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November 2, 2006

Mr. Glenn Boucher, P.E.
Regional Highway Work Permit Coordinator
NYSDOT Region 8 – Traffic & Safety
4 Burnett Blvd.
Poughkeepsie, NY 12601

**RE: Greenport Retail, Response to Comments, US Route 9, Town of Greenport, NY;
CME Project No. 05-135d**

Dear Mr. Boucher:

Creighton Manning Engineering, LLP (CME) is in receipt of your comment letter dated August 30, 2006 regarding the above noted project. Based on a review of your comments, the following responses have been prepared regarding the Departments outstanding comments:

- 1. As discussed at our meeting and stated in our previous correspondence, the Department would like the developer to continue to make every effort to align the proposed northern most access drive with Joslen Boulevard thereby giving vehicles exiting Joslen Boulevard the benefit of the proposed traffic signal.*

Response: The Widerwaters Group has directed CME to evaluate five alternatives with regards to access from the site to Route 9 and Joslen Boulevard. The following descriptions summarize the alternatives contained on the attached Figures:

Alternative 1: The northern site driveway remains as-is on the current site plan, located approximately 560 feet south of the Joslen Boulevard intersection. Traffic signals would be installed at the site driveway and Joslen Boulevard.

Alternative 2: The northern site driveway is moved to the northern most extent of the site. In its place, a right in/right out driveway is installed (Middle Site Drive). Because the existing condominium apartment complex restricts the alignment of the north driveway, it is shown offset from Joslen Boulevard by approximately 50 feet. A dual span traffic signal provides signalized access for the north site driveway and Joslen Boulevard.

Alternative 3: The northern site driveway is moved to the northern most extent of the site. In its place, a right in/right out driveway is installed (Middle Site Drive). Joslen Boulevard is realigned south through the adjacent garage property to provide a typical intersection configuration. A single traffic signal controls all movements under this configuration.

Engineers, Planners and Surveyors

Alternative 4: The northern site driveway is moved through the adjacent condominium property to provide a typical intersection configuration with Joslen Boulevard, controlled by a single traffic signal. In its place, a right in/right out driveway is installed (Middle Site Drive).

Alternative 4a: Similar to Alternatives 3 and 4, the northern site driveway is moved to the northern most extent of the site with minor encroachments on the adjacent condominium property to provide a typical intersection configuration with Joslen Boulevard, controlled by a single traffic signal. In its place, a right in/right out driveway is installed (Middle Site Drive). A connection to the condominium parking lot would be provided at the east end of the property. This is the preferred alternative and is shown on the attached Bergmann Associates plan, dated September 22, 2006.

Table 1 summarizes the level of service analysis of the above noted alternative intersection configurations.

**Table 1 – Level of Service Summary
 Joslen Boulevard Alternatives**

Intersection Approach	Control	PM Peak Hour			Saturday Peak Hour			
		Alt 1	Alt 2	Alt 3, 4, & 4a	Alt 1	Alt 2	Alt 3, 4, & 4a	
Rt 9/Joslen Blvd/North Site Drwy	S	Joslen Blvd EB LTR	C (28.5)	E (58.8)	D (35.5)	C (30.2)	E (63.6)	C (34.8)
Site Drwy WB L		---	D (45.3)	C (27.2)	---	D (45.5)	C (34.5)	
TR		---	E (57.1)	B (16.6)	---	E (70.1)	B (17.3)	
Rt 9 NB L		A (6.0)	D (53.7)	A (7.8)	A (5.8)	D (51.0)	A (7.6)	
TR		B (10.3)	E (70.1)	C (22.1)	B (9.1)	E (55.5)	B (17.4)	
Rt 9 SB L		---	D (52.8)	B (14.4)	---	E (62.5)	B (16.1)	
TR		A (9.2)	C (25.2)	B (17.2)	B (10.4)	C (26.9)	B (17.2)	
Overall		B (11.7)	D (52.2)	C (21.1)	B (11.3)	D (50.5)	C (20.2)	
Rt 9/Middle Site Drwy	U	Middle Site Drwy WB R	---	B (13.7)	B (13.7)	---	B (12.8)	B (12.8)

Key: X (Y.Y) = Level of Service (Delay, seconds per vehicle).
 S = Signalized intersection; U = Unsignalized intersection; R = Roundabout.
 NB, SB, WB, EB = Northbound, Southbound, Westbound, Eastbound intersection approaches.
 LTR = Left-turn, through, and/or right-turn movements.
 --- = Not Applicable.

The following results are evident from this analysis:

Alternative 1 - Under this scenario, the Joslen Boulevard traffic signal would operate at the same 80 to 85-second cycle length as the North Site Driveway and will require the signals to be coordinated. Under this condition, Joslen Boulevard would operate at an overall LOS B with all movements operating at LOS C or better.

Alternative 2 – The offset of the northern site driveway and Joslen Boulevard intersections in this alternative requires the eastbound approach of Joslen Boulevard and the westbound approach of the site driveway to operate as split phases. In other words, the two approaches cannot share the same green phase; hence, a longer cycle length is needed. Similarly, the northbound and southbound left turn lanes on Route 9 will also be required to operate separately, further

increasing the cycle length to a total of 120 seconds. Under these conditions the Route 9/Joslen Boulevard/North Site Drive will operate at an overall LOS D with several movements operating at LOS E. Under this scenario, the southbound left turn lane would require a 430-foot storage bay, increasing the widening needed on Route 9 approximately 230 feet further to the north than already planned.

Alternative 3 - Under this scenario, the north driveway is moved to the northern most extent of the site and Joslen Boulevard is realigned to provide a typical intersection configuration. It is estimated that approximately 5,200 SF (0.12 acre) of the adjacent garage property would be required to realign Joslen Boulevard and provide for the signal equipment. With this alignment, the eastbound and westbound approaches can share the same signal phase, as can the northbound and southbound left turn movements with an 80 to 85-second cycle length. Under these conditions the Route 9/Joslen Boulevard/North Site Drive will operate at an overall LOS C with all movements operating at LOS D or better. Under this scenario, the southbound left turn lane would only require a 130-foot storage bay.

Alternative 4 - Under this scenario, the north driveway is moved onto the adjacent condo minimum property to provide a typical intersection configuration with Joslen Boulevard. It is estimated that approximately 9,000 SF (0.21 acre) of the adjacent condominium property would be required to align the site driveway with Joslen Boulevard. The area of adjacent property needed to accommodate the north site driveway may be reduced depending on the actual on-site design on the driveway. With this alignment, the eastbound and westbound approaches can share the same signal phase, as can the northbound and southbound left turn movements with an 80 to 85-second cycle length. Under these conditions the Route 9/Joslen Boulevard/North Site Drive will operate at an overall LOS C with all movements operating at LOS D or better. Under this scenario, the southbound left turn lane would only require a 130-foot storage bay, approximating a similar amount of widening north of the intersection as is already planned.

Alternative 4a - Under this scenario, the north driveway is moved slightly onto the adjacent condominium property to provide a typical intersection configuration with Joslen Boulevard. It is estimated that approximately 1,300 SF (0.030 acre) of the adjacent condominium property would be required to align the site driveway with Joslen Boulevard. With this alignment, the eastbound and westbound approaches can share the same signal phase, as can the northbound and southbound left turn movements with an 80 to 85-second cycle length. Under these conditions the Route 9/Joslen Boulevard/North Site Drive will operate at an overall LOS C with all movements operating at LOS D or better. Under this scenario, the southbound left turn lane would only require a 130-foot storage bay, approximating a similar amount of widening north of the intersection as is already planned. Additionally residents of the condominium project could use the site access to turn left on to Route 9 via the traffic signal.

As noted earlier, Alternative 4a is the preferred option.

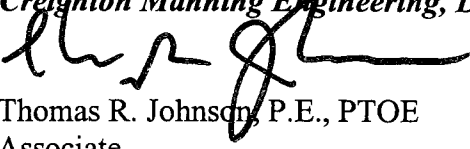
- The Department does not agree with the assertion that the level of service (LOS) of the Joslen Boulevard approach will improve from a LOS E to a LOS D under the full build out, PM peak, condition. Your assertion is based on the use of the proposed two-way left turn lane (TWLTL) as a refuge area for vehicles exiting Joslen Boulevard before merging with*


northbound traffic. As stated in our previous letter, the proposed center lane will need to be striped as a dedicated left turn lane northbound, and a flush median southbound at the intersection of Route 9 and Joslen Boulevard. The Department understands that "Highway Capacity Software" calculates a TWLTL as an improvement. However, the New York State Manual of Uniform Traffic Control Devices (MUTCD) defines a TWLTL as "a lane in the center of the highway reserved for exclusive use by left turning vehicles." The MUTCD goes on to state, "It may not be used for overtaking and passing, or for travel except to make a left turn. The lane may be used by drivers making left turns in either direction." The Department will not consider, nor do we want to encourage, the use of the TWLTL as a refuge for traffic entering from a side road. Thus, without some other form of mitigation, under Build conditions, the LOS of the Joslen Boulevard approach deteriorates to failure during the PM peak. This issue will need to be addressed as this project proceeds through the State Environmental Review (SEQR) process.

Response: With the implementation of the preferred alternative discussed in the response to comment 1 (above), dedicated left turn lanes will be striped on Route 9 and a traffic signal will be provided at the Joslen Boulevard intersection, which would address the Department's concerns regarding the use of a two-way left turn lane.

If you have any questions regarding the above analysis, please do not hesitate to contact our office.

Respectfully submitted,
Creighton Manning Engineering, LLP


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Associate


Kenneth Wersted, P.E.
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Attachments

Cc: Marco Marzocchi – The Widewaters Group
Steve Boisvert – Bergmann Associates