Memo

PLANNING COMMISSION EXHIBIT 112

To:	Alliance for Sound Area Planning (ASaP)	From:	Kermit W. Hua, PE, PTOE Principal KWH Enterprise, LLC 277 Reservoir Avenue Ste. 1101 Meriden, CT 06451 (203) 606-3525
File:		Date:	February 16, 2011

Reference: Traffic Engineering Peer Review 2, the Preserve, Old Saybrook, Connecticut

A summary of this memorandum:

- The evaluation basis for the traffic impact and off-site roadway improvements should be the full development scenario of the Preserve project. These improvements should be in place before any part of the Preserve project is occupied.
- Traffic from the three residential pods will represent about 11% to 14% increases to existing traffic flow on Ingham Hill Road during weekday AM and PM peak hours and 1.5% to 2% increases to existing traffic flow on Bokum Road during peak hours.
- A map depicting problem intersections with high degrees of traffic congestion in year 2010 even without any traffic generated by the Preserve project is presented in Figure 2. The project will aggravate traffic conditions at these intersections. The current application does not include any measures to address these concerns.

Basis of Traffic Impact Assessment: Full Development

The basis for evaluating the Preserve project and the corresponding off-sit roadway improvements should be the full development scenario. The fact that the applicant is only amending the development of the three residential pods should not change this basis. To ensure public safety and a reasonable level of traffic service, these improvements should be in place before any part of the Preserve project is occupied.

Traffic Growth from Three Residential Pods

At the January 19, 2011, hearing, the commission's traffic consultant Mr. Hillson inquired about the relationship between the traffic generated by the three proposed residential pods and the existing traffic volumes on Ingham Hill Road and Bokum Road.

Reference: Traffic Engineering Peer Review 2, the Preserve, Old Saybrook, Connecticut

The answers to this question are detailed in Tables 2 and 3 below. Traffic from the three development pods will represent about 11% to 14% increases to existing volumes on Ingham Hill Road during weekday AM and PM peak hours and 1.5% to 2% increases to existing volumes on Bokum Road during peak hours.

In Table 1, which summarizes the generated vehicular trips from these three pods, the land use category for this exercise is "Single-Family Detached Housing" as described in the 8th Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE).

Table 1. Trip Generation

	Trip Generation for Three Residential Pods		
	Weekday AM Peak Hour	Weekday PM Peak Hour	Saturday Midday Peak Hour
Ingham Hill Road Pod (13 Lots)	10	13	12
Westbrook Pod (11 Lots)	8	11	10
Bokum Road (9 Lots)	7	9	8
Total	25	33	30

Based on information contained in Figure 3 of the 2004 BL Companies traffic impact study, which shows the 2010 background traffic volumes, Table 2 below summarizes the traffic growth for the Bokum Road pod in relation to the peak hour traffic volumes on Bokum Road.

Table 2. Traffic Growth on Bokum Road

	Weekday AM Peak Hour	Weekday PM Peak Hour	Saturday Midday Peak Hour
Bokum Road (9 Lots)	7	9	8
2010 Bokum Road Volumes (Both Directions)	335	615	455
% Increase from Development	2%	1.5%	1.8%

The BL report does not contain traffic volume information for Ingham Hill Road where the 13 lots will be located. We collected the following volumes during weekday AM and PM peak hours south the intersection of Ingham Hill Road and Goose Pond Road on January 26 and 31, 2011. Figure 1 below shows the location of the traffic counts. The result is summarized in Table 3.

Reference: Traffic Engineering Peer Review 2, the Preserve, Old Saybrook, Connecticut

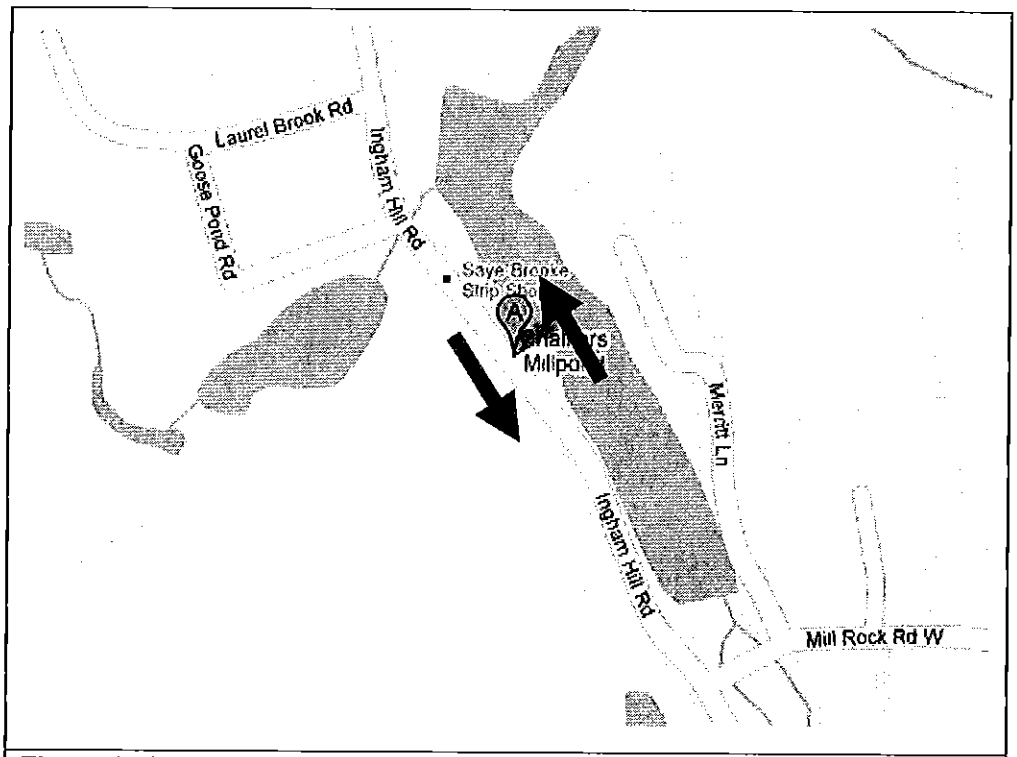

Figure 1. Location of Traffic Counts on Ingham Hill Road
Weekday AM Peak Hour, Wednesday, January 26, 2011
Weekday PM Peak Hour, Monday, January 31, 2011

Table 3. Traffic Growth on Ingham Hill Road

	Weekday AM Peak Hour	Weekday PM Peak Hour
Ingham Hill Road (13 Lots)	10	13
2011 Ingham Hill Road Volumes (Both Directions)	73	115
% Increase from Development	14%	11%

Deficient Intersections under 2010 No-Build Traffic Conditions

In a table contained in my January 19, 2011, memorandum, I listed seven intersections projected to operate at levels of services (LOS) E and/or F in year 2010 even without any traffic generated by the Preserve project. These were based on the BL Companies traffic study. To help the public and the commission visualize these problem locations in relation to main area traffic corridors, I have included them in Figure 2.

Reference: Traffic Engineering Peer Review 2, the Preserve, Old Saybrook, Connecticut

With any incremental traffic growth from the Preserve project, the traffic conditions at these intersections will certainly worsen. The current application includes no measures to address these concerns.

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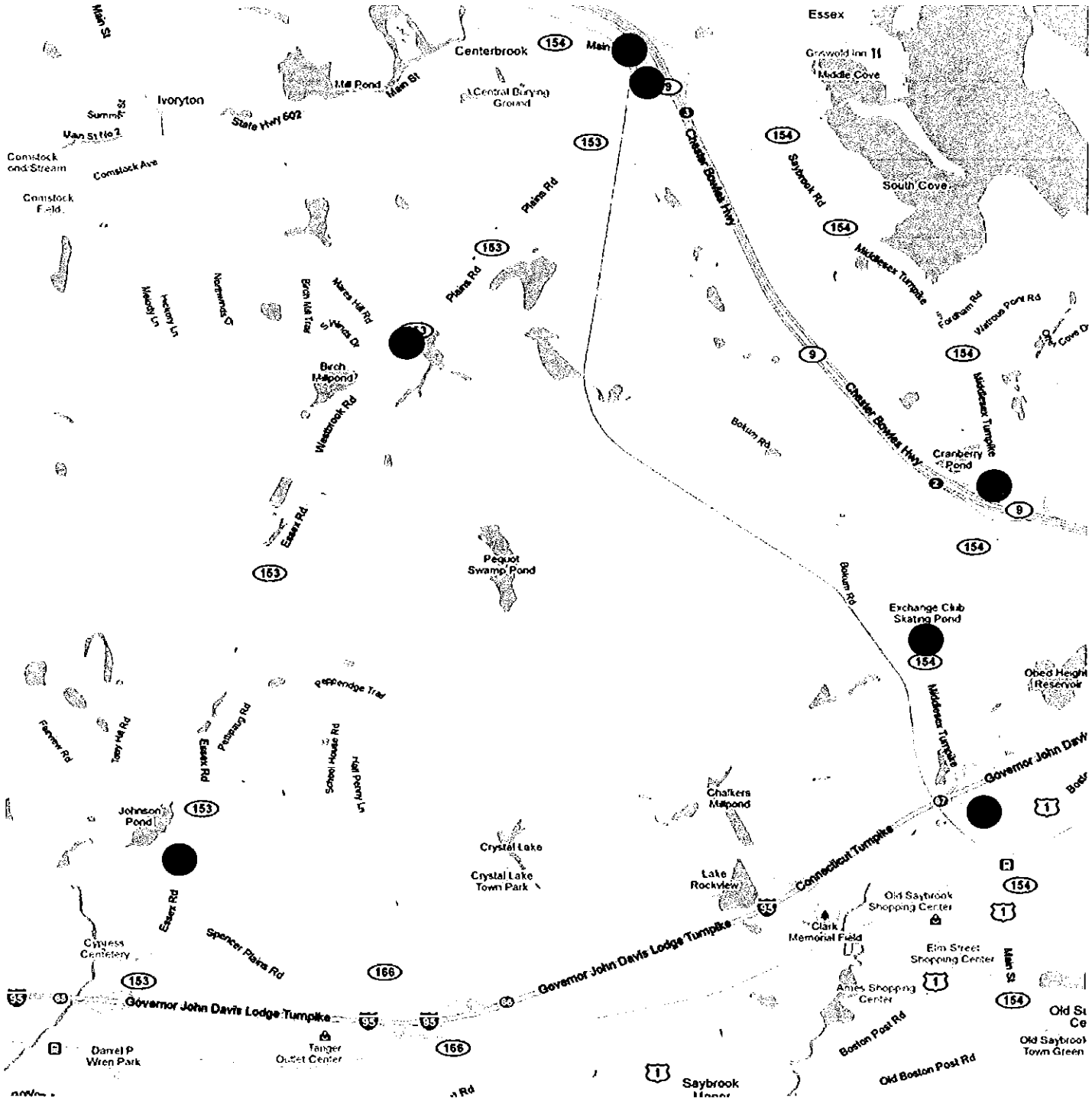

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Figure 2 2010 No-Build Traffic Conditions
Intersections Operating at Levels of Service E and/or F in Peak Hours