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PLANNING  
COMMISSION  
EXHIBIT #CC

MEMORANDUM

TO: Christine Nelson, AICP

DATE: May 11, 2005

FROM: Geoffrey L. Jacobson P.E.



PROJECT No.: 0719-0011

SUBJECT: The Preserve – Safety Improvements to Bokum Road & Ingham Hill Road

COPIES: W. Peace, L. Bonin, M. Branse, Esq., D. Goderre

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The purpose of this memorandum is to summarize the safety improvements to Bokum Road and to Ingham Hill Road that the Town of Old Saybrook has determined to be the minimum necessary to accommodate the increased vehicular traffic anticipated to be generated by the "The Preserve", and to maintain pedestrian/bicycle safety. The recommendations included in this memorandum are based on local knowledge as well as a recent joint field investigation conducted by Bill Peace (current selectman and retired Connecticut DOT Engineer), Larry Bonin (Director of Public Works), Christine Nelson (Town Planner) and Geoffrey Jacobson (Town Consulting Engineer). The specific recommendations outlined in this memorandum, were based on the following consensus opinions:

- Ingham Hill Road will serve as the primary connection (majority of traffic) within Old Saybrook to its town center, including but not limited to schools, library, town hall, parks, beach, restaurants, shopping, personal services, and will serve as the principal access for Old Saybrook's emergency services. The local delivery of goods and services will be provided by the principal entrance to "The Preserve" at Connecticut Route 153 in Westbrook. Additionally, all construction traffic will utilize Connecticut Route 153 as the nearest State road offering the most capacity.
- Since Ingham Hill Road has been officially designated as a "Local Scenic Road", recommended improvements must maintain the existing scale, rural character and aesthetic qualities that served as the basis for this recognition.
- Given the aforementioned anticipated increase in traffic volume, and the need to temper the extent of roadway improvements due to the "scenic" roadway designation, there exists a need for a separate means for pedestrian travel to be provided along Ingham Hill Road so that residents can enjoy the scenic quality of this area, access the existing adjacent municipal open space areas, and travel to the nearest commercial thoroughfare.

- Bokum Road will be the least utilized access point due to its more distant location from local points of interest, and the serpentine roadway alignment, particularly to the east, which makes traveling this roadway inconvenient.

Safety improvements recommended by the aforementioned individuals are as follows:

### Ingham Hill Road

1. Provide a minimum 20-foot pavement width from the proposed Road H intersection to Interstate 95. Based on random measurements taken during our field investigation, the existing pavement ranges in width from 18-feet to 22-feet. This will require minor widening in some locations.
2. Relocate the proposed Road H intersection near the existing northern most 90-degree horizontal curve in Ingham Hill Road so as to create as close to a "T" intersection as possible, with the existing western end of Ingham Hill Road as a dead end leg. Care should be taken to avoid intrusion into wetland No. 8.
3. Realign the existing 90-degree horizontal curve in Ingham Hill Road (next curve to the south of the aforementioned curve) where the applicant owns frontage on both sides of the right-of-way. The design should conform to town design standards for a feeder street. In addition, the existing stonewall should be removed and relocated along the realigned road section.
4. A 6-foot wide pedestrian path/bikeway should be constructed along Ingham Hill Road, from the Road H intersection to Interstate 95, wherever sufficient area is available to construct this improvement within the existing Ingham Hill Road right-of-way or adjacent open space lands. To the extent possible, the pedestrian path/bikeway should be offset from the existing edge of Ingham Hill Road and meander around mature trees and rock outcrops with limited disturbance to existing topography. Due to the apparent right-of-way configuration, it is recognized that crossings of Ingham Hill Road will be necessary. Based on our initial field observations it would appear as though the pedestrian path/bikeway would be located as follows:
  - Beginning along the west side of Ingham Hill Road at the south side of Interstate 95 northerly to a point approximately 200-feet south of Barley Hill Road.
  - Continuing along the east side of Ingham Hill Road from the proceeding location to Dwayne Road.
  - Continuing along the west side of Ingham Hill Road Dwayne Road to Road H.
5. Improve the sight line to the south of the intersection of Deer Run and Ingham Hill Road with some limited grading, limbing and/or removal of the pine tree and oak tree on the east side of Ingham Hill Road.
6. Retrofit a grate over top of the existing stone "D-G" type end wall located on the west side of Ingham Hill Road to the north of the Dwayne Road intersection.

7. Grade back the existing shoulder on the west side of the curve on Ingham Hill Road across from House #207 (do not disturb existing stone wall).
8. Construct an off-road catch basin on the east side of Ingham Hill Road at the low point on the inside of the horizontal curve to the north of the Barley Hill Road Intersection. Connect to the existing cross culvert at this location. Extend the cross culvert on the west side of Ingham Hill Road further from the edge of pavement and reconstruct a stone head wall.
9. Remove/Replace existing guide rail and/or provide steel backed timber guide rail with tapered edge treatment at the following locations (note that all locations need to be confirmed, but in general, are to be provided wherever existing guide rails are located and they are not proposed to be eliminated and replaced with object markers):
  - On the east and west sides of Ingham Hill Road in the vicinity of houses #208 and #224.
  - On the east and west sides of Ingham Hill Road in the vicinity of the entrance to Lake Rockwell.
10. Install object markers (mounted on stained cedar posts) at the following locations (note that all locations need to be confirmed, but in general, are to be provided wherever existing head walls and end walls are located that are not protected with guide rails):
  - Existing head walls and end walls located on the east and west sides of Ingham Hill Road just to the north of the Dwayne Road intersection; in the vicinity Pheasant Lane; in the vicinity to the north and south of Fox Hill Road; in the vicinity of Barley Hill Road; and, in the vicinity of houses #206.

#### Bokum Road

1. The proposed intersection of The Preserve Road A and Bokum Road must conform to current AASHTO design standards and good engineering practice. In this regard, it is recommended that this intersection be designed for a 40 mph design speed. Of particular concern is the location of this proposed intersection on a sharp horizontal curve where a ledge outcrop on the inside of the curve severely restricts the east/west sight distance on Bokum Road. This obstruction must either be removed, or Bokum Road realigned to provide the required intersection sight distance. Other recommended improvements in the immediate vicinity of this intersection are as follows:
  - Travel lanes should be twelve (12) feet in width at the entrance intersection and tapered back on Bokum Road to match the existing pavement width.
  - A west-bound bypass lane should be provided on Bokum Road at the intersection.
  - Some spot drainage, shoulder widening and guide rail improvements should be provided on the intersection approach (approximately five hundred (500) feet on each side of the intersection).

2. The intersection of Bokum Road and Route 154 should be improved to provide a “T” intersection with acceleration, de-acceleration and a Route 154 north-bound bypass lane. It is recognized that these improvements would be subject to review and approval by the Connecticut Department of Transportation. In this regard, a meeting should be set up by the applicant with representatives from both the Town of Old Saybrook and the Connecticut Department of Transportation to discuss this issue further.

END OF MEMORANDUM