and shall contain the same quality workmanship and materials.
 2. Dwelling unit size and unit type. Dwelling unit types may include multifamily and single family attached or single family detached types and may include one or two bedroom units.
 3. Phasing. Each Phase shall include an equal number of Priority Units spread throughout the project.
 4. Building Size. Total Building Area shall comply with the Floor Area Ratio (FAR) for the OP-2 zone.
- H. Selection and affordability standards.
1. Each project shall be required to define the selection criteria and process for compliance of the project to this section as part of the Project Marketing Plan or Community Benefits Agreement.
 2. The Project Marketing Plan or Community Benefits Agreement shall identify the organization, group or company who shall ensure compliance with the eligibility requirements for the project.
 3. Each project shall define how the project shall benefit the identified preference groups/population identified in the Project Marketing Plan or Community Benefits Agreement.
 4. At least 30% of the project units shall be designated to serve the preference group/population (i.e. Priority Units).
 5. The Project Marketing Plan or Community Benefits Agreement will include the method to ensure the Priority Units serve the preference group/population.

6. Typical preference groups could include such residents and/or workers in the Town of Southeast who are members of the fire and police force, school district employees, veterans residing in Putnam County, etc.
 7. At least 34% of the Priority Units shall be subject to a 99 year restriction limiting the sale or rental price of such Affordable Priority Units, initially and upon re-rental or resale. With respect to rental units, such Affordable Priority Units shall be rented to Qualifying Affordable Households at rates equal to 30% of 80% of the Putnam County Household Income, as published by the United States Census Bureau from time to time or as adjusted consistent with increases in the CPI during interim periods. With respect to sale units, such Affordable Priority Units shall be sold to Qualifying Affordable Households at sales prices equal to 90% of the prices set forth in the Sales Offering Plan or Memorandum (for the first six months of sales or marketing) or 90% of the sales price of similar housing units in the multi-unit multi-family housing development in the 6 months preceding the date of the contract of sale, adjusted for unit size.
- I. Application procedure. The procedure for planning and zoning approval of a proposed multifamily work force housing development in accordance with this section shall involve a three-stage review process, including (1) Town Board approval of a Zoning Map change to designate the subject property as within the Multifamily Work Force Housing District, (2) Town Board approval of a special permit for the single family or multifamily residential development, (3) Planning Board approval of a site plan.

EXHIBIT B



ZONING MAP

- Zoning District Boundary
- R-160** Residence R-160 District
- R-80** Residence R-80 District
- R-60** Residence R-60 District
- R-40** Residence R-40 District
- R-20** Residence R-20 District
- RMF** Residence RMF District
- NB-1** Neighborhood Business NB-1 District
- NB-2** Neighborhood Business NB-2 District
- LTW** Lake Tonetta Watershed District
- HC-1** Highway Commercial HC-1 District
- GC-1** Gateway Commercial District GC-1 District
- GC-2** Gateway Commercial District GC-2 District
- ED** Economic Development ED District
- OP-1** Office Park OP-1 District
- OP-2** Office Park Op-2 District
- OP-3** Office Park OP-3 District
- RC** Rural Commercial District
- SR-22** Special Route 22 District
- Ridgeline Overlay District

Michele Starcati

CERTIFIED BY THE TOWN CLERK AS THE OFFICIAL
ZONING MAP OF THE TOWN OF SOUTHEAST
Adopted by the Town Board by Local Law No. 70 of December 15, 2011

EXHIBIT C

**COMMUNITY BENEFITS AGREEMENT
FOR BARRETT HILL**

This Community Benefits Agreement (this “Agreement”) is made and entered into as of _____, 2016 (the “Effective Date”) between Barrett Hill Associates, LLC, a New York Limited Liability Company (“Barrett Hill”) with an office c/o Covington Development, LLC, 322 Clock Tower Commons, Brewster, New York 10509 and the Town of Southeast, a New York municipal corporation with its offices at 1360 Route 22, Brewster, New York 10509 (the “Town”). The Town and Barrett Hill are sometimes each referred to as a “Party”, and collectively as the “Parties”.

WITNESSETH:

WHEREAS, Barrett Hill is the owner of property known as Mount Ebo Lot 6 and bearing Tax Assessment map designation 46-5-2 (the “Property”); and

WHEREAS, the Property is currently unimproved and Barrett Hill has the following approvals:

The approvals granted for the 2006 site plan, entitled _____, dated _____, last revised _____, prepared by _____, remain valid today and due to the similarities of many elements of the current proposed plan (such as keeping the proposed disturbance and impervious surface within the limits of the approved plan), most will be applicable to the current proposed plan. The approvals/referrals granted to the Barrett Hill Senior Housing project in 2006, and their status as relates to the 2006 site plan, are as follows:

- Town of Southeast Town Board
 - Special Permit Approval, granted 8/31/06 (remains valid)

Town of Southeast Planning Board

- Site Plan Approval, granted 10/23/06 (remains valid)

-

Town of Southeast Architectural Review Board

- Recommendations on Architectural Design, 4/18/06 (positive referral made to Town Board)

Putnam County Department of Planning

- GML §239-m Review (positive referral made from Department of Planning)

Putnam County Department of Health

- Approval of Wastewater Collection System, granted 10/4/06 (remains valid)
- Approval of Water Main Extension, granted 10/4/06 (remains valid)

Putnam County Department of Highways & Facilities

- Approval of Traffic Signal (construction is completed)

New York City Department of Environmental Protection

- Approval of SWPPP, granted 10/10/06 (remains valid)

New York State Department of Environmental Conservation

- Approval for Coverage under SPDES General Permit, granted 5/9/07 (remains valid)
- 5-Acre waiver, granted 6/1/07 (remains valid)

New York State Department of Health

- Approval of Plans for Public Water Supply Improvement, granted 10/5/06 (remains valid)
- Approval of Backflow Prevention Device, granted 10/4/06 (remains valid)

WHEREAS, on _____, 2016, the Town Board amended the Town's zoning map for the Barrett Hill Property to designate the property in the Multifamily Work Force Housing District; and

WHEREAS, to benefit the Town and its residents, Barrett Hill has voluntarily offered to make, and the Town Board has agreed to accept, certain community benefits.

NOW, THEREFORE, in consideration of the premises, and other good and valuable consideration received, Barrett Hill and the Town agree as follows:

Barrett Hill shall provide priority in initial marketing of 50 units (30% of the total rental units), designated as “Priority Units,” and a 99 year guarantee of affordability (to the extent of 34% of the Priority Units – 17 units) for the following categories of individuals, in no particular order of priority and as further defined herein:

- i. Veterans living in the Putnam County;
- ii. Full-time employees of the Town of Southeast;
- iii. Full-time employees of school districts serving the Town of Southeast;
- iv. Unpaid active volunteer members of the Town’s Fire Department; and
- v. Putnam County first responders (law enforcement, fire fighters and EMS workers).
- vi. Persons with Disabilities.
- vii. Persons aged 55 years and older.

Specifically, the dwelling units included as part of the multi-unit multi-family housing development shall be subject to the following special marketing and occupancy restrictions:

1) Thirty percent (30%) of the dwelling units shall be marketed to, in no particular order of priority, persons with disabilities, veterans living in Putnam County, qualified active volunteer members of the Town’s Fire Department, Putnam County First Responders, full time employees of school districts serving the Town of Southeast, and full time employees of the Town of Southeast, all as further defined herein. There will be a reservation period of six (6) months from the time of substantial completion for each phase of construction, for marketing of residential units to the above referenced groups.

2) 17 of the Priority Units (“Affordable Priority Units”) shall be subject to a 99 year restriction limiting the sale or rental price of such Affordable Priority Units, initially and upon re-rental or resale. With respect to rental units, such Affordable Priority Units shall be

rented to Qualifying Affordable Households at rates equal to 30% of 80% of the Putnam County Household Income, as published by the United States Census Bureau from time to time or as adjusted consistent with increases in the CPI during interim periods. With respect to sale units, such Affordable Priority Units shall be sold to Qualifying Affordable Households at sales prices equal to 90% of the prices set forth in the Sales Offering Plan or Memorandum, (for the first six months of sales or marketing) or 90% of the sales price of similar housing units in the multi-unit multi-family housing development in the 6 months preceding the date of contract of sale, adjusted for unit size.

3) For purposes of Section 2, Qualifying Affordable Households shall mean households where at least one member meets the following requirements:

a) Persons with disabilities. Person with a disability, physical disability and/or developmental disability is a person as determined by the Developmental Disabilities Regional Office (DDRO) of the NYS Office for People with Developmental Disabilities (OPWDD) and/or the State Health Department and/or Putnam County Health Department;

b) Veterans living in Putnam County. A Veteran is defined as someone who has served in the US armed forces (Army, Navy, Air Force, Marines, Coast Guard), been on active duty for 180 days or longer, and been honorably discharged.

c) Active volunteer members of the Town's Fire Department;

d) Putnam County first responders (law enforcement, fire fighters, and EMS workers);

e) Full-time employees of school districts serving the Town of Southeast; and

- f) Full-time employees of the Town of Southeast.
- g) Persons aged 55 years and older.

4) For purposes of Section 3, Qualifying Affordable Households shall also mean households which meet the requirements set forth in Section 2 above and where total household income is equal to or less than 80% of Putnam County Household Income as published by the United States Census Bureau from time to time or as adjusted consistent with increases in the CPI during interim periods.

All Qualified Affordable Households, applying for housing under this subsection, shall be approved by an independent, third party entity¹, engaged and paid for by the property owner. Such third-party entity shall have experience in reviewing and approving income qualified housing applications in the region and such entity's retention shall be subject to approval by the Town of Southeast Town Board.

5) Barrett Hill's obligations hereunder are conditioned upon (i) receipt by Barrett Hill of site plan approval from the Planning Board for the project proposal, and (ii) all other required Town and other governmental approvals and permits, all of which are reasonably acceptable to Barrett Hill; and (iii) receipt by Barrett Hill of the first building permit.

6) Barrett Hill agrees for itself and its successors and assigns, including (as hereinafter defined) Transferees, that it negotiated this Agreement for its benefit and the benefit of its successors and assigns, and that it freely and willingly agrees to its provisions

¹ Third party entity may be a new commission representing the various groups to be served.

for its benefit and the benefit of its successors and assigns. It is therefore expressly agreed that Barrett Hill, for itself, and its successors and assigns, including Transferees, forever waive any and all causes of action whatsoever in any jurisdiction at law or in equity challenging the legality and enforceability of this Agreement.

7) This Agreement may be assigned by Barrett Hill with the consent or approval of the Town to any transferee (a “**Transferee**”) of Barrett Hill’s right, title and interest in and to the Property, which consent shall not be unreasonably withheld. Notwithstanding anything in this Agreement to the contrary, the parties agree that: (i) if there is a transfer, then the Transferee shall be deemed automatically, and without the need for any further document or instrument, to succeed to the rights of, and be bound by the obligations imposed upon, Barrett Hill under this Agreement, with the same force and effect as if the Transferee, and not Barrett Hill, had been an original party to his Agreement; and (ii) from and after the effective date of any transfer except to an affiliate, Barrett Hill shall be released from any and all, and shall have no further or additional, obligations and/or liability under this Agreement. Barrett Hill shall give written notice to the Town of any transfer at least thirty (30) days prior to the date such transfer becomes effective.

8) All covenants, stipulations, promises, agreements and obligations of the Town contained in this Agreement shall be deemed to be the covenants, stipulations, promises, agreement and obligations of the Town and not of any officer, agent, servant, or employee of the Town in his or her individual capacity. It is expressly understood that this Agreement is a “corporate” obligation, and that no personal liability whatsoever shall attach to, or is or

shall be incurred by, any such officer, agent, servant, or employee of the Town or any person so executing this Agreement, under or by reason of the obligations, covenants or agreements contained in this Agreement or implied therefrom. Any and all such personal liability of, and any and all such rights and claims against, every such officer, agent, servant, or employee under or by reason of the obligations, covenants or agreements contained in this Agreement or implied therefrom are, to the extent permitted by law, expressly waived and released as a condition of, and as a consideration for, the execution of this Agreement.

9) All covenants, stipulations, promises, agreements and obligations of Barrett Hill contained in this Agreement shall be deemed to be the covenants, stipulations, promises, agreements and obligations of Barrett Hill and not of any partner, member, shareholder, director, officer, agent, servant, or employee of Barrett Hill in his or its individual capacity, and no recourse under or upon any obligation, covenant or agreement contained in this Agreement, or otherwise based or in respect of thereof, shall be had against any past, present or future partner, member, shareholder, director, officer, agent, servant, or employee of Barrett Hill, or of any partner or member or shareholder of Barrett Hill, or any successor thereto, or any person executing this Agreement on behalf of Barrett Hill. It is expressly understood that this Agreement is an obligation of Barrett Hill and not of any unit owner or any other person or entity, and that no personal liability whatever shall attach to, or is or shall be incurred by, any partner, member, shareholder, director, officer, agent, servant, or employee of Barrett Hill, or any partner or member or shareholder of Barrett Hill, or any successor thereto, or any person so executing this Agreement, under or by reason of the obligations, covenants or agreements contained in this Agreement, or implied therefrom are,

to the extent permitted by law, expressly waived and released as a condition of, and as a consideration for, the execution of this Agreement.

10) The Town represents and warrants to Barrett Hill that as of the date of this Agreement:

(a) The Town is a duly organized, validly existing New York municipal corporation; and

(b) The Town has the requisite power and authority to execute, deliver and perform this Agreement and consummate the transactions herein described; the Town has taken all necessary actions to authorize this Agreement, and no further action is necessary to make this Agreement and the terms and provisions hereof bindings and enforceable against the Town; and the person who has executed this Agreement on behalf of the Town has the authority to do so.

11) Barrett Hill represents and warrants to the Town that as of the date of this Agreement:

(a) Barrett Hill is a Limited Liability Company duly organized and in good standing under the laws of the State of New York, and is duly authorized to do business in the State of New York; and

(b) Barrett Hill has the requisite power and authority to execute, deliver and perform this Agreement and consummate the transactions herein described; Barrett Hill has taken all necessary actions to authorize this Agreement, and no further action is

necessary to make this Agreement and the terms and provisions hereof binding and enforceable against Barrett Hill; and the person who has executed this Agreement on behalf of Barrett Hill has the authority to do so.

12) All notices, demands and requests that may be given or that are required to be given by either Party to the other Party under this Agreement must be in writing. Notices given by a Party's attorney on behalf of such Party shall be deemed given by such Party. All notices, demands, request or other communications required or permitted to be given hereunder must be sent by (i) personal delivery, or (ii) Federal Express or a similar nationally recognized overnight courier service, or (iii) via email transmission. Notices delivered by personal delivery shall be deemed to have been given upon tender to a natural person at the address shown. Notices delivered by email transmission shall be deemed to have been given on the day transmitted in accordance herewith, provided that a duplicate copy of such notice is sent via one of the other means of transmittal permitted hereby. Notices delivered by overnight courier shall be deemed to have been given the next day after delivery to such overnight commercial courier. All copies of notices sent to the attorney's listed in this Section 12 as receiving copies shall be given in the same manner as the original notice that was sent but shall not be a prerequisite to the effectiveness of any notice. Notwithstanding the foregoing, whenever under this Agreement a notice is either received on a day that is not a business day or is required to be delivered on or before a specific day that is not a business day, the day of receipt or required delivery shall automatically be extended to the next business day.

The addresses and emails for property notice under this Agreement are as follows:

IF TO BARRETT HILL:

Barrett Hill LLC
c/o Covington Development LLC
322 Clock Tower Commons
Brewster, New York 10509
Phone: (914)
Email:

AND TO:

Keane & Beane, P.C.
Attn: Richard L. O'Rourke
445 Hamilton Avenue
Suite 1500
White Plains, New York 10601
Phone (914) 946-4777
Email: rorourke@kblaw.com

IF TO THE TOWN:

Town Supervisor
Town of Southeast
3760 Route 22
Brewster, New York 10509
Email: _____

WITH A COPY TO:

Town Attorney
Town of Southeast
3760 Route 22
Brewster, New York 10509
Email: _____

Either Party may from time to time by written notice to the other Party, designate a different address for notices within the United States of America.

13) This Agreement shall bind and inure to the benefit of the Parties and their respective successors and/or assigns.

14) Notwithstanding anything in this Agreement to the contrary, nothing in this Agreement or any approval or consent by the Town in connection with this Agreement shall prevent or restrict the exercise and/or performance by the Town of any regulatory, policing or permitting functions or obligations, except as otherwise provided herein.

15) It is understood and agreed that no agreement of partnership is intended hereby and nothing herein shall be deemed or construed to make the Town the partner of Barrett Hill or any Party the agent of any other so as to authorize or empower any Party to bind any other to financial or other obligations to third parties, or constitute or give rise to any joint venture.

16) The Parties do not intend to confer any rights and/or benefit under this Agreement on any person and/or entity other than the Parties hereto. Nothing in this Agreement is intended to, nor shall it, create any rights in favor of, or benefit, the general public or any persons and/or entities other than the Town and Barrett Hill, and their respective successors and/or assigns, and Transferees and no persons and/or entities other than the Town and Barrett Hill and their successors and/or assigns and Transferees, shall have a right to enforce this Agreement.

17) This Agreement shall be governed by and interpreted in accordance with the laws and regulations of the State of New York. All claims, actions, proceedings and lawsuits brought in connection with, arising out of, related to, or seeking enforcement of this

Agreement shall be brought in the Supreme Court of the State of New York, Westchester County.

18) No waiver of any breach of any agreement or provisions herein contained shall be deemed a waiver of any preceding or succeeding breach thereof or of any other agreement or provision herein contained. No extension of time for performance of any obligations or acts shall be deemed an extension of time for performance of any other obligations or acts.

19) The Parties to this Agreement specifically reserve any and all rights and remedies they may have if the other Party materially defaults in any of its obligations under this Agreement, including but not limited to injunctive relief and other equitable remedies.

20) This Agreement contains the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior understandings and writings with respect thereto. This Agreement may not be modified, changed, supplemented, or terminated, nor may any obligations hereunder be waived, except by written instrument signed by the Party to be charged. If any provision, sentence, term, clause or word of this Agreement shall be determined by any court or competent jurisdiction to be invalid or unenforceable, such determination shall not invalidate or render unenforceable any other provision, sentence, term, clause or word herein, and this Agreement shall be enforced, to the maximum extent possible by law, with reference to the original intention of the parties hereto, from a reading of the entire Agreement, including any such provision, sentence, term, clause or word held to be invalid.

21) Each Party agrees to within ten (10) days following written notice by the other party, execute, acknowledge and deliver to the requesting Party a statement in writing certifying that this Agreement, as may be amended, is still in full force and effect and stating whether or not to the actual knowledge of the signer of such certificate, without any duty of inquiry or due diligence but based upon actual notice only, the other Party is in default in performance of any covenant, agreement, or condition contained in this Agreement, and, if so, specifying each such default of which the signer may have actual knowledge, it being intended that any such statement delivered pursuant to this section may be relied upon by any prospective mortgagee or assignee of any mortgage in respect of the requesting Party's interest in all or any part of the Property.

22) This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same agreement. However, this Agreement shall not be effective unless and until all counterpart signatures have been obtained. Counterparts executed and transmitted via facsimile or pdf/email transmission shall be deemed fully effective upon receipt as if the originals of such documents had been transmitted and delivered.

23) TO THE EXTENT PERMITTED BY LAW, EACH PARTY HEREBY WAIVES TRIAL BY JURY IN ANY ACTION, PROCEEDING, CLAIM OR COUNTERCLAIM BROUGHT BY EITHER PARTY IN CONNECTION WITH ANY MATTER ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS

AGREEMENT, AND THE RELATIONSHIP OF THE TOWN AND BARRETT HILL
HEREUNDER.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the
date first above written.

BARRETT HILL LLC

By: _____

Name:

Title:

TOWN OF SOUTHEAST

By: _____

Name: Tony Hay

Title: Supervisor

STATE OF _____)
)SS:
COUNTY OF _____)

On this ____ day of _____ in the year 2016 before me the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her capacity, and that by her signature on the instrument, the individual, or the person upon behalf of which the individual acted executed the instrument.

Notary Public

STATE OF _____)
)SS:
COUNTY OF _____)

On this ____ day of _____ in the year 2016 before me the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her capacity, and that by her signature on the instrument, the individual, or the person upon behalf of which the individual acted executed the instrument.

Notary Public

Appendix B

Impact on School Enrollment

This report was prepared for an earlier version of the proposed petition and does not include or address the addition of Persons with Disabilities as part of the special occupancy component, the increase in the % of the project targeted for that component or the change of minimum lot size. These elements have been addressed in the text above. And this report is included for the background information it generated which was used above. The current school children generation for The Barrett Hill project is estimated at 33 school age children with 26 attending public school (See Chapter 3.5 above).



HOUSING IMPACT ESTIMATE: SCHOOL ENROLLMENT

Potential Effects of Proposed Barrett Hill Apartments on Brewster Central School District Enrollment

Prepared by
Hudson Valley Pattern for Progress
April 2015

Table of Contents

Assignment	4
Project Background: Hudson Valley Pattern for Progress	4
Scope of This Study	5
School Enrollment and Projections	5
Findings.....	7
The Impact of Barrett Hill on the Brewster School District Enrollment.....	8
The Brewster Central School District	9
Recently Approved School Building Program	10
Influx of ESL students	10
Demographics	11
Overall County Population Projections	12
Town of Southeast	14
American Community Survey 5-year data (ACS)	14
Brewster Central School District (for all residents)	15
American Community Survey 5-year data (ACS)	15
Determination: Predicting the Number of School Aged Children Using Multipliers	16
APPENDIX A	19
Contributors to This Report	19

Assignment

Hudson Valley Pattern for Progress (Pattern) has been retained by Covington Development to examine the potential impact of a proposed apartment complex on student enrollment in the Brewster School District. Pattern for Progress has agreed to compile information and provide an objective analysis in conjunction with the Center for Housing Solutions, a division of Hudson Valley Pattern for Progress formed in September 2012.

Pattern for Progress is a not-for-profit policy and planning organization that promotes regional, balanced and sustainable solutions to enhance the growth and vitality of the Hudson Valley. Founded in 1965 by business, academic and civic leaders, and based in Newburgh, N.Y., Pattern works within the nine-county area that includes Columbia, Dutchess, Greene, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester.

Project Background: Hudson Valley Pattern for Progress

Hudson Valley Pattern for Progress has examined a number of factors in order to consider the proposed Barrett Hill apartment complex as it relates to the enrollment and capacity of the Brewster Central School District.

Pattern for Progress has intimate familiarity with the Village of Brewster and the surrounding communities including the Brewster School District. Pattern has worked as an outside consultant on the "Envision Brewster" plan since 2013. In addition, Pattern conducted the recent study, "Garden Street School: This Was Then - What Could It Be Now. A Study on Adaptive Reuse" (February 2013). Pattern staff was commissioned by the Village of Brewster to write the report following the closure of the Brewster School District's Garden Street School in June 2012. A number of factors played into the closing of the school, among them a declining enrollment.

Pattern for Progress, now in its 50th year, has had a long-time interest in schools and school enrollments as they pertain to Pattern's mission in the Hudson Valley. Most recently in 2012 and again in 2013, Pattern published research briefs on the phenomenon of declining enrollment in many of the Hudson Valley's School Districts. These briefs "Closed Schools, Open Minds" and "The Empty Classroom Syndrome" sought to explain the declining enrollments in order shed a light on the issues raised and so that those in positions of responsibility could better plan for impacts.

Through its Center for Housing Solutions, Pattern has gained a particular knowledge of housing in Putnam Valley; in 2013-14 Pattern staff worked under a commission from the Putnam County Housing Corporation, to compile the "Housing Needs Assessment and Strategic Plan." In addition, Pattern has assembled and published the Hudson Valley Housing Report annually since 2011.

The Center, created in 2012, has benefited from an advisory board of many of the region's leading housing developers and has a staff with years of housing research experience.

Scope of This Study

Estimating the impact of enrollment on school district capacity poses inherent challenges. Districts can have more capacity than they need for actual enrollment. This is because some spaces are specialized and cannot be considered interchangeable.

Classroom size and location are most often governed by state and federal regulations based on the age of the child and curriculum. For example, a school may hold math and English in the same room, but would need dedicated rooms for chemistry, earth science, physics, computer science, and so forth. There are generally more seats available than students, and not every space is utilized every period of every day.

The evaluation of Brewster's educational program is not part of this report as it is beyond the scope of this study.

Despite such challenges, it often becomes important to use the tools available to make estimates of impact in order to assist stakeholders in making judgments and forming strategies. In this case, such tools include U.S. Census data, Cornell University and Rutgers studies and analytics and NYS Department of Health statistics.

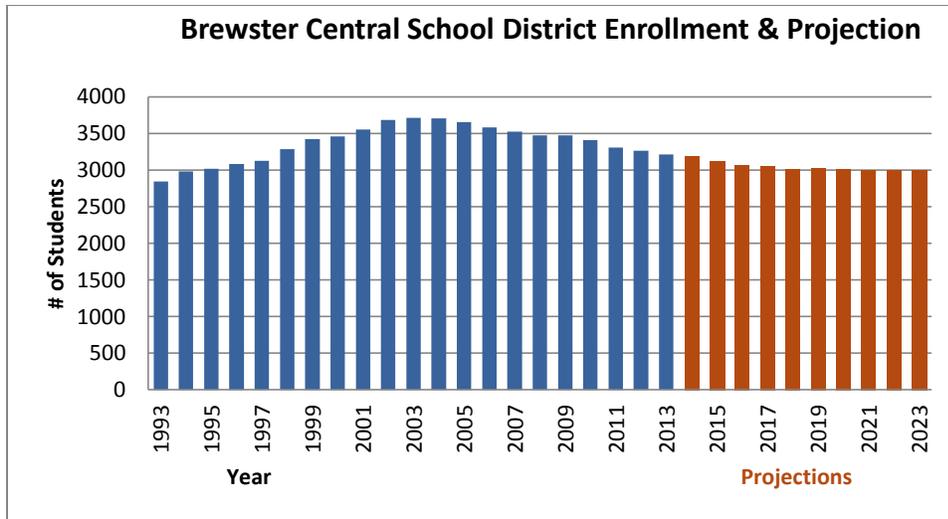
In addition, school age children that may be generated by the housing project and who may be homeschooled or attend private school are not included in the analysis as the potential numbers are too small to be of high statistical relevance.

School Enrollment and Projections

There is little disagreement that the enrollment of the Brewster School District is in decline. Even as the Board of Education sought voter approval last December for a \$38.9 million capital project, the district's Facilities Planning Task Force noted the decline in enrollment in a number of instances. "Biggest reason referendums pass is because of enrollment growth which is not the case in Brewster," the Task Force minutes stated in October 2014.

The Cornell Program on Applied Demographics and the New York State Center for Rural Schools collect and analyze student enrollment in New York State's 695 school districts. The demographic projections are based upon statistical analysis of decennial census trends, American Community Survey data, birth and death rates along with net-migration data. The following chart represents both past enrollment and Cornell's projections for enrollment of the Brewster Central School District. Clearly, the projections indicate a continued decline through 2023.

In numbers of students, Cornell demographics show a projected decline of 209 students in school enrollment in the time period 2013 to 2023.



Source: Cornell Program on Applied Demographics

The following chart represents the enrollment in all grades from 2004 through 2013. There has been an actual decline in all grades, except for 11th and 12th, with an overall decline of 468 students or 12.6%.

Grade Level	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	# change '04-'13	% change '04-'13
K	219	233	203	204	211	200	188	186	213	195	-24	-11.0%
1 st	261	226	247	213	226	237	216	199	198	245	-16	-6.1%
2 nd	301	267	225	245	217	228	235	218	202	196	-105	-34.9%
3 rd	242	292	272	236	250	229	228	240	215	213	-29	-12.0%
4 th	306	252	293	267	237	248	236	237	246	227	-79	-25.8%
5 th	295	308	253	301	278	243	256	231	241	247	-48	-16.3%
6 th	311	308	304	264	307	282	253	261	226	243	-68	-21.9%
7 th	298	290	287	315	265	313	290	253	267	228	-70	-23.5%
8 th	300	283	304	284	308	270	310	292	257	271	-29	-9.7%
9 th	302	294	297	315	292	314	268	317	305	257	-45	-14.9%
10 th	328	301	292	301	313	302	316	270	312	305	-23	-7.0%
11 th	302	311	303	297	289	315	301	313	268	313	11	3.6%
12 th	243	287	304	285	280	292	310	292	313	270	27	11.1%
Total	3,708	3,652	3,594	3,538	3,512	3,497	3,421	3,335	3,291	3,240	-468	-12.6%
K-12th	3,708	3,652	3,594	3,538	3,494	3,497	3,421	3,335	3,291	3,240	-468	-12.6%
K-6th	1,935	1,886	1,800	1,730	1,727	1,673	1,618	1,579	1,552	1,573	-362	-18.7%
7th-12th	1,773	1,766	1,794	1,808	1,767	1,824	1,803	1,756	1,739	1,667	-106	-6.0%

Source: Cornell Program on Applied Demographics / Hudson Valley Pattern for Progress

Findings

The proposed Barrett Hill apartment complex in the Town of Southeast, Putnam County, NY, as currently configured, is expected to generate 29 school-age children as the project is phased-in over three years. These estimates are based on the widely used Rutgers University residential multiplier (see multiplier discussion, page 16).

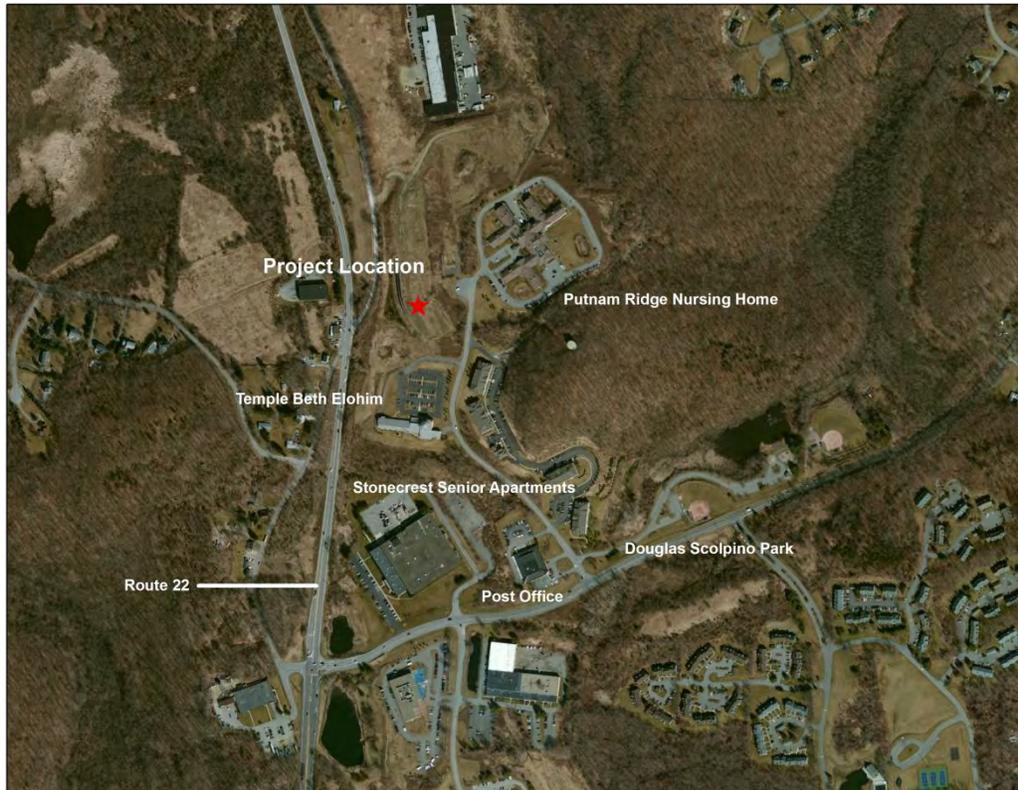
The student enrollment of the Brewster Central School District has been in decline since 2004 and is projected to decline further. In fact, the Garden Street School was closed in June 2012 due in part to declining enrollment.

Current enrollment numbers and projections anticipate that the school district will see a decline of 209 students from 2013 to 2023 and indicate the district can accommodate the students generated by the housing complex. Other factors, including live births (2003 to 2013) in the district, further indicate the district can accommodate the students generated. In addition, district voters in December 2014, approved a \$38.9 million building program which will see the addition of 10 classrooms and other space expansions and upgrades in 2017.

It is also important to note that at least some portion of the 29 students generated by the apartment project may already be students living in the district and enrolled in Brewster Central Schools. In addition, a number of other social behavioral trends may mean there may be even fewer than 29 students generated (see discussion of these trends, page 11).

The Impact of Barrett Hill on the Brewster School District Enrollment

The Barrett Hill apartment complex is a proposed 168-unit apartment complex planned by Wilder, Balter Partners, Inc. and Covington Development, LLC, on a 29-acre parcel of currently vacant land at Mt. Ebo Road in the Town of Southeast, Putnam County.



Source: Hudson Valley Pattern for Progress

Originally proposed as a community for those 55 years old and over, Barrett Hill was granted final site plan approval in October 2006 by the Town of Southeast Planning Board. In addition, the planning board issued a negative declaration under SEQRA (the State Environmental Quality Review Act) in March of 2006. At that time, approvals on the project were also given by the Putnam County Department of Health, the New York State Department of Environmental Conservation and the NYC Department of Environmental Protection (storm water pollution prevention).

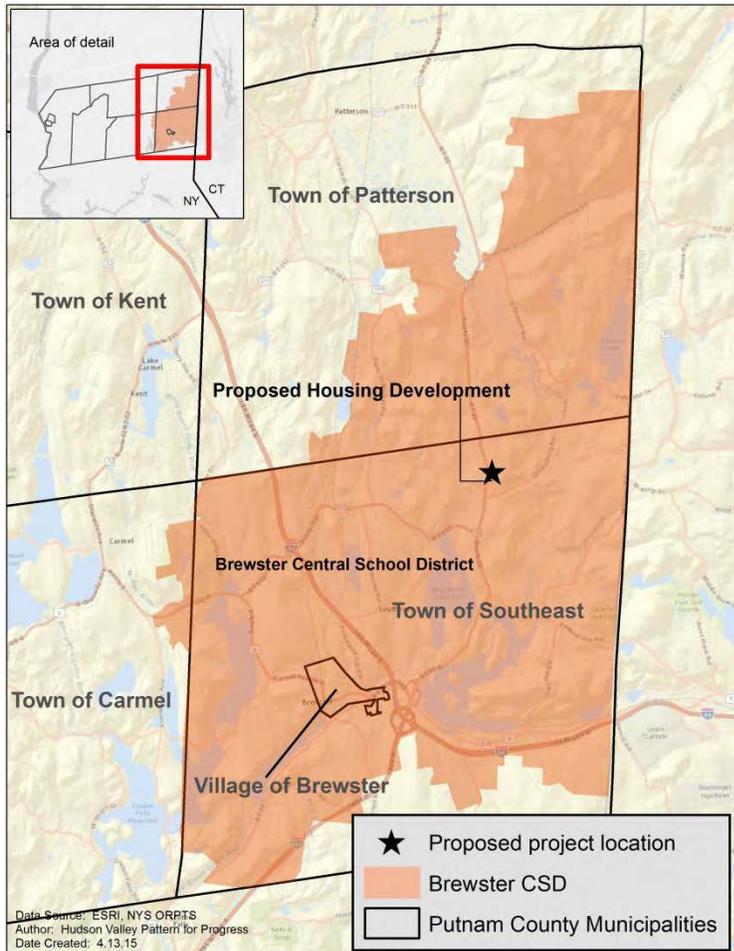
The project owners / development group now plan to resubmit the project to local authorities for an amendment that will reflect intent to establish a market-rate complex instead of a 55+ community and with 42 of the 168 units reserved for veterans, emergency services volunteers and teachers. In the amended plan, rent on units occupied by veterans would be developer-subsidized. It is estimated that 17 units will be developer-subsidized for this population. The development group plans to phase in development over three years and to begin construction in 2016; renters are expected to take residence in 2017 in the completed first phase of the complex.

Current plans call for the following allocation of the 168 units: 84 - 1BR units (50%); 84 - 2BR units (50%).

The Brewster Central School District

The Brewster Central School District is a public school district in eastern Putnam County. It shares an eastern border with the state of Connecticut. The student enrollment of the district is 3,282.

As is the case with many school districts in New York State, the school district crosses a number of municipal boundaries. The district is comprised of portions of three towns, with the Town of Southeast comprising the largest town within the district. The Village of Brewster, located within the Town of Southeast, is wholly contained within the school district.



Source: Hudson Valley Pattern for Progress

Putnam County Municipalities Within Brewster Central School District (SD)			
Municipality	Total Municipal area (square miles)	Portion of Municipality in SD (square miles)	Percentage of municipal area in SD
Brewster Village	0.47	0.47	100.0%
Patterson Town	32.7	13.6	41.6%
Southeast Town	35.1	30.3	86.3%
Carmel Town	40.7	0.6	1.5%

Source: GIS analysis / Hudson Valley Pattern for Progress

Recently Approved School Building Program

According to a variety of sources as of August 2014, enrollment in the district was as follows:

- John F. Kennedy Elementary school ... 640
- C.V. Starr Elementary School ... 642
- Henry H. Wells Middle School ... 725
- Brewster High School (BHS) ... 1,163

In addition out-of-district placements as of August 2014 were 112.

In December 2014, district voters approved a \$38.9 million building program in addition to numerous upgrades to safety, security and technology, the program calls for an addition of 10 classrooms:

- John F. Kennedy Elementary school - 6 classrooms will be added
- C.V. Starr Elementary School - 4 classrooms will be added

Other expansions include those to library, auditorium, art and music, and cafeteria space.

Influx of ESL students

According to district minutes, the school system is experiencing an increase in the number of English as Second Language (ESL) students, also often designated as LEP (Limited English Proficient) students.

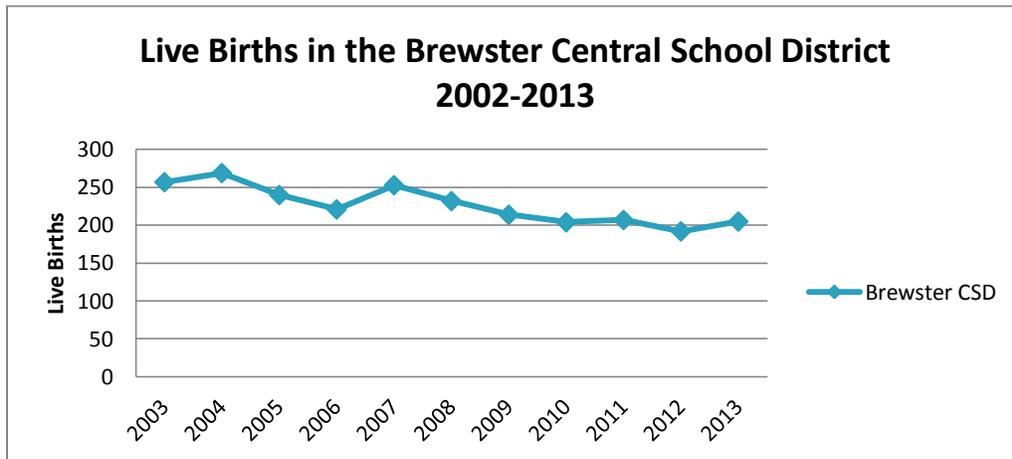
The June 2014 minutes of the district's Facilities Planning Task Force noted:

- "District-wide ESL student population is expected to grow by 35-40%."
- "Most ESL families in district are from Guatemala where political turmoil is forcing families to flee to the US or send their children here. Influx of thousands of young children into US."
- "Three years ago, BHS had 4 students with minimal elementary-level education and no English. There were 19 the following year, now about 45 of those students are in BHS and they are sent to BOCES for appropriate programs. It is expected that the number will rise significantly next year. Difficult to project numbers. May be multiple families in one home."

It is difficult to say what impact this influx will have on capacity of the buildings in Brewster; the document indicated that a large number of these students are sent out-of-district to BOCES. The task force minutes also suggested that a more extensive demographic study of this population is needed. More recently, the district has indicated it plans to move some BOCES students into the district to save costs.

Demographics

As in many Hudson Valley areas, live births are in decline. Live births are among the top indicators of school district enrollment. Over the past 12 years, live births peaked in 2004 at 269; they reached a low of 192 in 2012 and had only a slight incline the following year to 205. This phenomenon of a declining household size is occurring in many communities across the country and in the Hudson Valley. In general, families are having fewer children and as a result, the household size is shrinking. Anecdotally we can attribute this to the decline in wages, higher cost of living (e.g., healthcare, higher education and debt) and the overall changes in market demand of the millennials, which result in marriage and child bearing later in life. Simultaneously, recent trends suggest, millennials are leaving NYS and the Hudson Valley in large numbers in search of higher paying jobs and a lower cost of living.



Source: New York State Department of Health

Also, the population is aging. In the Town of Southeast alone, census figures and census estimates indicate a decline in the youngest segments of the population.

Town of Southeast			
Age Cohort	1990	2000	2010
Under 5	8.1%	7.3%	5.1%
5 to 9	7.0%	7.8%	6.0%
10 to 14	5.9%	7.0%	7.2%
15 to 19	6.3%	6.2%	7.0%
20 to 24	6.5%	4.1%	5.4%
25 to 29	10.5%	5.4%	5.4%
30 to 34	9.5%	7.7%	5.1%
35 to 39	8.5%	10.2%	6.3%
40 to 44	8.5%	9.8%	7.9%
45 to 49	6.2%	8.9%	9.6%
50 +	23.1%	25.7%	34.9%
Median Age	33.4	37.2	41.7

Source: U.S. Census

Overall County Population Projections

Age Cohort	Census 2010	Putnam County Population Projections			Percentage Change		
		2020	2030	2040	2010 to 2020	2010 to 2030	2010 to 2040
0-19	25,842	23,977	24,383	24,453	-7.22%	-5.65%	-5.37%
20-34	14,590	16,498	15,499	15,631	13.08%	6.23%	7.14%
35-49	24,447	22,309	24,908	24,223	-8.75%	1.89%	-0.92%
50-64	22,414	23,990	20,568	21,688	7.03%	-8.24%	-3.24%
65-84	10,935	14,300	17,470	16,550	30.77%	59.76%	51.35%
85+	1,482	1,397	1,679	2,271	-5.74%	13.29%	53.24%
Totals	99,710	102,471	104,507	104,816	2.77%	4.81%	5.12%

Source: Cornell Program on Applied Demographics

According to the Cornell University Program on Applied Demographics, the projected population growth in Putnam County will be drastically slower than in prior decades. The overall population is projected to grow by only 4% through 2025.

Age Cohort	COUNTY LEVEL CENSUS		COUNTY LEVEL CORNELL PROJECTIONS			
	2000	2010	2015	2020	2025	% change 2010 to 2025
Under 20	27,181	25,842	24,342	23,977	24,154	-6.5%
Young Adults (20-29)	8,978	9,803	10,238	9,975	9,503	-3.1%
Prime Labor Force (30-44)	25,952	19,439	19,854	21,492	22,817	17.4%
Mature Labor Force (45-64)	24,487	32,209	32,656	31,330	29,715	-7.7%
Early Retirement (65-74)	5,186	7,238	8,604	9,737	10,626	46.8%
Retired (75-84)	2,911	3,697	3,861	4,563	5,449	47.4%
Elderly 85+	1,050	1,482	1,441	1,397	1,469	-0.9%
Total	95,745	99,710	100,996	102,471	103,733	4.0%

Source: Cornell Program on Applied Demographics

Under 20 and Young Adults (Millennials): The decline in the age cohorts of Under 20 (-6.5%) and Young Adults 20-29 (-3.1%) in combination with the high cost of purchasing a home or renting an apartment may lead to apartment sharing, living with parent(s) longer or relocating. The Millennials that remain in Putnam are more ethnically diverse, primarily Hispanic and Latino. Based on a slow economy, a lack of employment opportunities for this demographic and college debt, these age cohorts are not typically buying homes.

Prime Labor Force: The age cohort of 30-44 is projected to grow by 17.4% by 2025. This may be considered a positive trend for Putnam County. As the decade from 2000 to 2010 showed a decline in owner-occupied housing in this age cohort due to the economy. Cornell's projections of a population increase may provide a positive impact to the housing market. However, the market is likely to call for smaller, more affordable and energy efficient homes, potentially resulting in smaller-sized families.

Mature Labor Force: The age cohort of 45 to 64 is projected to decline by almost 8%. This may have a negative impact on the "trade-up" home market. These are the homes that are typically higher in value than the "first-time buyer" homes.

Retirement and Elderly Ages: The age cohorts of 65-74 and 75-84 are projected to grow by almost 50% by 2025. This increase will not result in an increase in school-age population. The elderly population of 85+ shows a negligible decline of less than 1%. Again, these projected increases will lead to needs in housing rehabilitation for the senior population as they may age in place. The cohorts experiencing the largest increase will not add school aged children.

Town of Southeast

American Community Survey 5-year data (ACS)

SEX AND AGE	2010	2011	2012	2013	# change	% change
Total population	18,340	18,370	18,365	18,369	29	0.16%
Male	8,938	9,373	9,399	9,257	319	3.57%
Female	9,402	8,997	8,966	9,112	-290	-3.08%

Under 5 years	893	810	812	742	-151	-16.91%
5 to 9 years	1,146	1,228	1,110	1,203	57	4.97%
10 to 14 years	1,390	1,394	1,453	1,446	56	4.03%
15 to 19 years	1,418	1,271	1,277	1,214	-204	-14.39%
20 to 24 years	1,058	994	1,111	1,108	50	4.73%
25 to 34 years	1,819	1,959	1,855	2,074	255	14.02%
35 to 44 years	2,807	3,034	2,879	2,767	-40	-1.43%
45 to 54 years	3,578	3,472	3,561	3,372	-206	-5.76%
55 to 59 years	1,314	1,240	1,245	1,189	-125	-9.51%
60 to 64 years	1,035	1,042	1,067	1,232	197	19.03%
65 to 74 years	1,094	1,136	1,112	1,102	8	0.73%
75 to 84 years	579	598	599	665	86	14.85%
85 years and over	209	192	284	255	46	22.01%

Median age (years)	40.9	40.5	40.8	40.7	-0.2	-0.49%
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18 years and over	13,865	14,051	14,095	14,187	322	2.32%
Male	6,740	7,138	7,190	7,296	556	8.25%
Female	7,125	6,913	6,905	6,891	-234	-3.28%

65 years and over	1,882	1,926	1,995	2,022	140	7.44%
Male	832	798	843	881	49	5.89%
Female	1,050	1,128	1,152	1,141	91	8.67%

Source: American Community Survey

Brewster Central School District (for all residents)

American Community Survey 5-year data (ACS)

SEX AND AGE	2010	2011	2012	2013	# change	% change
Total population	21,474	22,835	22,843	23,065	1,591	7.41%
Male	10,545	11,518	11,539	11,403	858	8.14%
Female	10,929	11,317	11,304	11,662	733	6.71%

Under 5 years	960	953	984	1,009	49	5.10%
5 to 9 years	1,244	1,387	1,317	1,369	125	10.05%
10 to 14 years	1,896	1,923	1,894	1,793	-103	-5.43%
15 to 19 years	1,640	1,584	1,582	1,547	-93	-5.67%
20 to 24 years	1,146	1,168	1,361	1,519	373	32.55%
25 to 34 years	2,124	2,551	2,439	2,548	424	19.96%
35 to 44 years	3,297	3,531	3,379	3,250	-47	-1.43%
45 to 54 years	4,269	4,549	4,615	4,500	231	5.41%
55 to 59 years	1,417	1,538	1,533	1,636	219	15.46%
60 to 64 years	1,165	1,184	1,208	1,290	125	10.73%
65 to 74 years	1,279	1,441	1,447	1,471	192	15.01%
75 to 84 years	760	800	737	830	70	9.21%
85 years and over	277	226	347	303	26	9.39%

Median age (years)	41.2	40.7	41.0	41.0	0	-0.49%
---------------------------	------	------	------	------	---	---------------

18 years and over	16,160	17,414	17,519	17,826	1,666	10.31%
Male	7,766	8,576	8,637	8,806	1,040	13.39%
Female	8,394	8,838	8,882	9,020	626	7.46%

65 years and over	2,316	2,467	2,531	2,604	288	12.44%
Male	897	932	975	1,047	150	16.72%
Female	1,419	1,535	1,556	1,557	138	9.73%

Source: American Community Survey

Determination:

Predicting the Number of School Aged Children Using Multipliers

When determining the potential number of students produced by new construction, the widely accepted approach is to apply a multiplier to the number of proposed new units. The multiplier provides the expected number of students per unit, which are then aggregated to come up with a total number of students.

Multipliers are based on U.S. Census data. Separate multipliers are produced for the type and tenure of housing. For example, one would expect a 4-bedroom single family detached home to result in more students than a studio apartment. Similarly, one would expect a detached single family house with 3 bedrooms to produce more children than a 3-bedroom apartment in a large apartment building. Census data has borne out both of these examples as true. Units with more bedrooms are more likely to have more children in them. Detached homes are more likely to have children than apartments.

The standard industry multiplier used is based on research done at Rutgers University Center for Urban Policy Research.¹ The subset of formulas within the multiplier varies widely depending on the type of housing (single family or multi-family), the number of units in the structure, whether it is owned or rented and the number of bedrooms. In determining the impact of the projected number of students upon school systems, it is possible not only to determine the number of students, but also the grade distribution of those students.

In the proposed Barrett Hill development, in addition to regular market rate apartments, the project sets aside 42 units for veterans, school teachers and emergency respondents such as police and fire fighters. The units for veterans and first responders are proposed to be priced below market rate. For the purpose of this analysis it is assumed that a portion of the set aside units, or 17 units, would be allocated to veterans or first responders at below market rate.

For the purposes of evaluating Barrett Hill, which contains buildings with more than 5 units per building with a total of 168 units of rental housing, this analysis applied the appropriate subset of formulas from the Rutgers model. Less expensive units with the same number of bedrooms generate more students. Therefore, a different multiplier is applied to units priced below market rate. The following table shows the multiplier for both the market rate and below market rate units.

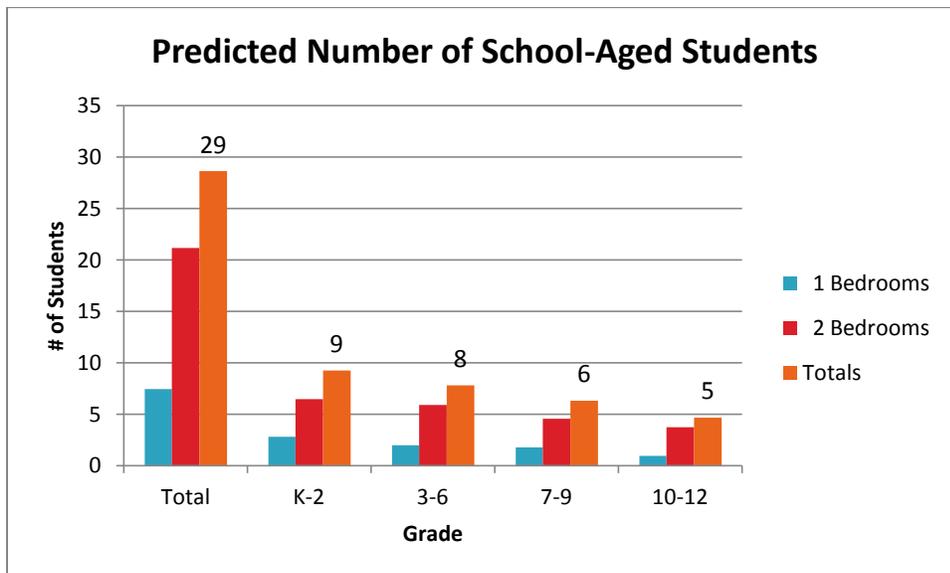
¹ Burchell, Robert W., et al. (2006). Residential Demographic Multipliers: Estimates of the Occupants of New Housing. Rutgers University, Center for Urban Policy Research.

Rutgers Multiplier for 5+ Units per Structure Rental Apartments					
Multiplier	Total School Aged Children	K-2	3-6	7-9	10-12
1 Bedroom Below Market Rate	0.16	0.06	0.05	0.03	0.02
1 Bedroom >\$1000	0.08	0.03	0.02	0.02	0.01
2 Bedroom Below Market Rate	0.49	0.15	0.17	0.10	0.09
2 Bedroom >\$1100	0.23	0.07	0.06	0.05	0.04

These Rutgers multipliers have been applied to the units proposed at Barrett Hill by number of bedrooms per unit at Barrett Hill, multiplied by the number of units of that size and totaled for each cohort.

# of Units	# of Bedrooms	Total School Aged Children	K-2	3-6	7-9	10-12
9	1 Bedroom Below Market Rate	1	1	0	0	0
76	1 Bedroom >\$1000	6	2	2	2	1
8	2 Bedroom Below Market Rate	4	1	1	1	1
75	2 Bedroom >\$1100	17	5	5	4	3
168	Totals	29	9	8	6	5

Note: Fractions have been rounded to whole numbers



Note: Due to rounding, does not add up to 100% of true total (28.69 students)

As the project is scheduled to be phased in a three-year construction period, the predicted student impact will start at a low level and grow.

School Aged Children	Students Added	K-2	3-6	7-9	10-12
Year 1	10	3	3	2	2
Year 2	9	3	2	2	1
Year 3	10	3	3	2	2
Totals	29	9	8	6	5

Note: Due to rounding, does not add up to 100% of true total (28.69 students)

The Rutgers model is based on 2000 U.S. Census data. Birthrates have declined significantly between 2000 and 2010. The Rutgers multiplier has been well tested,² thus this analysis finds that Barrett Hill is likely to generate 29 school-aged children, but given declining birthrates, it may produce fewer.

² Saylor, Anne. (September 2012). School Children and Affordable Housing: is It Really an Issue? Plan On It, A Dutchess County Planning Federation eNewsletter retrieved April 14, 2015 from <http://www.co.dutchess.ny.us/CountyGov/Departments/Planning/planonit0912.pdf>. The Dutchess Planning Federation found that 19% of the students in the new development at Pendell Commons in the Hyde Park School District were living in the district prior to tenancy at Pendell Commons.

APPENDIX A

Contributors to This Report

Barbara Gref - Barbara Gref is Vice President of Research and Communications at Pattern for Progress. She is a journalist who specialized in public education for much of her 25-year career, publishing work on accountability and the changing role of schools that has been nationally recognized. She has also served on the news production team at the Casey Center for Journalism on Children and Families at the University of Maryland. At Pattern, she has contributed to a number of studies for the Center for Housing Solutions, including the Putnam County "Housing Needs Assessment and Strategic Plan" (2014).

Joseph Czajka - Joseph Czajka (independent reviewer / contributor) is the founding director of the Center for Housing Solutions and a former Vice President for Research and Grants Administration at Pattern for Progress served as an independent reviewer and contributor to this the report. Mr. Czajka, who is recognized throughout the state as a housing expert, expertise on housing matters, has been asked to serve on numerous housing and is well versed in demographics and their impact on school-ages populations. He has also worked extensive with the Village of Brewster to help chart their revitalization efforts.

March Gallagher - March Gallagher is the Chief Strategy Officer at Hudson Valley Pattern for Progress, specializing in infrastructure. She has served on the Mid-Hudson Regional Economic Development Council and has worked to understand the impact of economic development on communities. Prior to her work at Pattern, she was with Ulster County Government as Director of Business Services and a Deputy Director of Planning. Ms. Gallagher is an attorney admitted to practice law and worked in the litigation department of Ropes & Gray prior to moving to New York.

Paul Hesse - Paul Hesse is senior research planner focusing primarily on the revitalization of the region's urban centers, including villages such as Brewster, Walden, Ellenville and Monticello. Prior to joining Pattern, Paul was the Community Development Director for the City of Poughkeepsie. Mr. Hesse holds a Masters in Urban Planning from the Urban Affairs and Planning Program at Hunter College – City University of New York.

Jonathan Drapkin - Jonathan Drapkin is President and CEO of Pattern for Progress. Prior to Pattern, he served as executive director of the Gerry Foundation. Mr. Drapkin has more than 30 years examining the impact of policies, with a particular focus on New York State and the Hudson Valley. He has supervised the work of Pattern's Center for Housing Solutions and its work in education, including Pattern's impact studies on school enrollment which have been widely recognized for their ability to inform the regional discussion on the Hudson Valley's changing demographics. He currently serves on the executive community of the Mid-Hudson Regional Economic Development Council.

Appendix C

Peak Hour Traffic Generation
Comparison

Table C-1 Site Trips Various Locations and Zoning				
Basis for Determining Trips *	Trip Rates ¹			
	A.M. Weekday Peak Hour		P.M. Weekday Peak Hour	
	IN (Trips per unit) ²	OUT (Trips per unit) ²	IN (Trips per unit) ²	OUT (Trips per unit) ²
Age Restricted ITE Code 252				
168 dwelling units Barrett Hill	0.092	0.178	0.232	0.198
139 dwelling units site IX	0.092	0.178	0.232	0.198
60 dwelling units site IV	0.092	0.178	0.232	0.198
Apartments ITE Code 220				
168 dwelling units Barrett Hill	0.102	.0.410	0.426	0.229
139 dwelling units site IX	0.103	0.413	0.440	0.237
60 dwelling units site IV	0.110	0.442	0.549	0.295
Office ITE Code 710				
158,270 square feet Barrett Hill	1.564	0.213	0.282	1.379
144,840 Square feet site IX	1.536	0.209	0.275	1.341
119,900 square feet site IV	1.624	0.221	0.302	1.473
* Trip rates based on the Institute of Transportation Engineers Trip Generation, 9 edition, 2012. Using equation rates except senior housing is maximum rates.				
² Units are dwelling units for apartments and 1000 square feet for office				
See section 3.1 on land use.				

Table C-2 Projected Site Trips						
Basis for Determining Trips	Trips *					
	A.M. Weekday Peak Hour			P.M. Weekday Peak Hour		
	IN (Trips)	OUT (Trips)	Total Trips	IN (Trips)	OUT (Trips)	Total Trips
Age Restricted ITE Code 252						
168 dwelling units Barrett Hill	15	30	45	39	33	72
139 dwelling units site IX	13	25	38	32	28	60
60 dwelling units site IV	6	11	18	14	12	26
Apartments ITE Code 220						
168 dwelling units Barrett Hill	17	69	86	72	38	110
139 dwelling units site IX	14	57	61	61	33	94
60 dwelling units site IV	7	27	34	33	18	51
Office ITE Code 710						
158,270 square feet Barrett Hill	243	33	276	44	212	256
144,840 Square feet site IX	227	31	258	41	200	241
119,900 square feet site IV	195	26	221	36	177	213
* See Table C-1 for trip rates based on the Institute of Transportation Engineers Trip Generation.						



SITE LOCATION MAP

PROPOSED RESIDENTIAL HOUSING
Barrett Hill Mount Ebo Lot 6
Southeast, New York



- LEGEND**
- STUDY AREA INTERSECTIONS
 - KEY ROADWAYS
 - - - SITE ACCESS DRIVES
 - - - - - PROPERTY LINE

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Date: 5/4/16



File: C:\751_002 Barrett Hill, Southeast\Map\MapCAD2016 Figures\Figuring 2

- LEGEND**
-  TRAFFIC LANE
 -  TRAFFIC SIGNAL
 -  STOP SIGN
 -  TRAFFIC SIGN
 -  PROPERTY LINE

CURRENT STREET SYSTEM CHARACTERISTICS

PROPOSED RESIDENTIAL HOUSING
Barrett Hill Mount Ebo Lot 6
Southeast, New York



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Scale in Feet



Date: 5/4/16

Table 1
 2016 TWO-WAY HOURLY TRAFFIC VOLUMES – PEAK HOURS
 Proposed Residential Housing
 Barrett Hill - Mount Ebo Lot 6
 41 Mount Ebo Road North
 Southeast, New York

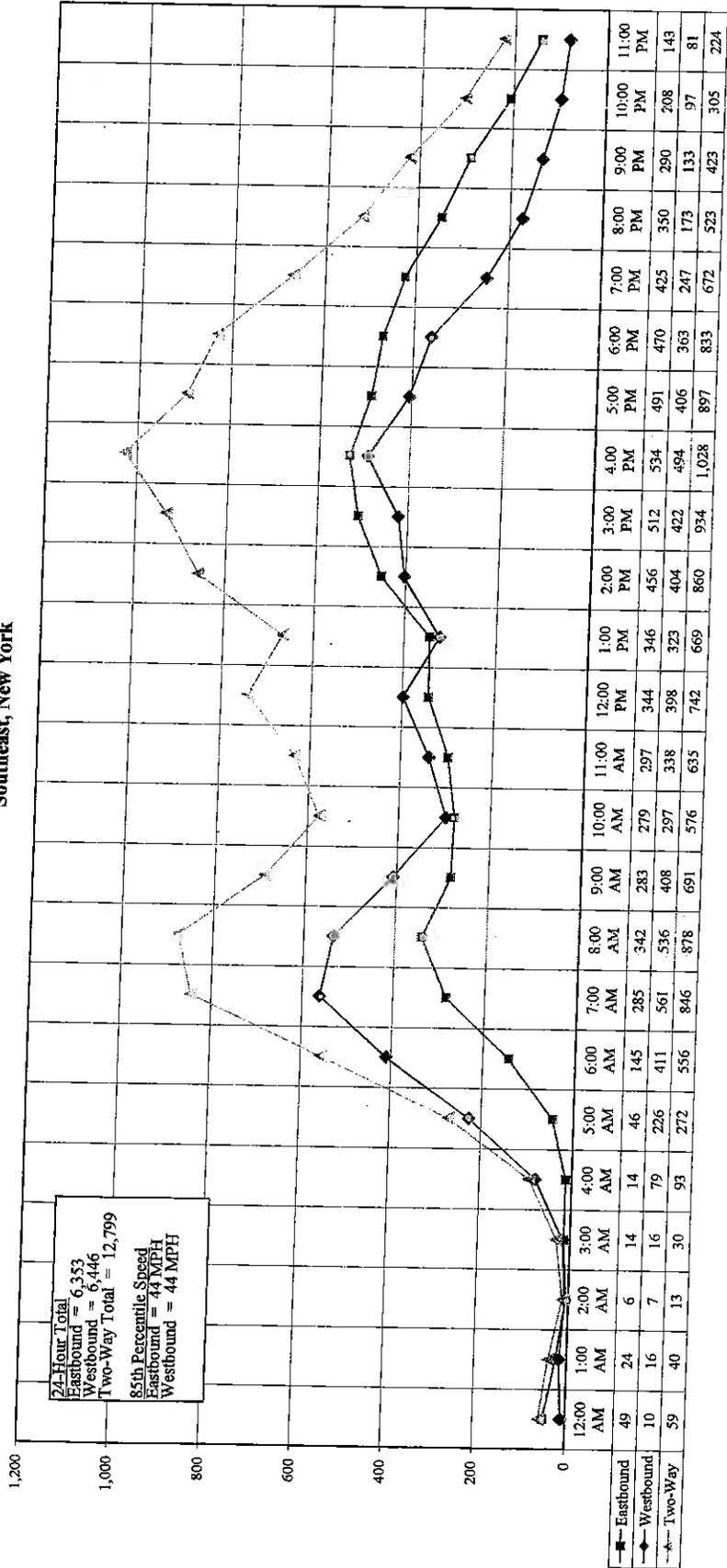
LOCATION	VEHICLES	
	Weekday Morning (8:00 – 9:00 A.M.)	Weekday Afternoon (4:30 – 5:30 P.M.)
Doansburg Road, East of Mount Ebo Road South/Powers Lane	878	1,088
Doansburg Road, West of Mount Ebo Road South/Powers Lane	1,049	1,221
Powers Lane, North of Doansburg Road	13	20
Mount Ebo Road South, South of Doansburg Road	232	243

Source: Manual turning movement counts conducted by Frederick P. Clark Associates, Inc. on Tuesday, March 29, 2016 from 7:00 to 9:00 A.M. and 4:00 to 6:00 P.M.

Notes:

1. The 2016 existing traffic volumes were adjusted and balanced (where necessary) to New York State Department of Transportation (NYSDOT) Automatic Traffic Recorder (ATR) data collected within the Study Area.
2. The 2016 existing traffic volumes entering and exiting Mount Ebo Road North were extracted from the Mount Ebo Corporate Center – Lot 6 Traffic Impact and Access Study conducted by Frederick P. Clark Associates, Inc. in March 2005.

TWO-WAY HOURLY TRAFFIC VOLUMES FRIDAY, APRIL 15, 2016
DOANSBURG ROAD, WEST OF MOUNT EBO ROAD SOUTH
Proposed Residential Housing, Barrett Hill (Mount Ebo - Lot 6)
 41 Mount Ebo Road North
 Southeast, New York

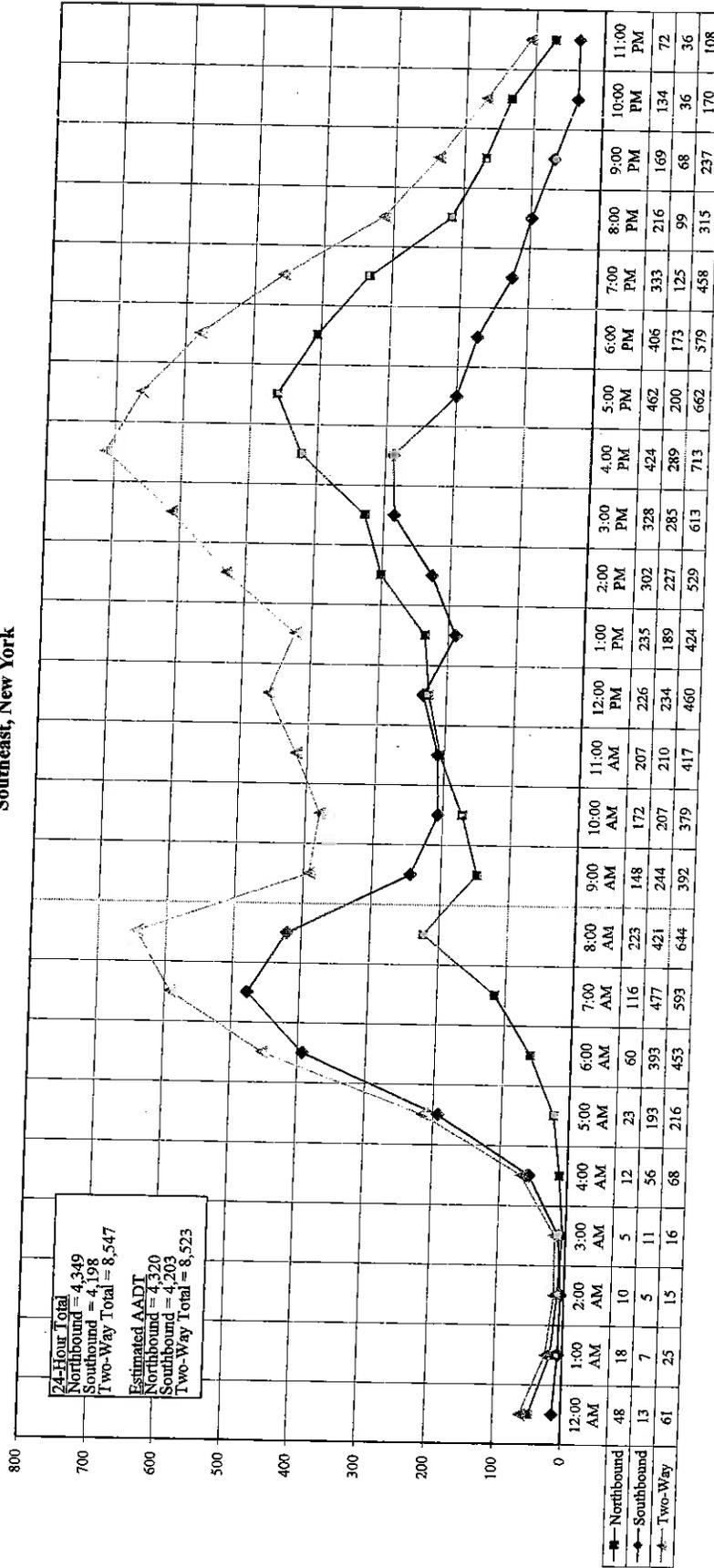


24-Hour Total
 Eastbound = 6,353
 Westbound = 6,446
 Two-Way Total = 12,799

85th Percentile Speed
 Eastbound = 44 MPH
 Westbound = 44 MPH

Source: Automatic Traffic Recorders conducted by Frederick P. Clark Associates, Wednesday, April 13 to Thursday, April 21, 2016.
 Frederick P. Clark Associates, Inc.
 April 2016

TWO-WAY HOURLY TRAFFIC VOLUMES THURSDAY, DECEMBER 6, 2012
DOANSBURG ROAD, 0.388 MILES SOUTH OF GAGE ROAD
Proposed Residential Housing, Barrett Hill (Mount Ebo - Lot 6)
41 Mount Ebo Road North
Southeast, New York



Source: Roadway Traffic Counts conducted by New York State Department of Transportation (NYSDOT), Tuesday, December 4 to Tuesday, December 11, 2012.
 Frederick P. Clark Associates, Inc.
 April 2016

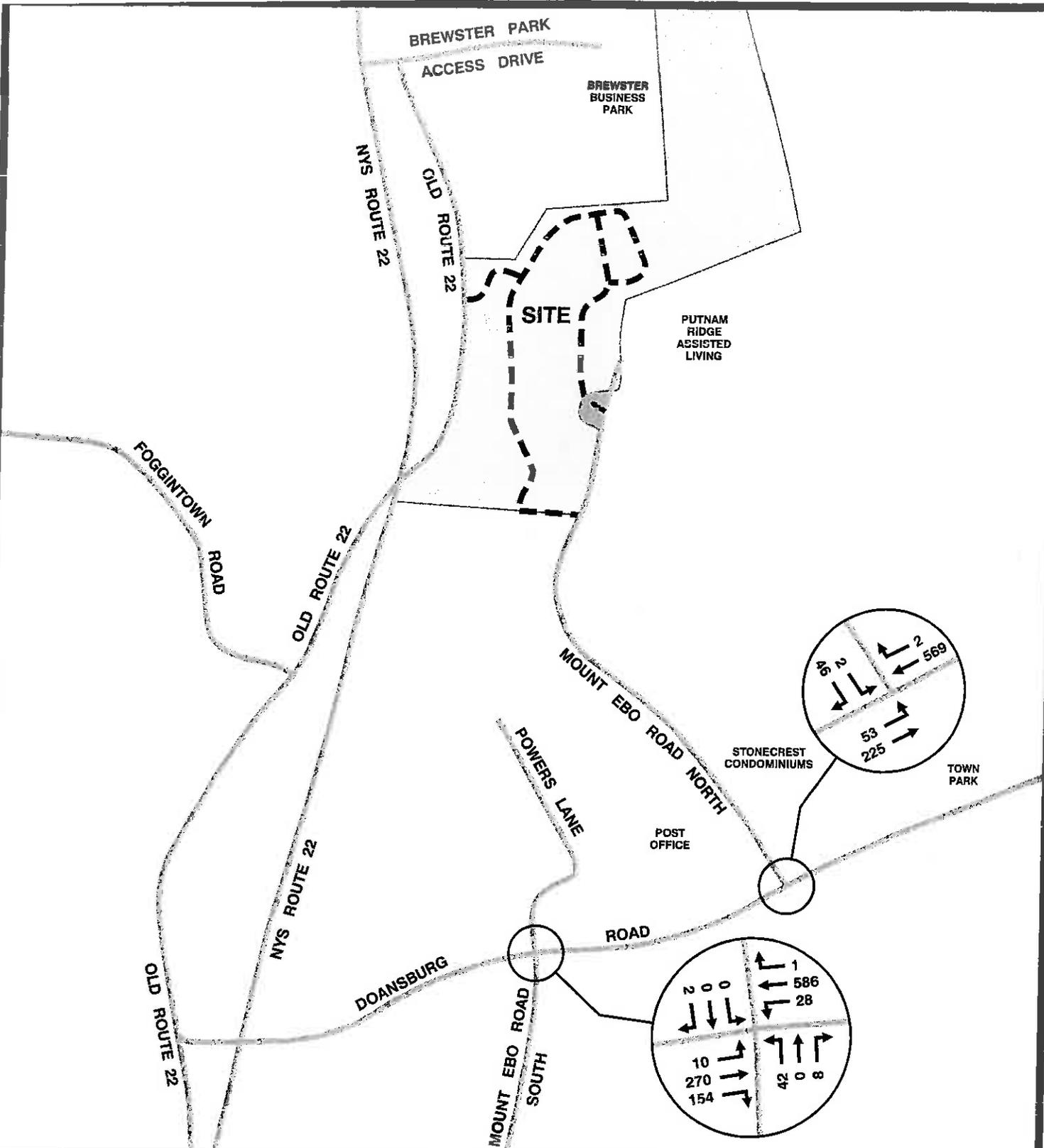
Table 2
TWO-WAY DAILY AND PEAK HOUR TRAFFIC VOLUME COMPARISON
 Proposed Residential Housing
 Barrett Hill – Mount Ebo Lot 6
 41 Mount Ebo Road North
 Southeast, New York

DOANSBURG ROAD, WEST OF MOUNT EBO ROAD NORTH									
VEHICLES									
DIRECTION	Weekday Morning ¹			Percent Change	Weekday Afternoon ²			Daily ³	
	2016 (8 to 9 A.M.)	2005 (8 to 9 A.M.)	Percent Change		2016 (4 to 5 P.M.)	2005 (5 to 6 P.M.)	Percent Change	2016	2005
Eastbound	342	229	49.3	534	674	-20.8	6,353	6,306	0.7
Westbound	536	539	-0.6	494	343	44.0	6,446	5,993	7.6
Two-Way	878	768	14.3	1,028	1,017	1.1	12,799	12,229	4.7

Source: Automatic Traffic Recorder (ATR) data collected by the Frederick P. Clark Associates, Inc in March 2005 and April 2016.

Notes:

1. Weekday morning peak hour traffic volumes represent the highest one-hour traffic volumes recorded between 12:00 A.M. and 12:00 Noon on the date that the respective traffic counts were conducted.
2. Weekday afternoon peak hour traffic volumes represent the highest one-hour, two-way traffic volumes recorded between 12:00 Noon and 12:00 A.M. on the date that the respective traffic counts were conducted.
3. Daily traffic volumes represent a one-day period.



Notes:

- 1- A 0.8 percent growth rate per year was employed to the horizon year 2018 as per 2010 to 2015 New York Metropolitan Transportation Plan, Chapter 2, Socio-Economic and Demographic Forecast, Table 2.5, Page 2-13.
- 2- The majority of traffic generated by any vacancy in the Brewster Business Park will utilize NYS Route 22 and will therefore have limited impact on Doansburg Road.

LEGEND

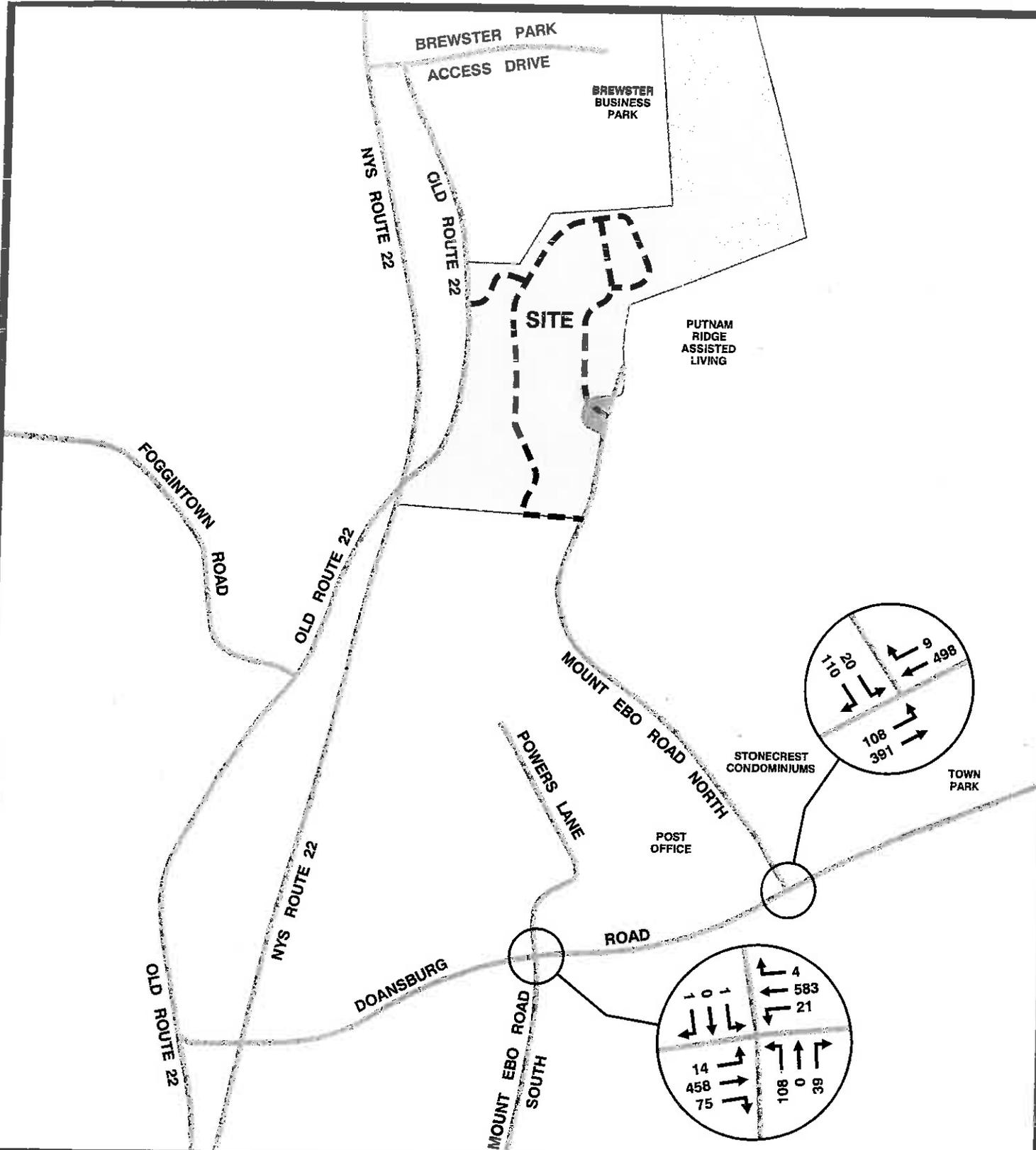
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**2018 NO-BUILD TRAFFIC VOLUMES
WEEKDAY MORNING PEAK HOUR**

**PROPOSED RESIDENTIAL HOUSING
Barrett Hill Mount Ebo Lot 6
Southeast, New York**



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Notes:

- 1- A 0.8 percent growth rate per year was employed to the horizon year 2018 as per 2010 to 2015 New York Metropolitan Transportation Plan, Chapter 2, Socio-Economic and Demographic Forecast, Table 2.5, Page 2-13.
- 2- The majority of traffic generated by any vacancy in the Brewster Business Park will utilize NYS Route 22 and will therefore have limited impact on Doansburg Road.

LEGEND

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**2018 NO-BUILD TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR**

**PROPOSED RESIDENTIAL HOUSING
Barrett Hill Mount Ebo Lot 6
Southeast, New York**



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Date: 5/4/16

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Page 3

June 23, 2016

graphically illustrate the 2018 no-build (base) traffic volumes for Doansburg Road at Mount Ebo Road South/Powers Lane in addition to Doansburg Road at Mount Ebo Road North for the weekday morning and weekday afternoon peak hours, respectively. The 2018 no-build traffic volumes utilized the annual growth rate provided by the New York Metropolitan Transportation Plan to provide the most conservative analysis. Based on discussions with the Town Planning Consultant, Crossroad 312 traffic was added and Maco Land and Stateline developments were included in the growth rate. Table 3 provides a comparison of two-way peak hour traffic volumes for NYS Route 22, south of Doansburg Road, between 2005 and 2015. The 2015 traffic volumes for NYS Route 22 were obtained from the Crossroads 312 Traffic Impact and Access Study conducted by Clark Associates in 2013. New York State Route 22 traffic volumes are provided for reference purposes only as this roadway was not part of the 2016 limited updated Traffic Impact and Access Analysis for the proposed residential housing development.

A comparison of the traffic volumes on Doansburg Road, west of the Mt. Ebo Road North intersection indicates that during the weekday morning peak hour the eastbound volume increased significantly and the westbound increased very little. However, overall the two-way volume during the 11-year period increased by 14.3 percent during the weekday morning peak hour.

During the weekday afternoon peak hour the eastbound volume decreased by almost 21 percent; however, increased by 44 percent westbound during the same one-hour period. Overall the two-way volume only increased by 1.1 percent.

For comparison purposes the daily volume on Doansburg Road indicated an increase in the two-way volume of 4.7 percent. A comparison of the traffic volumes on NYS Route 22, south of the Doansburg Road intersection, indicated an increase of 48.5 percent during the 11-year period during the weekday morning peak hour and 13.4 percent during the weekday afternoon peak hour.

Trip Generation Rates for the Proposed Development Based on Apartments Type Land Use

The proposal is for a residential housing development comprising 64 one-bedroom and 104 two-bedroom units. Assuming a worst case for site traffic estimated, the trip rates used in the analysis do not include any reduction to account for seniors, disabled

Table 3
 NYS ROUTE 22 TWO-WAY TRAFFIC VOLUME COMPARISON – PEAK HOURS
 Proposed Residential Housing
 Barrett Hill - Mount Ebo Lot 6
 41 Mount Ebo Road North
 Southeast, New York

NYS ROUTE 22, SOUTH OF DOANSBURG ROAD						
DIRECTION	VEHICLES					
	Weekday Morning			Weekday Afternoon		
	2015 ¹	2005 ²	Percent Change	2015 ¹	2005 ²	Percent Change
Northbound	521	458	13.8	1,368	1,262	8.4
Southbound	1,658	1,009	64.3	1,108	921	20.3
Two-way	2,179	1,467	48.5	2,476	2,183	13.4

Source:

1. 2005 Existing Traffic Volumes obtained from the Mount Ebo Corporate Center – Lot 6 Traffic Impact and Access Study conducted by Frederick P. Clark Associates Inc. in March 2005.
2. 2015 Projected Traffic Volumes obtained from the Crossroads 312 Traffic Impact and Access Study conducted by Frederick P. Clark Associates, Inc. in 2013.

Frederick P. Clark Associates, Inc.
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Table 4
 SITE TRAFFIC GENERATION COMPARISON – WEEKDAY PEAK HOURS
 Proposed Residential Housing Development
 Barrett Hill – Mount Ebo Lot 6
 41 Mount Ebo Road North
 Southeast, New York

LAND USE	SIZE	TRAFFIC DIRECTION	VEHICLE TRIP ENDS	
			Morning	Afternoon
Approved 2005 Senior Adult Housing – Attached ¹ .	168 Dwelling Units	Enter	20	32
		Exit	<u>25</u>	<u>20</u>
		Total	45	52
Proposed Apartments -- Rental Units ² .	168 Dwelling Units	Enter	17	72
		Exit	<u>69</u>	<u>38</u>
		Total	86	110
Net Difference	0 Dwelling Units	Enter	-3	40
		Exit	<u>44</u>	<u>18</u>
		Total	41	58

Sources:

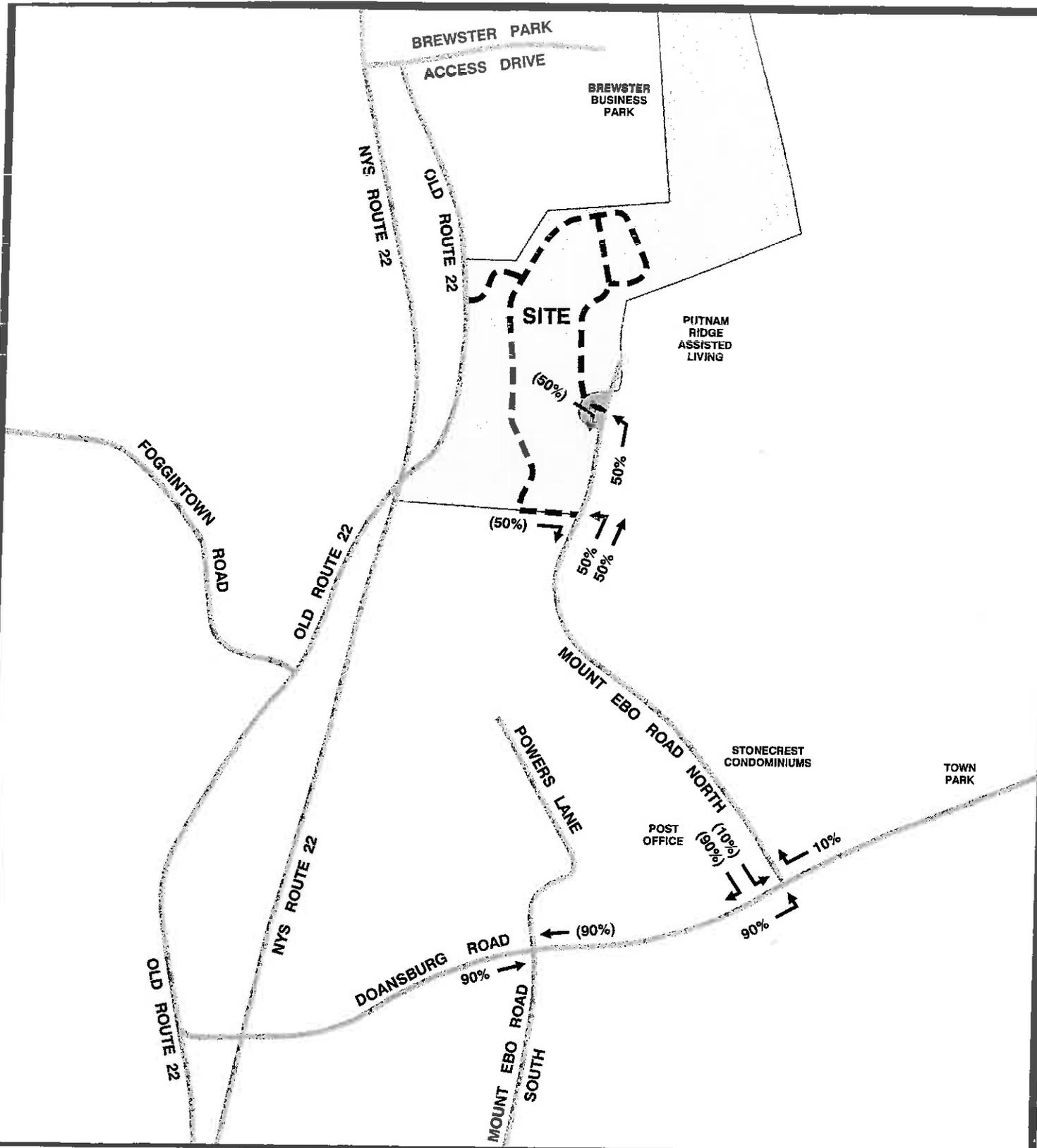
1. Mount Ebo Corporate Center – Lot 6 Traffic Impact and Access Study conducted by Frederick P. Clark Associates, Inc. in March 2005.
2. “Trip Generation,” 9th Edition, published by the Institute of Transportation Engineers (ITE), 2012, using Senior Adult Housing – Attached, Code #252 Fitted Curve Equation based on the number of Dwelling Units.

Note: The 2005 Approved site traffic generation volumes were obtained utilizing “Trip Generation,” 7th Edition, published by the ITE in 2003.

Frederick P. Clark Associates, Inc.

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5/4/16



SITE TRAFFIC
 Enter 00%
 Exit (00%)

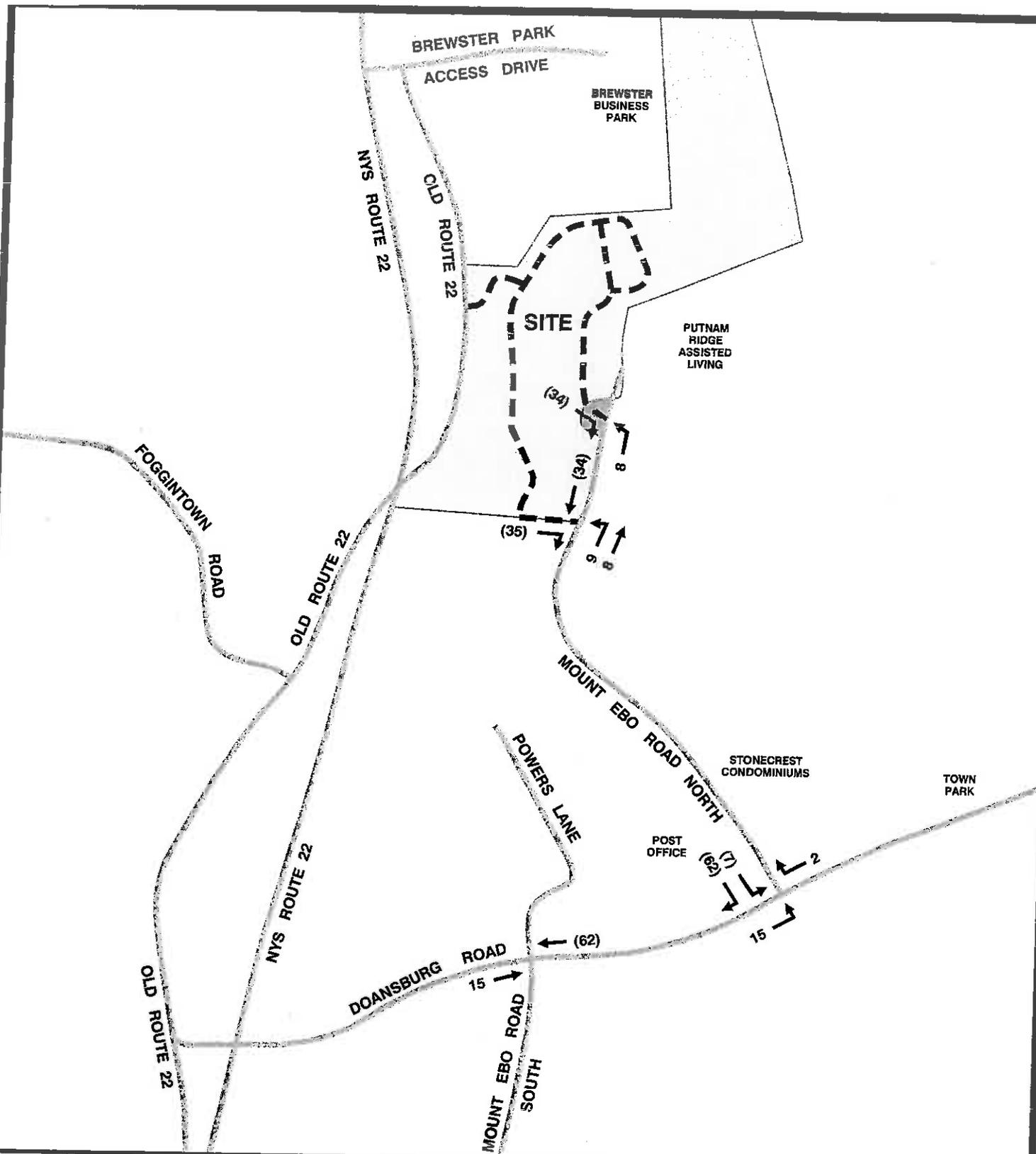
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SITE TRAFFIC DISTRIBUTION

PROPOSED RESIDENTIAL HOUSING
 Barrett Hill Mount Ebo Lot 6
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SITE TRAFFIC

Enter 17
 Exit (69)
 Total 86 Vehicle Trip Ends

LEGEND

--- SITE ACCESS

**SITE TRAFFIC GENERATION
 AND ASSIGNMENT
 WEEKDAY MORNING PEAK HOUR**

**PROPOSED RESIDENTIAL
 HOUSING
 Barrett Hill Mount Ebo Lot 6
 Southeast, New York**

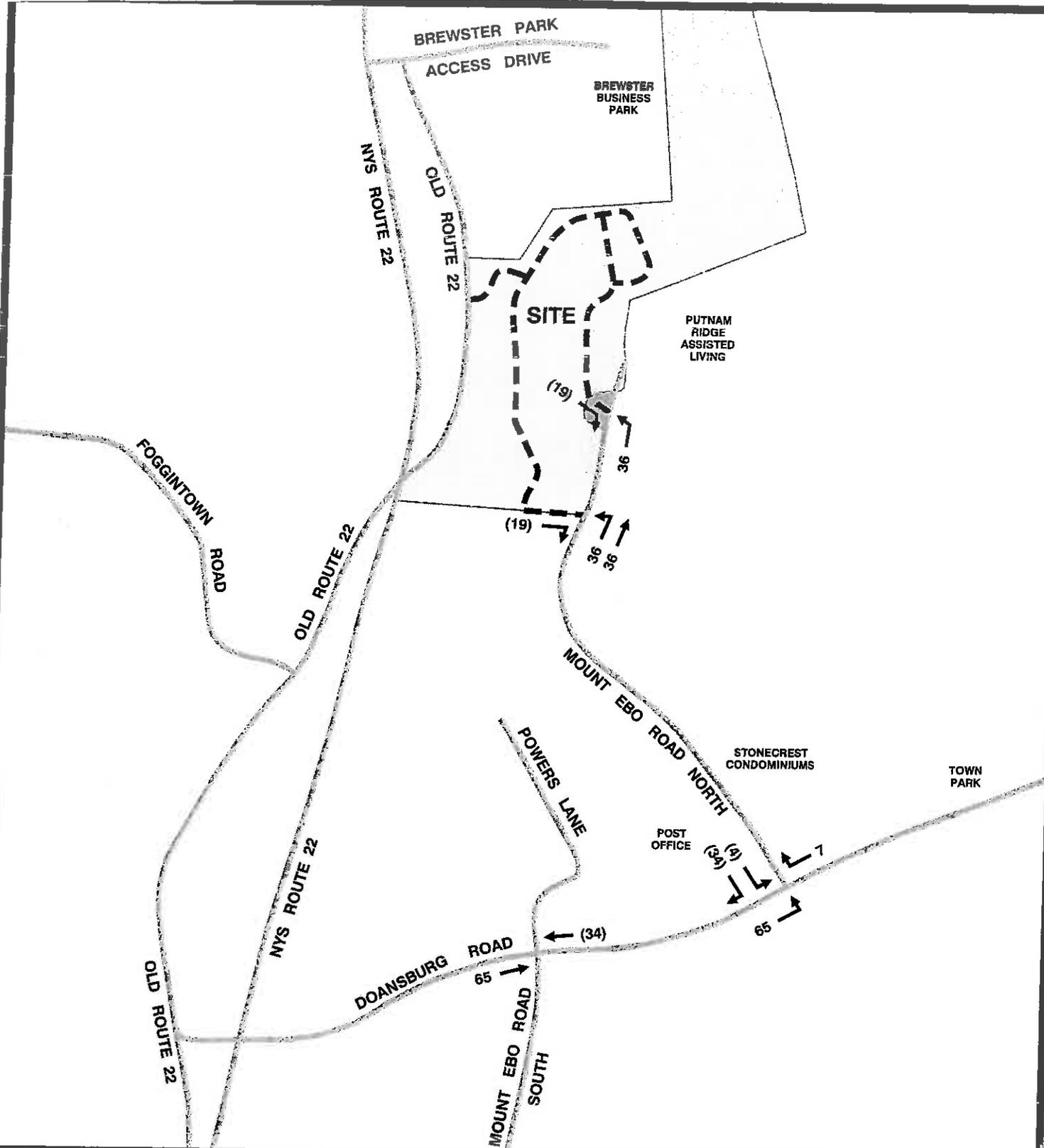


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10

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SITE TRAFFIC
 Enter 72
 Exit (38)
 Total 110 Vehicle Trip Ends

LEGEND
 - - - - SITE ACCESS

**SITE TRAFFIC GENERATION AND ASSIGNMENT
 WEEKDAY AFTERNOON PEAK HOUR**

PROPOSED RESIDENTIAL HOUSING
 Barrett Hill Mount Ebo Lot 6
 Southeast, New York



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Page 4

June 23, 2016

Veterans or those who may not drive. Based on trip generation rates provided by the Institute of Transportation Engineers (ITE) and published in "Trip Generation," 9th Edition, 2012, a 168 dwelling unit, apartment type land use is estimated to generate 86 and 110 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively. The 168 dwelling unit senior adult housing development approved in 2005, was estimated to generate 45 and 52 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively. Table 4 provides a more detailed breakdown of the entering and exiting levels of site traffic anticipated for each of the peak hours for both the previously approved senior adult housing development and the proposed unrestricted apartment rental development. A comparison between the approved senior adult housing development and the proposed unrestricted rental apartment development indicates a net increase in site traffic generation of 41 and 58 vehicle trip ends during the two peak hours, respectively.

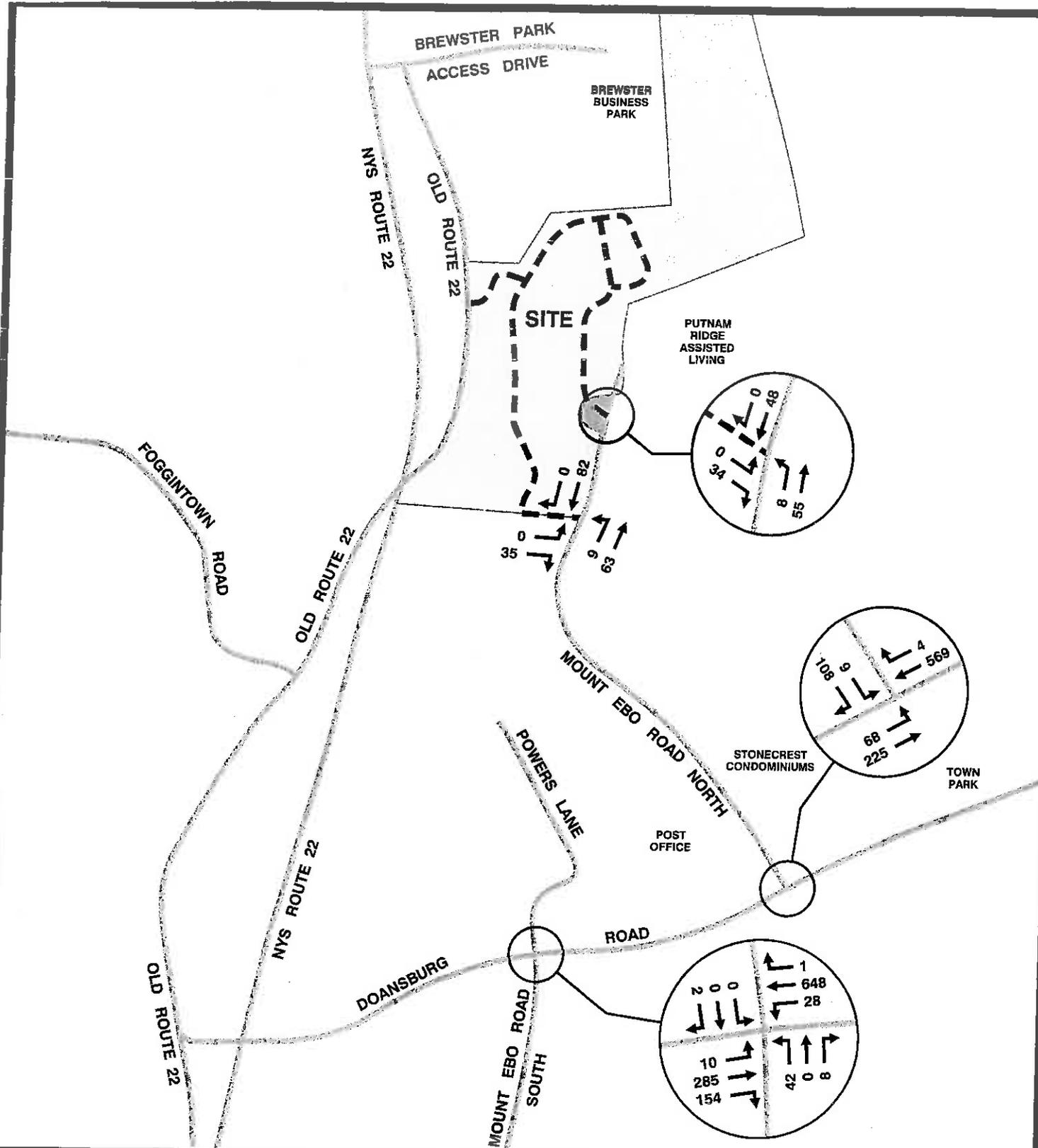
Site traffic volumes were graphically illustrated based on the site traffic distribution provided in the 2005 Traffic Impact and Access Study. Figure 9 graphically illustrates the unchanged site traffic distribution patterns, while Figures 10 and 11 graphically illustrate the assignment of this traffic for the weekday morning and weekday afternoon peak hours, respectively.

The build traffic volumes were subsequently developed by adding the no-build traffic volumes to the site traffic generation, as described above. These volumes are graphically illustrated for the limited Study Area and a 2018 condition in Figures 12 and 13 for the weekday morning and weekday afternoon peak hours, respectively.

Complete Capacity Analyses for Existing, No-Build and Build Conditions Using the Latest SYNCHRO Analysis

SYNCHRO 8.0/HCM 2010 capacity analyses for the STOP controlled intersection of Doansburg Road at Mount Ebo Road South/Powers Lane were completed for the 2016 existing, 2018 no-build and 2018 build conditions during the weekday morning and weekday afternoon peak hours in response to the Town's Planning Consultant's comments.

Results of the analysis indicate that the eastbound and westbound left-turn movements from Doansburg Road to Powers Lane and Mount Ebo Road South, respectively,



Note: The 2018 Build Traffic Volumes include the 2018 No-Build Traffic Volumes and the Site Traffic Generation.

LEGEND

--- SITE ACCESS

**2018 BUILD TRAFFIC VOLUMES
WEEKDAY MORNING PEAK HOUR**

**PROPOSED RESIDENTIAL HOUSING
Barrett Hill Mount Ebo Lot 6
Southeast, New York**

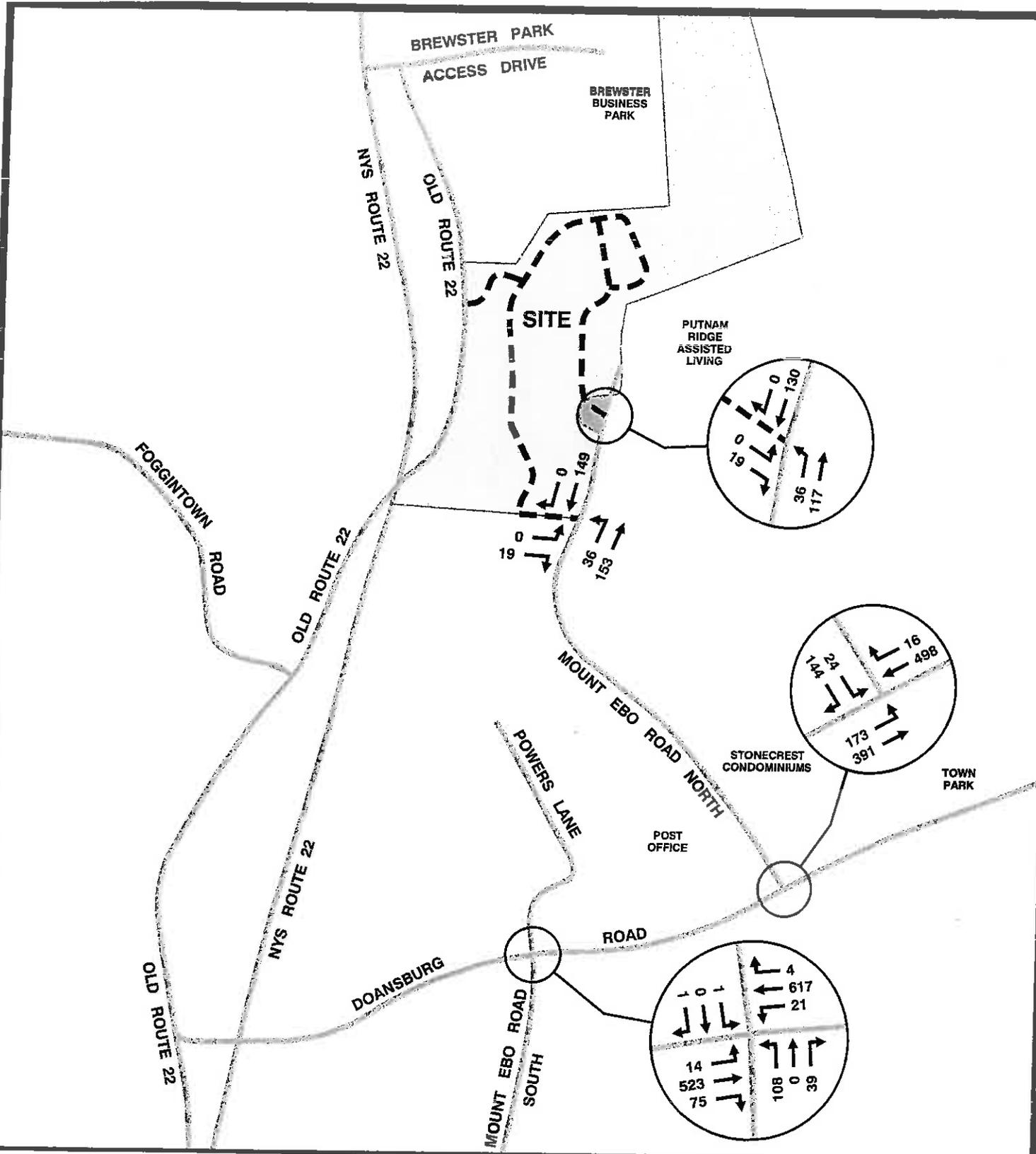


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12

Not to Scale

Date: 5/4/16



Note: The 2018 Build Traffic Volumes include the 2018 No-Build Traffic Volumes and the Site Traffic Generation.

LEGEND

— — — SITE ACCESS

**2018 BUILD TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR**

**PROPOSED RESIDENTIAL HOUSING
Barrett Hill Mount Ebo Lot 6
Southeast, New York**



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13

Not to Scale

Date: 5/4/16

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Mr. Harold Lepler

Page 5

June 23, 2016

operate/will operate at Level of Service "A" during both peak hours and under all conditions. The STOP controlled Powers Lane southbound lane group (left-through-right movement) operates/will operate at Level of Service "B" and "C" during the weekday morning and weekday afternoon peak hours, respectively, under all conditions. The STOP controlled Mount Ebo Road South northbound right-turn lane group operates/will operate at Level of Service "A" and "B" during the weekday morning and weekday afternoon peak hours, respectively, under all conditions. The STOP controlled Mount Ebo Road South northbound left-through lane group operates/will operate at Level of Service "C" during the weekday morning peak hour under all conditions; the northbound left-through lane group will decrease in Level of Service, from "E" to "F," during the weekday afternoon peak hour from the no-build to build conditions.

Average control delay per vehicle on the northbound left-through lane group will increase by only 14.0 seconds and vehicle queuing will not exceed available storage. Furthermore, SimTraffic micro-simulation of the Doansburg Road at the Mount Ebo Road South/Powers Lane intersection for the weekday afternoon peak hour under 2018 build conditions suggests that the average control delay per vehicle of all movements and lanes groups will be significantly lower than estimates provided using the SYNCHRO 8.0/HCM 2010 analysis. Specifically, the SimTraffic micro-simulation for this condition indicates that average control delay on the Mount Ebo Road South northbound left-through lane group will be approximately 35.0 seconds per vehicle. Although this limited SimTraffic micro-simulation model does not account for the upstream signalized intersections; it is our opinion that results of the analysis would be more favorable (decreased delay on the Mount Ebo Road South northbound left-through lane group) if the gaps created on westbound Doansburg Road by the traffic signal at Mount Ebo Road North were accounted for in the analysis. SimTraffic micro-simulation results for the 2018 build conditions weekday afternoon peak hour are provided in the Appendix of this report. Table 5 provides a more detailed summary of the results of the capacity analysis including Level of Service, volume-to-capacity ratio, and control-delay per vehicle. Table 6 provides a more detailed summary of the results of the storage/queue analysis.

Table 7 provides a comparison between the capacity analysis results for the approved senior adult housing development as obtained from the 2005 Traffic Study and the currently proposed rental apartment development based on the most recent traffic volumes obtained for Doansburg Road. It should be noted that the capacity analyses completed in 2005 utilized Synchro 6.0 software and HCM 2000 methodology. The

Table 5
SYNCHRO 8.0/HCM 2010 CAPACITY ANALYSIS RESULTS – MEASURES OF EFFECTIVENESS (MOE) – PEAK HOURS
 Proposed Residential Housing Development
 Barrett Hill - Mount Ebo Lot 6
 41 Mount Ebo Road North
 Southeast, New York

INTERSECTION	CONTROL TYPE	APPROACH	PHYSICAL UNITS	2016 EXISTING CONDITIONS (BASELINE)						2018 NO-BUILD CONDITIONS (BASE)						2018 BUILD CONDITIONS						PROJECT IMPACTS (NO-BUILD TO BUILD)					
				Weekday Morning		Weekday Afternoon		Weekday Morning		Weekday Afternoon		Weekday Morning		Weekday Afternoon		Weekday Morning		Weekday Afternoon		Weekday Morning		Weekday Afternoon					
				LOS/ Delay	V/C Ratio	LOS/ Delay	V/C Ratio	LOS/ Delay	V/C Ratio	LOS/ Delay	V/C Ratio	LOS/ Delay	V/C Ratio	LOS/ Delay	V/C Ratio	LOS/ Delay	V/C Ratio	LOS/ Delay	V/C Ratio	Deterio-ration in LOS	Project Delay (Sec.)	Deterio-ration in LOS	Project Delay (Sec.)				
Doansburg Road at Mount Ebo Road South/ Power's Lane	TWSC	Doansburg Road	EB L	A/8.9	0.01	A/8.8	0.02	A/8.9	0.01	A/8.9	0.02	A/8.9	0.01	A/8.9	0.02	A/8.9	0.02	No	0.2	No	0.1						
			WB L	A/8.4	0.03	A/8.7	0.02	A/8.4	0.03	A/8.7	0.02	A/8.4	0.03	A/8.7	0.02	A/8.4	0.03	No	0.0	No	0.3						
			NB Ln1 (L/T)	C/20.9	0.17	E/39.6	0.54	C/21.3	0.17	E/41.6	0.56	C/23.1	0.19	E/55.6	0.65	C/23.1	0.19	E/55.6	0.65	No	1.8	E-F	14.0				
			SB Ln2 (R)	A/9.7	0.01	B/10.4	0.06	B/10.4	0.01	B/10.4	0.06	A/9.8	0.01	B/10.7	0.06	A/9.8	0.01	B/10.7	0.06	No	0.1	No	0.3				
		Power's Lane	SB Ln1 (L/TR)	B/10.3	0.00	C/17.0	0.01	B/10.4	0.00	C/17.3	0.01	B/10.7	0.00	C/18.7	0.01	B/10.7	0.00	C/18.7	0.01	No	0.1	No	1.4				

- Notes:
1. Synchro 8.0/HCM 2010 is used for capacity analysis.
 2. Level of Service determining parameter is called the service measure.
 3. TWSC = Two-Way STOP Control.
 4. For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).
 5. ITE publication for Traffic Access and Impact Studies for site development "A Recommended Practice" indicated that overall Level of Service ratings of A to D are normally considered acceptable for signalized intersections (Level C or better are considered desirable). Levels of Service E and F are normally undesirable.
 6. V/C ratio indicates the amount of congestion for each Movement. Any V/C ratio greater than or equal to one indicates that the Movement is operating at above capacity.
 7. Physical Units consist of Lane Group and Critical Movement for TWSC Intersections.

NB = Northbound
 L = Left Turn
 EB = Eastbound
 T = Through
 SB = Southbound
 R = Right Turn
 WB = Westbound
 Lt = Lane

Table 6
SYNCHRO 8.0/HCM 2010 STORAGE/QUEUE ANALYSIS RESULTS -- PEAK HOURS
 Proposed Residential Housing Development
 Barrett Hill - Mount Ebo Lot 6
 41 Mount Ebo Road North
 Southeast, New York

INTERSECTION	CONTROL TYPE	APPROACH	STORAGE/ LINK LENGTH (VEHICLES)	PHYSICAL UNITS	2016 EXISTING CONDITIONS (BASELINE)			2018 NO-BUILD CONDITIONS (BASE)			2018 BUILD CONDITIONS		
					Weekday Morning Queue Length (Feet)	Weekday Afternoon Queue Length (Feet)	Weekday Morning Queue Length (Feet)	Weekday Afternoon Queue Length (Feet)	Weekday Morning Queue Length (Feet)	Weekday Afternoon Queue Length (Feet)			
Doansburg Road at Mount Ebo Road South/ Power's Lane	TWSC	Doansburg Road	28	EB L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
		Doansburg Road	26.4	WB T	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
		Mount Ebo Road South	14.8	NB Ln1 (L,T)	0.6	2.9	0.6	3.0	0.7	3.8	0.7	3.8	
		Power's Lane	7.0	Ln2 (R)	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.2	
			10.0	SB Ln1 (L,R)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Notes:

- Synchro 8.0/HCM 2010 is used for storage/queue analysis.
- The Queue Length rows show the 95th percentile maximum queue length in vehicles.
- The Queue Length is for each lane. The total queue length is divided by the number of lanes and the lane utilization factor.
- The 95th percentile queue is the maximum back of the queue with the 95th percentile traffic volumes.
- **Bolded** 95th percentile queue exceeds the storage available.
- TWSC = Two-Way STOP Control.
- Physical Units consist of Lane Group and Critical Movement for TWSC Intersections.

NB = Northbound EB = Eastbound SB = Southbound WB = Westbound
 L = Left Turn T = Through R = Right Turn Ln = Lane

Table 7
 APPROVED VS. PROPOSED RESIDENTIAL HOUSING DEVELOPMENT CAPACITY ANALYSIS RESULTS COMPARISON – LEVEL OF SERVICE AND DELAY – PEAK HOURS
 Proposed Residential Housing Development
 Barrett Hill – Mount Ebo Lot 6
 41 Mount Ebo Road North
 Southeast, New York

INTERSECTION	CONTROL TYPE	APPROACH	PHYSICAL UNITS	2005 EXISTING CONDITIONS (APPROVED)			2016 EXISTING CONDITIONS (BASELINE)			2007 NO-BUILD CONDITIONS (APPROVED)			2018 NO-BUILD CONDITIONS (BASE)		
				Weekday Morning LOS/Delay	Weekday Afternoon LOS/Delay	Weekday Weekend Morning LOS/Delay	Weekday Morning LOS/Delay	Weekday Afternoon LOS/Delay	Weekday Weekend Morning LOS/Delay	Weekday Morning LOS/Delay	Weekday Afternoon LOS/Delay	Weekday Weekend Morning LOS/Delay	Weekday Afternoon LOS/Delay		
Doansburg Road at Mount Ebo Road South/Power's Lane	TWSC	Doansburg Road	EB L	A/0.2	A/0.1	A/8.9	A/0.2	A/8.8	A/0.2	A/0.1	A/8.9	A/0.2	A/8.9		
			WB L	A/0.4	A/0.1	A/8.4	A/0.4	A/8.7	A/0.4	A/8.4	A/0.4	A/8.7			
			NB Ln1 (LT)	D/29.1	D/29.1	C/20.9	E/39.6	B/13.6	D/32.2	C/21.3	E/41.6				
			SB Ln2 (R)	B/10.9	B/10.4	A/9.7	B/11.0	A/9.7	B/10.4	E/41.6					
Doansburg Road at Mount Ebo Road South/Power's Lane	TWSC	Power's Lane	EB Ln1 (LTR)	B/13.4	C/17.2	B/10.3	C/17.0	B/13.8	C/17.9	B/10.4	C/17.3				

INTERSECTION	CONTROL TYPE	APPROACH	PHYSICAL UNITS	2007 BUILD CONDITIONS (APPROVED)			2018 BUILD CONDITIONS (CURRENT PROPOSAL)			PROJECT IMPACTS (2007 TO 2018)		
				Weekday Morning LOS/Delay	Weekday Afternoon LOS/Delay	Weekday Weekend Morning LOS/Delay	Weekday Morning LOS/Delay	Weekday Afternoon LOS/Delay	Weekday Weekend Morning LOS/Delay	Deterioration in LOS	Project Delay (Sec.)	Deterioration in LOS
Doansburg Road at Mount Ebo Road South/Power's Lane	TWSC	Doansburg Road	EB L	A/0.2	A/0.1	A/9.1	A/9.0	A/9.0	No	8.9	No	8.9
			WB L	A/0.4	A/0.1	A/8.4	A/9.0	A/8.4	No	8.0	No	8.9
			NB Ln1 (LT)	B/14.4	E/35.6	C/23.1	F/55.6	B-C	8.7	E-F	20.0	
			SB Ln2 (R)	A/9.1	B/11.2	A/9.8	B/10.7	No	0.7	No	0.0	
Doansburg Road at Mount Ebo Road South/Power's Lane	TWSC	Power's Lane	EB Ln1 (LTR)	B/14.1	C/18.7	B/10.7	C/18.7	No	0.0	No	0.0	

- Notes:
- Synchro 6.0 was utilized for the capacity analysis approved in 2005.
 - Synchro 8.0/HCM 2010 is used for capacity analysis of the proposed 2016 Application.
 - Level of Service determining parameter is called the service measure.
 - TWSC = Two-Way STOP Control.
 - For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).
 - ITE publication for Traffic Access and Impact Studies for site development "A Recommended Practice" indicated that overall Level of Service ratings of A to D are normally considered acceptable for intersections (Level C or better are considered desirable). Levels of Service E and F are normally undesirable.
 - Physical Units consist of Lane Group and Critical Movement for TWSC Intersections

NB = Northbound EB = Eastbound SB = Southbound WB = Westbound
 L = Left Turn T = Through R = Right Turn Ln = Lane

Table 8
 APPROVED VS. PROPOSED RESIDENTIAL HOUSING DEVELOPMENT COMPARISON
 SYNCHRO 8.0/HCM 2010 CAPACITY ANALYSIS RESULTS - LEVEL OF SERVICE AND DELAY - PEAK HOURS
 Proposed Residential Housing Development
 Barrett Hill - Mount Ebo Lot 6
 41 Mount Ebo Road North
 Southeast, New York

INTERSECTION	CONTROL TYPE	APPROACH	PHYSICAL UNITS	2016 BUILD CONDITIONS (APPROVED DEVELOPMENT)			2018 BUILD CONDITIONS (CURRENT PROPOSAL)			PROJECT IMPACTS		
				Weekday Morning	Weekday Afternoon	Weekday Delay	Weekday Morning LOS	Weekday Afternoon Delay	Weekday Morning Deterioration in LOS	Weekday Afternoon Project Delay (Sec.)	Weekday Morning Project Delay (Sec.)	Weekday Afternoon Deterioration in LOS
Doansburg Road at Mount Ebo Road South/Power's Lane	TWSC	Doansburg Road	EB L	A/9.0	A/9.0	A/9.1	No	A/9.0	No	0.1	No	0.0
			WB L	A/8.4	A/8.8	A/8.4	No	A/9.0	No	0.0	No	0.0
			NB Ln1 (L/T)	C/22.2	E/47.1	C/23.1	No	F/55.6	No	0.9	E-F	8.7
			SB Ln2 (R)	A/9.8	B/10.6	A/9.8	No	B/10.7	No	0.0	No	0.1
		Power's Lane	SB Ln1 (L/TR)	E/10.5	C/17.9	B/10.7	No	C/18.7	No	0.2	No	0.8

Notes:
 1. Synchro 8.0/HCM 2010 is used for capacity analysis of both the approved and proposed developments.
 2. Level of Service determining parameter is called the service measure.
 3. TWSC = Two-Way STOP Control.
 4. For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).
 5. ITE publication for Traffic Access and Impact Studies for site development "A Recommended Practice" indicated that overall Level of Service ratings of A to D are normally considered acceptable for intersections (Level C or better are considered desirable). Levels of Service E and F are normally undesirable.
 6. Physical Units consist of Lane Group and Critical Movement for TWSC Intersections

NB = Northbound
 L = Left Turn
 EB = Eastbound
 T = Through
 SB = Southbound
 R = Right Turn
 WB = Westbound
 Ln = Lane

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Page 7

June 23, 2016

For comparison purposes the daily volume on Doansburg Road indicated an increase in the two-way volume of 4.7 percent. A comparison of the traffic volumes on NYS Route 22, south of the Doansburg Road intersection, indicated an increase of 48.5 percent during the 11-year period during the weekday morning peak hour and 13.4 percent during the weekday afternoon peak hour.

For comparison purposes and a worst case scenario for the purposes of completing this analysis, the proposed 168-unit development is based on trip generation rates provided by the most recent publication from the Institute of Transportation Engineers (ITE) and indicates that a development of this type and size could generate 86 and 110 vehicle trip ends during a typical weekday morning and weekday afternoon peak hour, respectively. Although it is assumed this development will include senior citizens, potentially Town employees, potentially Veterans with disabilities, to represent a worst case analysis, credits have not been applied to these estimates to reduce the potential site traffic generation. It is possible that depending on the mix of residents the level of site traffic could decrease during peak hours.

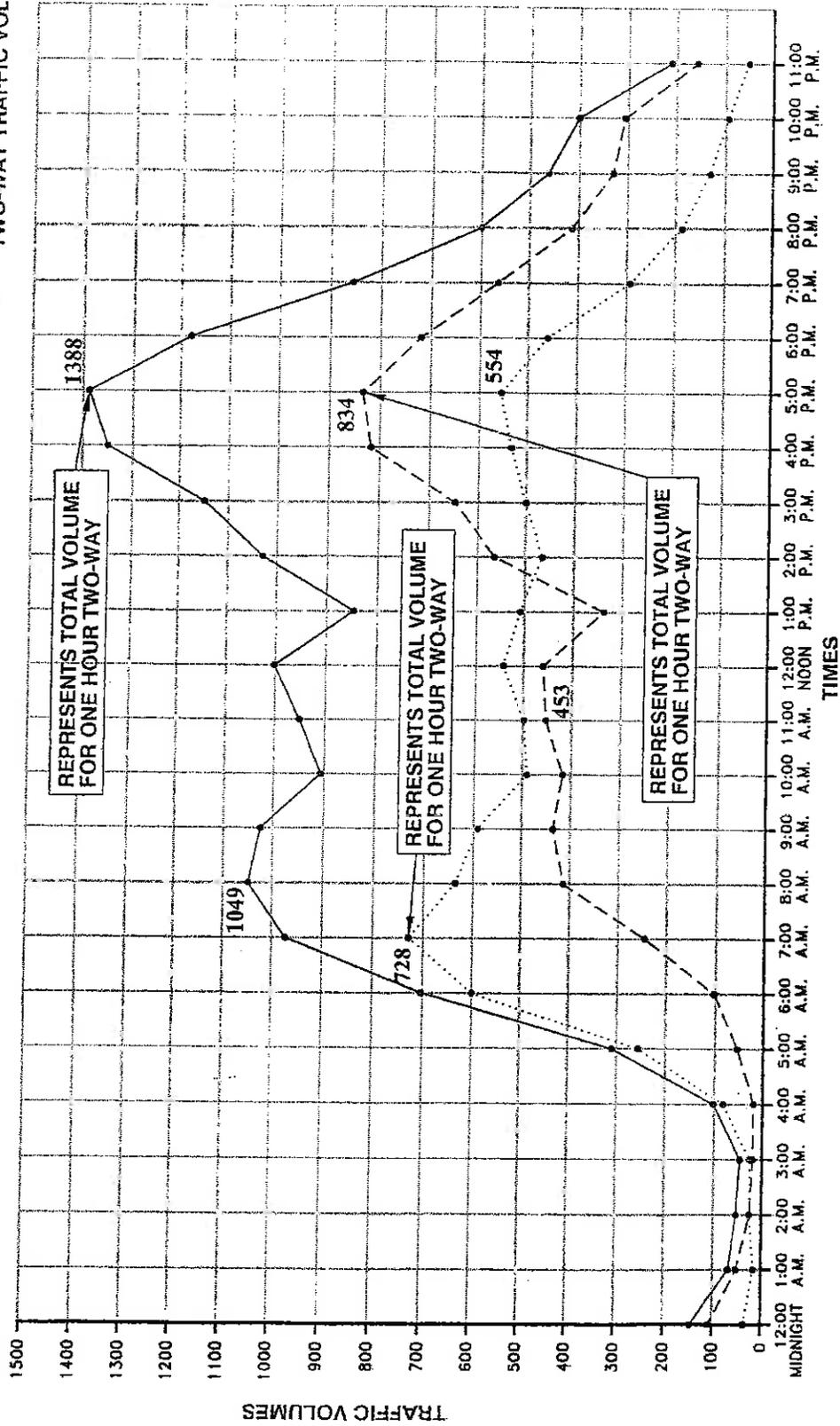
The results of the analyses of the one STOP sign controlled intersection of Doansburg Road at Mt. Ebo Road South/Power's Lane indicates that under existing conditions this intersection operates at acceptable Levels of Service, except for the northbound left/through movement during the weekday afternoon peak hour. Under a no-build condition for 2018 this approach would continue to operate at Level of Service "E," although all other approaches to the intersection would operate at acceptable Levels of Service. With the increase in traffic based on adding site traffic generation to this intersection, which would be along Doansburg Road there would be no change in Level of Service during the weekday morning peak hour and an insignificant, if any, increase in vehicle delay due to site traffic. However, during the weekday afternoon peak hour the northbound left/through movement from Mt. Ebo Road South changed from Level of Service "E" to "F" due to an increase in vehicle delay of 14.0 seconds. Although this may be considered significant by general standards since it is a change in Level of Service from "E" to "F" the increase in delay per vehicle is only 14.0 seconds. For a STOP sign controlled intersection motorists entering Doansburg Road, which is a busy east-west, collector-arterial-type of roadway serving the entire area, this increase in delay may not be considered significant.

APPENDIX

2005 TRAFFIC IMPACT AND ACCESS STUDY

2005 WEEKDAY HOURLY TRAFFIC VOLUMES
N.Y.S. ROUTE 22, SOUTH OF OLD ROUTE 22
MOUNT EBO CORPORATE CENTER "LOT 6"
 Southeast, New York

LEGEND
 SOUTHBOUND TRAFFIC VOLUMES
 - - - NORTHBOUND TRAFFIC VOLUMES
 — TWO-WAY TRAFFIC VOLUMES



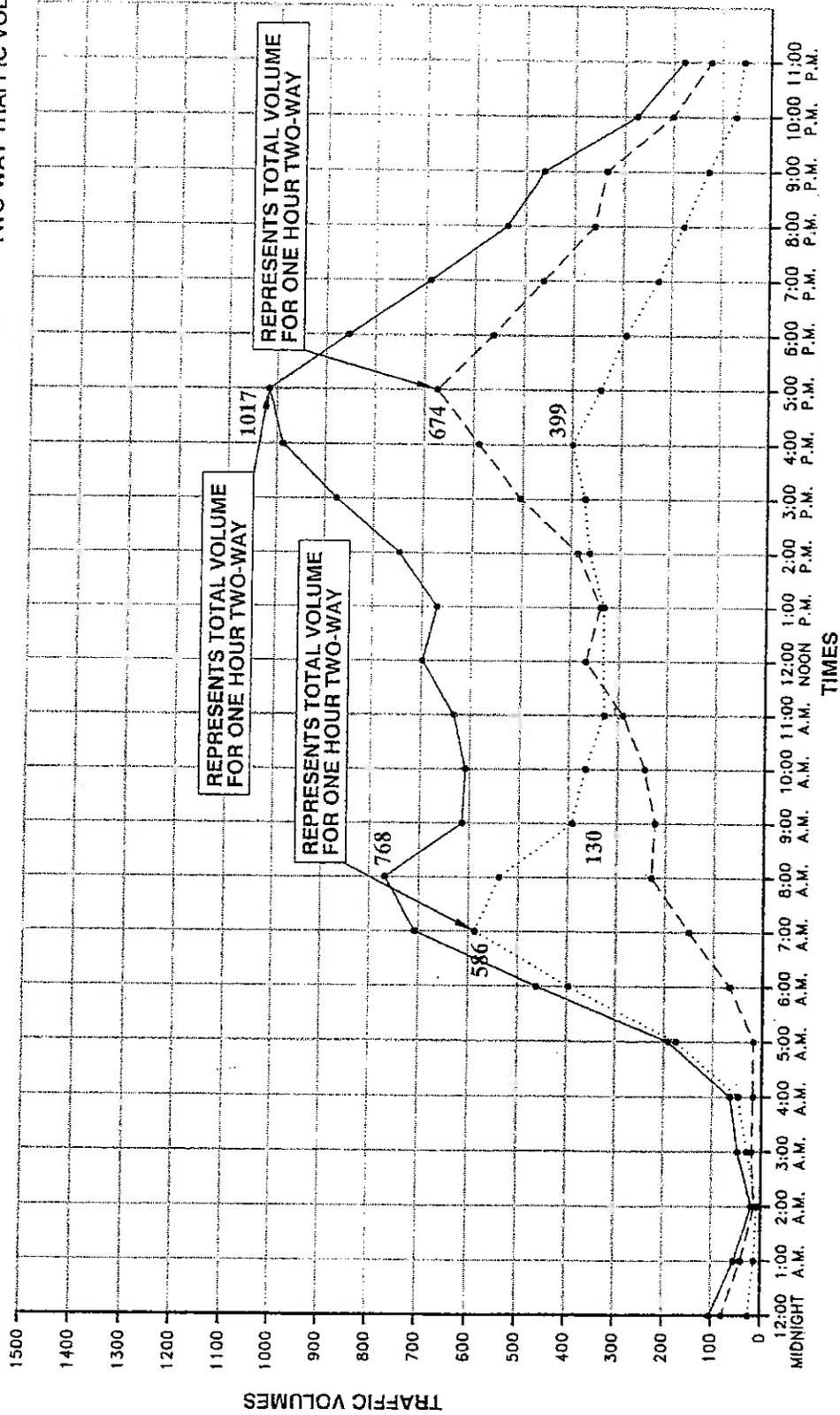
Source: ATR's conducted by Frederick P. Clark Associates, Inc. from Monday, March 7 to Friday, March 11, 2005.

ADT: For 2005 = 8,306 for Southbound
 ADT: For 2005 = 8,699 for Northbound
 ADT: For 2005 = 17,005 for Two-Way

Figure 5

2005 WEEKDAY HOURLY TRAFFIC VOLUMES
DOANSBURG ROAD, WEST OF MOUNT EBO ROAD NORTH
MOUNT EBO CORPORATE CENTER "LOT 6"
 Southeast, New York

LEGEND
 WESTBOUND TRAFFIC VOLUMES
 - - - - EASTBOUND TRAFFIC VOLUMES
 ——— TWO-WAY TRAFFIC VOLUMES



Source: ATR's conducted by Frederick P. Clark Associates, Inc.
 from Monday, March 7 to Friday, March 11, 2005.

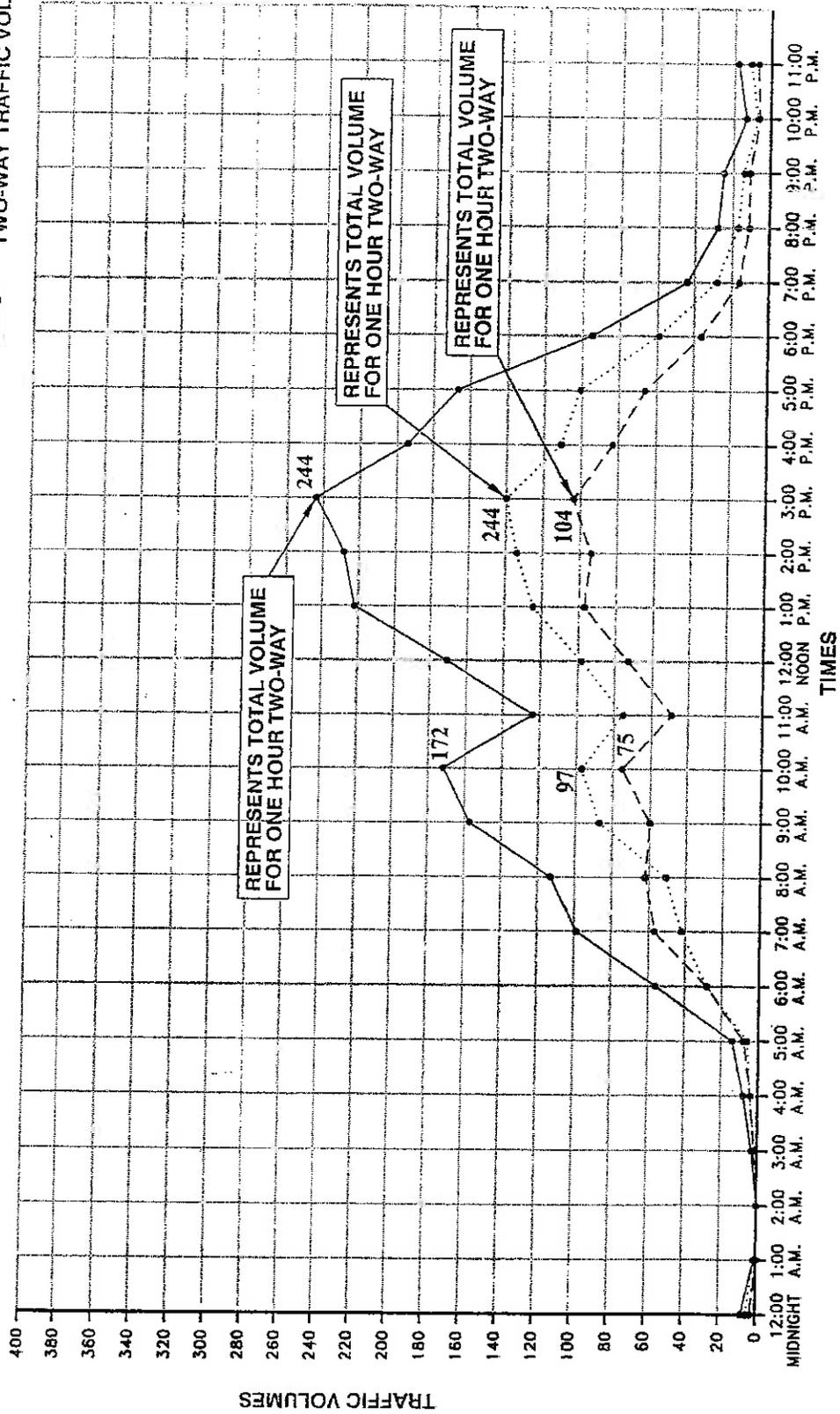
ADT: For 2005 = 5,993 for Westbound
 ADT: For 2005 = 6,306 for Eastbound
 ADT: For 2005 = 12,299 for Two-Way

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 March 24, 2005
 File: 734-001fig6

Figure 6

2005 WEEKDAY HOURLY TRAFFIC VOLUMES
MOUNT EBO ROAD NORTH, NORTH OF DOANSBURG ROAD
MOUNT EBO CORPORATE CENTER "LOT 6"
 Southeast, New York

LEGEND
 SOUTHBOUND TRAFFIC VOLUMES
 - - - NORTHBOUND TRAFFIC VOLUMES
 — TWO-WAY TRAFFIC VOLUMES



Source: ATR's conducted by Frederick P. Clark Associates, Inc. from Monday, March 7 to Friday, March 11, 2005.

ADT: For 2005 = 1,195 for Southbound
 ADT: For 2005 = 1,060 for Northbound
 ADT: For 2005 = 2,255 for Two-Way

Table 1
 2005 TWO-WAY TRAFFIC VOLUMES – WEEKDAY PEAK HOURS
 Mount Ebo Corporate Center “Lot 6”
 Southeast, New York

LOCATION	VEHICLES	
	Morning	Afternoon
New York State Route 22, south of Doansburg Road	1,477	2,183
New York State Route 22, north of Doansburg Road	810	1,237
New York State Route 22, south of Old Route 22	817	1,237
New York State Route 22, north of Old Route 22	821	1,238
New York State Route 22, south of Brewster Business Park Access Drive	813	1,297
New York State Route 22, north of Brewster Business Park Access Drive	811	1,273
Old Doansburg Road, west of New York State Route 22	100	125
Doansburg Road, east of New York State Route 22	757	1,181
Doansburg Road, west of Powers Lane	697	1,141
Doansburg Road, east of Powers Lane	652	1,057
Doansburg Road, west of Mount Ebo Road North	649	1,057
Doansburg Road, east of Mount Ebo Road North	650	877
Mount Ebo Road North, north of Doansburg Road	95	232
Old Route 22, East of New York State Route 22	2	3
Old Route 22, west of New York State Route 22	6	6
Brewster Business Park Access Drive, west of New York State Route 22	36	68

Source: Turning movement counts conducted by Frederick P. Clark Associates, Inc. from 6:30 to 9:30 A.M. and from 4:00 to 7:00 P.M. on Thursday, March 10, 2005.

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Table 4
 SITE TRAFFIC GENERATION – WEEKDAY PEAK HOURS
 Mount Ebo Corporate Center “Lot 6”
 Southeast, New York

LAND DEVELOPMENT	SIZE	TRAFFIC DIRECTION	VEHICLE TRIPS	
			Morning	Afternoon
Age-Restricted Housing	168 units	Enter	20	32
		Exit	<u>25</u>	<u>20</u>
		Total	45	52

Source: • "Trip Generation," 7th Edition, published by the Institute of Transportation Engineers (ITE) in 2003.

Notes: • The project development program calls for developing: 168 age-restricted, attached dwelling units, 3,000 s.f., clubhouse and 2,100 s.f. conservatory to service the local community.
 • Estimates for age-restricted housing (senior adult housing) conducted using Code #252 and the maximum range of the trip generation rates per occupied dwelling units to be conservative.

Frederick P. Clark Associates, Inc.

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TURNING MOVEMENT COUNTS

PROPOSED RESIDENTIAL HOUSING, BARRETT HILL (MT. EBO - LOT 6), DOANSBURG ROAD/MT. EBO ROAD SOUTH, SOUTHEAST, NEW YORK (#754.001)

FIELD DATA SUMMARY - Doansburg Road at Mount Ebo Road South & Fowers Lane

Passenger Vehicles

Tuesday 29-Mar-16	Eastbound - Doansburg Road			Westbound - Doansburg Road			Northbound - Mount Ebo Road			Southbound - Fowers Lane			Total	Last 4 Quarters		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			Total	
7:00 AM	0	33	11	0	154	2	156	2	0	0	0	0	0	202		
7:15 AM	2	29	9	5	217	5	227	2	0	1	3	0	0	270		
7:30 AM	4	66	22	5	168	0	173	3	0	0	3	1	0	269		
7:45 AM	2	81	39	2	125	4	131	3	0	1	4	0	0	258	999	
8:00 AM	2	60	42	9	126	0	135	5	0	1	6	0	1	246	1,033	
8:15 AM	6	48	39	10	142	0	152	10	0	2	12	0	0	257	1,030	
8:30 AM	0	73	38	5	167	0	172	14	0	3	17	0	0	300	1,061	
8:45 AM	2	84	35	4	141	1	146	13	0	2	15	0	1	283	1,086	
AM Peak Hour Vol.	10	265	154	28	576	1	605	42	0	8	50	0	2	1,086		
Peak Hour Factor				0.89			0.88			0.74			0.50			0.91
Wednesday 16-Dec-15	Eastbound - Doansburg Road			Westbound - Doansburg Road			Northbound - Mount Ebo Road			Southbound - Fowers Lane			Total	Last 4 Quarters		
4:00 PM	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			Total	
4:00 PM	4	87	9	0	94	0	94	11	0	4	15	0	0	209	209	
4:15 PM	3	103	7	1	109	2	112	13	0	3	16	0	1	242	451	
4:30 PM	2	117	13	2	125	1	128	29	0	9	38	0	0	298	749	
4:45 PM	4	96	18	6	143	0	149	28	0	10	38	0	0	305	1,054	
5:00 PM	3	114	21	9	160	1	170	29	0	12	41	1	2	351	1,196	
5:15 PM	5	123	23	4	145	2	151	22	0	8	30	0	0	332	1,206	
5:30 PM	2	85	15	3	128	0	131	31	0	9	40	0	0	273	1,261	
5:45 PM	1	94	2	1	115	1	117	23	0	6	29	0	1	244	1,200	
PM Peak Hour Vol.	14	450	75	21	573	4	598	108	0	39	147	1	1	1,286		
Peak Hour Factor				0.89			0.88			0.90			0.25			0.92

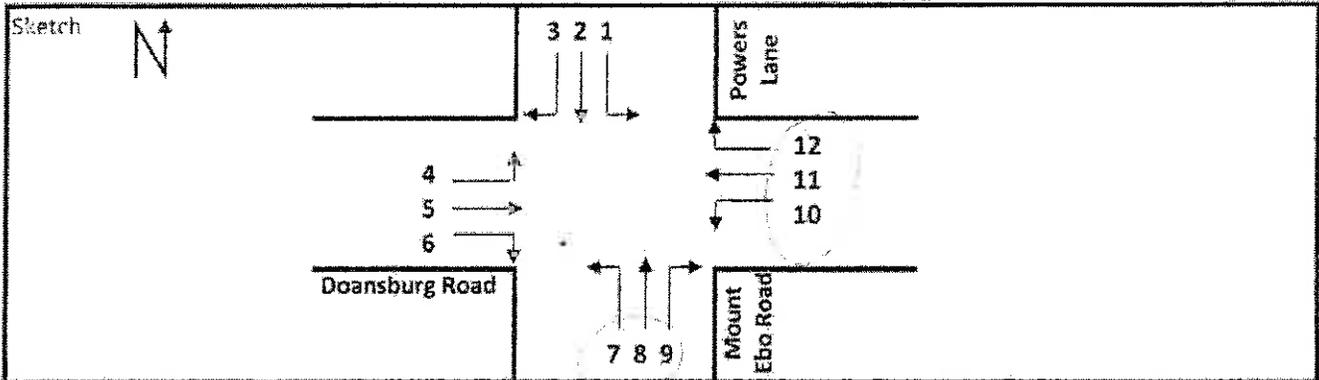


TURNING MOVEMENT COUNTS

Location: Doansburg Road & Mount Ebo Road South & Powers Lane

Surveyor: Greg A.

Day/Date: Tuesday 3/29/16



Time	Vehicle Movement Number											
	1	2	3	4	5	6	7	8	9	10	11	12
7:15							2	0	0	0	154	2
7:30							2	0	1	5	217	5
7:45							3	0	0	5	168	0
8:00							3	0	1	2	125	9
8:15							5	0	1	9	126	0
8:30							10	0	2	10	142	0
8:45							14	0	3	5	167	0
9:00							13	0	2	41	141	1

Time	Vehicle Movement Number											
	1	2	3	4	5	6	7	8	9	10	11	12
4:15							11	0	1	0	97	0
4:30							13	0	3	1	107	2
4:45							29	0	9	2	127	1
5:00							28	0	10	6	142	0
5:15							27	0	12	9	160	1
5:30							21	0	8	4	143	2
5:45							31	0	9	2	120	0
6:00							23	0	6	1	115	1

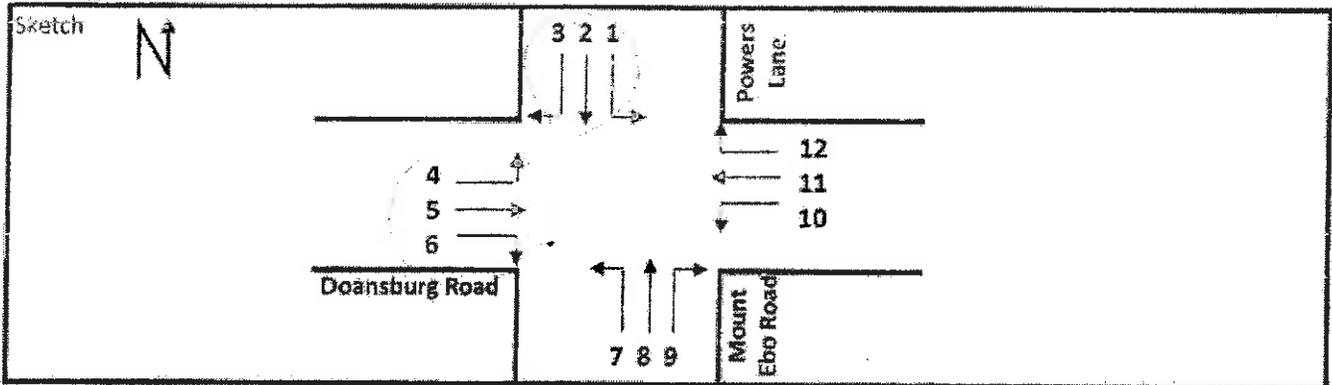


TURNING MOVEMENT COUNTS

Location: Doansburg Road & Mount Ebo Road South & Powers Lane

Surveyor: S. J. ...

Day/Date: Tuesday 3/29/16



Time	Vehicle Movement Number											
	1	2	3	4	5	6	7	8	9	10	11	12
7:15	0	0	0	6	33	11						
7:30	0	0	0	2	29	9						
7:45	1	0	0	4	66	22						
8:00	0	0	1	2	81	39						
8:15	0	0	1	2	60	42						
8:30	0	0	0	6	48	39						
8:45	0	0	0	0	73	38						
9:00	0	0	1	2	84	35						

Time	Vehicle Movement Number											
	1	2	3	4	5	6	7	8	9	10	11	12
4:15	0	0	0	1	87	3						
4:30	0	0	1	3	63	7						
4:45	0	0	0	2	117	13						
5:00	0	0	0	1	96	18						
5:15	1	0	1	3	114	21						
5:30	0	0	0	5	123	23						
5:45	0	0	0	2	85	15						
6:00	0	0	1	1	94	2						

PROPOSED RESIDENTIAL HOUSING, BARRETT HILL (MOUNT EBO - LOT 6), 41 MOUNT EBO ROAD NORTH, SOUTHEAST, NEW FIELD DATA SUMMARY - Doansburg Road, West of Mount Ebo Road South

TIME	Wednesday, April 13, 2016			Thursday, April 14, 2016			Friday, April 15, 2016			Saturday, April 16, 2016			Sunday, April 17, 2016		
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL
12:00 AM	0	0	0	39	12	51	49	10	59	88	16	104	71	24	95
1:00 AM	0	0	0	21	12	33	24	16	40	41	20	61	36	22	58
2:00 AM	0	0	0	7	6	13	6	7	13	16	12	28	32	12	44
3:00 AM	0	0	0	7	19	26	14	16	30	11	12	23	17	10	27
4:00 AM	0	0	0	17	83	100	14	79	93	12	25	37	12	15	27
5:00 AM	0	0	0	54	226	280	46	226	272	39	46	85	15	46	61
6:00 AM	0	0	0	163	437	600	145	411	556	95	100	195	49	75	124
7:00 AM	0	0	0	262	589	851	285	561	846	126	155	281	62	126	188
8:00 AM	0	0	0	375	525	900	342	536	878	186	226	412	155	228	383
9:00 AM	0	0	0	313	414	727	283	408	691	247	256	503	177	285	462
10:00 AM	0	0	0	240	278	518	279	297	576	268	299	567	298	319	617
11:00 AM	275	343	618	257	317	574	297	338	635	276	321	597	379	352	731
12:00 PM	343	366	709	328	345	673	344	398	742	323	297	620	370	422	792
1:00 PM	369	328	697	348	343	691	346	323	669	314	284	598	339	331	670
2:00 PM	398	388	786	441	355	796	456	404	860	340	314	654	355	337	692
3:00 PM	507	448	955	490	394	884	512	422	934	368	372	740	359	252	591
4:00 PM	531	485	1,016	551	504	1,055	534	494	1,028	285	298	583	313	268	581
5:00 PM	564	346	910	585	402	987	491	406	897	304	355	659	300	219	519
6:00 PM	508	310	818	484	313	797	470	363	833	208	239	447	279	182	461
7:00 PM	398	227	625	408	244	652	425	247	672	232	209	441	255	192	447
8:00 PM	298	136	434	375	159	534	350	173	523	176	164	340	221	145	366
9:00 PM	233	96	329	241	101	342	290	133	423	144	135	279	151	71	222
10:00 PM	145	44	189	141	46	187	208	97	305	142	129	271	99	59	158
11:00 PM	97	50	147	94	52	146	143	81	224	112	82	194	53	42	95
TOTAL	4,666	3,567	8,233	6,241	6,176	12,417	6,353	6,446	12,799	4,553	4,366	8,719	4,377	4,034	8,411
TIME	Monday, April 18, 2016			Tuesday, April 19, 2016			Wednesday, April 20, 2016			Thursday, April 21, 2016					
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL			
12:00 AM	38	8	46	40	22	62	44	17	61	47	4	51			
1:00 AM	9	6	15	24	15	39	24	16	40	25	12	37			
2:00 AM	11	2	13	5	7	12	5	6	11	11	5	16			
3:00 AM	8	22	30	7	23	30	17	22	39	7	23	30			
4:00 AM	10	74	84	15	87	102	9	72	81	6	72	78			
5:00 AM	48	209	257	48	235	283	50	247	297	51	230	281			
6:00 AM	137	468	605	134	475	609	145	441	586	150	433	583			
7:00 AM	251	554	805	282	533	815	274	549	823	279	569	848			
8:00 AM	329	476	805	351	501	852	362	505	867	365	493	858			
9:00 AM	298	422	720	293	402	695	289	396	685	0	0	0			
10:00 AM	284	333	617	224	316	540	263	321	584	0	0	0			
11:00 AM	275	334	609	287	343	630	276	336	612	0	0	0			
12:00 PM	391	331	722	344	345	689	329	351	680	0	0	0			
1:00 PM	357	333	690	386	328	714	355	337	692	0	0	0			
2:00 PM	429	386	815	436	363	799	411	368	779	0	0	0			
3:00 PM	510	457	967	474	415	889	507	402	909	0	0	0			
4:00 PM	488	490	978	538	496	1,034	536	509	1,045	0	0	0			
5:00 PM	387	389	776	513	383	896	595	368	963	0	0	0			
6:00 PM	481	275	756	494	295	789	510	285	795	0	0	0			
7:00 PM	447	231	678	403	216	619	410	222	632	0	0	0			
8:00 PM	278	159	437	360	158	518	299	137	436	0	0	0			
9:00 PM	192	88	280	84	289	373	239	101	340	0	0	0			
10:00 PM	124	58	182	147	58	205	159	64	223	0	0	0			
11:00 PM	71	48	119	83	47	130	92	49	141	0	0	0			
TOTAL	6,053	6,153	12,206	6,093	6,147	12,240	6,200	6,121	12,321	941	1,841	2,782			

American Traffic Information, Inc.

336 Pulaski Ave
Staten Island, NY, USA 10303
718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

Start Time	11-Apr-16		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	*	*	*	*	39	12	49	10	88	16	71	24	62	16
01:00	*	*	*	*	*	*	21	12	24	16	41	20	36	22	30	18
02:00	*	*	*	*	*	*	7	6	6	7	16	12	32	12	15	9
03:00	*	*	*	*	*	*	7	19	14	16	11	12	17	10	12	14
04:00	*	*	*	*	*	*	17	83	14	79	12	25	12	15	14	50
05:00	*	*	*	*	*	*	54	226	46	226	39	46	15	46	38	136
06:00	*	*	*	*	*	*	163	437	145	411	95	100	49	75	113	256
07:00	*	*	*	*	*	*	262	589	285	561	126	155	62	126	184	358
08:00	*	*	*	*	*	*	375	525	342	536	186	226	155	228	264	379
09:00	*	*	*	*	*	*	313	414	283	408	247	256	177	285	341	379
10:00	*	*	*	*	*	*	240	278	279	297	268	299	298	319	271	298
11:00	*	*	*	*	*	*	257	317	297	338	276	321	379	352	297	334
12:00 PM	*	*	*	*	*	*	328	345	344	398	323	297	370	422	342	366
01:00	*	*	*	*	*	*	348	343	346	323	314	284	339	331	343	322
02:00	*	*	*	*	*	*	398	388	441	355	340	314	355	337	398	360
03:00	*	*	*	*	*	*	507	448	490	422	368	372	339	252	443	378
04:00	*	*	*	*	*	*	531	485	512	494	285	298	313	268	443	410
05:00	*	*	*	*	*	*	564	346	491	406	304	355	300	219	449	346
06:00	*	*	*	*	*	*	508	310	470	363	208	239	279	182	390	281
07:00	*	*	*	*	*	*	398	227	425	247	232	209	255	192	344	224
08:00	*	*	*	*	*	*	298	136	350	173	176	164	221	145	284	224
09:00	*	*	*	*	*	*	233	96	290	133	144	135	151	71	212	155
10:00	*	*	*	*	*	*	145	44	208	97	142	129	99	59	147	75
11:00	*	*	*	*	*	*	97	50	143	81	112	82	53	42	100	61
Lane	0	0	0	0	4666	3567	6241	6176	6353	6446	4353	4366	4377	4034	5450	5294
Day	0	0	0	0	12417	8233	12799	8719	8411	10744						
AM Peak					11:0011:	00	08:0007:	0008:	0007:	0011:	0011:	00	11:0011:	0011:	00	08:00
Vol.					275	343	375	589	342	561	276	321	379	352	297	379
PM Peak					17:0016:	00	17:0016:	0016:	0016:	0015:	0015:	00	12:0012:	0017:	00	16:00
Vol.					564	485	585	504	534	494	368	372	370	422	449	410

American Traffic Information, Inc.

336 Pulaski Ave
Staten Island, NY, USA 10303
718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

EB	Start Time	15	16	20	21	25	26	30	31	35	36	40	41	45	46	50	51	55	56	60	61	65	66	70	71	75	76	85th Percent	95th Percent		
	04/14/16	0	0	0	0	0	1	4	4	16	16	16	11	11	5	5	2	2	0	0	0	0	0	0	0	0	0	0	39	46	50
	01:00	0	0	0	0	0	0	4	4	6	6	7	7	7	3	3	0	0	0	0	0	0	0	0	0	0	0	0	21	46	48
	02:00	0	0	0	0	0	2	1	1	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	7	45	46	
	03:00	0	0	0	0	1	0	1	1	4	4	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	39	41	
	04:00	1	0	0	3	3	2	3	3	5	5	1	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	17	40	46	
	05:00	0	1	1	3	3	14	11	11	8	8	5	9	9	5	5	3	3	0	0	0	0	0	0	0	0	0	54	45	50	
	06:00	9	1	1	5	5	31	39	39	42	42	25	25	25	6	6	3	3	1	1	0	0	0	0	0	1	0	163	43	47	
	07:00	17	10	10	17	17	43	39	39	69	69	48	48	48	14	14	4	4	0	0	0	0	0	0	0	0	0	262	43	47	
	08:00	33	11	11	26	26	72	74	74	101	118	101	101	101	14	14	3	3	1	1	1	1	0	0	0	2	0	375	41	46	
	09:00	10	7	7	15	15	32	55	55	118	118	86	86	86	8	8	3	3	1	1	0	0	0	0	0	0	0	313	43	45	
	10:00	7	2	2	10	10	23	50	50	86	86	94	94	94	13	13	0	0	0	0	0	0	0	0	0	0	0	240	43	46	
	11:00	6	2	2	6	6	42	42	42	94	94	111	111	111	11	11	3	3	1	1	0	0	0	0	0	0	0	257	44	46	
	12 PM	12	4	4	14	14	39	65	65	111	111	108	108	108	15	15	2	2	1	1	1	1	0	0	0	0	0	328	43	46	
	13:00	8	5	5	17	17	40	48	48	108	108	151	151	151	20	20	8	8	2	2	0	0	0	0	0	0	0	348	44	49	
	14:00	14	3	3	21	21	48	84	84	151	151	161	161	161	26	26	5	5	1	1	0	0	0	0	0	0	0	441	44	47	
	15:00	33	11	11	15	15	44	86	86	161	161	187	187	187	24	24	7	7	1	1	0	0	0	0	0	0	0	490	44	47	
	16:00	31	9	9	13	13	43	80	80	224	224	224	224	224	24	24	7	7	3	3	0	0	0	0	0	0	0	551	43	47	
	17:00	33	7	7	12	12	45	90	90	210	210	210	210	210	37	37	6	6	6	6	1	1	0	0	0	0	0	585	44	48	
	18:00	18	6	6	6	6	17	58	58	199	199	196	196	196	23	23	9	9	1	1	1	1	0	0	0	0	0	484	44	48	
	19:00	12	1	1	6	6	17	46	46	196	196	184	184	184	20	20	5	5	0	0	0	0	0	0	0	0	0	408	44	47	
	20:00	3	0	0	4	4	14	84	84	157	157	84	84	84	18	18	7	7	3	3	0	0	0	0	0	0	0	375	44	48	
	21:00	0	0	0	1	1	6	38	38	118	118	66	66	66	9	9	2	2	1	1	0	0	0	0	0	0	0	241	44	45	
	22:00	0	0	0	1	1	3	20	20	65	65	39	39	39	8	8	3	3	1	1	0	0	0	0	0	0	0	141	44	48	
	23:00	0	0	0	0	0	3	16	16	37	37	27	27	27	7	7	1	1	1	1	0	0	0	0	0	0	0	94	45	49	
	Total	247	81	81	191	191	569	1038	1038	2288	2288	1385	1385	1385	313	313	83	83	25	25	5	5	6	6	10	10	0	6241	45	49	
	Percent	4.0%	1.3%	1.3%	3.1%	3.1%	9.1%	16.6%	16.6%	36.7%	36.7%	22.2%	22.2%	22.2%	5.0%	5.0%	1.3%	1.3%	0.4%	0.4%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	
	AM Peak	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	09:00	09:00	11:00	11:00	11:00	07:00	07:00	07:00	07:00	06:00	06:00	01:00	01:00	01:00	01:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00
	Vol.	33	11	11	26	26	72	74	74	118	118	67	67	67	14	14	4	4	1	1	1	1	1	1	2	2	2	375	44	48	
	PM Peak	15:00	15:00	14:00	14:00	14:00	14:00	14:00	17:00	16:00	16:00	18:00	18:00	18:00	17:00	17:00	18:00	18:00	17:00	17:00	12:00	12:00	13:00	13:00	15:00	15:00	15:00	17:00	17:00	17:00	17:00
	Vol.	33	11	11	21	21	48	90	90	224	224	145	145	145	37	37	9	9	6	6	1	1	1	1	1	1	1	585	45	49	

American Traffic Information, Inc.

336 Pulaski Ave
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Doansburg Rd w/o Mt Ebo Rd S

Start Time	15	16	20	21	25	26	30	31	35	36	40	41	45	46	50	51	55	56	60	61	65	66	70	71	75	76	85th Percent	95th Percent		
04/15/16	1	0	0	0	0	2	2	2	2	22	18	18	18	18	2	1	1	1	1	1	0	0	1	0	0	0	49	55		
01:00	0	0	0	1	0	0	0	5	0	7	8	8	8	1	0	0	0	0	0	0	0	0	1	0	0	0	24	44	51	
02:00	0	0	0	0	0	0	0	0	0	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6	42	43	
03:00	0	0	0	0	0	2	2	2	2	3	6	6	6	1	0	0	0	0	0	0	0	0	0	0	0	0	14	44	45	
04:00	0	0	0	0	0	1	5	5	4	4	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	14	46	47		
05:00	1	0	0	8	13	8	8	8	7	7	6	6	6	3	3	0	0	0	0	0	0	0	0	0	0	46	41	46		
06:00	7	2	6	6	6	26	32	32	7	36	25	25	25	7	7	2	2	0	0	1	1	1	1	0	0	145	43	47		
07:00	16	8	8	8	46	62	62	62	18	74	50	50	50	18	0	0	2	0	0	1	0	0	0	0	0	285	43	47		
08:00	19	11	18	18	76	78	78	78	8	85	48	48	48	8	1	4	4	1	1	1	0	0	0	1	1	0	342	42	45	
09:00	8	3	3	9	39	49	49	49	9	85	76	76	76	9	1	1	1	1	2	1	1	1	1	1	1	0	283	44	45	
10:00	7	4	4	14	37	49	49	49	15	90	57	57	57	15	2	3	3	2	1	1	1	1	0	0	0	0	279	44	48	
11:00	5	4	4	8	22	55	55	55	9	100	85	85	85	9	7	7	7	1	1	0	0	0	0	0	0	0	297	44	47	
12 PM	8	4	4	7	28	52	52	52	20	121	99	99	99	20	4	4	4	1	1	0	0	0	0	0	0	0	344	44	47	
13:00	11	5	5	21	50	46	46	46	15	108	86	86	86	15	3	3	3	0	0	1	0	0	0	0	0	0	346	44	46	
14:00	18	6	6	16	44	82	82	82	17	184	78	78	78	17	0	0	0	0	0	1	1	1	1	1	1	0	456	43	47	
15:00	26	9	9	14	25	102	102	102	29	174	126	126	126	29	2	5	5	2	2	0	0	0	0	0	0	0	512	44	47	
16:00	22	7	7	7	37	63	63	63	23	231	133	133	133	27	5	5	5	1	1	0	0	0	0	0	0	0	491	44	47	
17:00	20	6	6	4	29	54	54	54	19	194	146	146	146	23	11	11	11	4	4	0	0	0	0	0	0	0	470	44	48	
18:00	19	4	4	18	10	46	46	46	10	190	151	151	151	21	7	7	7	2	2	2	2	0	0	0	0	0	425	44	49	
19:00	10	3	3	5	11	83	83	83	7	175	101	101	101	22	10	10	10	3	3	1	1	1	1	1	1	0	350	44	48	
20:00	8	5	5	6	7	49	49	49	16	165	83	83	83	16	8	8	8	1	1	0	0	0	0	0	2	0	290	44	47	
21:00	1	2	2	2	14	51	51	51	18	122	78	78	78	18	1	1	1	0	0	1	1	1	0	0	0	0	208	44	49	
22:00	3	0	0	0	4	37	37	37	10	99	47	47	47	10	1	1	1	1	1	1	1	0	0	0	0	0	143	44	49	
23:00	0	0	0	0	4	17	17	17	14	54	49	49	49	14	3	3	3	1	1	1	1	0	0	0	0	0	143	45	49	
Total	209	83	172	1029	2326	1560	308	91	22	12	22	12	12	0	6353	0	0	0	0	0	0	0	0	0	0	0	6353	45	49	
Percent	3.3%	1.3%	2.7%	8.3%	16.2%	36.6%	4.9%	1.4%	0.3%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00
Vol.	19	11	18	78	100	85	18	7	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	342	44	48	
PM Peak	15:00	15:00	13:00	13:00	13:00	13:00	13:00	15:00	15:00	16:00	18:00	18:00	18:00	18:00	18:00	17:00	17:00	17:00	17:00	18:00	18:00	14:00	14:00	20:00	20:00	16:00	16:00	16:00	16:00	
Vol.	26	9	21	102	231	151	29	11	4	2	2	2	2	2	2	2	2	4	4	2	2	1	1	2	2	2	534	48	49	

American Traffic Information, Inc.

336 Pulaski Ave
Staten Island, NY, USA 10303
718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

EB	Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	75	76	85th Percent	95th Percent
	04/16/16	0	0	1	3	13	36	21	12	2	0	0	0	0	0	0	88	49
	01:00	0	0	0	0	5	19	10	7	0	0	0	0	0	0	0	41	48
	02:00	0	0	0	1	3	6	5	0	0	0	0	0	0	0	0	44	45
	03:00	0	0	1	0	1	5	3	1	0	0	0	0	0	0	0	42	43
	04:00	0	0	0	0	2	2	5	3	0	0	0	0	0	0	0	46	47
	05:00	0	0	5	6	5	5	10	5	2	0	0	1	0	0	39	47	51
	06:00	0	0	1	16	24	25	20	3	6	0	0	0	0	0	95	44	51
	07:00	0	0	4	5	16	49	37	10	5	0	0	0	0	0	126	45	50
	08:00	2	3	8	19	32	67	41	8	1	4	0	0	0	0	186	44	48
	09:00	5	2	6	20	38	100	54	11	6	2	1	0	2	0	247	44	50
	10:00	5	2	3	19	56	90	72	15	4	0	1	0	1	0	268	44	48
	11:00	8	1	4	12	35	118	75	16	7	0	0	0	0	0	276	44	48
	12 PM	10	6	6	8	55	135	84	16	3	0	0	0	0	0	323	44	46
	13:00	8	1	8	19	79	134	53	11	0	0	1	0	0	0	314	42	45
	14:00	11	2	11	32	100	122	51	9	0	1	1	0	0	0	340	41	45
	15:00	9	2	9	18	92	151	70	11	3	2	0	0	0	0	368	43	45
	16:00	5	6	4	18	51	132	59	7	2	0	1	0	0	0	285	43	45
	17:00	8	4	2	13	37	131	84	16	9	0	0	0	0	0	304	44	48
	18:00	3	1	2	6	24	77	72	8	7	7	0	1	0	0	208	45	54
	19:00	3	0	3	3	32	122	57	8	1	3	0	0	0	0	232	43	45
	20:00	0	1	0	7	37	79	47	4	0	0	0	0	1	0	176	43	45
	21:00	0	0	4	3	20	56	50	10	1	0	0	0	0	0	144	44	47
	22:00	0	0	2	7	29	60	34	7	3	0	0	0	0	0	142	44	47
	23:00	0	0	1	1	17	44	39	7	2	0	0	0	0	0	112	44	47
	Total	77	31	85	236	803	1765	1053	205	65	19	5	2	7	0	4353		
	Percent	1.8%	0.7%	2.0%	5.4%	18.4%	40.5%	24.2%	4.7%	1.5%	0.4%	0.1%	0.0%	0.2%	0.0%			
	AM Peak	11:00	08:00	08:00	09:00	10:00	11:00	11:00	11:00	11:00	08:00	09:00	05:00	09:00	09:00	11:00		
	Vol.	8	3	8	20	56	118	75	16	7	4	1	1	2	2	276		
	PM Peak	14:00	12:00	14:00	14:00	14:00	15:00	12:00	12:00	17:00	18:00	13:00	18:00	15:00	15:00	15:00		
	Vol.	11	6	11	32	100	151	84	16	9	7	1	1	1	1	368		

American Traffic Information, Inc.

336 Pulaski Ave
Staten Island, NY, USA 10303
718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

Start Time	15	16	20	21	25	26	31	36	41	46	51	56	61	66	71	76	Total	85th Percent	95th Percent
04/17/16	0	0	0	0	0	1	11	28	26	5	0	0	0	0	0	0	71	44	46
01:00	0	0	0	1	1	1	10	12	8	3	1	0	0	0	0	0	36	44	47
02:00	0	1	0	1	0	0	3	13	12	1	0	1	0	0	0	0	32	44	45
03:00	0	0	0	0	0	1	3	6	6	1	0	0	0	0	0	0	17	43	45
04:00	0	0	0	0	0	1	3	0	4	2	1	1	0	0	0	0	12	47	55
05:00	0	0	0	1	1	2	2	4	2	2	2	0	0	0	0	0	15	50	51
06:00	0	0	0	2	2	5	11	13	12	3	0	2	0	0	1	0	49	45	56
07:00	0	0	0	0	0	4	6	33	16	2	0	0	0	1	0	0	62	43	45
08:00	2	2	0	4	4	5	24	51	53	11	2	0	1	0	0	0	155	45	48
09:00	1	0	0	4	4	13	34	65	43	13	2	2	0	0	0	0	177	44	48
10:00	10	2	0	9	31	36	56	92	73	18	5	1	0	1	0	0	298	44	48
11:00	10	6	1	19	65	53	66	150	75	13	2	1	1	0	1	0	379	43	45
12 PM	16	1	3	18	53	25	60	129	64	17	3	2	0	0	1	0	370	43	46
13:00	12	3	1	13	36	25	60	121	77	22	5	0	0	0	1	0	339	44	48
14:00	6	1	6	6	8	8	51	159	94	20	8	1	1	0	0	0	355	44	48
15:00	7	4	1	5	19	14	41	141	92	18	3	5	2	2	0	0	339	44	49
16:00	1	1	1	3	14	14	57	137	74	20	5	1	0	0	0	0	313	44	48
17:00	6	4	4	1	9	9	45	130	75	22	6	0	0	0	2	0	300	44	49
18:00	5	1	1	1	6	6	44	117	85	13	5	2	0	0	0	0	279	44	47
19:00	2	1	1	2	5	5	45	110	65	21	2	1	0	1	0	0	255	44	48
20:00	0	0	0	2	7	7	46	88	58	14	4	0	0	0	2	0	221	44	48
21:00	0	0	0	0	5	5	30	67	39	5	1	3	1	0	0	0	151	44	47
22:00	0	0	0	0	3	3	13	48	26	7	1	1	0	0	0	0	99	44	47
23:00	0	0	0	0	4	4	9	21	17	1	0	1	0	0	0	0	53	44	45
Total	78	27	92	258	735	1735	254	58	25	6	0	8	5	0	0	0	4377	43	45
Percent	1.8%	0.6%	2.1%	5.9%	16.8%	39.6%	5.8%	1.3%	0.6%	0.1%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	11:00	11:00	11:00	11:00	10:00	10:00	06:00	08:00	07:00	06:00	06:00	11:00					
Vol.	10	6	19	36	65	150	18	5	2	1	1	2	1	379					
PM Peak	12:00	15:00	12:00	12:00	12:00	14:00	13:00	14:00	15:00	15:00	15:00	15:00	15:00	12:00	17:00				
Vol.	16	4	18	53	66	159	94	22	5	2	2	5	2	370					

American Traffic Information, Inc.

336 Pulaski Ave
Staten Island, NY, USA 10303
718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

EB	1	16	21	26	31	36	41	46	51	56	61	66	71	76	81st	85th	95th
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	80	Percent	Percent	Percent
04/18/16	0	0	0	0	10	14	10	4	0	0	0	0	0	0	38	44	47
01:00	0	0	0	0	2	3	4	0	0	0	0	0	0	0	9	43	44
02:00	0	0	0	0	0	7	3	1	0	0	0	0	0	0	11	42	43
03:00	0	1	1	1	2	1	0	1	1	0	0	0	0	0	8	50	51
04:00	0	0	0	0	4	5	0	1	0	0	0	0	0	0	10	39	40
05:00	0	1	9	13	6	8	6	4	1	0	0	0	0	0	48	43	48
06:00	1	0	8	38	29	30	21	8	2	0	0	0	0	0	137	43	47
07:00	19	3	13	47	41	68	46	9	4	0	1	0	0	0	251	43	46
08:00	22	7	18	71	74	82	37	12	4	1	1	0	0	0	329	41	46
09:00	10	5	12	50	53	110	42	12	4	0	0	0	0	0	298	42	46
10:00	5	2	9	22	53	106	69	14	4	0	0	0	0	0	284	44	47
11:00	2	1	14	24	42	107	63	20	1	1	0	0	0	0	275	44	47
12 PM	13	3	10	36	60	155	93	18	3	0	0	0	0	0	391	43	48
13:00	8	8	8	41	63	125	76	21	5	2	0	0	0	0	357	44	48
14:00	13	4	11	44	86	165	70	26	6	3	0	0	1	0	429	43	48
15:00	15	5	24	51	84	187	110	24	7	1	0	2	0	0	510	44	47
16:00	16	3	9	45	76	194	111	21	8	3	0	1	0	0	488	44	48
17:00	18	5	6	23	97	256	150	22	8	2	0	0	0	0	587	44	46
18:00	12	8	9	27	55	192	146	23	4	3	1	0	0	0	481	44	47
19:00	9	4	8	23	89	173	105	25	9	0	1	0	1	0	447	44	48
20:00	3	0	9	23	57	116	68	13	2	1	0	0	0	0	278	43	46
21:00	1	0	2	2	25	96	49	14	2	0	0	1	0	0	192	44	48
22:00	1	0	1	2	19	55	33	10	3	0	0	0	0	0	124	44	49
23:00	0	0	1	1	13	28	21	5	1	1	0	0	0	0	71	44	48
Total	168	60	182	570	1040	2283	1333	308	79	18	4	4	4	0	6053		
Percent	2.8%	1.0%	3.0%	9.4%	17.2%	37.7%	22.0%	5.1%	1.3%	0.3%	0.1%	0.1%	0.1%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	08:00	09:00	10:00	11:00	07:00	08:00	07:00						
Vol.	22	7	18	71	74	110	69	20	4	1	1				08:00		
PM Peak	17:00	13:00	15:00	15:00	17:00	17:00	17:00	14:00	19:00	14:00	18:00	15:00	14:00	17:00	329		
Vol.	18	8	24	51	97	256	150	26	9	3	1	2	1	587			

American Traffic Information, Inc.

336 Pulaski Ave
Staten Island, NY, USA 10303
718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

EB	Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	81st Percent	85th Percent	95th Percent
	04/19/16	0	0	0	2	2	20	15	1	0	0	0	0	0	0	40	44	45
	01:00	0	0	0	0	2	8	12	1	1	0	0	0	0	0	24	44	50
	02:00	0	0	0	0	0	3	1	0	0	0	0	0	0	0	5	38	41
	03:00	0	0	1	1	1	2	1	2	0	0	0	0	0	0	7	46	47
	04:00	0	0	1	2	4	4	4	0	0	0	0	0	0	0	15	42	43
	05:00	1	0	3	10	9	12	11	2	0	0	0	0	0	0	48	43	45
	06:00	5	1	8	32	25	34	14	9	4	1	0	0	1	0	134	43	49
	07:00	31	11	15	48	48	58	56	10	2	0	2	1	0	0	282	43	46
	08:00	12	4	18	80	85	83	55	13	0	1	0	0	0	0	351	42	45
	09:00	9	1	12	45	68	85	57	10	3	1	1	1	0	0	293	43	46
	10:00	4	2	12	30	52	65	52	6	0	1	0	0	0	0	224	43	45
	11:00	11	2	11	37	53	111	48	11	0	2	0	0	0	0	287	42	45
	12 PM	6	4	10	33	55	140	79	10	5	2	0	0	0	0	344	43	45
	13:00	13	8	18	45	68	129	74	18	6	3	2	0	0	0	386	44	48
	14:00	18	5	15	46	87	162	84	14	3	0	0	1	1	0	436	43	45
	15:00	30	6	8	44	74	163	117	26	5	0	0	1	0	0	474	44	47
	16:00	26	6	16	51	87	223	94	23	5	1	1	0	0	0	538	43	46
	17:00	20	6	8	29	82	210	126	23	4	2	2	0	0	0	513	44	47
	18:00	23	3	10	27	63	202	133	23	6	4	0	0	0	0	494	44	47
	19:00	12	4	1	14	59	185	98	25	3	1	1	0	0	0	403	44	47
	20:00	3	4	5	12	67	165	76	23	4	0	1	0	0	0	360	44	47
	21:00	1	1	1	8	44	73	59	12	3	2	1	0	0	0	205	44	48
	22:00	0	0	1	1	27	61	39	12	5	1	0	0	0	0	147	45	50
	23:00	0	1	0	2	7	37	29	6	0	0	0	0	0	0	83	44	47
	Total	225	74	174	599	1069	2235	1334	280	59	22	11	5	6	0	6093		
	Percent	3.7%	1.2%	2.9%	9.8%	17.5%	36.7%	21.9%	4.6%	1.0%	0.4%	0.2%	0.1%	0.1%	0.0%			
	AM Peak	07:00	07:00	08:00	08:00	08:00	11:00	09:00	08:00	06:00	11:00	07:00	07:00	06:00		08:00		
	Vol.	31	11	18	80	85	111	57	13	4	2	2	1	1		351		
	PM Peak	15:00	16:00	13:00	16:00	14:00	16:00	18:00	15:00	13:00	18:00	13:00	13:00	13:00		16:00		
	Vol.	30	11	18	51	87	223	133	26	6	4	2	1	1		538		

American Traffic Information, Inc.

336 Pulaski Ave
Staten Island, NY, USA 10303
718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

EB	Start Time	15	16	20	21	25	26	30	31	35	36	40	41	45	46	50	51	55	56	60	61	65	66	70	71	75	76	77	85th Percent	95th Percent		
	04:20/16	0	0	0	0	0	1	1	5	5	23	36	41	45	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	44	48	
	01:00	0	0	0	0	0	1	1	0	1	8	14	14	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24	44	45
	03:00	0	0	0	0	0	0	0	1	2	2	2	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	41	42	
	04:00	1	0	0	0	0	2	3	2	4	1	4	3	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	17	43	45	
	05:00	1	0	0	0	0	2	1	2	1	1	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	42	43	
	06:00	10	3	3	6	6	27	38	11	11	31	31	21	21	6	3	3	0	0	0	0	0	0	0	0	0	0	0	50	42	44	
	07:00	24	5	11	11	11	39	57	84	69	69	47	47	21	17	17	2	2	1	1	1	1	1	1	1	0	0	0	145	42	46	
	08:00	17	11	21	14	14	71	84	57	57	86	57	57	47	9	9	3	3	0	0	0	0	0	0	0	0	0	0	274	43	47	
	09:00	12	6	14	14	17	50	52	84	84	86	57	57	47	11	11	3	3	0	0	0	0	0	0	0	0	0	0	362	42	45	
	10:00	4	4	4	17	10	29	37	61	61	95	61	61	61	11	10	1	1	2	2	0	0	0	0	0	0	0	0	289	43	45	
	11:00	10	0	0	16	16	29	46	89	89	95	89	61	61	20	20	5	3	1	1	0	0	0	0	0	0	0	0	263	44	47	
	12 PM	9	1	1	11	11	37	66	66	66	112	89	69	69	19	19	3	3	2	2	0	0	0	0	0	0	0	0	276	44	48	
	13:00	12	3	21	11	11	51	71	66	66	112	69	69	69	4	4	4	4	0	0	0	0	0	0	0	0	0	0	329	44	47	
	14:00	19	8	8	16	16	46	71	66	66	112	63	63	16	16	16	1	1	1	1	0	0	0	0	0	0	0	0	355	43	46	
	15:00	31	9	9	11	11	47	82	71	71	129	94	94	94	18	18	6	6	2	2	2	2	0	0	0	0	0	0	411	44	47	
	16:00	19	10	10	17	17	43	82	82	82	129	99	99	99	27	27	6	6	2	2	0	0	0	0	0	0	0	0	507	43	47	
	17:00	19	6	7	7	7	37	90	90	90	179	148	148	148	21	21	2	2	4	4	0	0	0	0	0	0	0	0	536	44	46	
	18:00	15	7	7	7	7	37	99	99	99	251	135	135	135	31	31	6	6	3	3	0	0	0	0	0	0	0	0	595	44	47	
	19:00	6	2	2	9	9	8	22	57	57	229	135	135	135	25	25	6	6	5	5	2	2	0	0	0	0	0	0	510	44	48	
	20:00	3	0	0	3	3	16	66	66	66	172	109	109	109	14	14	5	5	2	2	2	2	0	0	0	0	0	0	410	44	47	
	21:00	1	0	0	0	0	9	53	53	53	108	76	76	18	18	4	4	3	3	3	1	1	0	0	0	0	0	0	299	44	48	
	22:00	0	0	0	0	0	2	23	23	23	99	62	62	10	10	1	1	1	2	2	2	2	0	0	0	0	0	0	239	44	47	
	23:00	0	1	1	0	0	2	18	18	18	84	42	42	7	7	1	1	1	0	0	0	0	0	0	0	0	0	0	159	43	45	
	Total	213	76	190	190	190	584	1111	1111	2199	1414	293	64	16	6	6	4	4	30	30	16	16	0	0	0	0	0	0	92	45	50	
	Percent	3.4%	1.2%	3.1%	3.1%	3.1%	9.4%	17.9%	17.9%	35.5%	22.8%	4.7%	1.0%	0.3%	0.3%	0.3%	1.0%	1.0%	0.5%	0.5%	0.3%	0.3%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	6200			
	AM Peak	07:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	10:00	10:00	10:00	10:00	10:00	11:00	11:00	10:00	10:00	09:00	09:00	08:00	08:00	07:00	07:00	07:00	07:00	07:00	07:00	08:00			
	Vol.	24	11	21	21	21	71	84	84	95	95	61	61	61	20	20	5	5	2	2	2	2	1	1	1	1	1	1	362			
	PM Peak	15:00	16:00	13:00	13:00	13:00	13:00	13:00	17:00	17:00	17:00	16:00	16:00	16:00	17:00	17:00	14:00	14:00	18:00	18:00	14:00	14:00	16:00	16:00	16:00	16:00	16:00	17:00				
	Vol.	31	10	21	21	21	51	99	99	251	251	148	148	148	31	31	6	6	5	5	2	2	1	1	1	1	1	595				

American Traffic Information, Inc.

336 Pulaski Ave
Staten Island, NY, USA 10303
718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

WB	Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	85th Percent	95th Percent
	04/14/16	0	0	0	1	0	3	5	3	0	0	0	0	0	0	12	46	47
	01:00	0	0	0	3	2	2	5	0	0	0	0	0	0	0	12	43	44
	02:00	0	0	0	1	0	0	4	0	0	1	0	0	0	0	6	44	56
	03:00	0	0	0	1	2	6	7	3	0	0	0	0	0	0	19	45	47
	04:00	0	0	1	2	6	19	29	19	4	2	1	0	0	0	83	49	53
	05:00	1	1	0	0	4	50	89	52	24	5	0	0	0	0	226	50	54
	06:00	3	3	3	6	26	94	169	108	21	3	1	0	0	0	437	49	51
	07:00	15	2	5	11	54	143	246	91	19	1	1	0	0	0	589	47	50
	08:00	19	6	18	29	46	143	181	68	9	1	1	1	3	0	525	46	50
	09:00	6	2	14	24	46	112	145	56	7	1	0	0	1	0	414	46	49
	10:00	5	3	9	24	36	84	76	37	4	0	0	0	0	0	278	45	49
	11:00	7	1	15	25	32	132	71	23	10	0	1	0	0	0	317	44	49
	12 PM	10	3	11	41	59	105	82	29	3	2	0	0	0	0	345	44	48
	13:00	5	4	11	26	47	113	102	26	5	3	1	0	0	0	343	45	49
	14:00	11	10	17	33	60	111	79	26	6	2	0	0	0	0	355	44	48
	15:00	22	8	12	45	63	118	101	21	2	0	0	0	0	0	394	44	46
	16:00	29	4	16	68	80	150	119	30	5	1	0	1	1	0	504	44	48
	17:00	29	7	15	56	61	98	101	28	4	2	0	0	0	0	402	44	48
	18:00	16	5	8	21	35	112	86	27	3	0	0	0	1	0	313	44	48
	19:00	8	2	4	14	40	95	51	24	4	2	0	0	0	0	244	45	49
	20:00	4	1	4	15	24	50	45	13	2	0	0	0	0	0	159	45	48
	21:00	0	2	3	1	14	33	35	12	1	0	0	0	1	0	101	45	48
	22:00	0	0	0	2	7	17	13	7	0	0	0	0	0	0	46	45	48
	23:00	0	0	1	5	12	16	14	3	1	0	0	0	0	0	52	45	48
	Total	190	64	167	454	756	1806	1855	706	134	26	6	2	10	0	6176		
	Percent	3.1%	1.0%	2.7%	7.4%	12.2%	29.2%	30.0%	11.4%	2.2%	0.4%	0.1%	0.0%	0.2%	0.0%			
	AM Peak	08:00	08:00	08:00	08:00	07:00	07:00	07:00	06:00	05:00	05:00	04:00	08:00	08:00		07:00		
	Vol.	19	6	18	29	54	143	246	108	24	5	1	1	3		589		
	PM Peak	16:00	14:00	14:00	16:00	16:00	16:00	16:00	16:00	14:00	13:00	13:00	16:00	15:00		16:00		
	Vol.	29	10	17	68	80	150	119	30	6	3	1	1	2		504		

American Traffic Information, Inc.

336 Pulaski Ave
Staten Island, NY, USA 10303
718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

WB	Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	85th Percent	95th Percent
	04/16/16	0	0	0	0	5	4	5	2	0	0	0	0	0	0	16	45	46
	01:00	0	0	2	4	2	6	4	2	0	0	0	0	0	0	20	43	46
	02:00	0	0	1	0	3	3	3	1	0	1	0	0	0	0	12	43	46
	03:00	0	0	0	0	1	3	4	4	0	0	0	0	0	0	12	47	48
	04:00	0	0	0	0	1	6	7	10	1	0	0	0	0	0	25	49	50
	05:00	0	0	0	2	3	13	17	9	2	0	0	0	0	0	46	47	50
	06:00	0	0	7	20	15	25	20	10	2	1	0	0	0	0	100	45	49
	07:00	0	0	3	12	18	48	59	12	1	1	1	0	0	0	155	45	48
	08:00	3	2	6	12	25	77	68	30	3	0	0	0	0	0	226	45	49
	09:00	4	0	4	5	28	80	89	40	5	0	0	0	1	0	256	46	49
	10:00	4	0	4	20	32	105	99	32	3	0	0	0	0	0	299	45	48
	11:00	5	1	7	22	57	118	81	24	6	0	0	0	0	0	321	44	48
	12 PM	5	1	1	13	50	122	82	20	3	0	0	0	0	0	297	44	47
	13:00	5	2	4	15	50	100	87	16	5	0	0	0	0	0	284	44	47
	14:00	11	10	4	16	48	105	88	26	5	0	1	0	0	0	314	45	48
	15:00	9	0	3	9	63	149	109	28	2	0	0	0	0	0	372	44	47
	16:00	9	0	4	14	29	108	104	28	1	0	1	0	0	0	298	45	48
	17:00	10	1	2	14	62	115	110	35	3	2	0	0	1	0	355	45	49
	18:00	0	1	2	10	28	71	93	30	3	1	0	0	0	0	239	45	49
	19:00	2	0	2	5	40	81	61	16	0	1	0	1	0	0	209	44	48
	20:00	1	1	2	7	32	60	47	14	0	0	0	0	0	0	164	44	47
	21:00	1	0	2	8	29	51	32	12	0	0	0	0	0	0	135	44	47
	22:00	0	1	3	7	25	54	32	6	0	1	0	0	0	0	129	43	46
	23:00	0	0	1	2	20	33	22	2	2	0	0	0	0	0	82	43	45
	Total	69	20	64	217	666	1537	1323	409	47	8	3	1	2	0	4366		
	Percent	1.6%	0.5%	1.5%	5.0%	15.3%	35.2%	30.3%	9.4%	1.1%	0.2%	0.1%	0.0%	0.0%	0.0%			
	AM Peak	11:00	08:00	06:00	11:00	11:00	11:00	10:00	09:00	11:00	02:00	07:00	07:00	09:00	09:00	11:00		
	Vol.	5	2	7	22	57	118	99	40	6	1	1	1	1	1	321		
	PM Peak	14:00	14:00	13:00	14:00	15:00	15:00	17:00	17:00	13:00	17:00	14:00	19:00	17:00	17:00	15:00		
	Vol.	11	10	4	16	63	149	110	35	5	2	1	1	1	1	372		

American Traffic Information, Inc.

336 Pulaski Ave
Staten Island, NY, USA 10303
718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

WB	Start Time	15	16	20	21	25	26	31	36	41	46	51	56	61	66	71	76	85th Percent	95th Percent	
	04/17/16	0	1	0	0	0	0	2	9	9	2	1	0	0	0	0	0	24	44	47
	01:00	0	0	0	0	0	1	3	11	4	3	0	0	0	0	0	0	22	44	47
	02:00	0	0	0	0	0	1	3	4	4	0	0	0	0	0	0	0	12	42	43
	03:00	0	0	0	0	0	0	0	4	4	0	1	0	0	0	0	0	10	43	44
	04:00	0	0	0	0	0	1	2	2	7	3	0	0	0	0	0	0	15	46	47
	05:00	0	0	0	0	0	0	2	7	19	10	7	1	0	0	0	0	46	51	54
	06:00	0	0	0	0	0	2	7	17	32	13	4	0	0	0	0	0	75	47	50
	07:00	0	0	0	0	0	4	8	35	51	22	6	0	0	0	0	0	126	47	50
	08:00	1	0	0	0	0	1	16	61	91	50	7	0	0	1	0	0	228	48	50
	09:00	2	0	0	0	0	4	19	77	98	64	12	0	1	0	0	0	285	48	50
	10:00	10	4	3	16	32	16	32	94	113	36	9	1	0	0	0	0	319	45	50
	11:00	7	2	10	24	50	24	50	110	105	41	3	0	0	0	1	0	352	45	49
	12 PM	11	3	10	41	68	41	68	139	121	26	2	1	0	0	0	0	422	44	47
	13:00	6	3	10	29	29	29	29	113	108	29	4	0	0	0	0	0	331	45	48
	14:00	4	2	15	29	31	29	31	110	107	35	2	1	0	0	0	0	337	45	49
	15:00	4	1	1	6	21	6	21	90	99	23	7	0	0	0	0	0	252	45	49
	16:00	2	1	1	11	39	11	39	103	75	26	8	0	0	0	0	0	268	45	49
	17:00	4	1	1	12	14	12	14	82	71	26	6	0	0	0	0	0	219	45	49
	18:00	5	1	2	5	21	5	21	65	61	17	5	0	0	0	0	0	182	45	49
	19:00	2	1	2	2	18	2	18	75	77	10	2	1	1	0	1	0	192	45	48
	20:00	0	0	0	7	29	7	29	54	36	17	2	0	0	0	0	0	145	45	49
	21:00	0	0	0	3	14	3	14	21	26	5	1	1	0	0	0	0	71	45	48
	22:00	0	0	0	0	9	0	9	21	16	10	3	0	0	0	0	0	59	47	50
	23:00	0	0	0	2	6	2	6	21	8	5	0	0	0	0	0	0	42	44	48
	Total	58	20	205	443	1326	205	443	1326	1342	473	92	6	2	1	4	0	4034		
	Percent	1.4%	0.5%	5.1%	11.0%	32.9%	5.1%	11.0%	32.9%	33.3%	11.7%	2.3%	0.1%	0.0%	0.0%	0.1%	0.0%			
	AM Peak	10:00	10:00	11:00	11:00	11:00	11:00	11:00	11:00	10:00	09:00	09:00	05:00	09:00	08:00	10:00	11:00			
	Vol.	10	4	24	50	110	24	50	110	113	64	12	1	1	1	1	352			
	PM Peak	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	14:00	16:00	12:00	18:00	14:00	14:00	12:00			
	Vol.	11	3	41	68	139	41	68	139	121	35	8	1	1	1	1	422			

American Traffic Information, Inc.

336 Pulaski Ave
 Staten Island, NY, USA 10303
 718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

WB	Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	85th	95th
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85th	Percent	Percent
04/18/16	0	0	0	0	2	3	1	1	1	0	0	0	0	0	0	8	51
01:00	0	0	0	0	3	1	1	0	1	0	0	0	0	0	0	6	41
02:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	46
03:00	0	1	0	0	5	7	5	2	2	0	0	0	0	0	0	22	49
04:00	0	0	0	0	3	14	31	18	8	0	0	0	0	0	0	74	49
05:00	0	0	0	4	18	64	89	24	9	1	0	0	0	0	0	209	46
06:00	3	2	0	10	25	114	211	81	18	3	1	0	0	0	0	468	47
07:00	9	2	17	12	43	164	194	102	10	1	0	0	0	0	0	554	50
08:00	16	7	13	25	56	134	153	60	10	2	0	0	0	0	0	476	46
09:00	5	3	16	27	57	128	143	36	5	1	0	0	1	0	0	422	45
10:00	2	2	13	20	49	115	97	29	6	0	0	0	0	0	0	333	45
11:00	9	3	13	21	37	112	95	39	4	0	0	0	0	1	0	334	45
12 PM	12	1	10	27	53	110	88	21	8	1	0	0	0	0	0	331	44
13:00	8	1	12	23	45	109	91	37	7	0	0	0	0	0	0	333	45
14:00	15	5	21	51	73	109	81	29	2	0	0	0	0	0	0	386	44
15:00	23	5	6	53	92	157	94	23	3	1	0	0	0	0	0	457	43
16:00	25	8	12	77	90	129	111	29	5	1	1	0	0	2	0	490	46
17:00	26	3	13	50	46	117	97	28	5	2	1	1	0	0	0	389	44
18:00	14	3	6	22	36	87	75	27	5	0	0	0	0	0	0	275	45
19:00	10	5	6	13	24	72	81	17	2	0	0	0	1	0	0	231	45
20:00	3	0	7	15	25	52	44	11	1	0	0	0	1	0	0	159	44
21:00	1	1	0	9	8	33	29	6	1	0	0	0	0	0	0	88	44
22:00	0	0	3	3	5	18	20	6	3	0	0	0	0	0	0	58	45
23:00	0	0	4	5	10	12	12	5	0	0	0	0	0	0	0	48	44
Total	181	52	172	467	806	1861	1843	632	116	13	3	3	4	4	0	6153	
Percent	2.9%	0.8%	2.8%	7.6%	13.1%	30.2%	30.0%	10.3%	1.9%	0.2%	0.0%	0.0%	0.1%	0.1%	0.0%		
AM Peak	08:00	08:00	07:00	09:00	09:00	07:00	06:00	06:00	06:00	06:00	06:00	09:00	11:00	11:00	07:00		
Vol.	16	7	17	27	57	164	211	102	18	3	1	1	1	1	554		
PM Peak	17:00	16:00	14:00	16:00	15:00	15:00	16:00	13:00	12:00	17:00	16:00	17:00	16:00	16:00	16:00		
Vol.	26	8	21	77	92	157	111	37	8	2	1	1	2	2	490		

American Traffic Information, Inc.

336 Pulaski Ave
 Staten Island, NY, USA 10303
 718-447-5161

Doansburg Rd w/o Mt Ebo Rd S

WB	Start Time	15	16	20	21	25	26	31	36	41	46	51	56	61	66	71	75	76	85th Percent	95th Percent	
	04/19/16	0	0	0	1	3	3	0	10	5	1	2	0	0	0	0	0	0	22	45	51
	01:00	0	0	0	3	3	3	0	5	2	1	1	0	0	0	0	0	0	15	42	50
	02:00	0	0	0	0	0	1	0	2	2	1	1	0	0	0	0	0	0	7	50	51
	03:00	0	0	0	0	0	0	4	5	7	5	1	1	0	0	0	0	0	23	49	55
	04:00	0	0	0	0	0	3	7	18	33	18	7	1	0	0	0	0	0	87	49	52
	05:00	0	0	0	0	0	0	11	49	86	67	19	2	0	0	0	0	0	235	49	53
	06:00	7	1	1	5	8	8	21	92	195	113	29	4	0	0	0	0	0	475	49	52
	07:00	18	8	4	11	19	19	36	158	175	90	16	1	0	1	0	0	0	533	47	50
	08:00	13	4	2	7	26	26	51	147	162	75	12	3	0	0	1	0	0	501	47	50
	09:00	9	2	1	6	25	25	51	145	119	40	5	0	0	0	0	0	0	402	45	49
	10:00	2	1	1	12	22	22	41	97	98	36	7	0	0	0	0	0	0	316	45	49
	11:00	12	6	6	23	30	30	40	120	80	24	6	1	0	0	0	0	0	343	44	48
	12 PM	9	1	1	12	33	33	47	116	97	28	2	0	0	0	0	1	0	345	44	48
	13:00	14	8	8	14	27	27	70	99	72	18	5	0	0	0	0	0	0	328	44	47
	14:00	16	5	5	11	52	52	53	107	82	29	4	1	2	0	1	0	0	363	44	49
	15:00	25	4	4	8	39	39	52	142	115	23	5	0	0	0	2	0	0	415	44	47
	16:00	32	7	7	19	67	67	105	126	102	34	4	0	0	0	0	0	0	496	44	47
	17:00	33	4	4	15	41	41	48	86	108	39	4	0	0	0	0	0	0	383	45	49
	18:00	18	1	1	8	19	19	30	83	95	35	4	1	0	0	1	0	0	295	45	49
	19:00	9	2	2	6	19	19	26	61	72	18	3	0	0	0	0	0	0	216	45	48
	20:00	1	1	1	3	13	13	19	40	56	24	1	0	0	0	0	0	0	158	46	49
	21:00	0	0	0	0	2	2	6	27	31	13	4	0	0	0	0	0	0	84	47	50
	22:00	0	0	0	1	6	6	6	27	16	2	0	0	0	0	0	0	0	58	43	45
	23:00	0	0	0	1	5	5	6	19	12	2	1	1	0	0	0	0	0	47	44	47
	Total	218	56	56	166	464	464	730	1781	1822	736	148	16	2	1	7	0	0	6147		
	Percent	3.5%	0.9%	0.9%	2.7%	7.5%	7.5%	11.9%	29.0%	29.6%	12.0%	2.4%	0.3%	0.0%	0.0%	0.1%	0.0%	0.0%			
	AM Peak	07:00	07:00	07:00	11:00	11:00	11:00	08:00	07:00	06:00	06:00	06:00	06:00	07:00	07:00	08:00	08:00	07:00	07:00	07:00	07:00
	Vol.	18	8	8	23	30	30	51	158	195	113	29	4	1	1	1	1	1	533		
	PM Peak	17:00	13:00	13:00	16:00	16:00	16:00	16:00	15:00	15:00	17:00	17:00	14:00	14:00	14:00	15:00	15:00	16:00	16:00	16:00	16:00
	Vol.	33	8	8	19	67	67	105	142	115	39	9	1	2	2	2	2	2	496		

NYSDOT AUTOMATIC TRAFFIC RECORDER

PROPOSED RESIDENTIAL HOUSING, BARRETT HILL (MOUNT EBO - LOT 6), 41 MOUNT EBO ROAD NORTH, SOUTHEAST, NEW YORK (#754.001)
 FIELD DATA SUMMARY - Doansburg Road, 0.338 Miles South of Gage Road

TIME	Thursday, December 06, 2012		
	EB	WB	TOTAL
12:00 AM	48	13	61
1:00 AM	18	7	25
2:00 AM	10	5	15
3:00 AM	5	11	16
4:00 AM	12	56	68
5:00 AM	23	193	216
6:00 AM	60	393	453
7:00 AM	116	477	593
8:00 AM	223	421	644
9:00 AM	148	244	392
10:00 AM	172	207	379
11:00 AM	207	210	417
12:00 PM	226	234	460
1:00 PM	235	189	424
2:00 PM	302	227	529
3:00 PM	328	285	613
4:00 PM	424	289	713
5:00 PM	462	200	662
6:00 PM	406	173	579
7:00 PM	333	125	458
8:00 PM	216	99	315
9:00 PM	169	68	237
10:00 PM	134	36	170
11:00 PM	72	36	108
TOTAL	4,349	4,198	8,547

New York State Department of Transportation Roadway Traffic Count Hourly Report

STATION: 846017

ROUTE/ROAD: DOANSBURG RD
FED DIR CODE: 1, 5
ST DIR CODE: 1, 2
DOT ID: 191692
BEGIN DATE: 12/4/2012
NOTES 1: SB TRAVEL LANE
NOTES 2:
TAKEN BY: TST----
FROM: RT22
REF. MARKER:
END MILEPOST: 2.25
LANES BY DIR: 1 North 1 South
WEEK OF YEAR: 49
PLACEMENT: 0.388 M I S OF GAGE RD
PROCESSED BY: DOT-jh
TO: FAIRFIELD DR
FUNC. CLASS: 16 - U Minor Arterial
FACTOR GROUP: 30
CC STN:
ADDL DATA:
JURISDICTION: 02-County
BATCH ID: DOT-R08CWW49b
REGION-COUNTY: 8-PUTNAM
MUNI: Southeast-Town-0789
BIN: 3345500
RR CROSSING:
HPMS SAMPLE:
1 WAY CODE:
COUNT TYPE: Axle
SPEED LIMIT:

DATE	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	DAILY TOTAL	HIGH HOUR	HIGH HOUR	
12/04, Tue	61	32	20	21	56	212	444	613	628	394	306	356	436	400	513	651	697	644	543	382	266	206	151	87	3764	8119	697	16-17
> 12/05, Wed	61	25	15	16	68	216	453	593	644	392	379	417	460	424	529	613	713	662	579	458	315	237	170	108	8547	8119	697	16-17
12/07, Fri	65	32	15	20	76	203	428	602	622	409	408	436	448	412	507	594	635	638	587	459	311	312	236	193	8648	8119	697	16-17
12/08, Sat	134	58	34	28	35	76	137	207	341	410	462	487	512	519	459	503	505	419	420	312	228	200	209	145	8648	8119	697	16-17
12/09, Sun	103	67	36	28	26	48	86	106	223	283	377	400	455	454	407	363	330	312	219	207	165	99	61	5310	8119	697	16-17	
12/10, Mon	38	13	13	23	77	196	399	590	587	387	301	315	379	403	505	619	618	509	336	285	176	120	85	7593	8119	697	16-17	
12/11, Tue	63	19	7	22	73	217	427	603	589	375	342	373	437											3547	8119	697	16-17	

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)

62	27	14	19	67	209	423	591	604	385	342	373	421	402	507	609	677	627	547	394	295	210	140	96	8041
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AVERAGE WEEKDAY

DAYS	HOURS	WEEKDAYS	WEEKDAY	North		South		ESTIMATED	
				Counted	% of day	Counted	% of day	Roadway	South
7	166	4	100	677	8.4	437	10.7	8524	4203
Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
12	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98

FACTOR

ROUTE/ROAD:	DOANSBURG RD	FROM:	RT22	TO:	FAIRFIELD DR
STATION:	846017	PLACEMENT:	0.388 M I S OF GAGE RD	REGION-COUNTY	8-PUTNAM

New York State Department of Transportation

NB Traffic Count Hourly Report

STATION: 846017

ROUTE/ROAD: DOANSBURG RD **FROM:** RT22 **TO:** FAIRFIELD DR
FED DIR CODE: 1 **REF. MARKER:**
ST DIR CODE: 1, 2 **END MILEPOST:** 2.25 **FUNC. CLASS:** 16 - U Minor Arterial
DOT ID: 191692 **LANES BY DIR:** 1 North **FACTOR GROUP:** 30
BEGIN DATE: 12/4/2012 **WEEK OF YEAR:** 49 **CC STN:**
NOTES 1: SB TRAVEL LANE **PLACEMENT:** 0 388 MI S OF GAGE RD **JURISDICTION:** 02-County
NOTES 2:
TAKEN BY: TST---- **PROCESSED BY:** DOT-jh **BATCH ID:** DOT-R08CWW49b
REGION-COUNTY: 8-PUTNAM
MUNI: Southeast-Town-0789
BIN: 3345500
RR CROSSING:
HPMS SAMPLE:
1 WAY CODE:
COUNT TYPE: Axle
SPEED LIMIT:

DATE	DAILY HIGH HIGH																TOTAL	COUNT	HOUR									
	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16				16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
12/04, Tue	36	24	13	2	12	25	85	157	195	151	134	166	210	207	277	366	448	444	365	271	216	153	106	62	84	2496	448	16-17
12/05, Wed	48	18	10	5	12	23	60	116	223	148	172	207	226	235	302	328	424	462	406	333	216	169	134	72	62	4125	448	16-17
12/06, Thu	44	22	8	7	13	23	53	132	200	162	193	209	222	223	293	324	390	429	363	295	206	202	159	136	136	4349	462	17-18
12/07, Fri	93	42	26	17	12	16	26	52	91	142	177	229	271	252	250	272	310	246	250	173	132	129	140	99	99	3447	429	17-18
12/08, Sat	72	50	22	19	9	18	25	25	94	98	176	156	196	215	226	219	223	193	203	129	123	113	68	44	44	2716	310	16-17
12/09, Sun	29	8	5	7	13	19	66	130	194	133	129	148	189	217	295	346	390	437	353	249	199	121	87	62	62	3826	429	17-18
12/10, Mon	48	13	3	6	9	22	69	128	200	131	141	176	212												1158			
12/11, Tue																									AWDT	69	4077	

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)

WEEKDAYS	Counted	WEEKDAY Hours	WEEKDAY High Hour	WEEKDAY % of day	WEEKDAY North High Hour	WEEKDAY South High Hour	WEEKDAY % of day	ESTIMATED AADT
Mon	23	130	199	143	151	178	206	216
Tue	66	130	199	143	151	178	206	216
Wed	66	130	199	143	151	178	206	216
Thu	66	130	199	143	151	178	206	216
Fri	66	130	199	143	151	178	206	216
Sat	66	130	199	143	151	178	206	216
Sun	66	130	199	143	151	178	206	216
Average	4	100	677	8.4	437	460	11.6	8524

DAYS	Counted	HOURS	WEEKDAYS				WEEKEND				ESTIMATED AADT	
			Counted	WEEKDAY Hours	WEEKDAY High Hour	WEEKDAY % of day	Counted	WEEKEND Hours	WEEKEND High Hour	WEEKEND % of day	North	South
7	166	4	100	677	8.4	437	460	11.6	8524	4320	4203	

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
12	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98

ROUTE/ROAD: DOANSBURG RD **FROM:** RT22 **TO:** FAIRFIELD DR
STATION: 846017 **PLACEMENT:** 0.388 MI S OF GAGE RD **REGION-COUNTY:** 8-PUTNAM

New York State Department of Transportation SB Traffic Count Hourly Report

STATION: 846017

ROUTE/ROAD: DOANSBURG RD
FED DIR CODE: 5
ST DIR CODE: 1, 2
DOT ID: 191692
BEGIN DATE: 12/4/2012
NOTES 1: SB TRAVEL LANE
NOTES 2:
TAKEN BY: TST----
FROM: RT22
REF. MARKER:
END MILEPOST: 2.25
LANES BY DIR: 1 South
WEEK OF YEAR: 49
PLACEMENT: 0.388 M I S OF GAGERD
PROCESSED BY: DOT-jh
TO: FAIRFIELD DR
FUNC. CLASS: 16 - U Minor Arterial
FACTOR GROUP: 30
CC STN:
ADDL DATA:
JURISDICTION: 02-County
BATCH ID: DOT-R08CWW49b
REGION-COUNTY: 8-PUTNAM
MUNI: Southeast-Town-0789
BIN: 3345500
RR CROSSING:
HPMS SAMPLE:
1 WAY CODE:
COUNT TYPE: Axle
SPEED LIMIT:

DATE	DAILY HIGH HOUR																								TOTAL	COUNT	HIGH HOUR	
	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24				
12/04, Tue	25	8	7	19	44	187	359	456	433	243	172	190	226	193	236	285	249	200	178	111	50	53	45	25	3994	456	07-08	
12/06, Thu	13	7	5	11	56	193	393	477	421	244	207	210	234	189	227	285	289	200	173	125	99	68	36	4198	477	07-08		
12/07, Fri	21	10	7	13	63	180	375	470	422	247	215	227	226	189	214	270	245	209	224	164	105	110	77	4340	470	07-08		
12/08, Sat	41	16	8	11	23	60	111	155	250	268	285	258	241	267	209	231	195	173	170	139	96	71	69	46	3393	285	10-11	
12/09, Sun	31	17	14	9	17	30	61	81	129	185	201	244	259	240	228	188	140	137	109	90	84	52	31	17	2594	259	12-13	
12/10, Mon	9	5	8	16	64	177	333	460	393	254	172	167	190	186	210	273	229	181	156	87	86	55	33	23	3767	460	07-08	
12/11, Tue	15	6	4	16	64	195	358	475	389	244	201	197	225													2389		

AVERAGE WEEKDAY HOURS (Axle Factored, Mon 6 AM to Fri Noon)

18	8	6	15	56	186	358	460	405	242	190	195	215	186	221	274	251	191	173	110	80	61	37	27	3965
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DAYS	HOURS	WEEKDAYS	WEEKDAY	AVERAGE WEEKDAY		ESTIMATED
				Counted	Hours	
7	166	4	100	677	437	8524
Counted				High Hour % of day	High Hour % of day	North
				8.4	10.7	4320
						South
						4203

FACTOR

Month	Seasonal	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Axl
12	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98

New York State Department of Transportation Traffic Count Hourly Report

ROUTE #: NY 22 ROAD NAME: FROM: RT 312 TO: RT 164 COUNTY: Putnam
 DIRECTION: Northbound FATOR GROUP: 30 REC. SERIAL #: 0074 TOWN: PATTERSON (JA 04
 STATE DIR CODE: 1 WK OF YR: 23 @ REF MARKER: 22 84031096 LION#: PATTERSON (JA 04
 DATE OF COUNT: 06/06/2011 ADDL DATA: JURIS: NYSDOT BIN:
 NOTES LANE 1: NB Travel Lane COUNT TYPE: AXLE PAIRS CC S/m: RR CROSSING:
 COUNT TAKEN BY: ORG CODE: TST INITIALS: --- PROCESSED BY: ORG CODE: DOT INITIALS: jh BATCH ID: DOT-R08CWV24bVol HPMS SAMPLE:

DATE	DAY	AM												PM												DAILY TOTAL	DAILY HIGH	DAILY LOW	DAILY COUNT	HOUR
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12					
68	54	25	12	20	76	173	329	378	331	392	413	431	417	504	643	794	807	807	650	444	313	283	180	152	849	17				
115	53	29	13	21	70	195	314	382	373	438	436	448	476	560	707	789	810	890	675	457	409	290	244	178	8162	17				
86	52	19	11	30	69	163	295	394	361	360	448	503	523	548	747	807	828	816	602	413	352	271	174	8872	828	17				
91	68	37	30	50	67	179	338	434	401																	17				

DAYS Counted	HOURS Counted	WEEKDAYS Counted	AVERAGE WEEKDAY		Axle Adj. Factor	Seasonal/Weekday Adjustment Factor	ESTIMATED (one way)
			High Hour	% of day			
5	92	5	807	10%	0.979	1.105	AADT 7441

ROUTE #NY 22 ROAD NAME: FROM: RT 312 TO: RT 164 COUNTY: Putnam
 STATION: 840198 STATE DIR CODE: 1 PLACEMENT: 1.5mi N of CR 65 DATE OF COUNT: 06/06/2011

CAPACITY ANALYSIS PROCEDURES

CAPACITY ANALYSIS PROCEDURES

Intersections – Four methods of analysis are needed to evaluate different kinds of intersections. These methods are based on procedures found in the Fifth Edition of the Highway Capacity Manual 2010 and are described below.

Two-Way STOP-Controlled Intersections (TWSC)

One typical configuration is a four-leg intersection, where the major street is uncontrolled, while the minor street is controlled by STOP signs. The other typical configuration is a three-leg intersection, where the single minor-street approach is controlled by a STOP sign.

Theoretical Basic – Gap-acceptance models begin with the recognition that TWSC Intersections give no positive indication or control to the driver on the minor street as to when it is appropriate to leave the stop line and enter the major street. The driver must determine when a gap on the major street is large enough to permit entry and when to enter, on the basis of the relative priority of the competing movements. This decision-making process has been formalized analytically into what is commonly known as gap-acceptance theory. Gap-acceptance theory includes three basic elements: the size and distribution (availability) of gaps on the major street, the usefulness of these gaps to the minor-street drivers, and the relative priority of the various movements at the intersection.

Critical Headway and Follow-Up Headway – The *critical headway* is defined as the minimum interval in the major street traffic stream that allows intersection entry for one minor-street vehicle. Thus, the driver's critical headway is the minimum headway that would be acceptable. Critical headway can be estimated on the basis of observations of the largest rejected and smallest accepted headway for a given intersection. The *follow-up headway* is defined as the time between the departure of one vehicle from the minor street and the departure of the next vehicle using the same major-street headway, under a condition of continuous queuing on the minor street.

Base Critical Headways for TWSC Intersections

VEHICLE MOVEMENT	BASE CRITICAL HEADWAY		
	Two Lanes	Four Lanes	Six Lanes
Left turn from major	4.1	4.1	5.3
U-turn from major	N/A	6.4 (wide) 6.9 (narrow)	5.6
Right turn from minor	6.2	6.9	7.1
Through traffic On major	1-stage:6.5 2-stage, stage I: 5.5 2-stage, Stage II: 5.5	1-stage:6.5 2-stage, stage I: 5.5 2-stage, Stage II: 5.5	1-stage:6.5* 2-stage, stage I: 5.5* 2-stage, Stage II: 5.5*
Left turn from minor	1-stage:7.1 2-stage, stage I: 6.1 2-stage, Stage II: 6.1	1-stage:7.5 2-stage, stage I: 6.5 2-stage, Stage II: 6.5	1-stage:6.4 2-stage, stage I: 7.3 2-stage, Stage II: 6.7

*Use caution; values estimated

Base Follow-up Headways for TWSC Intersections

VEHICLE MOVEMENT	BASE FOLLOW-UP HEADWAY		
	Two Lanes	Four Lanes	Six Lanes
Left turn from major	2.2	2.2	3.1
U-turn from major	N/A	2.5 (wide) 3.1 (narrow)	2.3
Right turn from minor	3.3	3.3	3.9
Through traffic on major	4.0	4.0	4.0
Left turn from minor	3.5	3.5	3.8

Level Of Service Criteria – LOS for a 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 turn. LOS is not defined for the intersection as a whole or for major-street approaches. LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

Automobile Mode – The methodology applies to TWSC intersections with up to three lanes (either shared or exclusive) on the major-street approaches and up to three lanes on the minor-street approaches (with no more than one exclusive lane for each movement on the minor-street approach). Effects from other intersections are accounted for only in situations in which a TWSC intersection is located on an urban street segment between coordinated signalized intersections. In this situation, the intersection can be analyzed by using the procedures in urban street segment.

Level-of Service Criteria for Automobile Mode

CONTROL DELAY (SECONDS PER VEHICLE)	LOS BY VOLUME-TO-CAPACITY RATIO	
	1.0	>1.0
0- 10	A	F
>10 to 15	B	F
>15 to 25	C	F
>25 to 35	D	F
>35 to 50	E	F
>50	F	F

Note: 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.

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3/25/2015

CAPACITY ANALYSIS WORKSHEETS

SYNCHRO 8.0 CAPACITY ANALYSIS WORKSHEETS

2016 Existing Conditions

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	265	154	28	576	1	42	0	8	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	175	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	291	169	31	633	1	46	0	9	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	634	0	0	460	0	0	776	1094	230	863	1177	317
Stage 1	-	-	-	-	-	-	398	398	-	695	695	-
Stage 2	-	-	-	-	-	-	378	696	-	168	482	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	945	-	-	1097	-	-	287	213	772	248	190	679
Stage 1	-	-	-	-	-	-	599	601	-	399	442	-
Stage 2	-	-	-	-	-	-	616	441	-	817	552	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	945	-	-	1097	-	-	273	200	772	234	179	679
Mov Cap-2 Maneuver	-	-	-	-	-	-	273	200	-	234	179	-
Stage 1	-	-	-	-	-	-	589	591	-	393	423	-
Stage 2	-	-	-	-	-	-	587	422	-	795	543	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.6	19.1	10.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	273	772	945	-	-	1097	-	-	679
HCM Lane V/C Ratio	0.169	0.011	0.012	-	-	0.028	-	-	0.003
HCM Control Delay (s)	20.9	9.7	8.9	0.1	-	8.4	0.2	-	10.3
HCM Lane LOS	C	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	0	-	-	0.1	-	-	0

Intersection

Int Delay, s/veh 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	14	450	75	21	573	4	108	0	39	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	175	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	489	82	23	623	4	117	0	42	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	627	0	0	571	0	0	917	1233	285	946	1272	314
Stage 1	-	-	-	-	-	-	560	560	-	671	671	-
Stage 2	-	-	-	-	-	-	357	673	-	275	601	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	951	-	-	998	-	-	227	176	712	216	166	682
Stage 1	-	-	-	-	-	-	480	509	-	412	453	-
Stage 2	-	-	-	-	-	-	633	452	-	708	488	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	951	-	-	998	-	-	217	166	712	194	157	682
Mov Cap-2 Maneuver	-	-	-	-	-	-	217	166	-	194	157	-
Stage 1	-	-	-	-	-	-	469	497	-	403	437	-
Stage 2	-	-	-	-	-	-	610	436	-	651	477	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.4	31.9	17
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	217	712	951	-	-	998	-	-	302
HCM Lane V/C Ratio	0.541	0.06	0.016	-	-	0.023	-	-	0.007
HCM Control Delay (s)	39.6	10.4	8.8	0.1	-	8.7	0.1	-	17
HCM Lane LOS	E	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	2.9	0.2	0	-	-	0.1	-	-	0

SYNCHRO 8.0 CAPACITY ANALYSIS WORKSHEETS

2018 No-Build Conditions

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	270	157	28	586	1	42	0	8	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	175	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	297	173	31	644	1	46	0	9	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	645	0	0	469	0	0	789	1112	235	876	1197	323
Stage 1	-	-	-	-	-	-	405	405	-	706	706	-
Stage 2	-	-	-	-	-	-	384	707	-	170	491	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	936	-	-	1089	-	-	281	207	767	243	185	673
Stage 1	-	-	-	-	-	-	593	597	-	393	437	-
Stage 2	-	-	-	-	-	-	611	436	-	815	546	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	936	-	-	1089	-	-	267	195	767	229	174	673
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	195	-	229	174	-
Stage 1	-	-	-	-	-	-	584	587	-	387	418	-
Stage 2	-	-	-	-	-	-	582	417	-	793	537	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.6	19.4	10.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	267	767	936	-	-	1089	-	-	673
HCM Lane V/C Ratio	0.173	0.011	0.012	-	-	0.028	-	-	0.003
HCM Control Delay (s)	21.3	9.7	8.9	0.1	-	8.4	0.2	-	10.4
HCM Lane LOS	C	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	0	-	-	0.1	-	-	0

Intersection

Int Delay, s/veh 4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	14	458	75	21	583	4	108	0	39	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	175	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	498	82	23	634	4	117	0	42	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	638	0	0	579	0	0	932	1253	290	961	1292	319
Stage 1	-	-	-	-	-	-	569	569	-	682	682	-
Stage 2	-	-	-	-	-	-	363	684	-	279	610	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	942	-	-	991	-	-	221	171	707	211	162	677
Stage 1	-	-	-	-	-	-	474	504	-	406	448	-
Stage 2	-	-	-	-	-	-	628	447	-	704	483	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	942	-	-	991	-	-	211	161	707	189	152	677
Mov Cap-2 Maneuver	-	-	-	-	-	-	211	161	-	189	152	-
Stage 1	-	-	-	-	-	-	463	492	-	396	432	-
Stage 2	-	-	-	-	-	-	604	431	-	646	471	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.4	33.3	17.3
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	211	707	942	-	-	991	-	-	296
HCM Lane V/C Ratio	0.556	0.06	0.016	-	-	0.023	-	-	0.007
HCM Control Delay (s)	41.6	10.4	8.9	0.1	-	8.7	0.1	-	17.3
HCM Lane LOS	E	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	3	0.2	0	-	-	0.1	-	-	0

SYNCHRO 8.0 CAPACITY ANALYSIS WORKSHEETS

2018 Build Conditions

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	285	154	28	648	1	42	0	8	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	175	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	313	169	31	712	1	46	0	9	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	713	0	0	482	0	0	838	1195	241	953	1278	357
Stage 1	-	-	-	-	-	-	420	420	-	774	774	-
Stage 2	-	-	-	-	-	-	418	775	-	179	504	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	883	-	-	1077	-	-	259	185	760	214	165	639
Stage 1	-	-	-	-	-	-	581	588	-	357	406	-
Stage 2	-	-	-	-	-	-	583	406	-	805	539	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	883	-	-	1077	-	-	245	173	760	201	154	639
Mov Cap-2 Maneuver	-	-	-	-	-	-	245	173	-	201	154	-
Stage 1	-	-	-	-	-	-	571	578	-	351	387	-
Stage 2	-	-	-	-	-	-	553	387	-	782	530	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.5	21	10.7
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	245	760	883	-	-	1077	-	-	639
HCM Lane V/C Ratio	0.188	0.012	0.012	-	-	0.029	-	-	0.003
HCM Control Delay (s)	23.1	9.8	9.1	0.1	-	8.4	0.2	-	10.7
HCM Lane LOS	C	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.7	0	0	-	-	0.1	-	-	0

Intersection

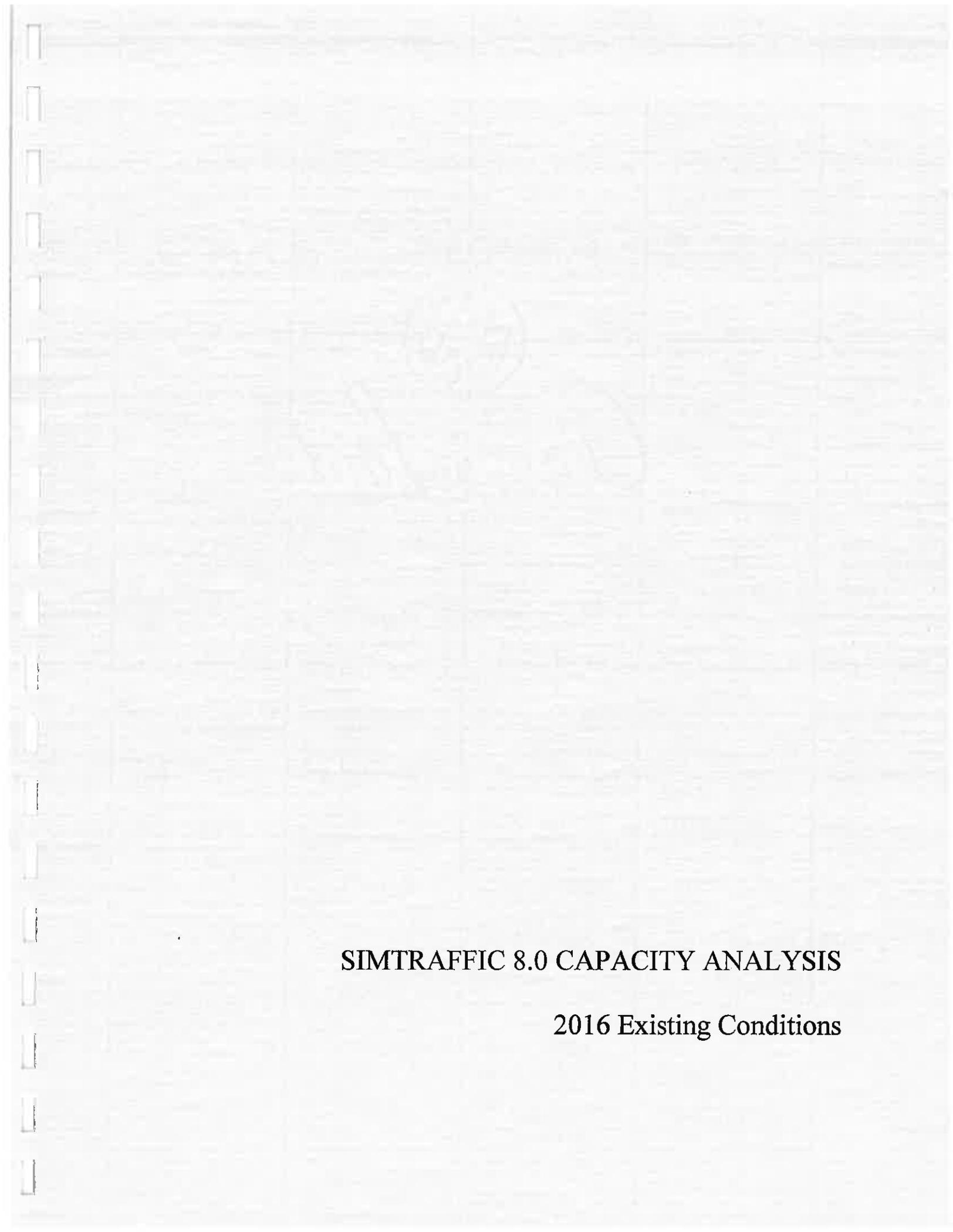
Int Delay, s/veh 5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	14	523	75	21	617	4	108	0	39	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	175	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	568	82	23	671	4	117	0	42	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	675	0	0	650	0	0	1021	1361	325	1033	1398	338
Stage 1	-	-	-	-	-	-	640	640	-	718	718	-
Stage 2	-	-	-	-	-	-	381	721	-	315	680	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	912	-	-	932	-	-	191	147	671	187	140	658
Stage 1	-	-	-	-	-	-	430	468	-	386	431	-
Stage 2	-	-	-	-	-	-	613	430	-	671	449	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	912	-	-	932	-	-	181	137	671	166	131	658
Mov Cap-2 Maneuver	-	-	-	-	-	-	181	137	-	166	131	-
Stage 1	-	-	-	-	-	-	419	456	-	376	414	-
Stage 2	-	-	-	-	-	-	588	413	-	612	437	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.5	43.7	18.7
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	181	671	912	-	-	932	-	-	265
HCM Lane V/C Ratio	0.649	0.063	0.017	-	-	0.024	-	-	0.008
HCM Control Delay (s)	55.6	10.7	9	0.1	-	9	0.2	-	18.7
HCM Lane LOS	F	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	3.8	0.2	0.1	-	-	0.1	-	-	0



SIMTRAFFIC 8.0 CAPACITY ANALYSIS

2016 Existing Conditions

SimTraffic Performance Report
 2016 EXISTING CONDITIONS, WEEKDAY MORNING PEAK HOUR

4/29/2016

2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All
Movements Served	LT	TR	LT	TR	LT	R	LTR	
Denied Del/Veh (s)								0.2
Total Del/Veh (s)	0.4	0.7	1.3	0.2	12.6	4.0	3.8	1.4

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	1.9

Queuing and Blocking Report
 2016 EXISTING CONDITIONS, WEEKDAY MORNING PEAK HOUR

4/29/2016

Intersection: 2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD

Movement	EB	WB	NB	NB	SB
Directions Served	LT	LT	LT	R	LTR
Maximum Queue (ft)	54	111	100	31	28
Average Queue (ft)	5	17	33	7	3
95th Queue (ft)	26	69	69	27	16
Link Distance (ft)	518	686	753		258
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				175	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Performance Report
 2016 EXISTING CONDITIONS, WEEKDAY AFTERNOON PEAK HOUR

4/29/2016

2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All
Movements Served	LT	TR	LT	TR	LT	R	LTR	
Denied Del/Veh (s)								0.3
Total Del/Veh (s)	0.5	0.6	0.8	0.2	22.6	3.1	6.9	2.5

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	2.9

Queuing and Blocking Report
 2016 EXISTING CONDITIONS, WEEKDAY AFTERNOON PEAK HOUR

4/29/2016

Intersection: 2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD

Movement	EB	EB	WB	NB	NS	SB
Directions Served	LT	TR	LT	LT	R	LTR
Maximum Queue (ft)	54	22	67	138	55	28
Average Queue (ft)	10	1	9	60	28	3
95th Queue (ft)	42	7	36	101	55	16
Link Distance (ft)	518	518	686	753		258
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)					175	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

SIMTRAFFIC 8.0 CAPACITY ANALYSIS

2018 No-Build Conditions

2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All
Movements Served	LT	TR	LT	TR	LT	R	LTR	
Denied Del/Veh (s)								0.2
Total Del/Veh (s)	0.3	0.8	1.4	0.2	12.5	4.0	3.8	1.4

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	1.9

Queuing and Blocking Report
 2018 NO-BUILD CONDITIONS, WEEKDAY MORNING PEAK HOUR

4/29/2016

Intersection: 2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD

Movement	EB	WB	NB	NB	SB
Directions Served	LT	LT	LT	R	LTR
Maximum Queue (ft)	54	111	100	31	28
Average Queue (ft)	5	18	32	7	3
95th Queue (ft)	26	70	69	27	16
Link Distance (ft)	518	686	753		258
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				175	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Performance Report
 2018 NO-BUILD CONDITIONS, WEEKDAY AFTERNOON PEAK HOUR

4/29/2016

2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All
Movements Served	LT	TR	LT	TR	LT	R	LTR	
Denied Del/Veh (s)								0.3
Total Del/Veh (s)	0.4	0.6	0.9	0.2	26.2	3.1	6.9	2.7

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	3.1

Queuing and Blocking Report
 2018 NO-BUILD CONDITIONS, WEEKDAY AFTERNOON PEAK HOUR

4/29/2016

Intersection: 2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD

Movement	EB	EB	WB	NB	NB	SB
Directions Served	LT	TR	LT	LT	R	LTR
Maximum Queue (ft)	54	22	67	138	55	28
Average Queue (ft)	9	1	9	62	28	3
95th Queue (ft)	36	7	36	102	55	16
Link Distance (ft)	518	518	686	753		258
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)					175	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

SIMTRAFFIC 8.0 CAPACITY ANALYSIS

2018 Build Conditions

SimTraffic Performance Report
 2018 BUILD CONDITIONS, WEEKDAY MORNING PEAK HOUR

4/29/2016

2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All
Movements Served	LT	TR	LT	TR	LT	R	LTR	
Denied Del/Veh (s)								0.2
Total Del/Veh (s)	0.4	0.9	1.4	0.3	14.8	3.5	2.4	1.6

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.0

Queuing and Blocking Report
 2018 BUILD CONDITIONS, WEEKDAY MORNING PEAK HOUR

4/29/2016

Intersection: 2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD

Movement	EB	WB	WB	NB	NB	SB
Directions Served	LT	LT	TR	LT	R	LTR
Maximum Queue (ft)	54	158	137	79	31	28
Average Queue (ft)	6	18	5	34	10	2
95th Queue (ft)	30	80	45	66	33	13
Link Distance (ft)	518	686	686	753		258
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)				175		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Performance Report
 2018 BUILD CONDITIONS, WEEKDAY AFTERNOON PEAK HOUR

4/29/2016

2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All
Movements Served	LT	TR	LT	TR	LT	R	LTR	
Denied Del/Veh (s)								0.3
Total Del/Veh (s)	0.6	0.7	0.8	0.3	33.8	3.0	2.5	3.5

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	3.9

Queuing and Blocking Report
2018 BUILD CONDITIONS, WEEKDAY AFTERNOON PEAK HOUR

4/29/2016

Intersection: 2: MOUNT EBO ROAD SOUTH/POWERS LANE & DOANSBURG ROAD

Movement	EB	WB	NB	NB	SB
Directions Served	LT	LT	LT	R	LTR
Maximum Queue (ft)	72	67	138	55	28
Average Queue (ft)	12	9	73	26	1
95th Queue (ft)	46	36	119	53	9
Link Distance (ft)	518	686	753		258
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				175	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0