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MEMORANDUM

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TO: GARRY RHODES  
FROM: ART WU, TRANSPORTATION ADVISORY COMMITTEE  
SUBJECT: REVIEW OF ELLSWORTH VILLAGE TRAFFIC IMPACT STUDY  
DATE: 1/13/2005  
CC: PLANNING BOARD, EAVO

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PROJECT DESCRIPTION:

Ellsworth Village is a proposed 33 unit seniors-only residential condominium project on 8.4 acres in East Acton in the vicinity of Brabrook and Pope Roads; 3 units will be classified as Affordable units.

For normal vehicular use, Ellsworth Village will be accessed by one driveway, Ellsworth Village Road, off the end of Brabrook Road (presently a cul-de-sac). Circulation within the project is provided by this driveway, which ends in a loop. Also proposed is a gravel walkway to the parcel that the Town acquired from the BrookSide Shops development and a sidewalk along Ellsworth Village Road. A minimum of 2 parking spaces per unit are required; 70 spaces are provided.

TRAFFIC IMPACT ASSESSMENT:

Project consultants conducted a traffic impact study consisting of an existing condition survey, future build-out projections, intersection impact assessment, and proposed mitigation measures. Trip generation was based on recorded data for Audubon Hill per ITE recommendations.

2,500 vehicles travel on Pope Road on a typical weekday, with about 230 (120 northbound, 110 southbound) passing Brabrook Road during a weekday afternoon peak hour. 120 vehicles travel on Brabrook Road on a typical weekday with about 13 leaving and 3 entering during a weekday afternoon peak hour. Ellsworth Village is expected to generate 150 trips on a typical weekday with about 17 trips during its weekday afternoon peak hour. 2008 traffic on Brabrook Road for the no-build and then build cases would increase from 13 to 32 trips for a weekday AM peak hour and from 27 to 48 trips for a weekday PM peak hour\*. Level of Service (LOS) for left turns from Brabrook to Pope and Pope to Brabrook is projected to remain at A for all 2008 build peak hour cases. Projected queue lengths are also minimal.

\* The study found that the stopping sight distance (SSD) for motorists traveling southbound on Pope Road near Brabrook was inadequate. Safe SSDs ranged from 205 feet for 30 mph on a -3% grade to 300 feet for 41 mph on a +4% grade; the available sight distance is less than 100 feet.

MITIGATION MEASURES PROPOSED BY PROPONENT:

- \* 1. Extend the sight line for motorists traveling southbound on Pope Road at Brabrook Road by cutting down several large oak trees and regrading a rise on the west side of Pope Road.
2. Install sidewalk from Ellsworth Village to Pope Road along south side of Brabrook Road (in response to residents' concerns).

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- \* 3. Install stop signs on Ellsworth Village Road at Brabrook Road, on Flagg Road at Brabrook Road, and on Brabrook Road at Pope Road (in response to residents' concerns).

TAC RECOMMENDATIONS:

- \* • Instead of implementing mitigation item (1), the proponent should work with the East Acton Village Organization (EAVO) to develop aspects of the East Acton Village Plan, Transportation strategy T1.4i<sup>†</sup>, in order to sufficiently resolve the SSD safety issue at Brabrook Road. One possible option, for example, may be to replace the raised crosswalk specified in T1.4i with an at-grade crosswalk and to add a raised crosswalk or speed hump at Brabrook and Pope Roads. The proponent should then implement these measures.
- \* • TAC concurs with mitigation items (2) and (3).
  - The proponent should install a pedestrian connection from Ellsworth Village Road along the Brabrook Road ROW to connect with the sidewalk running north from the Wetherbee Plaza Extension project (107 Great Road).
  - PB and/or other appropriate parties should review the proposed gravel path through Town land to the BrookSide Shops. Upon approval, the proponent should complete this path to enable a pedestrian connection to the BrookSide Shops. Non-emergency motorized vehicle use should be prohibited.
  - The proponent shall implement EAV Plan, Transportation strategy T1.1f<sup>‡</sup>. Without this, the proponent installed sidewalk would be isolated from the EAV sidewalk network.

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\* Figures 1B through 3B have erroneous EB numbers that inflate the baseline PM peak hour trip count.

† "Install a series of integrated traffic calming measures along the length of Pope Road at key locations, including signage and a raised crosswalk at intersection with Baybery Road."

‡ "Complete sidewalk on west side of Pope Road from Great Road up to Brabrook Road."