PETITION FOR TEXT AMENDMENT, MAP TEXT AMENDMENT, SUBDIVISION APPROVAL, AND SITE PLAN APPROVAL OF SADDLE RIDGE DEVELOPERS FOR PROPERTY LOCATED AT SPORT HILL ROAD, SILVER HILL ROAD, CEDAR HILL ROAD, AND WESTPORT ROAD (ROUTE 136)

EASTON CROSSING

Supplemental Materials
November 3, 2014

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November 3, 2014

Mr. Robert Maquat, Chair,
and Commission Members
Planning and Zoning Commission
Town of Easton
225 Center Road
P. O. Box 61
Easton, CT 06612

Re: Supplemental Materials; Petition for Text Amendment, Map Text Amendment, Subdivision Approval, and Site Plan Approval of Saddle Ridge Developers for Property Located at Sport Hill Road, Silver Hill Road, Cedar Hill Road, and Westport Road (Route 136)

Dear Chairman Maquat and Commission Members:

On behalf of Saddle Ridge Developers, LLC ("Saddle Ridge"), I am pleased to provide this letter and the attached documents in response to all comments on the above-referenced application received through October 29, 2014 as requested by the Commission at the public hearing on the above application on October 20, 2014. The attached documents are as follows:

1. Response to Town Sanitarian's September 16, 2014 letter;
2. Memo regarding Easton Crossing bedrock wells, prepared by Milone & MacBroom;
3. Response to GHD's October 17, 2014 memo;
4. Response to Fire Marshal's October 30, 2014 letter;
5. Response to Tree Warden's October 17, 2014 letter;

6. Response to Edward Nagy's October 20, 2014 letter;

7. Response to John Hayes' September 16, 2014 memo;

8. Response to John Hayes' October 27, 2014 memo;

9. Response to Police Chief's September 5, 2014 letter;

10. Response to September 16, 2014 letter from Janet Brooks;

11. Response to September 11, 2014 letter from Greater Bridgeport Regional Council;

12. Response to September 8, 2014 letter from Aquarion Water Company;

13. Response to Steven Danzer's October 29, 2014 letter;

14. Excerpt, Affordability Plan regarding § V, Entity Responsible for Administration and Compliance, and Schedule A, Designation of Accessory Affordable Apartments;

15. Display board of 18th and 19th Century architecture, photo-reduced to 11 x 17;

16. Response to Building Official's September 16, 2014 letter and revised floor plan for Greek Revival home;

17. Excerpt, Greater Bridgeport Planning Report, Growth Management Alternatives Regional Conservation & Development Plan Update, regarding low density residential development standard;

18. Zoning Analysis Map, prepared by Milone & MacBroom, October 20, 2010;

19. Source Water Assessment Report;

20. Draft Declaration of Easton Crossing and draft Maintenance Policy; and

21. Response to Steven Trinkaus' October 15, 2014 letter.

As noted during the public hearing, the proposed Easton Crossing plan was prepared and filed as a result of a court-assisted mediation to attempt to resolve pending litigation stemming from the Commission's earlier denial of Saddle Ridge's proposed 105 and 99 home development applications. Those appeals are still pending and Saddle Ridge continues to reserve and not waive its rights under those appeals. As a result of a full discussion of the Commission's concerns and reasons for denial associated with the prior plans, Saddle Ridge has in good faith and at considerable effort prepared the above-referenced application that attempts to address the Commission's concerns in a meaningful and positive fashion including (1) reduction of density by over 50 percent to less than one unit per two gross acres; (2) elimination of multi-family housing in favor of Commission preferred single-family homes with affordable accessory apartments; (3) elimination of public water main extension; (4) no new wetland disturbance; (5) 42 acres of open space (over 30 percent of the site); (6) fully protective stormwater management system with no increase in peak runoff rate and capable of conveying and treating up to a 100 year storm well in excess of the Town's requirements; and (7) over 50 percent reduction in the number of septic systems – all while fully protecting the public water supply watershed.

Letter From The State Department of Public Health
With Recommended Conditions Of Approval

As required by law, Saddle Ridge notified the State Department of Public Health ("DPH") of its application for Easton Crossing. The DPH reviewed the application and provided comments by letter dated September 16, 2014. The DPH did not raise any concerns regarding the density or level of impervious surface for the proposed plan. The DPH letter does contain four recommended conditions of approval if the Commission approves the project. The conditions require that (1) if the Town is not going to own the stormwater systems, a condition should be included requiring proper operations and maintenance; (2) inspection and pumping of the septic system every three to five years; (3) the open space should be protected against future development; and (4) DPH's recommended construction best management practices should be followed. Saddle Ridge has already planned for each of the recommended conditions of approval requested by DPH and consents to each as a condition of approval.

Health Code Compliant Private Drinking Wells
Eliminate Extension Of The Water Supply Main

As a result of on the Commission's concerns about extending the public water supply (and based on the reduction in density), Easton Crossing has eliminated the proposed extension of the public water line to the site and utilized individual private wells instead. The proposed plan shows the private wells located on each lot in accordance with the separation distances

required by the Public Health Code and there is ample water supply to serve each well. In response to comments from the Commission's consultants at GHD, Saddle Ridge reviewed the well drilling logs from the surrounding area and the site geology to confirm that adequate water supply exists for the wells and the lack of impact to any existing wells. Tab 2.

Health Code Complaint Septic Systems Improve Water Quality

All of the 48 proposed septic systems comply with the Public Health Code requirements. Saddle Ridge has conducted over 300 soil tests on the site to confirm the adequacy of the soils. In its prior application, Saddle Ridge proposed over 100 septic systems which were all fully designed and reviewed by the state DPH at the request of the Easton Sanitarian and recommended for approval as health code compliant. The proposed Easton Crossing plan has reduced the number of systems by more than 50 percent and again each system location has been soil tested in the presence of the Easton Health Department. The use of health code complaint septic systems is consistent with sewage disposal in other areas of Easton with one acre zoning and represents a water quality improvement over existing use of the site.

In addition, although Easton does not require septic system pump outs of other residents or new developments even if located in the watershed, Saddle Ridge has agreed to a condition of approval that requires septic inspections and pump outs as needed every three to five years as recommended by the DPH.

Storm Water Management System Meets And Exceeds Town And State Standards

Saddle Ridge has proposed a stormwater management system that is fully protective of the watershed, exceeds Town standards, and complies with the Department of Energy and Environmental Protection ("DEEP") 2004 Stormwater Manual. The Commission's consultant has requested that Saddle Ridge upgrade the drainage pipes that connect various parts of the system to the stormwater basins. He requested that the pipes be adequate to convey a 100 year storm even though the regulations require other developers to provide only for the 10 year storm. In a further effort to address all of the Commission's preferences, Easton Crossing has revised the system to satisfy this request. Tab 3.

Saddle Ridge has also revised the basin design to address other comments from the Commission's consultant regarding the design of infiltration basins. Saddle Ridge had not proposed infiltration basins and did not take credit for any infiltration basins in its stormwater calculations but rather merely noted that some infiltration may also occur. To eliminate any misunderstanding, Saddle Ridge has revised its plans to make clear that the proposed basins are not infiltration basins. Tab 3.

Impervious Coverage Well Below 10 Percent

The total impervious coverage on the proposed site plan is just over seven percent. Because this is a subdivision proposal and the home design for each lot will be selected by the homeowner or developer based on each lot characteristics, it is difficult to predict the precise coverage of the final project. However, in an abundance of caution and at the Commission's request, Saddle Ridge has calculated the impervious coverage using the very conservative assumption that each lot would contain the largest home design, the "Federal," which has a footprint of 2,864 square feet and the roadway, driveway, and walkway coverage and then, just in case, added an extra 500 square feet per lot on top of the total and the result is still one and a half acre below 10 percent impervious coverage. Tab 3. As a result, there is no need and no legal basis for the Commission to impose a deed restriction on each lot limiting it to 10 percent coverage. No such restrictions are placed on other lots in Easton and the Zoning Regulations do not limit impervious surfaces in other zones to 10 percent.

The Proposed Density Is Consistent With The State And Local Plans of Conservation and Development

The proposed density for Easton Crossing is a significant reduction from the prior plans and, as with Saddle Ridge's prior plans, fully protective of the public water supply watershed. There is simply no regulatory requirement in the state or local POCD that limits the density of development in the public water supply watershed. At the time of the prior applications, the State POCD contained a general recommendation that developments be limited to one home per two acres. However, the state POCD does not apply to private projects which do not receive state funding such as Saddle Ridge's as per General Statutes § 16a-31. The State POCD itself (p. 4) makes this perfectly clear by noting that the "Plan is advisory to municipalities, due to the fact that there is no statutory requirement for municipal plans, regulations, or land use decisions to be consistent with it." More importantly, the state revised the POCD in 2013 and deleted the general density recommendation. The revised State POCD still only applies to state-funded projects and instead recommends (p. 24) that impervious coverage be minimized to 10 percent or less "of the overall area to be developed and which preserves the most amount of land in a natural or undisturbed state." Easton Crossing provides an impervious surface of well below 10 percent and creates over 42 acres of open space – much more than is required for a traditional subdivision.

Easton's own POCD (also an advisory document) recommends a density of one unit per two acres or up to "six bedrooms for every two acres of upland soil." The 110 acre site contains 83 acres of upland area and would yield 249 bedrooms (37 more than proposed by Easton

Crossing). Moreover, general density guidance such as the POCD[1] and DEEP Bulletin 11[2] were not intended to be applied on a lot-by-lot basis but rather are used as planning tools for landscape or watershed scale planning. The DPH has reviewed the watersheds at issue here and has concluded they are very well protected. Tab 19. In fact, the amount of permanently preserved open space land in Easton alone is 7,040 acres including approximately 5,520 acres of BHC land or just over 38 percent of the Town. POCD at 29-30.

One acre zoning already exists in this watershed in Easton and in the surrounding towns. Easton itself has over 160 acres zoned for one acre lots on private septic within the public water supply watershed and in much closer proximity to the Easton Reservoir then Easton Crossing. Tab 18. The surrounding towns also have one acre zoning within the watershed. Id.

Finally, the Commission's consultant, GHD, notes (pp. 3-4) that there is no exact density standard for watersheds and recommends that the Commission should "retain some flexibility" to evaluate the proposed project as a whole. Consistent with that approach, Saddle Ridge has made every effort to address the Commission's preference for lower density while still addressing the Commission's other concerns and providing a high quality attractive proposal with much needed affordable housing. Easton Crossing proposes 48 homes on 110 acres (including 27.5 acres of wetlands) for a density of 2.29 units pre gross acre (or 1.73 per buildable acre) while maintaining impervious coverage at less than 10 percent and providing over 42 acres of open space – more than would be required of a traditional subdivision.

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[1] Contrary to claims by Mr. Roach from Aquarion and the GBRPA, there is no other regulatory restriction requiring two acre zoning in watersheds and both are well aware that one acre zoning exists within the watershed. The GBRPA's regional POCD (p. 15) even labels one acre zoning as low density development. Tab 17. Similarly, the *Eureka* decision cited by Mr. Roach is not only distinguished on the facts, but also reversed in part by the Appellate Court and remanded to the local commission to determine the appropriate number of homes in the watershed and after *Eureka* was decided, the state amended its POCD to eliminate the general density recommendation.

[2] Other guidance documents such as the Carrying Capacity of Public Water Supply Watersheds (a/k/a DEEP Bulletin 11) are not regulatory standards or documents and are not intended to be used as such or applied on a site-by-site basis. DEEP Bulletin 11 itself was drafted in 1990 and is a literature review of documents that are older still and which pre-date many of the stormwater management practices that are commonplace today and pre-date the DEEP Stormwater Manual. The introduction to DEEP Bulletin 11 clearly states that it "represents a beginning rather than an end" to broad topics raised and cautions against using "2 acre zoning . . . as a broad brush application."

The Need For Accessory Affordable Apartment Regulations And The Easton POCD

Saddle Ridge has proposed new regulations to allow for a planned accessory affordable apartment community. The new regulations are warranted to allow for a subdivision that is planned with the purpose of allowing a portion of the lots to have affordable accessory apartments. The Commission has expressed its preference for the use of affordable accessory apartments to meet Easton's affordable housing goals. However, the Commission itself has recognized the limitations of the existing zoning regulations with regard to affordable accessory apartments noting that they are unworkable and may tend to discourage new affordable accessory apartments. The proposed regulations are adequate for Easton Crossing but the Commission can, of course, amend them later to suit its other needs.

Because this application was submitted in an effort to resolve the pending dispute on appeal to the Superior Court and the Commission did not want to amend its POCD in that application, Saddle Ridge has not applied to amend Easton's POCD here. However, as noted above, Easton Crossing is consistent with the POCD and if the Commission approves this application, it may choose to amend its POCD to add the PAAAC District if it chooses to do so.

The Affordability Plan

As requested a the public hearing, Saddle Ridge has amended its Affordability Plan to make the developer, and then once established the Homeowners Association, the Administrator for the Affordability Plan rather than individual homeowners. Saddle Ridge has also amended Schedule A of the Plan to organize the lots eligible for affordable accessory apartments by the corresponding construction phase to the adequate availability of lots for each phase. Tab 14. As requested by the Town Building official, Saddle Ridge has also provided a modified floor plan for the affordable accessory apartment in the Greek Revival home to add a doorway to the main home that was inadvertently omitted in the prior plan. Tab 16.

The Proposed Affordable Accessory Apartments Constitute Affordable Housing

The proposed affordable accessory apartments qualify as affordable housing. In 2002, the legislature amended General Statutes § 8-30g(k) to add a definition of "accessory apartment" as a category of affordable housing and to specify that affordable accessory apartments must be smaller than the primary house. Tab 10. Specifically, the statute requires that such apartments have "a square footage that is not more than thirty percent of the total square footage of the house. . . ." Id. The statutory definition is also consistent with the general understanding of accessory apartments by municipal zoning commissions, including Easton's Planning and Zoning

Commission, that accessory apartments in single-family homes are "accessory" to the primary residence. If the primary house and the accessory apartment were the same size, the apartment would not be an "accessory" use; it would be part of a duplex.

Easton already recognizes and uses affordable accessory apartments as its preferred choice for providing affordable housing in Easton. Zoning Regulation § 7.8.

Conclusion

Easton Crossing addresses all of the concerns contained in the Commission's denial of Saddle Ridge's prior applications. It reduces the density and provides a single-family community that also creates more affordable housing than all of the other affordable housing in Easton combined. The affordable housing provided is precisely the style that the Commission prefers in its own regulations – affordable accessory apartments. Saddle Ridge has also taken great care to provide a site layout and architectural design that fits with and enhances Easton's existing high quality housing stock. Tab 15. In short, Saddle Ridge hopes that the Commission will agree that this project as a whole addresses its concerns in a manner that will benefit Easton, protect the environment, and assist in achieving the Town's affordable housing goals. We respectfully request that the Commission approve Saddle Ridge's application.

We look forward to the opportunity to present this application to the Easton Planning and Zoning Commission. If you need any additional information, please contact me directly.

Sincerely,

Matthew Ranelli

GMR:ekf
Attachments

c: Milone & MacBroom, Inc. (w/ att.)
Stein | Troost Architecture (w/ att.)
Soil Science and Environmental Services, Inc. (w / att.)
Saddle Ridge Developers, LLC (w/ att.)

Engineering, Planning,
Landscape Architecture
and Environmental Science

MILONE & MACBROOM®

November 3, 2014

Matthew Ranelli, Esq.
Shipman & Goodwin, LLP
One Constitution Plaza
Hartford, CT 06103

RE: Easton Crossing
Easton, Connecticut
MMI #2683-01-27

Dear Mr. Ranelli:

Milone & MacBroom, Inc. (MMI) is in receipt of a letter from the Town Sanitarian, Polly Edwards, addressed to the Easton Planning and Zoning Commission, dated September 16, 2014, in review of the above-referenced project. To the comments provided in her letter, we offer the following responses:

C1: The property is presently zoned for 3 acre development. The existing 3 acre homes in the vicinity of the development have both a septic system and a well. In comparison, the lower half of Easton is zoned for 1 acre development. These homes are served by a septic system and public water. The proposed subdivision is calling for 1 acre lots with both a septic system and a well. We are concerned that the water quantity may not be available to serve such a dense development. There are property owners in the vicinity of the development who have chosen to drill a second well due to insufficient water quantity. The developer must provide an answer to the question – will there be adequate water quantity to serve this development?

R1: Yes, there will be adequate water supply. Attached is a report prepared by Scott Bighinatti, Environmental Scientist, and David Murphy, P.E., a hydrogeologist, explaining the quantity of water available compared to the water necessary for each lot and neighbors. Based on our survey of well logs in the vicinity dating back to 1970, the bedrock formation below the site is relatively high yielding.

Since 1970, only three wells in the area have been redrilled according to the well log records. Of those, two are located on neighboring lots, and both now yield significant flows of 20 gallons per minute (GPM) and rank among the highest yielding lots in the vicinity.

C2: We are concerned about water quality. Based on experience, we believe that many of the wells will require water treatment units for high iron and manganese, low pH, etc. Have any water quality studies been performed?

R2: **Water testing will be conducted on each well as it is drilled. Future homeowners may decide to install water treatment units if they feel it is necessary.**

C3: The well water treatment units will require an onsite subsurface discharge other than the septic or roof drainage systems for the wastewater discharge. An additional subsurface structure would need to be installed for the well water treatment discharge.

R3: **The plans have been revised to incorporate a 5'W x 5'L x 1.5'D stone leaching bed on each of the proposed lots in order to accommodate the possible need for water softener backwash discharge treatment. Based on our research, we have determined that approximately 60 gallons of water are processed per backwash cycle. We have provided capacity for approximately 112 gallons (see attached calculations), which will provide the required 1.5 times the volume for the maximum daily discharge (60 x 1.5 = 90 gallons) as stated in the Connecticut Department of Energy & Environmental Protection (CTDEEP) General Permit for the Discharge of Low Flow Water Treatment Wastewater.**

C4: All 48 proposed wells must meet a 25' setback from storm drainage piping. We found several that do not meet this requirement. This must be addressed.

R4: **The plans have been revised to maintain a minimum separation distance of 25' between proposed wells and proposed storm drainage piping.**

C5: There are no footing drains shown on the proposed lots. All footing drains for the dwellings must discharge at a distance of at least 25' from the proposed subsurface sewage disposal systems. This must be addressed.

R5: **Footing drains have been added to the plans and are shown to discharge beyond 25' from proposed subsurface sewage disposal systems. A note has also been added to the plans describing that any storm piping within 25' of proposed subsurface sewage disposal systems is to be tight pipe consistent with Public Health Code requirements.**

C6: Roof drain subsurface discharge units must be located at least 25' up gradient or 50' down gradient of the septic systems. The location of these units should be checked.

R6: **All subsurface discharge units for the roof drains have been checked and are beyond 25' of proposed subsurface sewage disposal systems. Additionally, in instances where the discharge units are downgradient of the subsurface sewage disposal systems, the units are proposed to have a separation distance exceeding 50'.**

C7: The type of piping and backfill material for the storm drainage must be specified when located less than 50' down gradient or 25' up gradient to the septic system. There are a number of lots where the septic systems fall within these distances.

R7: **A note has been added to the plans describing that all storm drainage piping within 25' of the proposed subsurface sewage disposal systems is to be tight pipe. The backfill and bedding material for storm drains within 50' downgradient or 25' upgradient shall not contain free-draining material as noted on the revised plans.**

C8: Any existing stonewalls that act as drainage channels must be removed or relocated if within 50 feet down gradient of a proposed subsurface sewage disposal system. There should be notation to this effect.

R8: **A note has been added to the plans stating that any existing stone wall within 50' of the proposed subsurface sewage disposal system is to be removed and/or relocated.**

C9: All septic system components must be located outside the 75' well radius. We noted at least one lot (9) where the septic tank and effluent line are within the well radius. All lots should be checked.

R9: **All lots have been rechecked to ensure that all proposed subsurface sewage disposal system structures are outside of the 75' protective well radius. The type of piping proposed for all subsurface sewage disposal systems is listed on Table 2-C in the Connecticut Public Health Code as an acceptable pipe type to be within the 75' well radius.**

C10: It is our understanding that no specific lots have been designated as having accessory apartments attached to the main house. Therefore we require at this time that all subsurface sewage disposal systems be sized for 4 bedrooms plus a 1-bedroom accessory apartment. The sizing for a multi-family structure requires more square footage of leaching area than the sizing for a single family home.

R10: **The lots designated as eligible for one of the 20 accessory apartments are as follows:**

Phase	Lots
1	16, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 30
2	11, 31, 32, 35
3	6, 7, 8, 9
4	1, 3, 40
5	41, 43, 45, 46, 48

C11: The labeling of the model homes in Appendix 6 is misleading. The Greek Revival and Georgian homes are not 4 bedrooms, 3½ baths but actually 5 bedrooms, 4½ baths. NOTE: oversized tubs require additional septic leaching area.

R11: **The Greek Revival and Georgian home plans included in the submission show the optional affordable accessory apartment and list the bedrooms and baths accordingly. No oversized tubs are proposed for any of these homes.**

C12: Is the developer planning on limiting the house construction to the three house plans that were submitted?

R12: At this time, the houses depicted in the submitted architecture are examples of the houses most likely to be used throughout the development; however, they are not necessarily the only architectural plans that may be used. Any proposed future architecture would be required to fit into the theme of the currently submitted architecture.

C13: The 48 lots are presently laid out to show feasibility for handling a 4- or 5-bedroom home, septic system, and well. In reality, the homes will not be square or rectangle as shown, and the house styles and house locations may be changed based on builder's preferences, etc. These are important issues, as the changing of the layout for one lot will very likely affect the lots on either side. Is the developer planning on selling individual lots to different builders? If the lots are sold individually, who will control which lots will have the accessory apartments?

R13: **The developer is not planning on selling individual lots to different builders. The builder will select the lots that will have affordable accessory apartments based on the septic system design. The plans have been revised to show exactly which lots can have the apartments. Individual plot plans will be submitted for approval prior to construction.**

Should you have any further questions or comments, please do not hesitate to contact me.

Very truly yours,

MILONE & MACBROOM, INC.

Ted Hart

Ted Hart, P.E., Vice President
Director of Civil Engineering

Enclosures

cc: Bucky Stone
Bob Carlson
George Trudell

2683-01-27-n314-2-ltr

MILONE & MAC BROOM, INC. Inter-Office Memo

TO: Ted Hart, P.E., Milone & MacBroom, Inc.

FROM: Scott Bighinatti, CFM, Lead Environmental Scientist, Milone & MacBroom, Inc.
David Murphy, P.E., Senior Hydrogeologist, Milone & MacBroom, Inc.

DATE: November 3, 2014

RE: Easton Crossing Bedrock Wells
MMI #2683-01-27

Background

The Easton Health Officer has requested information regarding whether the proposed Easton Crossing wells have the potential to impact neighboring private wells and the bedrock aquifer in general. As detailed below, the bedrock aquifer in the vicinity of the Easton Crossing site is relatively high yielding and has ample capacity to supply the proposed development without impact to other nearby wells.

The Easton Crossing development has an estimated average daily water demand of 21,000 gallons per day (gpd)[1], or 14.58 gallons per minute (gpm). Each of the 48 proposed 1-acre lots will have an individual bedrock well installed. The information relied upon herein regarding the underlying aquifer is based on data published in other studies and from well logs of private bedrock wells in the surrounding area. Bedrock[2] underlying the Easton Crossing site generally strikes west to east, dips 42 degrees to the north, and is composed of granitic gneiss that was possibly formed during the Ordovician period. This bedrock formation is comprised of a light-colored, foliated granitic gneiss.

Fault lines[2] are mapped immediately to the west and east of the site striking in a north-south direction. It is likely that these fault lines contribute to the fracturing of bedrock in the area, which in turn provides higher yields to nearby wells. According to the USGS[3], steeply dipping, well-foliated gneisses and schists in western Connecticut are dominated by layer-parallel fracturing. "Unroofing" joints providing continuous lateral connections between steeply dipping layer-parallel fractures are also typically well developed. In many places, cross-fractures or joints strike perpendicular (or nearly so) to the strike of the layering. The strike and dip is

[1] Water demand calculation includes Department of Public Health (DPH) standard water usage of 75 gallons per person per day, PURA/DPH standard design population of 5 for four-bedroom dwelling for 28 homes, with an additional two persons for 20 homes with attached one-bedroom in-law apartment. 75 gpcd * 5 persons * 28 = 10,500 gpd; 75 gpcd * 7 * 20 = 10,500 gpd; total is 21,000 gpd.
[2] Rodgers, J., 1985, *Bedrock Geologic Map of Connecticut*, Connecticut Geological and Natural History Survey.
[3] Starn, J. J. and Stone, J. R., 2005, *Simulation of Ground-Water Flow to Assess Geohydrologic Factors and their Effect on Source-Water Areas for Bedrock Wells in Connecticut*, Reston, VA: United States Geological Survey Scientific Investigations Report 2004-5132.

particularly important in steeply dipping layered rocks because it may have a strong effect on the direction of groundwater flow.

Milone & MacBroom, Inc. (MMI) obtained bedrock well logs from the Connecticut Department of Consumer Protection (DCP) for the Town of Easton since 1970 and digitized the location of the well logs for the area surrounding the Easton Crossing site. Well locations were plotted based on recent aerial photography, and locations were estimated if the locational sketches showed only distances from nearby intersections. Information from these logs is summarized in Table 1 (attached), and well locations are shown on Figure 1. In general, the bedrock well logs indicate that the bedrock formation is relatively high yielding, with a high percentage of the well logs indicating yields of 5 gallons per minute or more.

Typically, drillers install bedrock wells until an adequate yield is noted, after which drilling is typically truncated by the property owner due to the cost. At the completion of drilling, a yield test is conducted over several hours (typically 4 hours for private residential wells) to determine the yield of the well. As such, 50 percent or more of the total yield listed on a drilling log is typically found within 20 feet of the bottom of the well. When significant yields are found but drilling continues, this information is typically noted on the log.

In some cases, new wells were installed at a property as replacements for earlier wells that were installed. Where well logs were identified as replacement wells at a property, this information is noted in Table 1. Given the high reported yields noted in Table 1, even if the bedrock wells near the proposed development had lost 50 percent of their original yield, it is likely that the existing wells would continue to be suitable for residential purposes. However, as noted below, there is no basis to assume that nearby wells would suffer any decrease in yield based on the proximity and yield of the proposed wells.

Based on the USGS mapping, bedrock groundwater beneath the site will tend to flow generally to the north due to the strike and dip of the bedrock. Based on the strike and dip, the bedrock groundwatershed associated with the Easton Crossing site was delineated by using the eastern and western limits of the individual source-water areas (delineated by the blue-hatched area on Figure 1 below) and extending north and south to the nearest watercourses or water bodies (as shown by the red-highlighted area on Figure 1). Although the actual bedrock groundwatershed is likely much larger, extending only to the nearest surface water bodies provides boundaries that are more appropriate for localized analysis of water usage. The total groundwatershed area associated with the Easton Crossing site is approximately 251 acres.

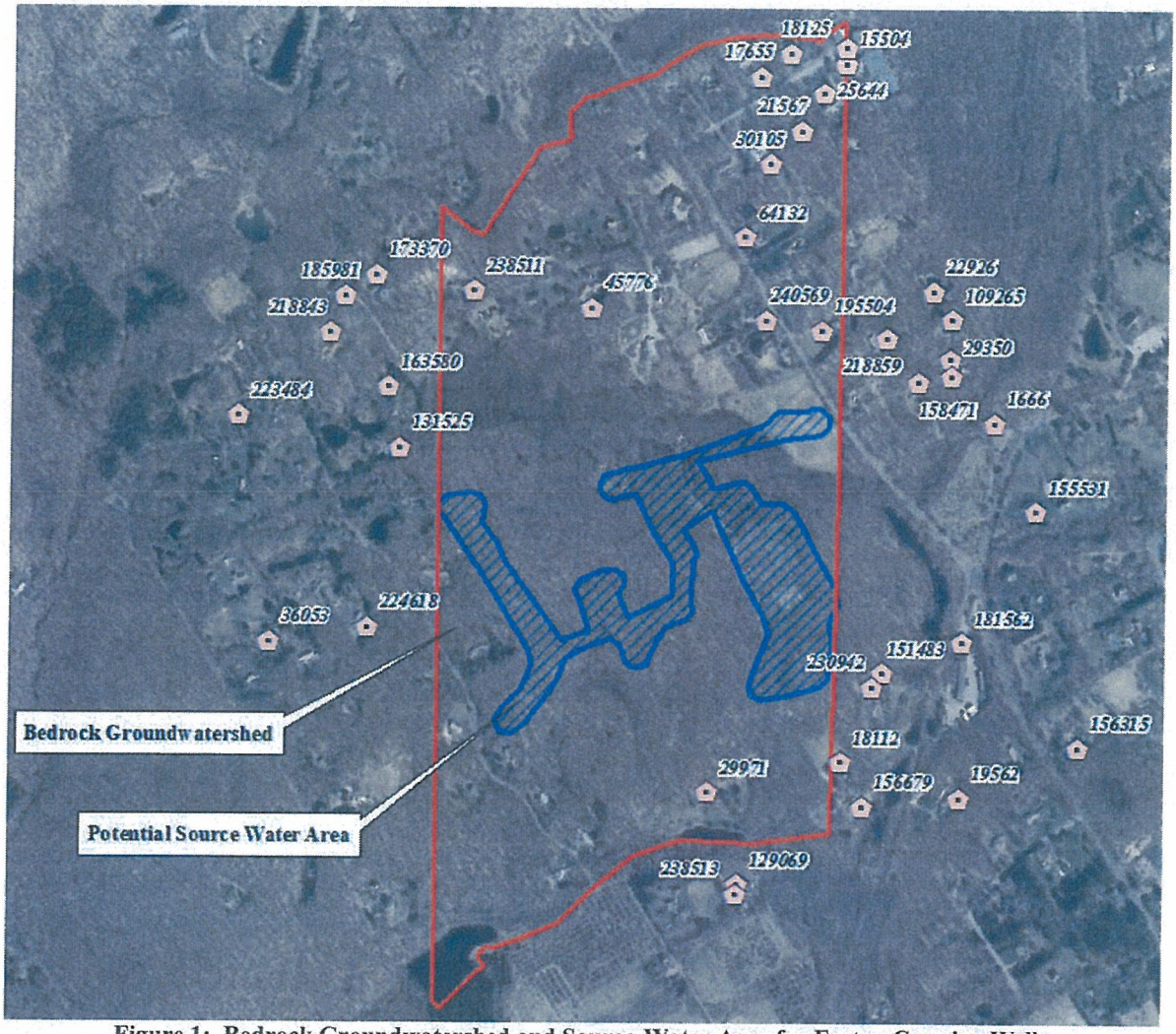

Figure 1: Bedrock Groundwatershed and Source-Water Area for Easton Crossing Wells

Assuming the bedrock area beneath these 251 acres is recharged at a rate of 7 inches per year (per the USGS[3]), the recharge of the bedrock will occur at a rate of 90.8 gpm. **The average daily water demand of the Easton Crossing site (21,000 gpd, or 14.58 gpm) is only 16.1 percent of the recharge rate for this bedrock aquifer.**

Approximately 34 existing homes lie within the 251-acre groundwatershed based on recent aerial photography of the area available from Microsoft. The average water demand for these 34 homes is estimated to be 7,523 gpd (5.22 gpm)[4]. This is equivalent to 5.7 percent of the recharge rate for the bedrock aquifer. The Easton Crossing development will increase the amount of water withdrawn from the aquifer to 21.8 percent of its recharge. This will likely be smaller as

[4] DPH standard water usage of 75 gallons per person per day * 2010 U.S. Census average household size for Town of Easton of 2.95 * 34 homes [water supply planning allows for application of census data].

the design population and design per-capita daily water usage values utilized herein are conservative. Furthermore, it is important to understand that the majority of the groundwater withdrawn for potable supply will be returned on site via septic systems and, therefore, will not be exported out of the groundwatershed.

Given the relatively small percentage of withdrawal in comparison to the bedrock groundwatershed area and the fact that most of this water will be returned to the subsurface, there is ample groundwater available to serve the proposed development without impacting neighboring wells in the overall groundwatershed. Furthermore, due to the low pumping rates of the residential wells, the on-site wells will have little to no effect on each other.

Summary

Based on the water budgets described in this memo, an adequate quantity of water is available to serve the new homes as well as to continue serving the existing homes in the area. Furthermore, the high yield of the aquifer minimizes the chance that mutual interference effects such as well drawdowns may occur. Finally, the majority of the groundwater withdrawn for potable supply will be returned on site via septic systems and, therefore, will not be exported out of the groundwatershed.

Attachment

2683-01-27-n314-imemo

Table 1. Well Logs for Properties Nearby Easton Crossing

Road	Depth to Bedrock	Depth of Well	Bedrock Type	Permit Number	Yield (GPM)	Year Drilled	Overburden Geology	Comment
Church Road	75	200	mixed ledge	1666	7	1970	dirt gravel	
Wimbleton Lane	15	152	granite, brown sand stone	15504	11	1973	stone dirt	
Wimbleton Lane	29	158	grey soft granite, mica-graphite	18125	15	1973	top soil, dirt- stone	
Wimbleton Lane	40	173	hardpan, brown sandstone, gray granite	17655	15	1973	hardpan	
Sport Hill Road	11	123	blue white and grey granite	22926	8	1974	sand-gravel	
Westport Road	7	100	bedrock	19562	25	1974	gravel	
Bibbins Road	4	68	hard pan, gray rock	18112	3	1973	sand-rocks	
Wimbleton Lane	25	170	soft gray granite, brown sandstone	21567	20	1974	hardpan	
Wimbleton Lane	60	175	mica	30105	18	1975	gravel	
Church Road	15	150	bedrock	29350	12	1975	soil	
Bibbins Road	31	385	mica	29971	14	1975	hardpan	
Cedar Hill Lane	3	155	black and white granite	36053	20	1976	dirt	
Silver Hill Road	18	300	bedrock	45776	5	1979	soil	
Sport Hill Road	29	325	mica, granite	64132	10	1980	gravel	
Cedar Hill Road	4	450	bedrock	131525	8	1988	soil	
Bibbins Road	12	160	grey granite, grey and white granite	129069	2	1988	dirt	
Wimbleton Lane	30	400	bedrock	145063	5	1991	soil	
Westport Road	14	303	light gray soft rock	151483	10	1992	dirt, clay and gravel	
Church Road	50	280	granite	158471	10	1993	topsoiled sand and gravel	
Church Road	12	145	white granite, black and white granite	109265	15	1986	dirt and stones	
Sport Hill Road	10	196	grey shale, grey granite	156315	4	1993	dirt	
Bibbins Road	14	200	soft gray shale	156679	10	1993	gravel and clay	
Sport Hill Road	9	262	gray shale	240569	15	2008	dirt	
Silver Hill Road	25	220	grey shale	238511	20	2008	sand	
Bibbins Road	11	215	grey shale	238513	20	2008	dirt	Replaced #129069
Cedar Hill Lane	6	220	grey granite	224618	20	2005	dirt	
Silver Hill Road	40	272	brown sandstone, grey shale	223484	8	2005	hardpan	
Westport Road	6	605	bedrock	230942	2	2005	soil	Replaced #151483
Sport Hill Road	0	180	grey shale	218859	20	2004	Redrilled existing well	
Silver Hill Road	7	265	grey shale	218843	5	2004	dirt	
Sport Hill Road	6	220	grey shale	195504	20	2000	dirt	
Westport Road	44	200	soft brown rock, light grey rock	181562	16	1997	sand, gravel and clay	
Church Street	7	185	grey shale	172364	30	1997	dirt	Replaced # 29350
Silver Hill Road	8	235	grey shale	185981	9	1998	dirt	
80 Silver Hill Road	15	218	brown sandstone and grey shale	173370	6	1996	hardpan	
Silver Hill Road	45	230	brown sandstone and grey shale	163580	5	1995	sand	
Stepney Road	14	285	soft seamy schist, schist	155531	3	1993	sand and gravel	

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November 3, 2014

Matthew Ranelli, Esq.
Shipman & Goodwin, LLP
One Constitution Plaza
Hartford, CT 06103

RE: Easton Crossing
Easton, Connecticut
MMI #2683-01-27

Dear Mr. Ranelli:

We are in receipt of a memorandum from Todd Ritchie, P.E., of GHD dated October 17, 2014 and offer the following responses to his comments:

C1. GHD recommends that the P&Z and/or Conservation Commission request that the applicant provides a report from a certified professional geologist which includes a review of the proposed well locations, anticipated depths, pumping rates, etc. along with a professional determination of whether there is a potential for adverse impacts to the aquifer or to adjacent wells.

R1. Please see the attached report from Scott Bighinatti and David Murphy, Senior Hydrogeologist, regarding the proposed private wells. Their finding is as follows: "*Based on the water budgets described in this memo, an adequate quantity of water is available to serve the new homes as well as to continue serving the existing homes in the area. Furthermore, the high yield of the aquifer minimizes the chance that mutual interference effects such as well drawdowns may occur. Finally, the majority of the groundwater withdrawn for potable supply will be returned on site via septic systems and, therefore, will not be exported out of the groundwatershed.*"

C2. GHD recommends that the P&Z and/or Conservation Commission request that the applicant provide site plans showing the locations for potential Low Flow Water Treatment Wastewater (LFWTW) dispersal systems on each residential lot which may be required for disposal of backwash from individual well water treatment systems.

R2. A Low Flow Water Treatment Wastewater (LFWTW) System has been designed and shown on each lot in accordance with the Department of Energy & Environmental Protection (DEEP) LFWTW General Permit guidelines. These systems have been shown on each lot but will only be constructed if it is found that the well water needs a water softening system.

C3. It is GHD's professional opinion that the proposed development density is more accurately reflected when the Parcel A property area is excluded from the development density calculations. With Parcel A excluded, the development density will be approximately 1 dwelling per 1.7 acres, which is significantly closer to a density goal of 1 dwelling per 2 acres than the previous 106 unit and 99 unit townhouse applications proposed by the applicant, each with development densities of approximately 1 dwelling unit per 1 acre.

R3. Comment noted. The development density of one home per 2 acres suggested in the *Carrying Capacity of Public Watersupply Watersheds: A Literature Review of Impacts on Water Quality from Residential Development* is based on a literature search of studies and reports of development in the 1980s and earlier, well before the DEEP issued its 2004 *Connecticut Stormwater Quality Manual* and prior to numerous revisions and upgrades to the Connecticut Department of Public Health (DPH) design standards for subsurface sewage disposal systems. This literature search report was based on watershed development that had little or no stormwater management practices to control the stormwater runoff quantity or quality in addition to inadequate and possibly failing subsurface sewage disposal systems. The most recent revisions to the state Plan of Conservation and Development (POCD) deleted references to this recommendation. The state POCD recommends that the project's impervious surfaces fall below 10 percent. Easton Crossing's proposed impervious surface is well below the recommended level.

The Easton POCD allows a density of six bedrooms per 2 acres of buildable area in the water supply watershed. This equates to 249 bedrooms (83.1 acres of buildable area divided by 2acres times six bedrooms) while the current application is for only 212 bedrooms.

C4. It is GHD's professional opinion that the current proposed 48-lot subdivision application does not fit the DPH and DEEP criteria requiring nitrogen analysis and therefore a nitrogen analysis is not warranted for the current development application.

R4. Comment noted. All of the septic systems will be designed and installed in accordance with the state Public Health Code. The nitrogen loading of 3.45 pounds per day as calculated by GHD equates to the daily nitrogen output of approximately 10 horses. As a result, the proposed development will result in an improvement over existing conditions horse farm activities on the project area.

C5. It is GHD's recommendation that the P&Z and/or Conservation Commission require that an impervious coverage limit of 10% (maximum) be placed as a deed restriction for each building lot so that the total impervious area of the subdivision will not exceed the 10% limit in perpetuity.

R5. The project includes over 42 acres of open space that needs to be factored into any density calculation for the overall project. This open space far exceeds the open space that would be required of a traditional subdivision under Easton's regulations. To demonstrate that Easton Crossing is well below the POCD recommendation of 10 percent impervious coverage, we have attached a total coverage calculation taking the conservative approach of placing the footprint of the largest of the three proposed house designs on all 48 lots, a walk to the front door, 500 SF of possible miscellaneous coverage, the proposed driveways, and the proposed roads. The resulting coverage is 8.7 percent for the project area, or 1.48 acres under what used to be a goal of 10% coverage for a water supply watershed. As a result, a deed restriction on each lot is unwarranted and would be unnecessarily burdensome to future owners. Easton's current regulations do not impose a minimum coverage limit on individual lots.

C6. It is GHD's recommendation that the P&Z and/or Conservation Commission require that the applicant provide updated site plans to show a "Limit of Disturbance" boundary line for review and approval by the Town which will serve as delineation (for record) of permitted areas for clearing, grading and construction. GHD also recommends that the Limit of Disturbance line be field staked on each lot prior to the start of construction so that no site disturbance (including tree clearing) or construction activity takes place in regulated areas, which have not been previously approved by the Town.

R6. A Limit of Disturbance line has been added to the plans.

C7. It was GHD's professional opinion in the previous application and remains our professional opinion for the current application that the stormwater basins have not been designed in accordance with the guidelines and standards of the CT DEEP 2004 Stormwater Quality Manual. GHD recommends that the P&Z and/or Conservation Commission require that the applicant address the stormwater quality basin design and design data deficiencies discussed in this report.

R7. Several modifications have been made to the basins including adding a liner so that they will not have the potential for infiltration and they will only provide detention. They now specifically follow the design of a "Pocket Pond" or "Micropool Extended Detention Pond."

C8. It is GHD's professional opinion that there are several locations of concern where overflows could occur from the storm drainage system during the 25, 50 and 100-year storms, which will exceed the design capacity of the storm drainage system and could cause adverse impacts to adjacent properties and wetlands. GHD recommends that the P&Z and/or Conservation Commission require that the applicant address the storm drain capacity concerns discussed in this report.

R8. **The storm drainage system has been modified in several areas by increasing pipe slopes and sizes so that it will now convey the stormwater flow from a 100-year design storm. It should be noted that the Easton regulations require only a 10-year design storm. Drainage systems for other new roads and subdivisions in Easton are designed to the town's standard of a 10-year design storm while this application is being held to a significantly higher standard of a 100-year design capacity. By meeting this higher standard, Easton Crossing will provide one of the finest stormwater management systems in the town of Easton, capable of treating stormwater for a 100-year storm.**

C9. GHD recommends that the P&Z and/or Conservation Commission require the applicant comply with the CT DEEP 2004 Stormwater Quality Manual and remove the temporary sediment traps from the basins and specify that the basin areas are not used for temporary sediment control measures.

R9. **The proposed stormwater basins were not counted on to be infiltration basins, and no credit was taken in any of our stormwater models for water infiltrating into the ground below the basins. Temporary sediment traps are only excluded from areas where infiltration practices are being proposed, which is not the case for the proposed stormwater basins in this application. Please see our response to Comment 7 above.**

Please feel free to contact me should you need any further information.

Very truly yours,

MILONE & MACBROOM, INC.

Ted Hart

Ted Hart, P.E., Vice President
Director of Civil Engineering

Enclosure

2683-01-27-n314-6-ltr

EASTON CROSSING
Requested Coverage Scenario Using Largest Home

State POCD 10% Impervious Coverage Guideline (11.06 acres)

Proposed Coverage

Road Coverage = 3.16 Acres
(Stonegate Lane, Boxwood Court, Bridle Bend, Bradford Place)

Hypothetical House Coverage

Assuming "The Federal" is built on every lot (largest home footprint of 2,864 SF)

48 Homes x 2,864 SF = 137,472 SF ÷ 43,560 SF/AC = 3.17 Acres

Front Walk Coverage

50' long by 3.5'wide equals 175 SF

48 Homes x 175 SF = 8,400 SF ÷ 43,560 SF/AC = 0.2 Acres

Driveway Coverage = 2.50 Acres
(Any additional parking spaces that may be provided will be constructed with permeable block pavers.)

Possible Miscellaneous Coverage – 500 SF per lot

500 SF x 48 Homes = 24,000 SF ÷ 43,560 SF/Acre = 0.55 Acre

TOTAL PROPOSED IMPERVIOUS COVERAGE (under largest home coverage scenario) = 9.58 Acres (1.48 acres less than POCD 10% Guideline)

2683-01-27-n314-notes

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November 3, 2014

Matthew Ranelli, Esq.
Shipman & Goodwin, LLP
One Constitution Plaza
Hartford, CT 06103

RE: Easton Crossing
Easton, Connecticut
MMI #2683-01-27

Dear Mr. Ranelli:

Milone & MacBroom, Inc. (MMI) is in receipt of a letter from Fire Marshal Peter Neary dated October 19, 2014 addressed to the Planning & Zoning Commission Chairman in review of the above-referenced application. To the comments provided in this letter, we offer the following responses:

C1: The project shall meet or exceed the minimum requirements of the National Fire Protection Association, ("NFPA") Standard 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting, 2012 edition. Furthermore, the Easton Fire Department's Water Supply Officer shall approve the design, location and type of sub-division's required water supply. *Note: There was no data that details specifications for the two water supply sources depicted on map LA-1.*

R1: The project will meet or exceed all applicable NFPA codes. The minimum water supply was calculated to be 20,533 gallons. The project proposes two cistern locations, and each is specified to provide 30,000 gallons. The final design of the cisterns will be submitted to the Easton Fire Marshal and Water Supply Officer for approval prior to construction. Furthermore, there is an existing dry hydrant on the property connected to the pond near the intersection of Westport Road and Sport Hill Road that currently serves the existing homes in the area and will also be available to serve the future homes at Easton Crossing.

C2: The project shall meet or exceed the minimum requirements of the National Fire Protection Association, ("NFPA") Standard 1142, Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural and Suburban Areas, 2012 edition.

R2: The project will meet or exceed all applicable NFPA codes.

C3: The project shall meet or exceed the minimum applicable requirements of the Connecticut State Fire Code.

R3: The project will meet the Connecticut Fire Code's minimum applicable requirements.

C4: Private roadways historically have presented problems in emergency access to dwellings during winter storms. This office is not in favor of private roadways serving multiple dwellings.

R4: The homeowners' association will have a contract with a local contractor to provide snow removal services and maintain the private roads throughout the winter. The homeowners along the roadway will have an equal interest in insuring that the contractor clears the roadway during storms.

C5: Minimum number of off street parking spaces for the 20 affordable housing dwellings is inadequate.

R5: Up to two off-street parking spaces constructed with permeable pavers may be provided on each of the lots with the affordable accessory apartments if necessary.

C6: If the subdivision is approved, the office of the Fire Marshal is requesting third party verification of compliance with the above captioned regulations and standards. The selection of a component verifying party will be agreed upon by this Office and the developer.

R6: The developer will propose a competent verifying party for the Fire Marshal's consent upon approval.

Should you have any further questions or require additional information, please do not hesitate to contact me.

Very truly yours,

MILONE & MACBROOM, INC.

Ted Hart

Ted Hart, P.E., Vice President
Director of Civil Engineering

Enclosure

2683-01-27-n314-5-ltr

Minimum Water Supply - NFPA 1142, 2012 Edition

Structure Length (ft)	78	
Structure Width (ft)	45	
Structure Height (ft)	27.3	
Volume of Structure (cf)	95,823	
Occupancy Hazard Classification	7	Dwellings
Construction Classification	1	Type V, Wood Frame Dwelling (6.2.2)
Minimum Water Supply (Gal) - No Exposures	13,689	
Minimum Water Supply (Gal) -With Exposures	**20,533.5**	

Notes:

Exposure Hazard - A structure within 50 feet of another building and 100 square feet or larger in area
"Federal Unit" used for structure footprint

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November 3, 2014

Matthew Ranelli, Esq.
Shipman & Goodwin, LLP
One Constitution Plaza
Hartford, CT 06103

RE: Easton Crossing
Easton, Connecticut
MMI #2683-01-27

Dear Mr. Ranelli:

Milone & MacBroom, Inc. (MMI) is in receipt of a letter from Mr. Richard Dina, the Easton Tree Warden, addressed to the Planning & Zoning Commission, dated October 17, 2014, in review of the above-referenced application. To the comments provided in this letter, we offer the following responses:

LA-1 SITE PLAN - LANDSCAPING

C1: Note #13 – Add: "and the Easton Tree Warden."

Response: Any discrepancies or questions on the location of plantings shall be brought to the attention of a landscape architect or wetland scientist.

C2: Street Tree Table: Acer Rebrum: Need to provide the varietal.

Response: The Acer Rebrum, Red Maple, will be a native Autumn Flame.

C3: Upland Review Area-Tree and Shrub Plantings Table: Using Pyrus Calleryana as a buffer screening on the west side of Bradford Place would not be appropriate. The buffer needs to be Norway spruce or as approved.

Response: The proposed row of Bradford Pear Trees along the west side of Bradford Place will be replaced with a variety of conifers including White Pines, Douglas Fir, and Norway Spruce.

C4: Tree and Shrub Plantings - The term for quantity TBD is not in compliance with the required Planting Map in the Subdivision Regulation V-b-5.

Response: The planting quantities have been provided in the tables on sheet LA-1.

C5: Note #6 – Add: "and Director of Public Works and the Easton Tree Warden."

Response: Any discrepancies or questions on the location of plantings shall be brought to the attention of a landscape architect or wetland scientist.

Should you have any further questions or require additional information, please do not hesitate to contact me.

Very truly yours,

MILONE & MACBROOM, INC.

Ted Hart

Ted Hart, P.E., Vice President
Director of Civil Engineering

2683-01-27-n314-3-ltr

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November 3, 2014

Matthew Ranelli, Esq.
Shipman & Goodwin, LLP
One Constitution Plaza
Hartford, CT 06103

RE: Easton Crossing
Easton, Connecticut
MMI #2683-01-27

Dear Mr. Ranelli:

Milone & MacBroom, Inc. (MMI) is in receipt of a letter from Mr. Edward Nagy addressed to the Planning & Zoning Commission, dated October 20, 2014, in review of the above-referenced application. To the comments provided in this letter, we offer the following responses:

SUBDIVISION MAP

C1: Subdivision Map shall meet all requirements of the State of Connecticut Regulation, Department of Consumer Protection, Minimum Standards for Surveys and Maps, Regulation: 20-300b-1 to 20-300b-20.

Response. The subdivision map has been revised pursuant to comments below, and it meets the Minimum Standards for Surveys and Maps, Regulation: 20-300b-1 to 20-300b-20.

C2: Title needs to be changed. This is a Resubdivision per Section 8-18 of the Connecticut General Statutes. The first cut created Lot #1, (3.03 Acres – 885 Sport Hill Road) was taken in 1981; Record Map #972. A Subdivision was done in 1984 that created Lot #2, (3.1 acres – 895 Sport Hill Road); Record Map #1036.

Response. "Resubdivision" will be added to the title.

C3: Provide table with area of wetland and area of upland soil of each lot.

Response. These areas are not necessary on a per-lot basis.

C4: The Subdivision Map does not have the name of the Land Surveyor and the plans are not signed by a Land Surveyor.

Response. The name and signature of our surveyor have been added to the map.

C5: Parcel A; Street lights shall comply with Subdivision Regulations. Street lines at intersections and cul-de-sacs shall be connected by a minimum radius of 25 feet. (See Section IB b of Subdivision Regulations) Parcel A is a lot being created by this application. Note #19 states "Parcel "A" should not be considered a building lot at this time. There have been buildings on this site for many years. This note seems erroneous.

Response. Note #19 has been modified to state that no new construction is proposed on Parcel A. Street lines have been modified at the intersection of Sport Hill Road and Silver Hill Road to comply with the regulations.

C6: Need Street Line monuments on new radius points at the Silver Hill Road and Sport Hill Road street line. Also install I. Pins on all corners of Parcel A. Parcel A is a separate lot and is part of the subdivision application.

Response. Iron pins and monuments have been added to the subdivision map as noted.

C7: All lot corners of all lots are to be marked with I. Pins or D. Holes. (See Subdivision Regulations, Section III h. Monuments and Lot Pins;... iron pins shall be used to mark the boundaries of easements...).

Response. Iron pins or drill holes will be installed at all lot and property corners.

C8: Need I. Pins or D. Hole at all property corners of Parcel A, Open Space #1, #2, and #3.

Response. Iron pins or drill holes will be installed at all lot and property corners.

C9: All run-off from driveways shall be collected and not allowed to run into Town roads.

Response. A detail for a trench drain has been added to the plans and will be installed on approximately 12 of the driveways to intercept runoff and convey it safely to a point of discharge.

C10: Boxwood Court: The road curve centerline radius does not comply with Subdivision Street Design Table IV-1.

Response. The centerline radius has been modified.

C11: Provide Index Map on Sheet # 2.

Response. An index map is shown on Sheet #2.

C12: Label the 1.702 acre parcel, at the corner of Stonegate Lane and Cedar Hill Road, Parcel "B".

Response. The 1.702-acre parcel has been divided into two separate parcels. One parcel is for the private road, Bradford Place, and the second parcel will be open space between Stonegate Lane and the neighbor to the north and Cedar Hill Road.

SITE DEVELOPMENT PLANS

C1: Who from the Town inspected the test pits in the detention areas ?

Response. MMI inspected the test pits within the detention basins as suggested in the *2004 Connecticut Stormwater Quality Manual*.

C2: Existing contour line elevations are too small. Need to enlarge numbers.

Response. The contour line numbers have been increased in size.

C3: Show sight distance required as 235 feet.

Response. The sightlines are shown on the road profiles. The requested 235' sightlines are now shown on the Site Plan as well.

C4: Construction of Stonegate Lane will require removal of Town trees at the intersection of Cedar Hill Road. These trees that are proposed to be removed need to be shown. These trees shall be replace with 4" caliper or larger by the applicant at a mutually agreed location.

Response. A detailed landscaping plan for the planting of trees along with several areas where existing trees are to remain adjacent to Stonegate Lane and Cedar Hill Road is shown on the Landscaping Plan, LA-1.

C5: The detention pond and recharge areas for each lot need to have test pits and percolation tests done to determine ground water and ledge elevations to design the pond to function properly. The tests need to be witnessed by Town staff. See Page 11-P3-3 of "Connecticut Stormwater Quality Manual."

Response. The detention ponds were designed and modeled as stormwater detention ponds to control the peak flow rates. These basins were not proposed or modeled to infiltrate stormwater; therefore, no credit was taken for the release of stormwater into the ground. Our report mentioned only that stormwater could infiltrate into the ground. If infiltration did occur, it would pass through a filtering soil layer designed to line the basin. This filtering layer is a specifically prepared high organic (high carbon) soil for filtering stormwater that may pass through it. This high organic soil is similar to a wetland soil and is designed for planting wetland species as identified on our detail sheet D-4. The *2004*

Connecticut Stormwater Quality Manual **does not recommend soil test pits for detention basins; therefore, no additional soil test pits are needed. Over 350 soil test pits were performed on site in addition to the soil percolation tests. The Town Sanitarian and/or the independent sanitarian hired by the town observed each of these test pits. In the Town Sanitarian's review memo dated November 10, 2008, she commented that "The soils throughout the parcel are generally well-draining and suitable for on-site septic systems." The results of the percolation tests were also remarkably consistent, with over 95% of the percolation test results falling in 5-10 minutes per inch and 10-20 minutes per inch. Based on the soil testing results, the proposed Cultec infiltration units proposed for the clean roofwater runoff will drain into the ground, assuming they are full, in 7 to 11 hours.**

C6: Residential Driveway Apron Detail is incorrect. The grade shall not exceed than 5%, 35' from the center line of the road and the grade has to go up then down so water does not go into the driveway.

Response. The Residential Driveway Apron Detail has been modified as noted.

C7: All sewage systems shall be a minimum of 50' up gradient of any stonewall that acts as a drain. Some septic areas do not meet the 50' up gradient requirement. See State of Connecticut Public Health Code.

Response. It appears that the existing stone walls on site are not retaining walls; they are simple stone walls that were constructed as the farmers cleared the land to make fields and piled the stones on top of the ground to form walls. The existing stone walls will not act as subsurface drains.

C8: All sewage systems shall be a minimum of 50' up gradient of any drain. Some of the systems are not 50' from the street underdrains and some are within 50' of storm drainage pipes that are not marked tight jointed. See State of Connecticut Public Health Code.

Response. All subsurface sewage disposal systems are located 50' upgradient of any drain in accordance with the State of Connecticut Public Health Code.

C9: No sewage system shall be located within 50' up gradient of any cut in slope if bleed out conditions are possible. See State of Connecticut Public Health Code.

Response. All subsurface sewage disposal systems are located 50' upgradient of any slope where a bleedout condition might occur, in accordance with the State of Connecticut Public Health Code.

C10: The detention ponds areas need to have test pits and percolation tests done to determine ground water and ledge elevations to design the pond to function properly. The tests

need to be witness by Town staff. See Page 11-P3-3 of "Connecticut Stormwater Quality Manual."

Response. MMI inspected the test pits within the detention basins; however, the guidelines of the *2004 Connecticut Stormwater Quality Manual* do not suggest that test pits are required for detention ponds. Page 11-P3-3 of the "Connecticut Stormwater Quality Manual" does not refer to detention ponds. See response to C5 above.

SD-1 SITE PLAN – LAYOUT GRADING AND UTILITIES

C1: Sales office is not permitted by Zoning Regulations.

Response. The proposed sales office is within one of the proposed homes and is not a separate structure. In addition, Section 4.2.10 specifically permits sales offices in subdivisions.

C2: Note 12 states that all septic systems must be 50' up gradient of any drainage pipe that is not constructed with a tight joint. However, the plan shows several septic systems within 50'. See State of Connecticut.

Response. All pipe within 50' downgradient of a septic system will be constructed with tight pipe as specified in the Connecticut Public Health Code.

SD-3 DRAINAGE PLAN AND PROFILE

C1: Label the size of the existing cross culvert at STA 56+00.

Response. The existing cross culvert at Station 56+00 is labeled as Existing 15" RCP on the profile where pipe sizes are noted.

C2: Cedar Hill is a Scenic Road. Show existing trees within the Right-of-Way adjacent to the proposed storm drainage.

Response. The plan sheet LA-1 calls for trees to be maintained along the frontage with Cedar Hill Road.

LA-1 SITE PLAN – LANDSCAPING

C1: Tree and Shrub Plantings – The term for quantity TBD is not in compliance with the required Planting Map in the Subdivision Regulation V-b-5. New subdivision roads require street trees every 50 feet both sides. A revised planting plan needs to be submitted to the Commission. Using Bradford Pears as a buffer screening on the west side of Bradford Place would not be appropriate. The buffer needs to be conifers.

Response. Planting quantities have been added to the plans, and a variety of conifers have been substituted for the flowering Bradford Pear trees.

RP ROADWAY PLAN AND PROFILE

C1: RP-1; Show curtain drains on both sides of Stonegate Lane in the road cut sections.

Response. Curtain drains have been shown on the plans.

C2: Show Dry Hydrant Easement.

Response. An easement has been added to the plans for the Dry Hydrant and cisterns.

C3: Provide a Drainage Easement for the infiltrators adjacent to CB 39.

Response. A drainage easement has been added to the plans for the storm drainage infiltration system adjacent to CB 39.

C4: At all catch basins the outlet inverts shall be at least .2 ft. lower than the inverts in.

Response. The storm drainage system design has been increased to convey the 100-year storm without surcharging.

C5: Detention Basins 140, 150, 210, 220 and 230; the end of the 12' gravel access road needs to terminate close to the flared ends and outlet control structures. The bottoms of the detention basins may be too soft to support rubber tired backhoe loaders and dump trucks.

Response. The 12' gravel access roads have been modified as suggested.

DETAIL SHEETS

C1: Class one Bituminous Concrete is a binder course the top course.

Response. The detail has been revised as noted.

C2: Class two Bituminous Concrete is the top (finish) course.

Response. The detail has been revised as noted.

C3: Provide specification for filter fabric for the curtain drain.

Response. A filter fabric product has been specified.

C4: Common Driveway Section – Regulation requires that the common driveways shall be constructed to the same specifications as a Town road except for the width.

Response. The pavement section detail has been revised to match the town road section.

S-1 SITE SIGNAGE PLAN

C1: Proposed signs do not conform to the Zoning Regulations Section 2.1.30 and Section 5.6.

Response. A temporary signage plan is provided for guidance during the construction and sale of the homes.

GENERAL

C1: All final plans shall bear the original signatures and seals of the design professional.

Response. Final plans will be signed by the design professional.

C2: All required documents shall be executed and recorded concurrently with the record map.

Response. Comment noted.

C3: Executed easement documents for the underground utilities shall be submitted and filed at the time of filing the Record Map.

Response. Comment noted.

C4: Applicant shall provide submittals on all drainage structures for review and approval prior to manufacture.

Response. Drainage structure submittals will be submitted to the town.

C5: The Town staff reserves the right to review and approve all final construction details.

Response. Comment noted.

C6: All silt fences shall be properly installed prior to start of land clearing/disturbance.

Response. Erosion and sediment control measures necessary for the work being performed will be installed prior to the start of land clearing.

C7: Submit Cut/Fill Earth Calculation.

Response. A cut and fill analysis will be provided prior to the start of construction.

C8: Prior to the start of work, a preconstruction meeting shall be held between the applicant, Town's Land Use staff and Aquarion Watershed Inspector.

Response. Prior to the start of work, a preconstruction meeting will be held as noted on the title sheet.

C9: These plans have shown some Soil Erosion and Sediment Control. However, due to the disturbance of land greater than five acres, the applicant shall register and comply with the State of Connecticut D.E.P. "General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities." The details of the General Permit to be submitted 5 days prior to the pre-construction meeting.

Response. Comment noted.

C10: A Maintenance Plan for the private detention basins on the subdivision shall be submitted to the Commission for review and approval.

Response. A Maintenance Plan has been provided on the Title sheet of the plan set.

C11: What assurance other than a note on a plan does the Town have that the cleared land will be established per the plans, i.e. trees and shrubs?

Response. Assurance will be through the bonding process.

C12: What items are considered a "Public Improvements" for bonding?

Response. Public improvements are the public roads, drainage and detention basins receiving stormwater runoff from public roads, fire water cisterns, and street trees.

C13: Submit Bond Calculation for all Subdivision Improvements.

Response. Bonding will be in accordance with the state statutes.

C14: Add 15% contingency to Bond Calculations.

Response. Bonding will be in accordance with the state statutes.

C15: Bond to be posted prior to recording of record map.

Response. Bonding will be in accordance with the state statutes.

C16: The road name "Stonegate Lane" and also "Boxwood" are similar to existing Town road names. Propose road names to be dissimilar to existing road names.

Response. The only existing road names that we found that were remotely similar to the name "Stonegate" are Stones Throw Road and Gate Ridge Road. The road name "Boxwood Court" appears to be distinct from many other existing road names that could be considered similar, such as Crestwood Drive, Deepwood Road, Dogwood Drive, Northwood Drive, and Rosewood Drive. If different road names are required, the road names will be discussed with the town prior to submission of the final subdivision mylar.

C17: Provide construction detail for the "PROPOSED DRY HYDRANT WITH STORAGE CISTERN." The western cistern adjacent to lots 4 and 5 is lacking metes and bounds of the easement locations.

Response. Construction details for the dry hydrant and water storage cisterns have been added to the plans.

C18: Do the proposed one-acre lots have the minimum requirement of 34,000 square feet of upland area that is in the current regulations?

Response. The 1-acre lots meet the requirements of the proposed PAAAC regulation.

C19: Add limits of land disturbance.

Response. A limit of disturbance line has been added to the plans.

C20: What assurance other than a note on a plan does the Town have that the cleared land will be established per the plans, i.e. trees and shrubs?

Response. Assurance will be through the bonding process.

C21: Provide curtain drains along all road gutters that are in cut.

Response. Curtain drains have been shown on the plans.

C22: Stonegate Lane @ Sport Hill Rd: Plans show an entrance wall on the road Right of Way. The Town of Easton does not allow fixed objects on its property. Entrance wall is also within the sightline triangle.

Response. The entrance wall has been moved out of the proposed right-of-way and sightline triangle.

OPEN SPACE

C1: The Open Space proposal of 42.5 acres that has a percentage of 56.2% of wetlands does not comply with Section 10.6(5). "THE RATIO OF THE AREA OF THE PROPOSED OPEN SPACE CLASSIFIED AS INLAND WETLANDS TO THE TOTAL AREA OF THE OPEN SPACE SHALL NOT BE GREATER THAN THE RATIO OF THE AREA OF ALL INLAND WETLANDS IN THE SUBDIVISION TO THE TOTAL AREA OF THE SUBDIVISION, UNLESS THE COMMISSION CONSIDERS SUCH INLAND WETLAND AREAS TO HAVE SPECIAL HABITAT OF OTHER UNIQUE ENVIRONMENTAL VALUE."

Response. The open space conforms to the proposed PAAAC regulation and Section X.12 of the Subdivision Regulations.

C2: Open Space #3; Does not meet Section 10.6(1) Subdivision Regulation: "OPEN SPACE AREAS SHALL TYPICALLY ABUT OR HAVE DIRECT PUBLIC ACCESS TO A PUBLIC STREET AND AS APPROPRIATE, ANY EXISTING PARK OR PUBLIC LAND."

Response. The open space conforms to the proposed PAAAC regulation and Section X.12 of the Subdivision Regulations. A pedestrian easement has been provided across Lot 17 to Open Space 3.

C3: There are two separate parcels labeled as "Open Space #2."

Response. The Open Space numbers have been adjusted.

C4: The Open Space is proposed to be owned by whom?

Response. It is proposed that the Homeowners' Association will own the Open Space.

Should you have any question or require additional information, please do not hesitate to contact me.

Very truly yours,

MILONE & MACBROOM, INC.

Ted Hart

Ted Hart, P.E., Vice President
Director of Civil Engineering

Enclosures

2683-01-27-n314-4-ltr

RESPONSE TO SEPTEMBER 16, 2014 MEMORANDUM OF JOHN HAYES, CONSULTANT

In the text below, comments and questions excerpted Mr. Hayes' letter from are in *italics*, and the applicant's responses are in **bold**.

(1) The Easton Town Plan of Conservation and Development strongly and repeatedly – recommends the principle of protecting the public watersupply watershed by maintaining its low-density development standards (see pages 4,10,21,34 and 101, and the Town Plan Mapz0. Why haven't the applications addressed this fundamental principle of the official Town Plan or provided revised text and Plan Map?

RESPONSE: **The proposed development is fully protective of the watershed. The Town and State Plans of Conservation and Development are advisory documents. Easton Crossing satisfies the recommendation for density in both documents. The State Plan of Conservation and Development recommends 10 percent impervious coverage. Easton Crossing is well below that level. Even if every lot contained the largest home, the coverage would be two acres less than 10 percent. Similarly, the Town Plan of Conservation and Development allows six bedrooms per two acres or 249 bedrooms on the subject site (83 1/2 x 6). Easton Crossing proposes 212 bedrooms.**

(2) The PAAAC District – is it conceived as a "floating zone", which would allow its potential designation, through application for amendments to other locations or smaller tracts? If it is not intended as a floating zone but a geographic zoning district, does not this "new zone" require an amendment to the Town Plan as well as conformity to the regulations which control all zones such as permitted uses, accessory uses, permitted special uses, etc.?

RESPONSE: **The PAAAC District applies only to the subject site as drafted. The Commission can expand its use as it sees fit to assist in creating more housing opportunities in Easton.**

(3) Why are these development applications – for subdivision and site plan approval – submitted concurrently with the proposed amendments to Town land use policy and standards? How are the layout or site plans to be objectively judged when the basic rules are not yet in effect?

RESPONSE: **This subdivision is an effort to resolve issues related to the prior application. The format for submission follows the same format. The Commission can evaluate all aspects of the application and make reasonable changes.**

(4) Where are the specific standards which should govern any well-planned residential community – such as accessory structures, placement of parking, exterior lighting, pedestrian ways, underground utilities, fire protection, on-street parking, street trees?

RESPONSE: **Each of the elements listed are provided in the Plan Sheets. If the Commission would like additional proscriptive standards, it can provide them.**

(5) Open space parcels – what is their disposition and maintenance? Where is the access to Open Space "A"?

RESPONSE: **Open space will be owned and maintained by the Homeowners Association.**

(6) Maintenance covenants for common driveways and private roadways – will they be provided as required by Town regulations?

RESPONSE: **See attached.**

(7) What standards are proposed to govern private driveway and street layout?

RESPONSE: **The plans use the Town standard for pavement width on the private roads and meet the requirements for private driveways.**

RESPONSE TO OCTOBER 27, 2014
REPORT OF JOHN HAYES, CONSULTANT

In the text below, comments and questions excerpted Mr. Hayes' letter are in *italics*, and the applicant's responses are in **bold**.

In a previous memorandum to the Planning and Zoning Commission (addressed to Robert Maquat, Chairman, on September 16, 2014) I raised a procedural question and six other questions which I believe should be addressed by the applicants. Please refer to that memorandum.

RESPONSE: **Please see attached response to September 16, 2014 letter (received by Saddle Ridge on October 20, 2014).**

The procedural issue is this: In order to allow an orderly and reasonable deliberation on the site plan(s) for this development I believe the proposed zoning and subdivision regulation changes should first have been submitted for hearing and resolution so that the basic standards governing this project would be in place to allow an objective evaluation of the layout and detailed plans. The submissions have not explained, other than for this particular tract, how the policies of the Town Plan should be revised nor have they provided a set of standards for site plan review.

RESPONSE: **Saddle Ridge has followed the same procedure that it followed in its prior application without objection from the Commission. The layout and detailed plans provided by Saddle Ridge can be evaluated by the Commission. Many towns follow a similar process for zone change and site plan applications and for other zoning techniques such as planned development districts without any impediment to commission review. The proposed regulation is narrowly drafted so that it applies to Saddle Ridge's parcel so that the Commission can apply the standard to the site plan proposed and need not address how it would be applied to other parcels. However, if the Commission would like to expand the applicability of the proposed zone to other areas, Saddle Ridge does not object.**

Because this property has been twice-previously divided (a first-cut lot in 1981, TLR Map #972 and a subdivision in 1985, TLR Map #1036) the present plans constitute a resubdivision and require that the entire tract (124 acres) be evaluated for layout and allocation of the proposed development. Virtually the entire property is still governed by a special permit for a horse farm, granted in November 1982, for the 103.91-acre site as it then existed.; (Refer to letters from Planning and Zoning Commission to Huntley J. Stone, dated April 12, 1983, April 25, 2008, July 30, 2008 and August 28, 2008). In summary it is improper for the PAAAC project to arbitrarily

divide the ownership tract into two parcels, of 110 acres and 14 acres respectively, in advance of resubdivision approval and cancellation or withdrawal of the existing special permit. It is interesting to note, in this connection, that consideration of the site as a whole is not only proper planning practice but coincidentally alters the proposed PAAAC project density to one dwelling per each 2.0 upland acres (96 upland acres, 48 dwellings), which exactly conforms to the long-standing and widely-supported recommended density for water supply watershed land development.

RESPONSE: **The applicant has not divided ownership of the tract in advance of the resubdivision. The subdivision plan does not propose any development on Parcel A. There is no regulatory requirement for a density limit of one unit per two acres. To the extent that Saddle Ridge has responded to requests regarding density, it is not improper to base the calculation on the portion of the site that contains the 48 proposed units and to exclude Parcel A. To the extent that this comment is suggesting that Parcel A ought to be treated as open space in addition to the 42 acres of open space provided, Saddle Ridge has already responded that it would not agree to such a restriction.**

While a maximum watershed density of one single-family dwelling per two upland acres is no longer cited in the State Plan of Conservation and Development (since 2013), it remains a valuable and well-researched guideline for safe watershed densities. Absolute fail-safe watershed protection is an elusive goal because of human fallibility, varying household sizes, myriad chemicals in common use, laxity in homeowner maintenance responsibility and other factors. The true value of this standard is the margin of safety it provides against accidents and unintended consequences. When considering the health and safety of hundreds of downstream residents, any increase in risk to the quality of the water supply is a risk not worth taking.

RESPONSE: **The proposed plan is fully protective of the watershed. There has been no specific risk or harm identified that would result form the proposed plan. Moreover, density in and of itself is not a risk and in many instances it is a poor proxy for evaluation risk. One acre zoning already exists in many public water supply watersheds, including in Easton. Easton has over 160 acres of one acre zoning in the watershed and the surrounding towns also have some one acre zoning in the watershed. Easton does not require pump out of septic systems in the watershed area and does not limit impervious cover to 10 percent but Easton Crossing will do both.**

<u>A Comparison of the Easton Crossing Plan With The 99-unit Townhouse Plan</u>

In concept the proposed Easton Crossing Plan is a very considerable improvement over both the 105-unit and the 99-unit townhouse plans. Serious technical flaws remain in the current plans, however, which must be amended to protect the watershed and achieve compatibility with the policies of the Town Plan.

Some positive aspects of the Easton Crossing Plan are:

- *Elimination of the proposed water service extension to the site;*

RESPONSE: Comment noted.

- *Fewer dwelling units (68 total vs. 99 total formerly) may result in lower traffic volumes at certain times;*

RESPONSE: Comment noted.

- *Diversified home and grounds maintenance responsibility, by individual homeowners, as opposed to monitoring and oversight by small poorly managed associations;*

RESPONSE: Comment noted.

- *Aesthetics – the visual character of a "single-family neighborhood" may be preferable to the sterile appearance of rows of townhouses and be more in character with the rest of the town.*

RESPONSE: Comment noted.

There are some negative comparisons of the Easton Crossing plan to the 99-townhouse plan as well;

- *A reduction in the number of affordable units from thirty to twenty;*

RESPONSE: It is simply unrealistic to expect an applicant to reduce the number of market-rate units while maintaining the number of affordable units. The Commission should be well aware of the challenges to developing affordable housing in Easton. Easton ranks near the bottom of the state in its efforts to allow for affordable housing. Easton Crossing would provide more affordable housing units than Easton has to date.

- *Increased total population and sewage impact (per report by Todd Ritchie, PE, 10/17/14), 212 bedrooms versus 198 formerly, 17,248 gallons of sewage per day (gpd) versus 14,692 gpd formerly, and 3.45 pounds of nitrogen discharge per day versus 2.93 pounds per day formerly;*

RESPONSE: **The numbers sited are design flows. As Mr. Richie pointed out in his presentation, the actual flows would likely be less. Even if the actual flows were the same, all of the proposed septic systems will meet the Public Health Code and result in an improvement over the existing use of the site as a horse farm.**

- *Very dense clustering of water wells, water treatment backwash systems, and sewage leachfields, necessitated by small and narrow lots increases the risk of groundwater contamination; and*

RESPONSE: **The State Public Health Code established minimum separation standards for wells and septic systems which are calibrated to protect the public health and include a "safety factor" as an additional precaution. The proposed layout satisfies those setback standards and does not present an "increased risk."**

- *Individual lots are difficult to monitor for limits of site disturbance.*

RESPONSE: **Almost if not all of Easton is composed of individual lots. Limits of disturbance have been added to the plans.**

Environmental Impact

The serious consequences of increased density of development on this site pose a direct threat to the quality of surface water runoff and groundwater recharge, ultimately increasing risks to the health and safety of Aquarion Water Company consumers and to residents of the local neighborhood. It is therefore imperative that all of the design defects in the Easton Crossing Plan, identified in the following professional engineer reports, be resolved to the satisfaction of the Town of Easton and to the State of Connecticut:

- *Easton Crossing Development – P&Z and Conservation Commission Applications, Technical Review and Presentation of Findings, October 17, 2014 (Report by GHD, Consultant, Todd Ritchie, PE, CPESC, CPSWG, LEED AP);*

- *RE: Saddle Ridge, Easton, CT, October 15, 2014 (Report by Trinkaus Engineering, LLC, for "Coalition to Save Easton", by Steven D. Trinkaus, PE, CPESC, CPSWQ); and*

- *RE: Easton Crossing – Subdivision Application, October 20, 2014 (Report to Planning & Zoning Commission, by Edward Nagy, PE, Director of Public Works and Town Engineer for Town of Easton).*

The primary issues raised in the above reports relate to stormwater management and detention basin design, sewage disposal and wastewater processing, water supply adequacy and quality,

safe density for watershed protection, erosion and sediment control. In addition to the reports cited above, reports or letters of concern from the Town of Easton Fire Marshal, Building Official, and Health Department are noted, as are letters of concern from the State of Connecticut Department of Public Health (Eric McPhee, Supervising Environmental Analyst, Drinking Water Section, September 16, 2014) and from Aquarion Water Company (Brian T. Roach, Supervisor, Environmental Protection, September 8, 2014). Each of these letters and reports raises a concern about one or more aspects of public health and safety inherent in the Easton Crossing Plans – and each must be responsibly addressed as a condition of any project approval.

RESPONSE: **Please see responses submitted herewith to each of the documents listed above.**

The Town Plan of Conservation and Development

In order to conform the Easton Crossing Proposal to the Town Plan, text is required to amplify and define standards for low density residential development consistent with a high degree of protection for water supply watersheds and the quality of the natural environment prevalent in the portions of Easton which lie in the R-3 or "B" Districts. This task must be accomplished before any change of zone which lowers minimum density is enacted.

RESPONSE: **The Commission may approve the proposed plans without amendment to its POCD. If the applications are approved, the Commission may amend its POCD accordingly.**

The PAAAC Zoning District

The appropriateness of providing for accessory affordable housing, as recommended by the Town Plan is acknowledged. To create a special overly zoning district for "setaside" or accessory affordable housing, based on density standards of the Town Plan and standards for comprehensive site plan review, is also appropriate.

Unfortunately the specific text proposed to govern the PAAAC District, at Tab 7 of the Application text booklet (dated August 7, 2014), falls far short of the comprehensive standards and review requirements which should be adopted for a special design district. The following shortcomings are particularly noted:

– *Purposes are vague and incomplete;*

RESPONSE: **The purposes are similar to the purposes contained in the Commission's existing affordable accessory apartment zoning regulation. To the extent that the Commission may amend the purposes beyond that, it may do so.**

– *Permitted uses, incomplete; extent of accessory and permitted special uses not defined; relation to underlying zone requirement needs to be defined;*

RESPONSE: **The permitted use section is intended to allow for affordable apartments as an accessory use. As with other overlay districts, the underlying uses are allowed.**

– *Density is unrealistic for a cluster development which should require reasonable space around each dwelling to avoid crowding of buildings, well, septic and other facilities; 1.5 – 2.0 acres/dwelling density would be more appropriate for 48 dwellings on a 110-acre site;*

RESPONSE: **The density and layout proposed satisfy all Public Health Code and other regulatory standards. Lot sizes ranging from one to over two and a half acres are not typical in many communities and should not fairly be described as "over crowding."**

– *Inadequate lot width results in long, narrow lots and crowded facilities. Suggest minimum lot shape requirement to incorporate a square 160ft x 160ft (25,600 square feet, 0.59 acre) and minimum side yards of 35 feet to allow reasonable air, sunlight, privacy, and fire access;*

RESPONSE: **The layout and lot shapes proposed satisfy all Public Health Code standards and accommodate all necessary facilities. With regard to the layout of facilities in each lot, every effort was made to minimize activities in the 100 foot upland review area.**

– *Covenants for maintenance of private roads and other common facilities should be specified;*

RESPONSE: **Maintenance of private roads and common facilities will be the responsibility of the Homeowners Association.**

– *Site plan standards should require a specific layout for all roads, buildings utilities, emergency access, stormwater and erosion controls, driveways and parking, pedestrian walks, landscaping, lighting ,fencing and other constructed features. The "Site Plan" with this application (sheets SD-1 and SD-2), for example, shows inadequate detail for each lot. Lot details required on the site plan do, in this application, appear (incompletely) on the road plan and profile (Sheets RP-1 through RP-8) but belong on the site plans.*

RESPONSE: **Necessary details are shown on the revised plan. In the absence of specific details being identified, Saddle Ridge, upon approval, will work with staff to add any necessary details from Plan Sheets SD-1 and SD-2 to Plan Sheets RP-1 to RP-8.**

Proposal to Amend Subdivision Regulations

The application requests (Tab 3) that Section 10.3 of the Town Subdivision Regulations (Open Space requirements) be amended to exempt PAAAC subdivisions from the existing standard which limits the amount of wetland includable in an open space setaside to the percentage of wetland present in the entire subdivision tract. This wise standard has long guaranteed that Easton's open space network contains a variety of terrain and natural conditions, useful for trails and passive recreation, not simply the cast-off land useless to the developer. There is nothing unique in an affordable housing development that lessens the need for useful open space, and in fact acceptance of this proposal would tend to undercut the discretion in choice of land for open space given by the Statues to the Commission (General Statues Section 8-25). I recommend that this request be denied.

RESPONSE: **Saddle Ridge has provided over 42 acres of quality open space. That is far more than required or could be required by law. Moreover, the Commission has already exempted affordable housing developments from the open space requirements in § X of the Subdivision Regulations. It is unclear why the commenter would recommend otherwise for Easton Crossing.**

Proposal to Amend Subdivision Regulations (continued)
A second request with the application (Tab 3 also) proposes that Section IV C (5) of the Subdivision Regulations be amended to allow a dead-end street within a PAAAC Subdivision to serve up to (16) building lots. The present limit is ten lots, extendable by the Commission to 16 lots only for reasons of unusual topographic difficulty. No basis to support this request has been supplied. Lengthy dead-end streets tend to inhibit access to more remote lots, especially during emergencies and storms, and should not be encouraged in a dense development. This amendment is unnecessary because the present regulation provides the Commission with discretion where unusual conditions apply.

RESPONSE: **The proposed amendment specifies that the Commission may exercise its discretion when acting on a proposed PAAAC development but provides a specific standard limiting the top range of that discretion to 16 building lots on such a proposed street.**

Findings and Recommendations
As noted above the tract which is the site of this application is a single integral parcel of 124 acres, not yet divided by resubdivision, proposed to be designated a PAAAC District in its entirety. The owners' desire is to create a resubdivision of 48 lots for 48 single-family dwellings incorporating 20 accessory affordable apartments therein, on 110 acres of the site. They would reserve a 14-acre tract, "Parcel A", not to be a building lot, on which to operate a horse farm.

RESPONSE: **Comment noted.**

Since Parcel A is an integral part of the tract proposed to be resubdivided, and to be included in the PAAAC District but not developed, it is the logical and most appropriate area of land to be designated as open space, for the following reasons:

RESPONSE: **Parcel A is not proposed for open space and there is no legal basis for the Commission to essentially take the land as open space.**

1) *Parcel A qualifies as desirable open space – virtually free of wetland, accessible, largely open (except for several small farm structures), planned to continue in recreational use.*

RESPONSE: **Parcel A is not intended for open space. It is currently actively used as a horse farm. The owner intends to maintain his ownership rights to use the land as allowed.**

2) *Including Parcel A within the resubdivision tract, as open space, achieves the desirable watershed development density of one dwelling per two upland acres (48 houses, 96 acres), as noted above, and renders this application clearly in conformity with the Town Plan and State of Connecticut's long established density guidelines.*

RESPONSE: **Easton Crossing has proposed a low density development that provides over 42 acres of open space. Further, it conforms to the most recent "guidance" in the State POCD to minimize impervious surfaces to less than 10 percent of the overall area to be developed. There is no legal basis for taking Parcel A as open space.**

3) *Farmland is recognized throughout the State, and in the Town Plan, as appropriate open space. Following such dedication, Parcel A can, and should, be leased back to its present owners for long-term farm use, without tax liability or other monetary consideration.*

RESPONSE: **See above response.**

4) *The dedication of Parcel A as open space allows the project to meet the Subdivision Regulations Section 10.11 open space wetland requirements.*

RESPONSE: **See § X.11(b) and proposed amendment which exempt certain subdivisions with affordable housing from the open space requirements.**

5) *Fringe areas of the Open Space Parcels #1, #2 and #3 may be transferred to adjoining lots, as necessary or desirable, to relieve site crowding of facilities and enhance the spacing between wells and wastewater treatment facilities.*

RESPONSE: **Comment noted.**

6) *The Connecticut Statutes clearly empower the Planning and Zoning Commission to determine the location and layout of subdivision open space parcels, a responsibility it should exercise in this instance (see CGS 8-25: "... commission may require ... provision of open space, parks and playgrounds ... in places, deemed proper by the planning commission ...").*

RESPONSE: **See response to No. 4) above. Saddle Ridge does not agree to taking Parcel A as open space.**

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November 3, 2014

Mr. Robert S. Carlson, Principal
Saddle Ridge Developers
68 Soundview Drive
Easton, CT 06612

RE: Response to Comment
Easton Crossing
Easton, Connecticut
MMI #2683-01-9

Dear Mr. Carlson:

We have prepared this letter in response to the September 5, 2014 review comment from the Easton Chief of Police, James Candee, pertaining to traffic associated with the proposed development:

> *I have reviewed the material provided. I see nothing that addresses the increase volume of traffic on Cedar Hill Road, Bibbins Road, Orchard Lane. These are narrow residential roads. I envision these roads being used by residents of Saddle Ridge to avoid morning and evening "Rotary" traffic.*

We agree with Chief Candee that some residents associated with the proposed development will use these local roads. In our prior traffic study from June of 2010[1], which was prepared for a previously proposed 105-townhouse-unit development on the site, we estimated that approximately 20% of new traffic during the weekday morning and afternoon peak hours would enter/exit the site via Cedar Hill Road. Of this portion, some will use Bibbins Road, and some will use Orchard Lane. Human nature, as it is, results in some people taking the most direct route and some selecting an alternate route. We estimated this in our assumptions of site traffic. Attached with this letter is a copy of our previous 2010 study, which documents our assumptions.

As discussed in our recent Traffic Assessment Update letter dated August 6, 2014, it is estimated that the currently proposed development of 48 houses will generate 11 trips entering and 32 trips exiting the site during a typical weekday morning peak hour and 34 trips entering and 20 trips exiting during a typical afternoon peak hour. We estimate 20% of the site traffic will utilize the Cedar Hill Road entrance; this would equate to approximately nine trips during the morning peak hour and 11 trips during the afternoon peak hour using a combination of Cedar Hill Road, Bibbins Roads, and Orchard Lane. This volume of traffic is on the order of around one vehicle

[1] Traffic Study – Saddle Ridge Village – Easton, Connecticut. Milone & MacBroom, Inc. June 22, 2010.

every 5 to 10 minutes during the peak hours. It is not anticipated that this volume of new traffic will have a negative impact on the traffic operations on these three residential roads.

We hope this information is useful to the town in assessing the traffic aspects of this project. If you have any questions or need further information, please do not hesitate to contact me.

Very truly yours,

MILONE & MACBROOM, INC.

David G. Sullivan, P.E., Associate
Manager of Traffic Engineering

Enclosure

2683-01-9-n314-ltr

TRAFFIC STUDY
SADDLE RIDGE VILLAGE
EASTON, CONNECTICUT

MMI #2683-01

June 22, 2010

Prepared for:

Saddle Ridge Developers
68 Soundview Drive
Easton, Connecticut 06612

Prepared by:

MILONE & MACBROOM, INC.
500 EAST MAIN STREET, SUITE 326
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Engineering,
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June 22, 2010

Mr. Robert S. Carlson, Principal
Saddle Ridge Developers
68 Soundview Drive
Easton, CT 06612

RE: Saddle Ridge Village
Easton, CT
MMI #2683-01

Dear Mr. Carlson:

At your request, we have undertaken a study to determine the traffic implications associated with a proposed 105-unit townhouse residential cluster development to be located between Sport Hill Road and Cedar Hill Road in Easton, Connecticut. Figure 1 depicts the site location.

The work comprising the study consisted of a number of tasks including a field reconnaissance, an inventory of present roadway and traffic conditions, and a traffic counting program along the study roadways and at key intersections. Subsequent steps dealt with a determination of site traffic volumes and an evaluation of the expected traffic impact.

Roadways and Site Environs

The site is a largely undeveloped area of land situated between Sport Hill Road and Cedar Hill Road. Both roadways are north/south town facilities adjacent to the site. Sport Hill Road extends the length of town from Redding to Fairfield. It is 24 feet in width abutting the site and has a posted speed limit of 30 miles per hour. South of the site, beginning at an all-way stop controlled intersection with Westport Road (Route 136), Sport Hill Road becomes a state facility (Route 59). Cedar Hill Road is located between Silver Hill Road and Bibbins Road. It is 22 feet in width adjacent to the site and has a posted speed limit of 25 miles per hour. The surrounding site vicinity is sparsely settled, primarily with single family homes.

Accidents

Information on recent traffic accident statistics for Sport Hill Road and Cedar Hill Road near the site was obtained for the latest three year period. The information was received from the Easton Police Department for the period of October 2005 to October 2008 and from the Connecticut Department of Transportation (ConnDOT) for the period of June 30, 2005 through June 30, 2008. No accidents were reported on Cedar Hill Road. The accident data for Sport Hill Road is shown in Table 1, summarized by location, accident severity and collision type.

Table 1
ACCIDENT SUMMARY

LOCATION ON SPORT HILL ROAD:	ACCIDENT SEVERITY				TYPE OF COLLISION							
					TURN							
	FATALITY	INJURY	PROPERTY DAMAGE	TOTAL	INTERSECTING	SAME	OPPOSITE	REAR END	ANGLE	FIXED OBJECT	DEER IN ROAD	TOTAL
At Westport Road and Stepney Road			7	7				2	1	4		7
At Silver Hill Road			1	1							1	1
Total	0	0	8	8	0	0	0	2	1	4	1	8

Source: ConnDOT from 6/30/05 through 6/30/08. Easton Police Department from 10/05 to 10/08.

Eight accidents occurred along Sport Hill Road from Westport Road and Stepney Road to Silver Hill Road. All of the accidents involved property damage only. The majority of the accidents involved northbound traveling vehicles colliding with a fixed object such as a guide rail, curbing, or roadway sign.

Proposed Development

A 105-unit residential townhouse development to be called Saddle Ridge Village is proposed for the site. Vehicle access is to be provided at Sport Hill Road about 200 feet north of Church Road and at Cedar Hill Road approximately 1,250 feet north of Bibbins Road. These two access points will be connected by a new town road that traverses the site. Access for individual residences will be made to/from the new town road via several driveways and short cul-de-sac roads. No direct access to individual residences is proposed from either Sport Hill Road or Cedar Hill Road.

Traffic Volumes

Information on weekday traffic volumes was obtained from ConnDOT for three nearby traffic monitoring locations. Table 2 summarizes the information taken from Automatic Traffic Recorder (ATR) data at those locations. The data shows that the Average Daily Traffic (ADT) near the site for the year 2007 ranged from 5,000 vehicles on Sport Hill Road southeast of Bibbins Road to 8,700 vehicles on Stepney Road northeast of Sport Hill Road.

Table 2
2007 TRAFFIC VOLUMES

LOCATION	AVERAGE DAILY TRAFFIC	WEEKDAY MORNING PEAK HOUR	WEEKDAY AFTERNOON PEAK HOUR
Stepney Road (Route 59) northeast of Westport Road (Route 136)	8,700	1,008	882
Sport Hill Road (Route 59) southeast of Bibbins Road	5,000	457	432
Westport Road (Route 136) southwest of Sport Hill Road (Route 59)	6,900	819	995

Source: ConnDOT.

All-day traffic volumes were recorded as part of this study on Sport Hill Road and Cedar Hill Road near the locations of the proposed intersections with the new town road that will traverse the site. Information was taken by ATR from midday on October 8, 2008 to midday October 13, 2008. Weekday 24-hour traffic on Sport Hill Road was found to be approximately 2,275 vehicles. Weekday 24-hour traffic on Cedar Hill Road was about 125 vehicles.

To supplement this data, manual turning movement counts were conducted during the weekday morning and afternoon commuter peak hours at the following intersections:

- Sport Hill Road at Silver Hill Road
- Sport Hill Road at Church Road
- Sport Hill Road at Stepney Road and Westport Road
- Cedar Hill Road at Bibbins Road
- Orchard Lane at Bibbins Road

The counts were taken on Wednesday, October 22, 2008 between 7:00-9:00 A.M. and 4:00-6:00 P.M. The peak hour during the morning occurred from 7:15 - 8:15 A.M. and the afternoon peak hour occurred from 4:30 - 5:30 P.M. Figures 2 and 3 illustrate the peak one hour traffic flows observed during these two time periods at the Sport Hill Road intersections.

The 2008 traffic volumes were spot checked to assess traffic growth. The intersection of Sport Hill Road at Stepney Road and Westport Road was recounted during the morning commuter period on Tuesday, June 9, 2009. Review of the two data sets for this intersection finds them comparable, thus confirming that the 2008 volumes are acceptable to use as the basis for this study.

Sight Lines

A check of the required and available sight line distances from the proposed intersections of the new town road with Sport Hill Road and Cedar Hill Road was made. Easton Street Design Guidelines indicate the minimum intersection sight distances needed at Sport Hill Road and Cedar Hill Road are 285 feet and 200 feet, respectively. These are based on the number of vehicles per day that the two town roads experience. As mentioned, Sport Hill Road has approximately 2,275 vehicles per day. This is classified as a residential collector by the town. Cedar Hill Road has about 125 vehicles per day and is considered a light residential road by the town. The available sight distances from the location of the new town road approach to Sport Hill Road are about 630 feet looking left (north) and 950 feet looking right (south). At the location of the new town road approach to Cedar Hill Road, the available sight distances are about 290 feet looking right (north) and 320 feet looking left (south). Sight lines at both intersections exceed the Easton Street Design Guidelines.

Site Traffic

Industry standard statistical data published by the Institute of Transportation Engineers (ITE)[1] was used to determine the number of peak hour trips that may be expected from the proposed development. Table 3 indicates the anticipated amount of site traffic based on the proposed 105-unit residential development.

Table 3
ANTICIPATED SITE TRAFFIC

TIME PERIOD	NUMBER OF VEHICLE TRIPS		
	IN	OUT	TOTAL
Weekday Morning Peak Hour	9	46	55
Weekday Afternoon Peak Hour	43	21	64
Weekday All-Day	344	344	688

Source: *Trip Generation*, Institute of Transportation Engineers, Eighth Edition, 2008.
105 Units. Land Use #230 – Residential Condominium/Townhouse

[1] *Trip Generation*, Institute of Transportation Engineers, Eighth Edition, 2008.

It is seen that during the weekday morning peak hour, the development is expected to generate approximately 9 vehicle trips entering and 46 trips exiting, for a total of about 55 vehicle trips. During the weekday afternoon peak hour, about 43 vehicle trips may enter and 21 may leave, for a total of around 64 vehicle trips. On an all-day basis, the development could be expected to generate about 344 trips entering and 344 trips exiting.

The estimated directional distribution for the site traffic was based on Journey to Work data from the 2000 Census and on the area roadway traffic patterns. It has been estimated that the majority of site traffic, about 80 percent, will be oriented to and from the south along Sport Hill Road and Westport Road. Approximately 15 percent of the site traffic will be oriented along Stepney Road to the northeast and five percent will be oriented to/from the northwest along Sport Hill Road. Based on the layout of the residential development and the road network adjacent to the site, it is expected that the majority of site traffic will utilize Sport Hill Road as a convenient point of site access in relation to these routes. Figure 4 shows the site traffic distribution. The peak hour site traffic volumes were distributed onto the nearby roads based on these expected patterns as illustrated in Figures 5 and 6.

Future Traffic Volumes

To determine traffic volumes that would be reflective of conditions prior to the proposed development, the background (no-build) traffic volumes were determined. The current volumes at the study intersections were increased by three percent, balanced, and then rounded to the nearest five, to reflect traffic volumes in the horizon year 2011. Figures 7 and 8 indicate the background traffic volumes for the weekday morning and afternoon peak hours, respectively, at the study locations.

The anticipated site traffic volumes were added to the 2011 background traffic volumes to derive the future combined (build-out) traffic volumes. The combined volumes are reflective of conditions with the proposed residential development in place. Figures 9 and 10 depict the 2011 combined traffic volumes at the study intersections for the weekday morning and afternoon peak hours, respectively.

Analysis

The surrounding roadways were evaluated by means of capacity analysis techniques through the use of Highway Capacity Software. A comparison of the background and combined analysis results were used to determine the traffic impact of the proposed development. These analyses were conducted for the study intersections and a Level of Service (LOS) was determined. The

LOS is a qualitative measure of the efficiency of operations of intersections in terms of delay and inconvenience to motorists. A description of the various LOS designations, A through F, is given in the Appendix. Table 4 summarizes the analyses results.

It is seen that all LOS are expected to remain the same between background (no-build) and combined (build) conditions, with the exception of two approaches. These are the westbound approach from Church Road to Sport Hill Road during the weekday morning peak hour, decreasing from LOS A to B, and the eastbound approach of Westport Road at Sport Hill Road and Stepney Road during the weekday afternoon peak hour, with a decrease from LOS E to F. With these changes, Church Road at Sport Hill Road can still be considered to operate at a good LOS and the eastbound approach from Westport Road to Sport Hill Road and Stepney Road will remain at a poor LOS. The proposed Saddle Ridge roadway intersections at Sport Hill Road and at Cedar Hill Road will operate at an excellent LOS. From a traffic impact standpoint, the area roadways are expected to see a negligible reduction in operations with only a minor traffic impact.

As indicated, there are some movements at the intersection of Sport Hill Road with Westport Road and Stepney Road that currently experience significant delays today and will continue to do so even if the proposed development is not built. These are the result of the present geometry, traffic control and heavy commuter flows.

Recommendations

Appropriate signage should be installed at the proposed new town road approaches to Sport Hill Road and Cedar Hill Road, as well as internal to the site. This includes STOP signs, as well as stop-bars, for exiting motorists. Signage near the new town road intersections should be placed so as to not obscure visibility for drivers. Existing vegetation should be trimmed and maintained as well.

Table 4
LEVEL OF SERVICE

APPROACH/MOVEMENT	LEVEL OF SERVICE			
	WEEKDAY MORNING PEAK HOUR		WEEKDAY AFTERNOON PEAK HOUR	
	BACKGROUND	COMBINED	BACKGROUND	COMBINED
	Two-Way Stop Controlled			
Proposed New Town Road at Sport Hill Road				
Northbound Left	--	A	--	A
Eastbound Left / Right	--	A	--	A
Proposed New Town Road at Cedar Hill Road				
Southbound Left	--	A	--	A
Westbound Left / Right	--	A	--	A
Sport Hill Road at Silver Hill Road				
Northbound Left	A	A	A	A
Eastbound Left / Right	A	A	A	A
Sport Hill Road at Church Road				
Southbound Left	A	A	A	A
Westbound Left / Right	A	B	A	A
Cedar Hill Road at Bibbins Road				
Southbound Left / Right	A	A	A	A
Eastbound Left	A	A	A	A
Orchard Lane at Bibbins Road				
Northbound Left / Right	A	A	A	A
Westbound Left	A	A	A	A
	All-Way Stop Controlled			
Sport Hill Road at Westport Road and Stepney Road				
Northbound Left / Through	B	B	B	B
Northbound Right	B	B	B	B
Southbound Left / Through / Right	B	B	B	B
Eastbound Left / Through / Right	B	B	E	F
Westbound Left / Through / Right	F	F	B	B
Overall	F	F	D	D

The intersection of Sport Hill Road with Westport Road and Stepney Road operates poorly under both background and combined conditions, particularly during the weekday morning peak hour for westbound motorists and during the afternoon peak hour for eastbound motorists. Because this is an existing matter on a state highway, no recommendations are included as part of the proposed development for this intersection at this time. However, efforts can and should be made to coordinate with the town and ConnDOT to determine what type of improvement measures may be appropriate to address current operating conditions.

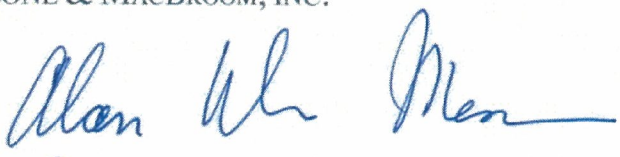
Summary and Conclusion

A study was conducted to assess the impact of a 105-unit townhouse residential cluster development to be located between Sport Hill Road and Cedar Hill Road. To determine a profile of existing conditions, a detailed field reconnaissance, data assembly effort, and traffic counting program were undertaken. Trip generation for the proposed development, based on industry standard data, was used. The development of the site is anticipated to generate about 55 total two-way trips during the weekday morning peak hour and 64 total two-way trips during the weekday afternoon peak hour. Analyses of the study intersections show that new traffic associated with the proposed residential development is expected to have a minor impact on the surrounding roadway system. The proposed new town road intersections with Sport Hill Road and Cedar Hill Road find excellent Levels of Service. A review of proposed sight lines finds that access to the proposed site meets the town of Easton Street Design Guidelines.

In conclusion, it is our opinion that the development can be accommodated on the adjacent streets assuming implementation of recommendations listed above. We hope this report is useful to you and the Town of Easton in assessing the traffic impact from this project. If you have any questions or need any further information, please do not hesitate to contact us.

Very truly yours,

MILONE & MACBROOM, INC.



Alan Wm. Mess, P.E.
Vice President-Traffic Engineering and Transportation Planning

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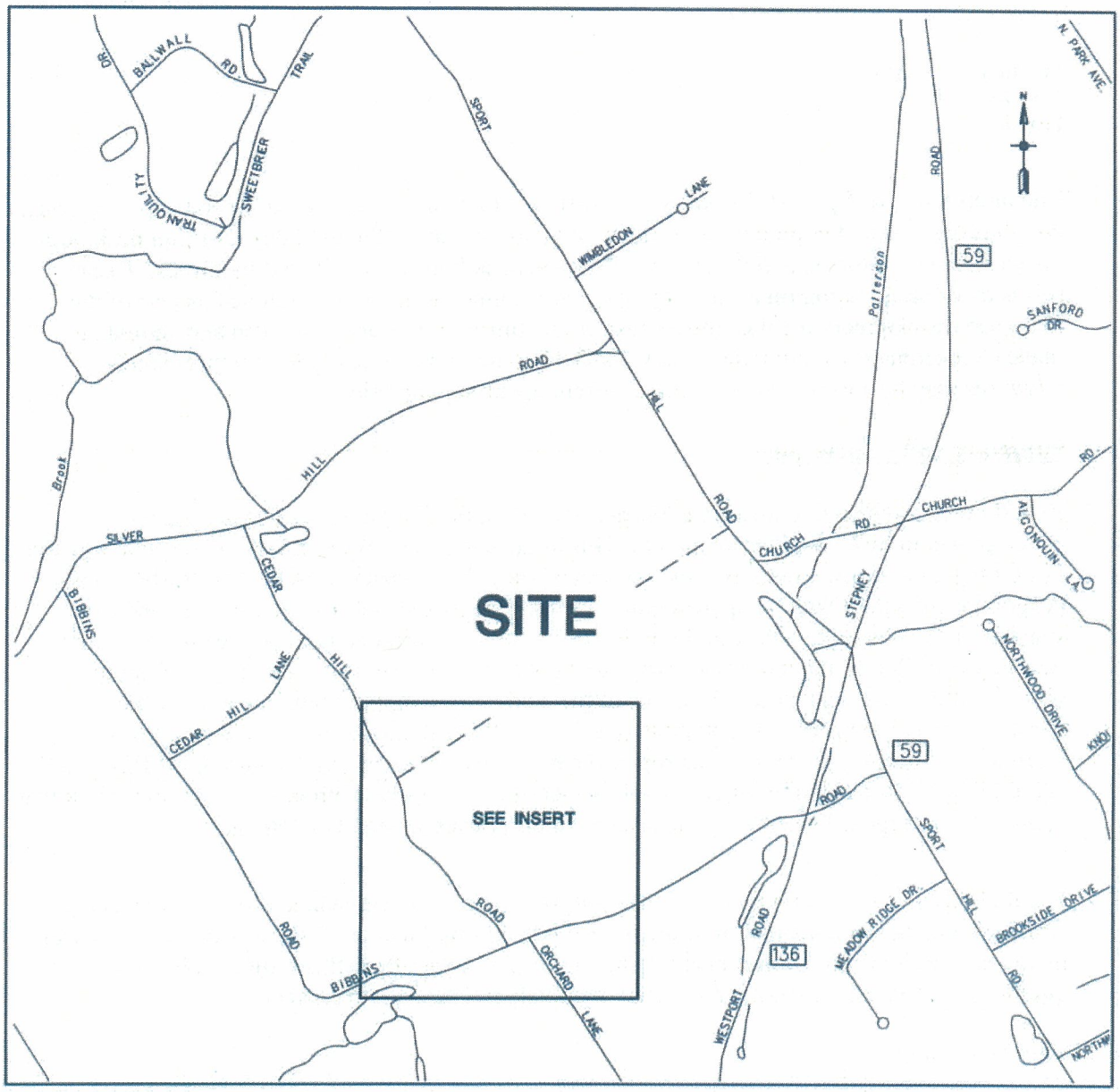

SITE LOCATION

Saddle Ridge Village
Easton, Connecticut

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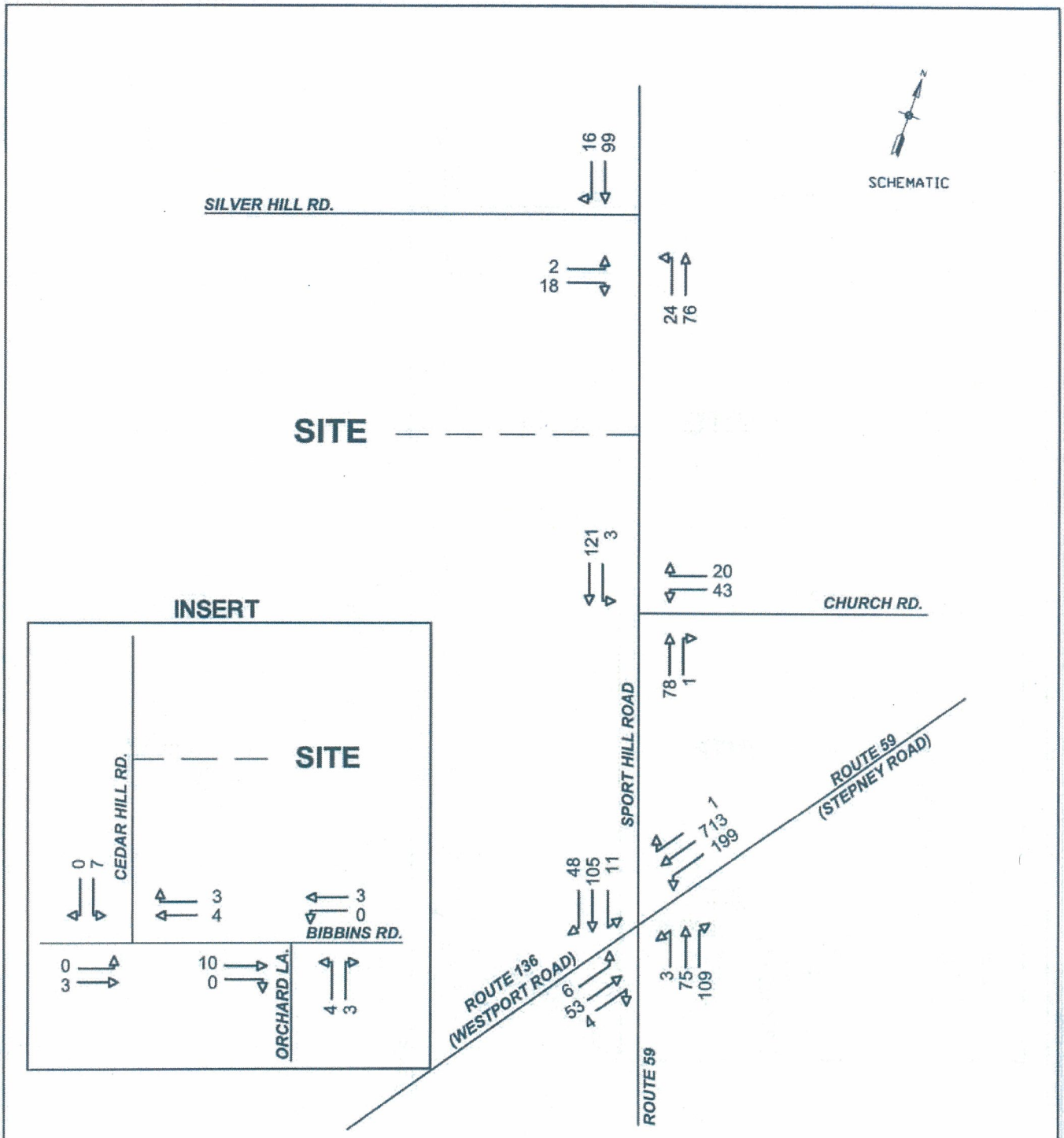
MILONE & MACBROOM, Inc.

FIGURE 1
JUNE 2010



OCTOBER 2008 EXISTING TRAFFIC VOLUMES
WEEKDAY MORNING PEAK HOUR
7:15 - 8:15 AM

Saddle Ridge Village
Easton, Connecticut

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FIGURE 2
JUNE 2010

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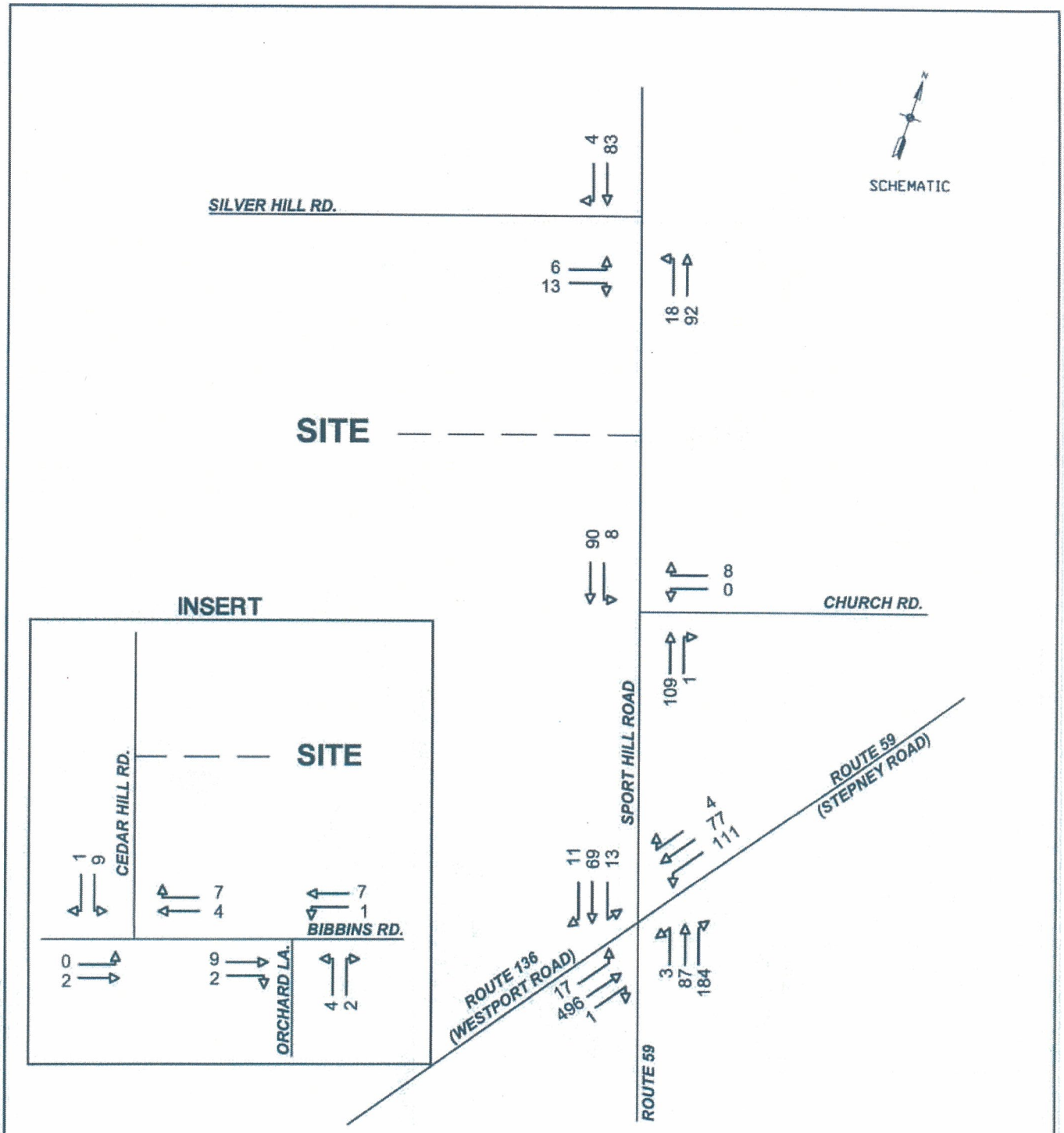

OCTOBER 2008 EXISTING TRAFFIC VOLUMES

WEEKDAY AFTERNOON PEAK HOUR

4:30 - 5:30 PM

Saddle Ridge Village
Easton, Connecticut

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FIGURE 3
JUNE 2010

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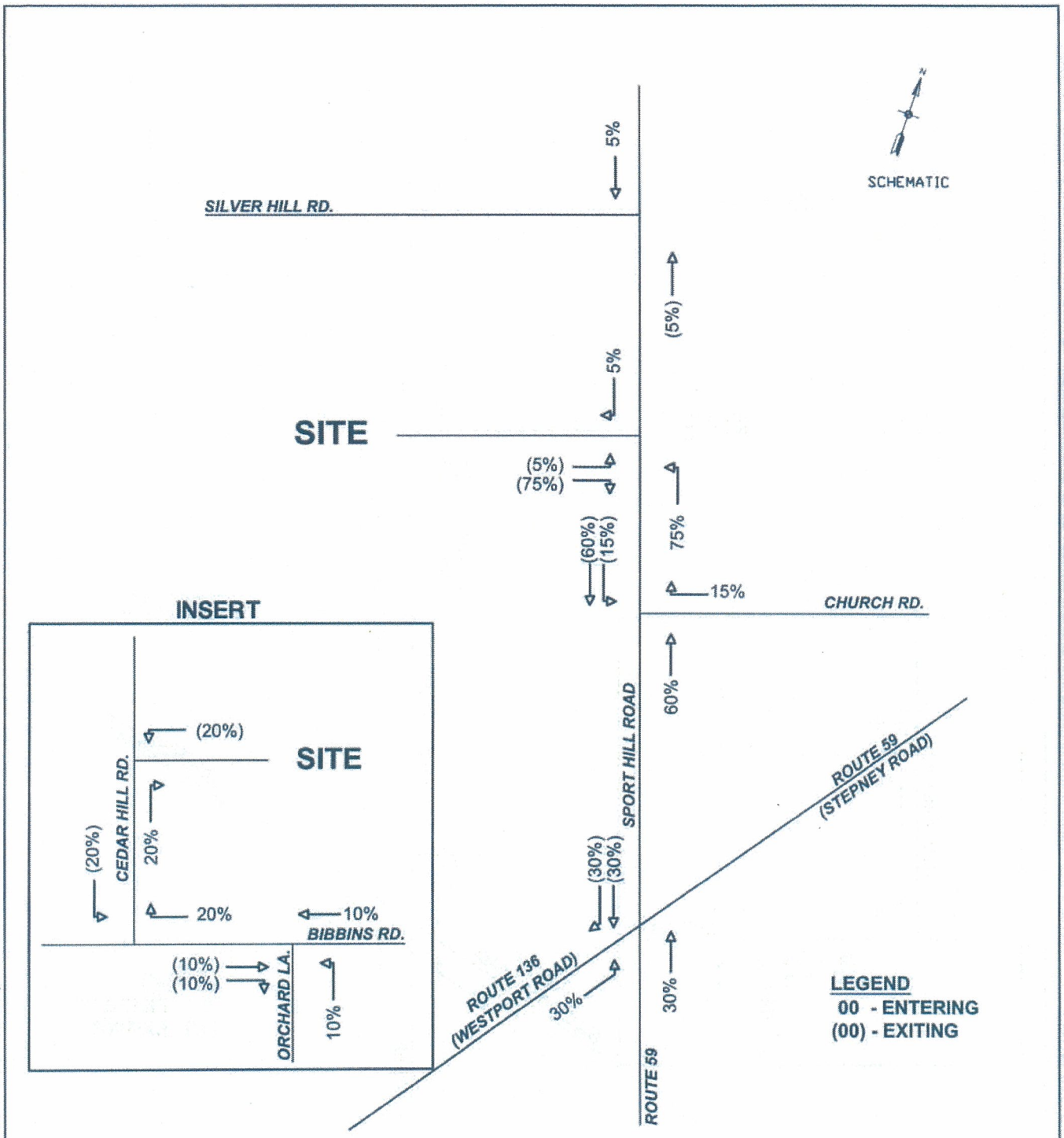

SITE TRAFFIC DISTRIBUTION

Saddle Ridge Village
Easton, Connecticut

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FIGURE 4
JUNE 2010

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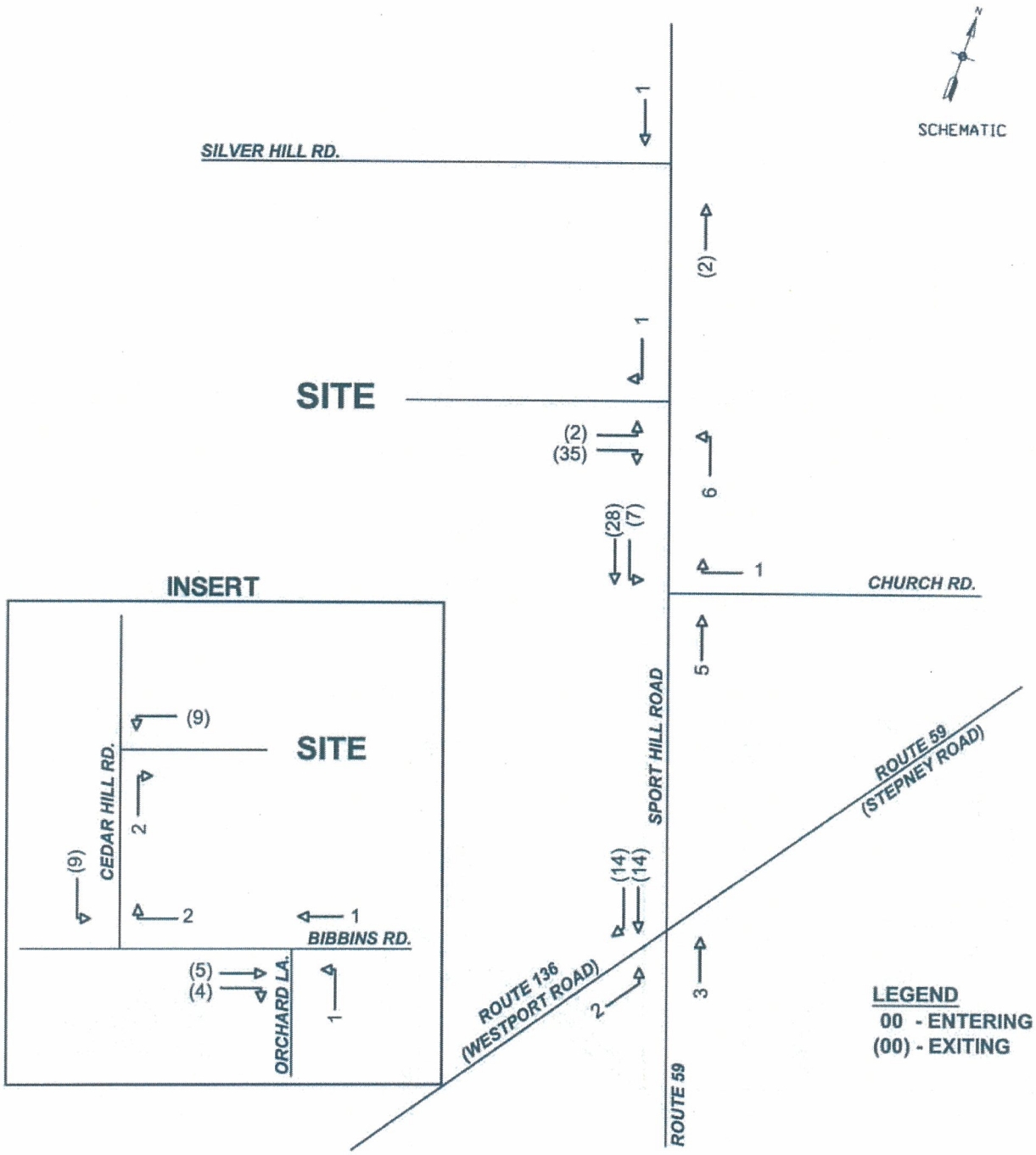

SITE TRAFFIC VOLUMES
WEEKDAY MORNING PEAK HOUR

Saddle Ridge Village
Easton, Connecticut

MILONE & MACBROOM, Inc.

FIGURE 5
JUNE 2010

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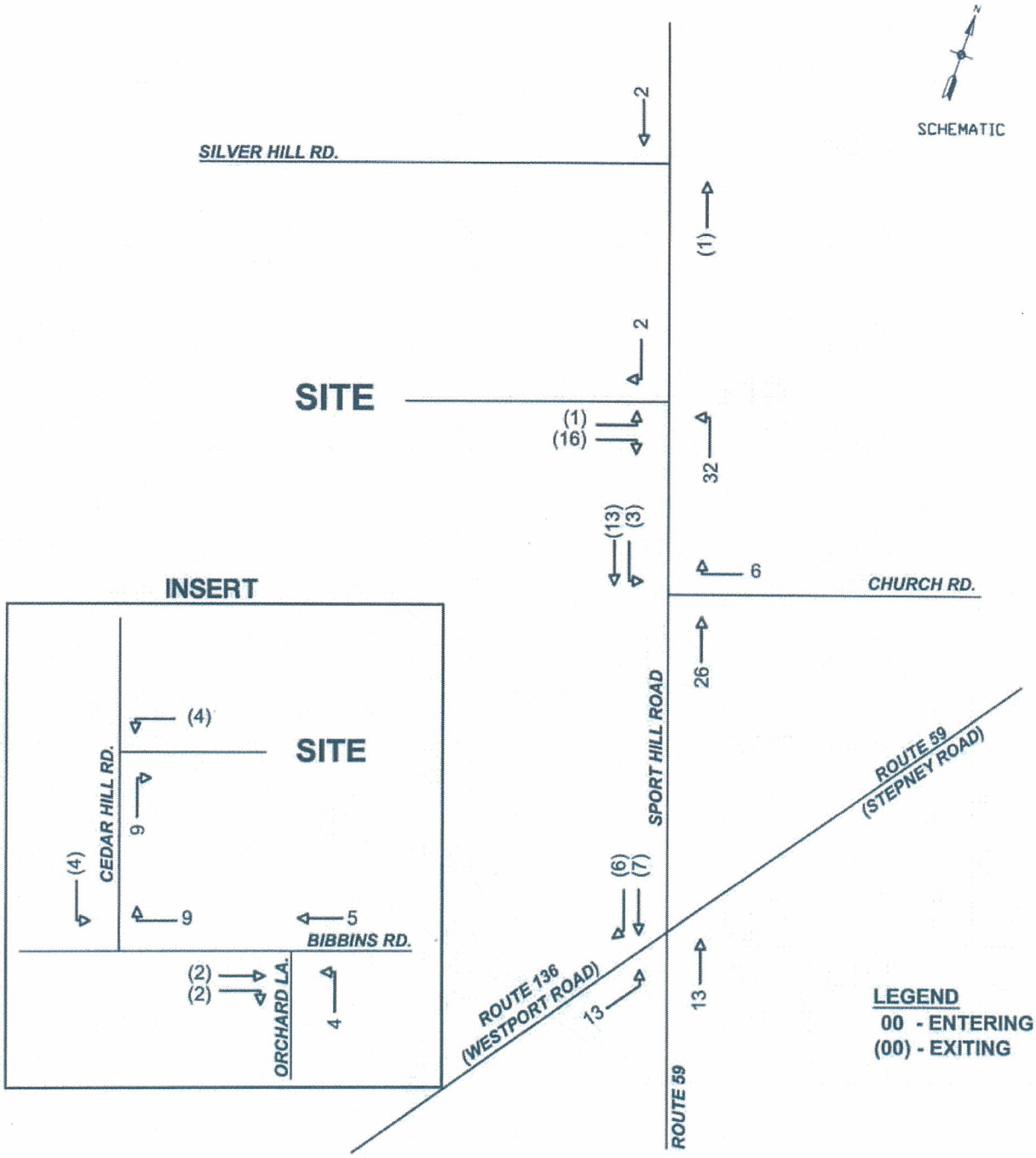

SITE TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR

Saddle Ridge Village
Easton, Connecticut

MILONE & MACBROOM, Inc.

FIGURE 6
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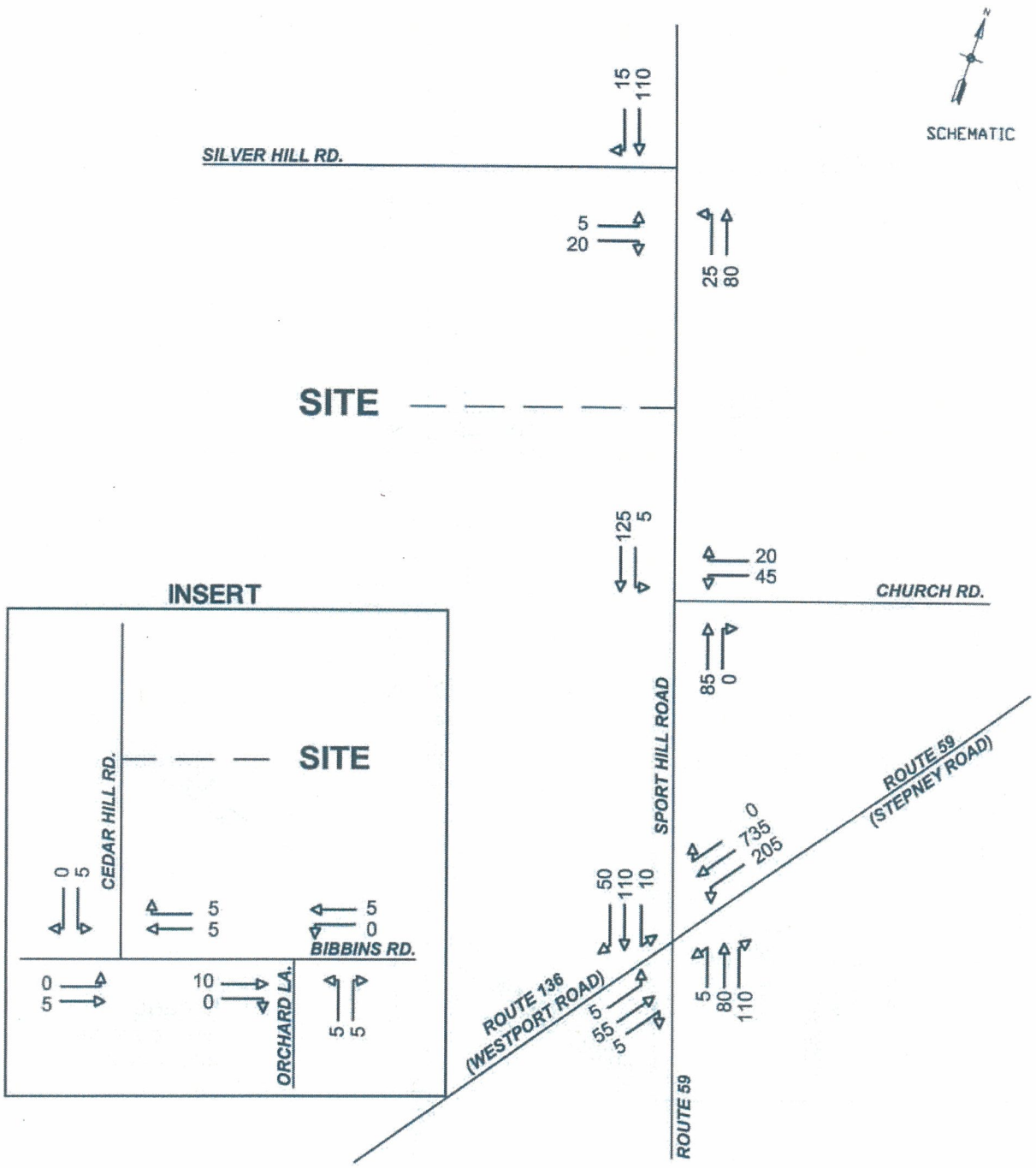

2011 BACKGROUND TRAFFIC VOLUMES
WEEKDAY MORNING PEAK HOUR

Saddle Ridge Village
Easton, Connecticut

MILONE & MACBROOM, Inc.

FIGURE 7
JUNE 2010

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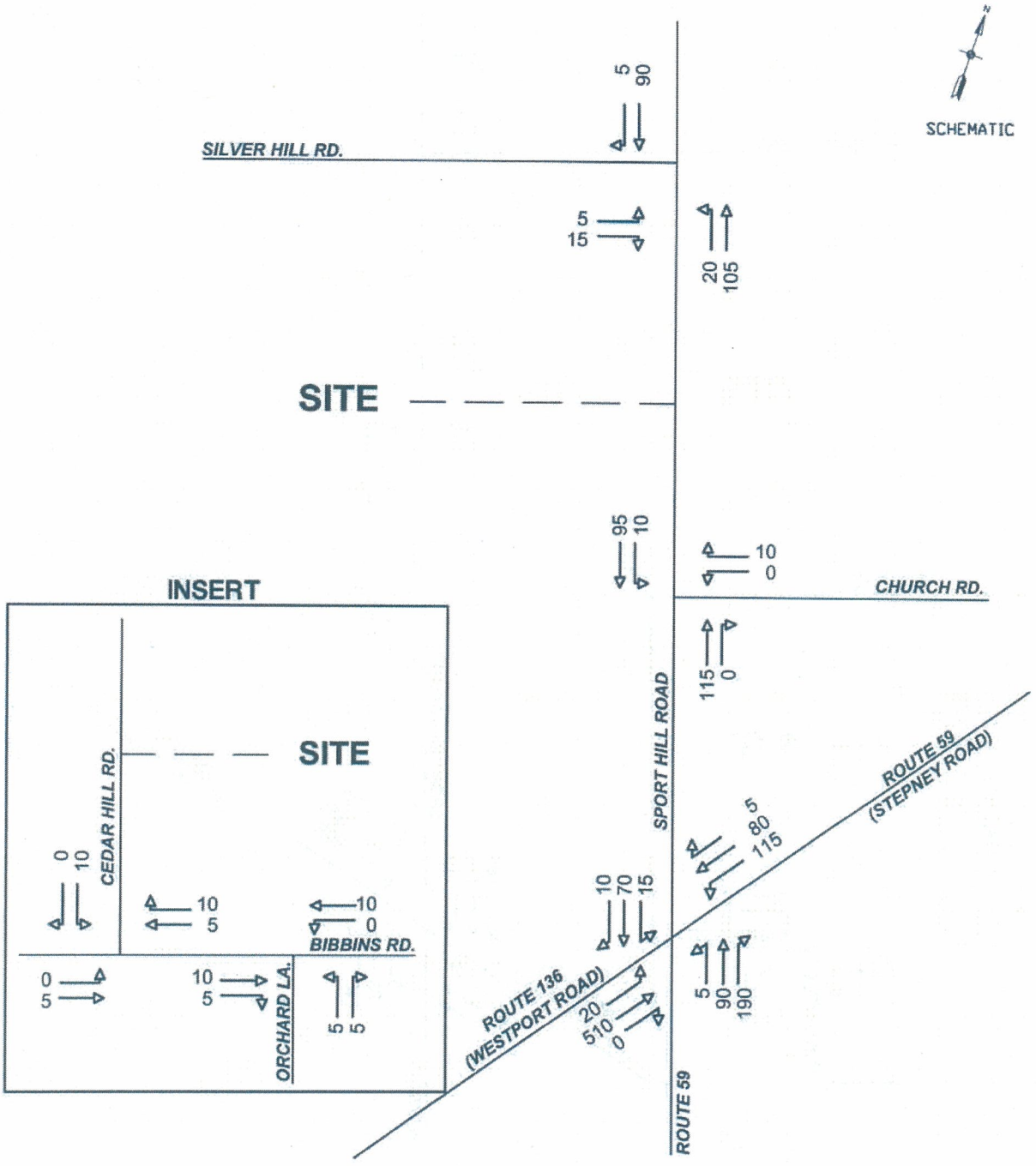

2011 BACKGROUND TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR

Saddle Ridge Village
Easton, Connecticut

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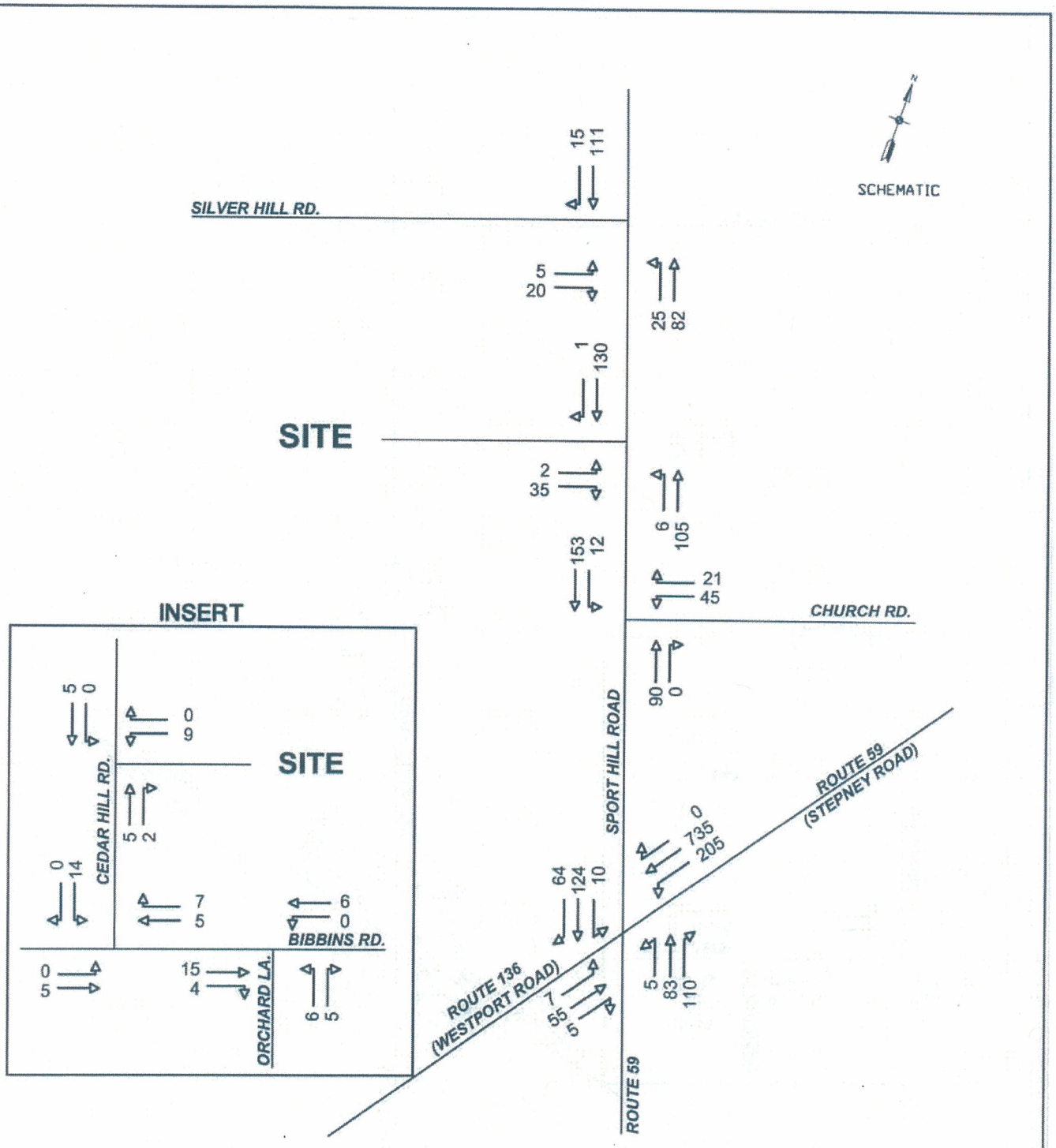
MILONE & MACBROOM, Inc.

FIGURE 8
JUNE 2010



2011 COMBINED TRAFFIC VOLUMES
WEEKDAY MORNING PEAK HOUR

Saddle Ridge Village
Easton, Connecticut

MILONE & MACBROOM, Inc.

FIGURE 9
JUNE 2010

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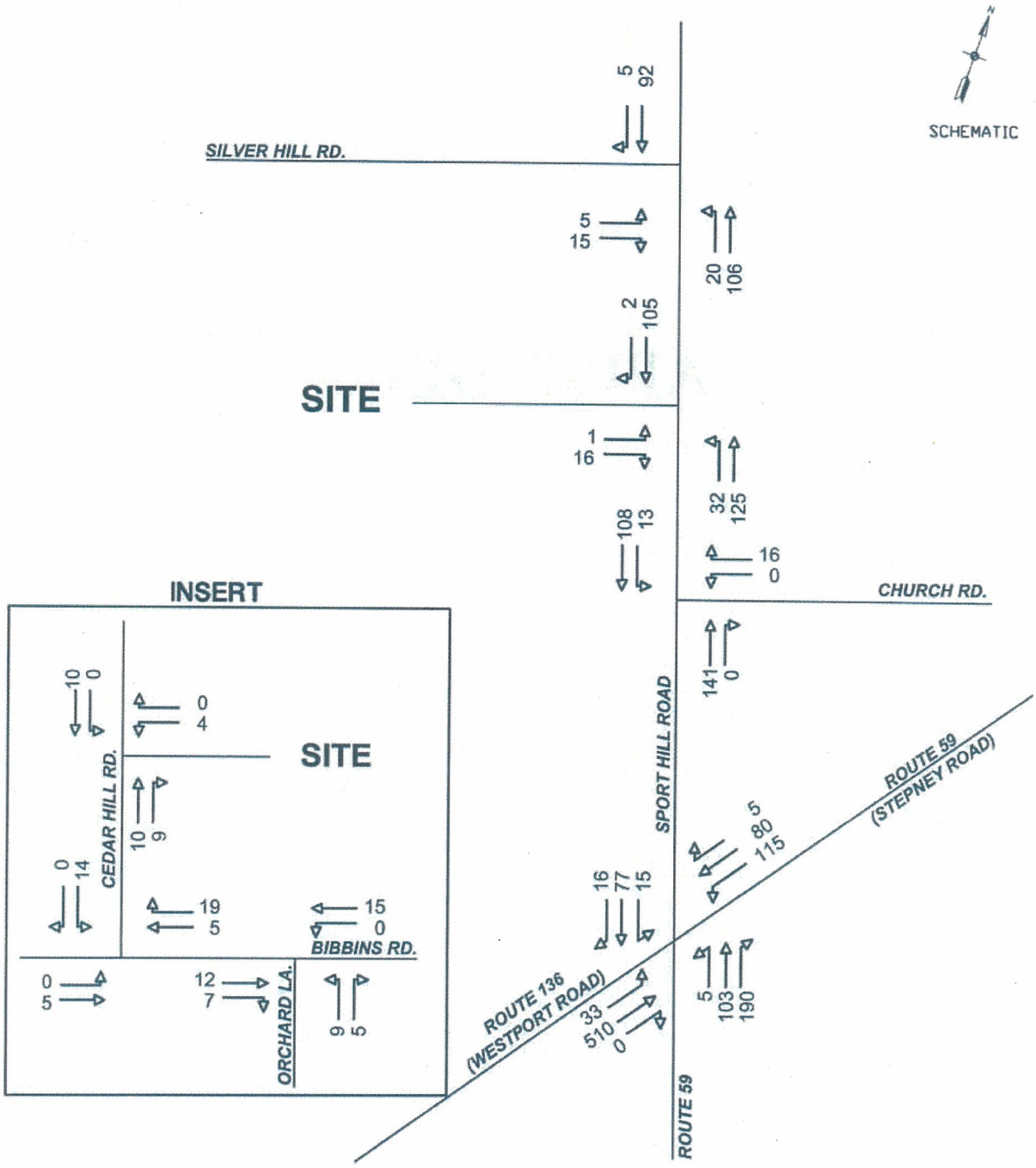

2011 COMBINED TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR

Saddle Ridge Village
Easton, Connecticut

MILONE & MACBROOM, Inc.

FIGURE 10
JUNE 2010

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APPENDIX

LEVEL OF SERVICE
FOR TWO-WAY
STOP SIGN CONTROLLED INTERSECTIONS

The level of service for a TWSC (two-way stop controlled) intersection is determined by the computed or measured control delay and is defined for each minor movement. Level of service is not defined for the intersection as a whole. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS criteria are given in the Table. LOS criteria are given below:

LEVEL-OF SERVICE CRITERIA FOR TWSC INTERSECTIONS	
LEVEL OF SERVICE	**AVERAGE CONTROL DELAY (s/veh)**
A	**≤0-10**
B	**>10 AND ≤15**
C	**>15 AND ≤25**
D	**>25 AND ≤35**
E	**>35 AND ≤50**
F	**>50**

Reference: Highway Capacity Manual 2000, Transportation Research Board, 2000.

LEVEL OF SERVICE
FOR
UNSIGNALIZED INTERSECTIONS

ALL-WAY STOP-CONTROL (AWSC)

The criteria for AWSC intersections have different threshold values than do those for signalized intersections primarily because drivers expect different levels of performance from distinct types of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an AWSC intersection. Thus a higher level of control delay is acceptable at a signalized intersection for the same LOS. The level-of-service criteria are given below.

LEVEL-OF SERVICE CRITERIA FOR AWSC INTERSECTIONS	
LEVEL OF SERVICE	**CONTROL DELAY (s/veh)**
A	**≤10**
B	**>10 AND ≤15**
C	**>15 AND ≤25**
D	**>25 AND ≤35**
E	**>35 AND ≤50**
F	**>50**

Reference: Highway Capacity Manual 2000, Transportation Research Board, 2000.

RESPONSE TO LETTER FROM JANET BROOKS ESQ. TO LESLIE MINASI DATED SEPTEMBER 16, 2014

The intervenors have submitted a letter from their counsel dated September 16, 2014 concluding that the proposed accessory apartments do "not qualify as affordable housing." Easton Crossing respectfully disagrees with the conclusion of intervenors' counsel. The proposed affordable accessory apartments satisfy all of the requirements to qualify as affordable housing.

In support of its claim, the letter notes that the proposed affordable apartments are "strikingly smaller than the single family houses." However, the letter fails to acknowledged that the legislature amended General Statutes § 8-30g in 2002 to add a definition of "accessory apartment" that requires affordable accessory apartments to be smaller than the primary house. See General Statutes § 8-30g(k). Specifically, the statute requires that such apartments have "a square footage that is not more than thirty percent of the total square footage of the house. . . ." Id. The statutory definition is also consistent with the general understanding of accessory apartments by municipal zoning commissions, including Easton's Planning and Zoning Commission, that accessory apartments in single-family homes are "accessory" to the primary residence. If the primary house and the accessory apartment were the same size, the apartment would not be an "accessory" use; it would be part of a duplex.

Next, the intervenors' counsel also cites two trial court decisions to support the intervenors' claim that affordable accessory apartments do not qualify as affordable housing: (1) *Wisniowski v. Planning Commission*, 9 Conn. L. Rptr. No. 7, 193 (1993); and (2) *Dauti Construction, LLC v. Planning and Zoning Commission*, Superior Court, J.D. of New Britain, Docket No. HHB CV 07 4014556 (2009). Neither case is controlling and both are distinguished. *Wisniowski* did not involve accessory apartments and more importantly was decided long before the legislature added the definition of "accessory apartment" and requirement that such apartments be smaller than the principal house. The *Wisniowski* Court acknowledged that there was no provision of § 8-30g that required the affordable units to be "comparable in size and workmanship" to the market-rate units. In the absence of any express language, the Court imposed the requirement from another statute (*i.e.*, § 8-2) which required like size and workmanship in multi-family units. The decision was not appealed and thus there is no Appellate Court authority regarding the issue. Easton Crossing is distinguished because, as noted above, the statute was amended in 2002 to specifically identify a specific category of affordable housing that by definition must be smaller than the principal house. The *Wisniowski* Court in 1993 did not have the benefit of specific statutory guidance that identified a special class of affordable housing that the General Assembly intended to be encouraged but which must by definition be smaller in size. Since 2002, there has not been any litigation or court decisions regarding the new statutory provision identifying affordable accessory apartments as affordable housing yet requiring it to be smaller in size.

The second case, *Dauti*, like the first did not involve affordable accessory apartments but rather involved townhouses. Thus *Dauti*, like *Wisniowski*, does not contain any interpretation or ruling regarding the new statutory language defining accessory apartments. *Dauti* is further

distinguished by the fact that the proposed development involved multi-family dwelling units (26 attached units in six buildings) and not single-family houses with accessory apartments. As in *Wisniowski*, the plaintiff in *Dauti* did not appeal the portion of the Court's decision regarding the size and workmanship requirement for the townhouses.[1] Thus, neither of the cases relied upon by the intervenors involved affordable accessory apartments and neither addresses the new language added by the legislature identifying a special type of housing that (1) qualifies as affordable housing and (2) is required to be smaller than the principal house.

Finally, this Commission has already adopted zoning regulations identifying affordable accessory apartments as affordable housing and the Town Plan of Conservation and Development relies substantially on affordable accessory apartments to achieve the Town's affordable housing goals. Zoning Regulations § 7.8. Clearly, under the Commission's own existing regulations, accessory affordable apartments qualify as affordable housing contrary to the intervenors' claim.[2] The accessory apartments proposed for Easton Crossing are even more affordable than required by the Commission's existing regulations and remain deed restricted for a longer period of time. Compare, § 7.8.1 and Proposed PAAAC. The purpose of the Commission's affordable accessory regulation is "to increase the availability of housing for those persons who earn moderate incomes including the elderly and town employees. . . ." The affordable accessory apartments proposed for Easton Crossing will achieve the same goal.

As a result, under the plain language of the statute, affordable accessory apartments that are smaller than the primary house are clearly qualified as affordable housing. The proposed affordable accessory apartments proposed for Easton Crossing are similar to the Commission's own use of affordable accessory apartments in its existing regulations and satisfy the statutory definition for affordable housing and as required by law are smaller in size than the principal house.

---

[1] *Dauti* was appealed on other grounds by the defendant challenging the Court's authority to remand for modifications imposed by the Court.

[2] The use of affordable accessory apartments as a meaningful category of affordable housing is further supported by the fact that municipalities, such as Ridgefield, that have applied for moratoriums from affordable housing applications under § 8-30g have relied in part on the existence of affordable accessory apartments. Those applications and the use of affordable accessory apartments to satisfy the moratorium requirements have been approved by the State.

cision of such agency. The commission shall issue notice of its decision as provided by law. Failure of the commission to render a decision within said sixty-five days or subsequent extension period permitted by this subsection shall constitute a rejection of the proposed modification. Within the time period for filing an appeal on the proposed modification as set forth in section 8-8, 8-9, 8-28 or 8-30a, as applicable, the applicant may appeal the commission's decision on the original application and the proposed modification in the manner set forth in this section. Nothing in this subsection shall be construed to limit the right of an applicant to appeal the original decision of the commission in the manner set forth in this section without submitting a proposed modification or to limit the issues which may be raised in any appeal under this section.

(i) Nothing in this section shall be deemed to preclude any right of appeal under the provisions of section 8-8, 8-9, 8-28 or 8-30a.

(j) A commission or its designated authority shall have, with respect to compliance of an affordable housing development with the provisions of this chapter, the same powers and remedies provided to commissions by section 8-12.

(k) Notwithstanding the provisions of subsections (a) to (j), inclusive, of this section, the affordable housing appeals procedure established under this section shall not be available if the real property which is the subject of the application is located in a municipality in which at least ten per cent of all dwelling units in the municipality are (1) assisted housing, or (2) currently financed by Connecticut Housing Finance Authority mortgages, or (3) subject to binding recorded deeds containing covenants or restrictions which require that such dwelling units be sold or rented at, or below, prices which will preserve the units as housing for which persons and families pay thirty per cent or less of income, where such income is less than or equal to eighty per cent of the median income, or (4) mobile manufactured homes located in mobile manufactured home parks or legally-approved accessory apartments, which homes or apartments are subject to binding recorded deeds containing covenants or restrictions which require that such dwelling units be sold or rented at, or below, prices which will preserve the units as housing for which, for a period of not less than ten years, persons and families pay thirty per cent or less of income, where such income is less than or equal to eighty per cent of the median income. The municipalities meeting the criteria set forth in this subsection shall be listed in the report submitted under section 32-1m. As used in this subsection, "accessory apartment" means a separate living unit that (A) is attached to the main living unit of a house, which house has the external appearance of a single-family residence, (B) has a full kitchen, (C) has a square footage that is not more than thirty per cent of the total square footage of the house, (D) has an internal doorway connecting to the main living unit of the house, (E) is not billed separately from such main living unit for utilities, and (F) complies with the building code and health and safety regulations.

(l) (1) Notwithstanding the provisions of subsections (a) to (j), inclusive, of this section, the affordable housing appeals procedure established under this section shall not be applicable to an affordable housing application filed with a commission during a moratorium, which shall be the four-year period after (A) a certification of affordable housing project completion issued by the commissioner is published in the Connecticut Law Journal, or (B) after notice of a provisional approval is published pursuant to subdivision (4) of this subsection. Any moratorium that is in effect on October 1, 2002, is extended by one year.

(2) Notwithstanding the provisions of this subsection, such moratorium shall not apply to (A) affordable housing applications for assisted housing in which ninety-five per cent of

RESPONSE TO LETTER FROM THE GREATER BRIDGEPORT REGIONAL COUNCIL DATED SEPTEMBER 11, 2014

The Greater Bridgeport Regional Council ("GBRC") letter alleges only that the proposed development "could pose a regional impact." The letter does not identify a specific impact that could occur. For support, the GBRC sites to a section of the Easton POCD that purports to state that Easton should conserve open lands as "permanently dedicated open space" and even where it is developed should preserve "as much open space as possible in each tract." GBRC does not provide a page cite for the quote that it uses and did not return our calls for the page citation. However, it is clearly unrealistic to expect that all open space be permanently preserved as dedicated open space. Importantly, the Easton Crossing plan preserves 42 acres of open space land. Easton's 1994 Open Space Plan referenced in the POCD recommends that subdivisions set aside 15 percent of the land as open space. Easton Crossing more than doubles the recommended open space.

The GBRC's suggestion that all open land be dedicated open space is also unwarranted given the fact that Easton enjoys a very high level of dedicated open space thanks in large part to the state funded purchase of the former Bridgeport Hydraulic Company ("BHC") watershed lands. Easton POCD at 29-30. The amount of permanently preserved open space land increased from just over one percent in 1977 to over 38 percent (7,040 acres of which approximately 5,520 acres is BHC land). Id.

The GBRC also claims, without citation, that the State POCD calls for "low and rural densities" on all of Easton's watershed lands and in the adjunct towns "for Rural or Conservation uses." We could find no such recommendation in the State POCD. The State POCD was recently amended to delete the general recommendation suggesting a limit of one unit per two acres of watershed land. It is noteworthy that the GBRC fails to acknowledge that its own Regional POCD for the Greater Bridgeport Regional Planning Agency defines low density development as density "less than 2 dwelling units per acre." Regional POCD at 15. Thus, based on GBRC's own POCD, Easton Crossing is a low density development.

RESPONSE TO LETTER FROM THE AQUARION WATER COMPANY DATED SEPTEMBER 8, 2014

Mr. Brian Roach of the Aquarion Water Company claims that the Easton Crossing proposal is "inappropriate within this public drinking watersupply watershed area." To support its position, Aquarion attempts to rely on the "October 20, 2010 decision the case of *Eureka V LLC v. Ridgefield Planning and Zoning Commission*, in which the Superior Court upheld the local zoning commission's decision to prohibit any development on the watershed portion of the Eureka site. Mr. Roach fails to note that the Superior Court's decision was overturned in part by the Appellate Court and remanded to the local commission with instruction to allow development on the watershed portion of the land at a density to be determined in further proceedings based on site conditions. Mr. Roach fails to address the other factual distinctions between the two proposals or to identify any specific harms that will result from the Easton Crossing plan.

Finally, Mr. Roach fails to note that the State POCD (cited in the Superior Court's decision) was later revised in 2013 to delete the general recommendation to limit developments to one unit per two acres on watershed lands and instead add a recommendation for impervious coverage less than 10 percent of the overall area to be developed. Although the POCD applies only to state-funded projects, the Easton Crossing nonetheless satisfies the new recommendation. The state Department of Public Health ("DPH") also reviewed the Easton Crossing plan and did not note any inconsistency with the State POCD but rather offered suggested conditions of approval in the event the Commission chooses to approve the application. Saddle Ridge is willing to accept the DPH recommended conditions of approval.

Easton Crossing also supports other elements of the State POCD (and Easton's own POCD) including the Growth Management Principle #2 – "expand housing opportunities and design choices to accommodate a variety of household types and needs."

RESPONSE TO ITEM 1 OF LETTER FROM STEVE DANZER DATED OCTOBER 29, 2014

The October 29, 2014 letter from the intervenor's consultant, Mr. Danzer, dedicates a long section encouraging this Commission to adopt what is referred to as the subtractive method for calculating lot density in an effort to create obstacles to the Commission's approval of Easton Crossing. He asks the Commission to exclude not only wetlands but also open space and roadways and other undeveloped areas. Mr. Danzer's claims are without merit and are not required by the Easton regulations, any state regulation, or even the material that he cites to for support.

As noted in other responses and repeated here, DEEP Bulletin 11 is not a regulatory document and has never been adopted by DEEP or this Commission. DEEP Bulletin 11 clearly states that it is intended as a "guide" for towns to develop their own watershed protection programs by "initiating a planning process, developing regulatory and non-regulatory strategies" and implementing them. The guide is not intended for lot-by-lot application but rather planning on a watershed scale. It specifically cautions that "minimum two acre zoning should not be used blindly as a broad brush application" and further that within the local land use process "it may not be possible or appropriate to provide the same level of protection throughout the watershed." See DEEP Bulletin 11 at 20, 41.

Moreover, contrary to Mr. Danzer's claim, DEEP Bulletin 11 does not call for the elimination of open space and roads from the density calculation. Rather, it notes that the subtractive method is "another method" other than soil based zoning. In fact, the DEEP guidance document entitled *Protecting Connecticut's Water-Supply Watersheds: A Guide For Local Officials* published three years after DEEP Bulletin 11 notes that the subtractive method has been criticized as "overly conservative."

Similarly, Mr. Danzer claims that his proposed subtractive method is "explicitly stated" in the Easton POCD at page 101. Page 101 of the POCD is attached but it is not clear where the use of the proposed method is explicitly stated or referenced.

Policy and Recommendations (continued)

The major policy recommendations of the Town Plan are summarized in Chapter 1, and expressed graphically in the Plan of Conservation and Development map which accompanies this report. Presented in the following text are the specific action recommendations by topics listed in Chapter 1, to implement the Plan. References in parentheses are to particular chapters of this report and to the Plan map where fuller descriptions appear.

The Region

- *Actively support state, regional and local area plans which incorporate principles of smart growth by directing major development into regional centers and existing urban infrastructure areas while limiting growth in rural fringe areas such as Easton. (Chapter 2)*
- *Maintain low-density development standards for all areas of Easton, especially the public water supply watersheds. (Chapters 2, 3, 5 and Plan Map)*
- *Support regional plans for transportation projects which strengthen urban centers and reduce traffic impacts on Easton, specifically, enhancement of rail commuter, I-95 and Rt. 25 improvements, and maintenance of Rts. 58, 59, and 136 as secondary two-lane roads. (Chapters 2 and 8)*

Land on Water-supply Watersheds.

- *Protect the environmental quality and low-density character of all water-supply watershed lands, as recommended by the State Conservation and Development Policies Plan for Connecticut, especially to maintain residential dwelling densities no greater than one 4 to 5 bedroom dwelling unit, or equivalent occupancy, for every two acres of contiguous upland site area. (Chapters 3, 5 and Plan Map)*
- *Work with the State, Nature Conservancy and Aquarion Water Company to protect the environmental and scenic quality of watershed open space lands, including future trail connections and appropriate limited recreational uses of benefit to the community. (Chapter 3)*

Residential Development and Housing

- *Preserve the attractive low-density and rural residential character of existing neighborhoods throughout the town, particularly by limiting development intensity and by controlling or barring uses incompatible with residential neighborhoods. (Chapter 5)*
- *Maintain the residential rural density of established three-acre residential neighborhoods and all water-supply watershed areas. (Chapter 5 and Plan Map)*
- *Maintain the residential low density of established one-acre (40,000 square feet) residential neighborhoods, with only minor zone-boundary adjustments where desirable to maintain neighborhood integrity. (Chapter 5 and Plan Map)*

(continues on page 102)

Policy and Recommendations (continued)

Residential Development and Housing (continued)

- *Adopt special standards for age-restricted residential or for a planned retirement community, subject to special permit and density no greater than existing zoning, where located on a large tract of land and found compatible with neighborhood and environmental protection. (Chapter 5 and Plan Map)*
- *Adopt provisions to allow by right a small limited-duration accessory apartment for one or two seniors who are relatives of the resident owner, subject to discontinuance when vacated. Continue present "affordable accessory apartment" regulations governed by special permit for other accessory apartments. (Chapter 4).*
- *In conformity with statutory mandate, and as limited by soil types, terrain, infrastructure capacity and water-supply watershed protection imperatives, explore means of increasing the availability of housing choice and economic diversity in housing such as public or private non-profit dwellings and "setaside" units in subdivisions. (Chapter 4)*

Open Space and Conservation of Natural Resources

- *Protect the quality of surface and ground water in all development review, plans and public activities as a cornerstone of Town land use policy. (Chapter 3)*
- *Conserve Easton's extensive water-supply watershed lands, wilderness areas, existing public and quasi-public open space preserves, and other open lands wherever possible, as permanently dedicated open space. (Chapter 3 and Plan Map)*
- *Take early action to acquire or reserve the several intervening tracts needed to complete linkages in the Town's open space network. (Plan Map)*
- *Adopt environmentally-sensitive land development standards to limit massive land disturbance, tailor new building to fit more compatibly with natural features, reduce new road construction and site clearances, allow plan-based or flexible siting, protect aquifers and extreme slopes, and preserve scenic and historic features. (Chapter 3)*
- *Use creative efforts and special land use standards (such as tax relief, negotiated easements or purchase of development rights, and compact or cluster design to preserve remaining farms and farmland wherever possible. (Chapters 3, 5 and Plan Map)*
- *Focus future open space acquisitions on protection of vital natural or scenic areas, desirable recreation space, and key linkages for trails between existing open space tracts. (Chapter 3 and Plan Map)*

(continues on page 103)

Engineering, Planning,
Landscape Architecture
and Environmental Science

MILONE & MACBROOM®

November 3, 2014

Matthew Ranelli, Esq.
Shipman & Goodwin, LLP
One Constitution Plaza
Hartford, CT 06103

RE: Easton Crossing
Easton, Connecticut
MMI #2683-01-27

Dear Mr. Ranelli:

Milone & MacBroom, Inc. (MMI) is in receipt of an Environmental Report from Steven Danzer, dated October 29, 2014, regarding the above-referenced project.

Our responses are focused on the report's discussion items numbered 2, 4, and 5.

Comment #2: Deficiencies regarding the conceptual locations of proposed structures and activities.

Response: We have increased the impervious coverage in our drainage and hydrology analysis for each lot. We took a very conservative approach by taking the largest house footprint of 2,864 SF, plus 175 SF for a 50-foot-long front walk. We added approximately another 500 SF for possible miscellaneous coverage on each lot. This is in addition to the proposed road coverage and driveway coverage. The revised drainage system, revised for minor increases in runoff attributed to additional coverage on each lot, will convey the runoff from the 100-year storm, and the stormwater basins will still provide a zero increase in runoff for all the storm events from the 2- through 100-year storms. All of the hydrologic sizing criteria, groundwater recharge volume, water quality volume, etc. have also been adjusted. The proposed house and driveway locations have been shown to indicate how the lot could possibly be developed but not necessarily how the lot will be developed. The final size, shape, and location of the house and driveway, etc. may vary as long as the approved PAAAC zoning criteria are maintained. It is understood that a detailed plot plan will be submitted for the development of each lot. A limit of clearing line has been added to the plan that clearly defines the limits of the project. Furthermore, the upland review area disturbance has been decreased by 3 acres from the originally approved subdivision.

Comment #4: Location of stormwater basins.

Response: All of the stormwater basins shown on the current plans were part of the previously approved plans. The areas where these basins are proposed were previously cleared by the original farmers for agricultural fields and, currently, there are riding trails and horse paddocks where some of the basins are located.

Comment #5: Functional integrity of stormwater basins.

Response: The reviewer's comment is irrelevant since no credit was taken for the infiltration of stormwater at these basins. We only mentioned that infiltration could occur. The revised basins have been lined with an impermeable layer. The stormwater basins will not fail.

Should you have any questions or concerns regarding the responses provided in this letter, please do not hesitate to contact me.

Very truly yours,

MILONE & MACBROOM, INC.

Ted Hart

Ted Hart, P.E., Vice President
Director of Civil Engineering

2683-01-27-n314-1-ltr

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

Wetland Delineations Ecological Studies Site Assessments Project Planning Soil Testing

November 3, 2014

ATTN: Huntley Stone & Bob Carlson
Saddle Ridge Developers, LLC
68 Soundview Drive
Easton, CT 06612

RE: Easton Crossing, Sport Hill Road, Easton, CT

Dear Mr. Stone and Mr. Carlson:

In accordance with your request, Soil Science and Environmental Services, Inc. (SSES) has addressed comments 3, 6 and 7 contained within the "Environmental Report, Saddle Ridge, Easton, CT" document prepared by Steven Danzer, dated October 29, 2014.

Comment # 3: Preservation of Natural Features

Response: The current plan shows no grading on the small wooded bedrock outcrop located in the southern portion of the property. Grading for the cul-de-sac is proposed north of the small bedrock outcrop and minor grading is proposed on the house lots east and west of the small outcrop. It was proposed to extend the cul-de-sac onto the bedrock outcrop in the southern portion of the property as part of the 2010 application. The wooded nature of the bedrock precludes scenic vistas. The vegetation species observed on the small bedrock outcrop are similar to those existing in the surrounding woodland. No xeric (dry habitat) species or species unusual to a mesic (moist habitat) woodland were observed on the small outcrop. No critical habitats or CT /Federal listed species are known to exist or were observed on this property during numerous inspections. Approximately 42 acres of the project property will be preserved in open space, including woodland areas that will continue to provide habitat for wildlife.

Comment #6: Hydrologic Impacts to Wetlands 6 and 7

Response: Wetlands 6 and 7 are considered groundwater discharge wetlands. The following table includes the dominant species observed growing within Wetlands 6 and 7. The complete table including the dominant species observed growing within each of the wetlands on the property is included with the Environmental Assessment dated August 20, 2014.

Table 1: Dominant Wetland Vegetation Inventory – Wetlands 6 and 7

Scientific Name	Common Name	Indicator Status	Wetland Location
Trees			
Acer rubrum	red maple	FAC	6,7
Betula alleghaniensis	yellow birch	FAC	6,7
Betula lenta	black birch	FACU	7
Fraxinus americana	white ash	FACU	6
Saplings/Shrubs			
Berberis thunbergii	Japanese barberry	FACU	6
Carpinus caroliniana	ironwood	FAC	6,7
Lindera benzoin	spicebush	FACW-	7
Lonicera tatarica	tartarian honeysuckle	FACU	6
Rosa multiflora	multiflora rose	FACU	6
Viburnum recognitum	arrowwood	FACW-	7
Herbaceous			
Arisaema triphyllum	jack-in-the-pulpit	FACW-	6,7
Carex sp.	sedge	---------	7
Impatiens capensis	jewelweed	FACW	7
Osmunda cinnamomea	cinnamon fern	FACW	6,7
Parthenocissus quinquefolia	Virginia creeper	FACU	6,7
Sphagnum sp.	moss	---------	6
Lianas			
Celastrus orbiculata	bittersweet	UPL	6,7

Indicator Status: Taken from the "National List of Plant Species that Occur in Wetlands:1988 National Summary," Fish and Wildlife Service, U.S. Department of the Interior

OBL: obligate wetland; occur almost always under natural conditions in wetlands
FACW: facultative wetland; usually occur in wetlands, but occasionally found in non-wetlands
FAC: equally likely to occur in wetlands or non-wetlands
UPL: occur almost always under natural conditions in non-wetlands
+ : more frequently found in specified condition
- : less frequently found in specified condition

Several of these species, including red maple, yellow birch, black birch, ash, Japanese barberry, ironwood, multiflora rose, viburnum (arrowwood), were noted to be growing within the wooded upland areas. In addition, spicebush, jack-in-the-pulpit and jewelweed are often observed within moderately drained upland areas. Based on the dominant vegetation observed within the wetlands and its similarity to the vegetation within the adjacent uplands and the fact that these wetlands are groundwater discharge areas, the reduction of surface water flow into these small wetland areas will not significantly decrease the minimal functions provided by the wetland areas. Surface

water flow reduction is more of a concern for small vernal pool areas that are typically dependant on surface water for filling.

Comment #7: Wetland Evaluation – Functions and Values

No wetland assessment methodology was or is required by the Town of Easton. Our assessment provides significant description as to why each wetland does or does not provide a specific function and how each wetland was rated for those functions on an on-site basis. This information is included as Appendix II of our report, dated August 20, 2014. The overall existing conditions and functions of the wetlands have not changed since our involvement in the project when it began in 2008. We use the Highway Methodology on many wetland description jobs that have significant impacts to wetlands and that will be submitted to the Army Corps for review. This project does not have a significant adverse impact on wetland functions provided on the site and mitigation in the form of wetland restoration and buffer plantings will be provided to compensate for the direct wetland impact.

Respectfully submitted,

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

Jennifer L. Beno
Biologist

AFFORDABILITY PLAN FOR
Easton Crossing

SUBMISSION DRAFT
August 7, 2014
(Revised to November 3, 2014)

Submitted by Saddle Ridge Developers, LLC
to the Easton Planning and Zoning Commission

PREPARED BY:
Shipman & Goodwin LLP
One Constitution Plaza
Hartford, CT 06103-1919
(860) 251-5000

administrative permits or approvals. The standards and specifications applicable to the Community are set forth in Schedule B, attached.

V. Entity Responsible for Administration and Compliance.

This Affordability Plan will be administered by the Developer during initial construction and then transferred to the Home Owners Association or its successors and assigns which may include the Town of Easton if it establishes a Housing Authority (the "Administrator"), who shall also be the principal point of contact under this Plan.

The Administrator shall submit annually a written status report to the Commission or its designee. The role of Administrator may be transferred or assigned to another entity, provided that such entity has the experience and qualifications to administer this Plan. In the event of any assignment of the role of Administrator, the prior Administrator, or its successors, will provide prior written notice to the Commission.

VI. Notice of Initial Rental of PAAA Units.

The Administrator shall provide notice of the availability for rental of each PAAA Unit. Such notice shall be provided, at a minimum, by advertising at least two times in a newspaper of general circulation in the Town of Easton. The Administrator shall also provide such notice to the Commission and to the Clerk of the Town of Easton. Such notice shall include a description of the PAAA Unit(s), the eligibility criteria for potential residents, the maximum rental price (as hereinafter defined), and the availability of application forms and additional information. All such notices shall comply with the federal Fair Housing Act, 42 U.S.C. §§ 3601 *et seq.* and the Connecticut Fair Housing Act, General Statutes §§ 46a-64b *et seq.* (together, the "Fair Housing Acts").

VII. Resident Eligibility.

Eligibility of applicants to rent a PAAA Unit shall be determined in accordance with this Plan and General Statutes § 8-30g as amended through 2014.

VIII. Application Process.

A person seeking to rent one of the PAAA Units ("Applicant") must complete an application to demonstrate eligibility. The application form and process shall comply with the Fair Housing Acts.

A. Application Form.

The application form shall be provided by the Administrator and shall include an income certification form. In general, "income" for purposes of determining an Applicant's qualification shall include the Applicant family's total anticipated income from all sources for the twelve (12) month period following the date the lease commences (the "Lease Begin Date"). If the Applicant's financial disclosures indicate that the Applicant may experience a significant change

SCHEDULE A
DESIGNATION OF ACCESSORY AFFORDABLE APARTMENTS

Total number of units:

Market-Rate Units		48
Accessory Affordable Apartment Units		20
	Total	68

The specific homes containing Accessory Affordable Apartment are dispersed throughout the Community on 20 of the following 32 lots:

LOT NUMBERS

1	14	25	35
3	16	26	40
6	18	27	41
7	19	28	43
8	20	30	44
9	21	31	45
10	22	32	47
11	23	33	48

LOT NUMBERS ORGANIZED BUT CONSTRUCTION PHASE

Phase	Lots
1	**16, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 30**
2	**11, 31, 32, 35**
3	**6, 7, 8, 9**
4	**1, 3, 40**
5	**41, 43, 45, 46, 48**

18th and 19th Century Architecture

RESPONSE TO LETTER FROM EASTON BUILDING OFFICIAL DATED SEPTEMBER 16, 2014

In the text below, comments and questions excerpted Mr. Hayes' letter from are in *italics*, and the applicant's responses are in **bold**.

1. *Design for The Georgian is a four (4) bedroom three and one half bath (3 1/2) residence with a one bedroom one bath apartment over the garage. This is considered an accessory use as it is contiguous on the interior of the residence and can be used as single family dwelling.*

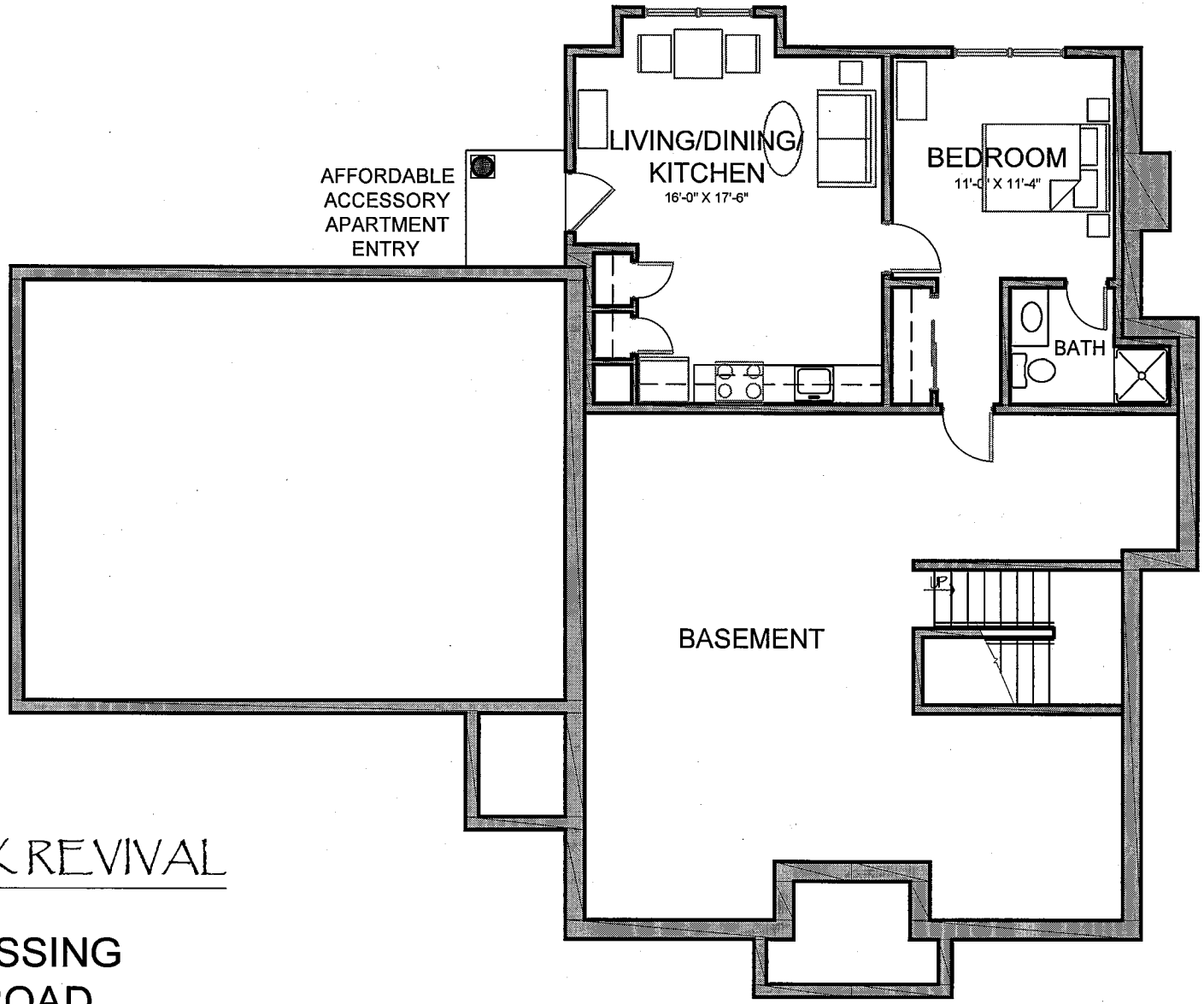
RESPONSE: **Comment noted.**

2. *Design for The Greek Revival is a four (4) bedroom three and one half bath (3 1/2) residence with a one bedroom one bath apartment in a lower level walk out at the rear of the building. This is considered a two (2) family dwelling because it is completely separate from the residence and could not be used as a single family residence.*

RESPONSE: **The affordable accessory apartment contained in the Greek Revival design is intended to have an interior access doorway to the primary residence. Please see attached revised floor plan.**

3. *Design for The Federal is a four (4) bedroom three and one half bath (3 1/2) residence without any other living space or apartments.*

RESPONSE: **Comment noted.**



THE GREEK REVIVAL

EASTON CROSSING
SPORT HILL ROAD
EASTON, CT

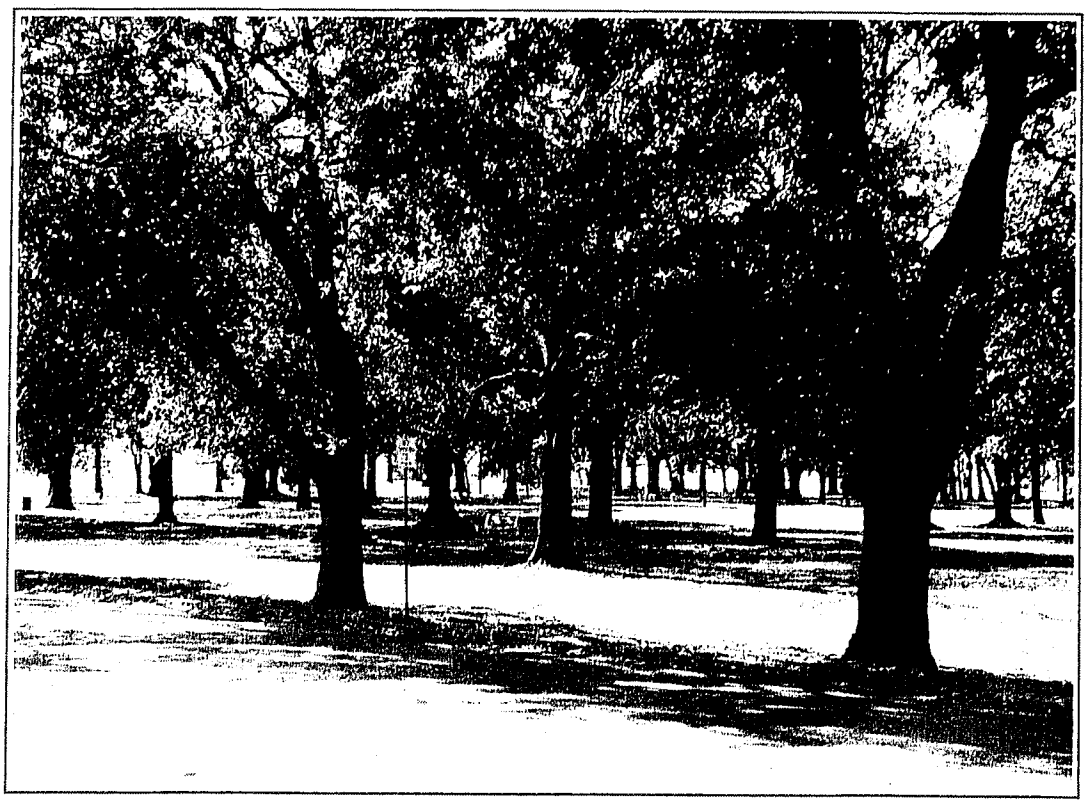
REVISED BASEMENT PLAN

1/8"=1'-0"

Greater Bridgeport Planning Region

Growth Management Alternatives

Regional Conservation & Development Plan Update



Greater Bridgeport Regional Planning Agency

January 2008

2. Defined Geographic Planning Areas

Following the conversion of the 1990 *Plan Alternatives* report, the Region was divided into four (4) planning areas: Central Business District (CBD), Urban, Suburban and Rural areas. In the case of data calculation, they were identified along the boundaries of TAZ, 2000 census urban/rural population boundaries, transit access ring and community activity ring. At this level, the initial Region-wide population and employment forecasts for the growth scenarios were made. They also operated as central totals for the Region when allocating population and employment on a TAZ basis.

3. Focus of Growth

Focus of growth zones, identified along TAZ boundary lines where possible, or then by land use polygons (see next paragraph), were established for each plan alternative. These zones dictated where future development would take place under the corresponding scenario. More detail is provided on these under the specific alternative section of this report.

4. Land Use Pattern Map

The GBRPA GIS-based land use map was vital to the spatial presentation of future growth. However, to be compatible for the report some modifications were made:

- The land use polygons were split along TAZ boundaries to allow for tabulation/summarization of land use by TAZ.
- The present GIS-based land use map developed by the GBRPA is divided into too many land use categories which complicates the project. Since population and employment and their density was the focus of the report, the map was simplified to incorporate only the following categories:

  Residential

  - Low Density (less than 2 dwelling units per acre)
  - Medium Density (2 to 7 dwelling units per acre)
  - High Density (8 or more dwelling units per acre)

  Employment (Commercial, Industry, Infrastructure & Services)

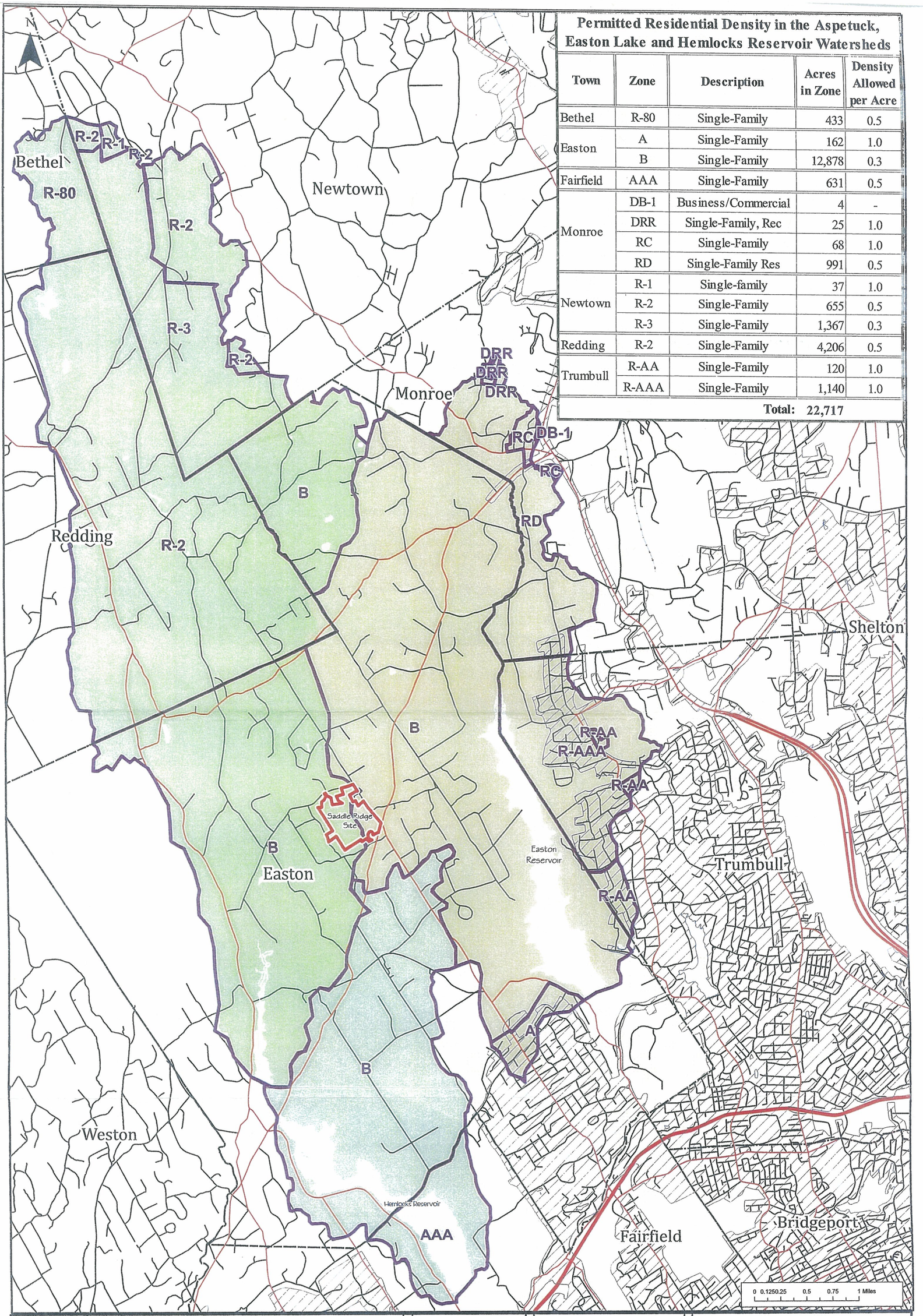
  - Low Density (less than 25 jobs per acre)
  - Medium Density (25 to 74 jobs per acre)
  - High Density (75 or more jobs per acre)

  Land Available for Growth

  - Bridgeport Hydraulic Company (BHC) Class III
  - Brownfields
  - Vacant Land
  - Underutilized Land

  Environmentally Sensitive Lands

  - Agricultural



Permitted Residential Density in the Aspetuck, Easton Lake and Hemlocks Reservoir Watersheds

Town	Zone	Description	Acres in Zone	Density Allowed per Acre
Bethel	R-80	Single-Family	433	0.5
Easton	A	Single-Family	162	1.0
	B	Single-Family	12,878	0.3
Fairfield	AAA	Single-Family	631	0.5
Monroe	DB-1	Business/Commercial	4	-
	DRR	Single-Family, Rec	25	1.0
	RC	Single-Family	68	1.0
	RD	Single-Family Res	991	0.5
Newtown	R-1	Single-family	37	1.0
	R-2	Single-Family	655	0.5
	R-3	Single-Family	1,367	0.3
Redding	R-2	Single-Family	4,206	0.5
Trumbull	R-AA	Single-Family	120	1.0
	R-AAA	Single-Family	1,140	1.0
		Total:	**22,717**	

DESIGNED: RA | DRAFN: | CHECKED: MZ

DATE: OCTOBER 20, 2010

PROJECT NO: 2683-01-17

FILE NAME:

SHEET NO

SADDLE RIDGE DEVELOPMENT

ZONING ANALYSIS

EASTON, CONNECTICUT

REVISIONS

April 28, 2011

Engineering, Landscape Architecture and Environmental Science

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Aspetuck Reservoir
Easton Lake Reservoir
Hemlocks Reservoir
Public Water Service Area
Zoning
Town Boundary

SOURCE WATER ASSESSMENT REPORT

AN EVALUATION OF THE SUSCEPTIBILITY OF PUBLIC DRINKING WATER SOURCES TO POTENTIAL CONTAMINATION

CT0150011

Aquarion Water Company of Connecticut
Easton Reservoir System

The State of Connecticut Department of Public Health (DPH) in cooperation with the Department of Environmental Protection (DEP) recently completed an initial assessment of the Easton Reservoir System, which is a source of public drinking water that is maintained and operated by the Aquarion Water Company of Connecticut. This one-time assessment is part of a nationwide effort mandated by Congress under the Safe Drinking Water Act Amendments of 1996 to evaluate the susceptibility of all public drinking water sources in Connecticut to potential sources of contamination. DPH began working in partnership with the DEP in 1997 to develop Connecticut's Source Water Assessment Program, which was approved by the U.S. Environmental Protection Agency in 1999. Sources of potential contamination that are of concern to public drinking water supplies here in Connecticut are generally associated with historic waste disposal or commercial, industrial, agricultural and residential properties that store or use hazardous materials like petroleum products, solvents or agricultural chemicals.

The assessment is intended to provide Aquarion Water Company of Connecticut consumers with information about where their public drinking water comes from, sources of potential contamination that could impact it, and what can be done to help protect it. This initial assessment complete will also assist the public water supply system, regional planners, local government, public health officials and state agencies in evaluating the degree to which the Easton Reservoir System may be at risk from potential sources of contamination. The assessment can be used to target and implement enhanced source water protection measures such as routine inspections, protective land use regulations, acquisition of critical land, proper septic system maintenance, and public education. General sources of contamination with the potential to impact the Easton Reservoir System include properties with underground fuel storage tanks, improperly maintained on-site septic systems, improper waste disposal, or commercial/industrial sites that store or use chemicals or generate hazardous wastes.

Easton Reservoir System Source Water Assessment Summary

STRENGTHS

Point source pollution discharge points not present in this watershed area

More than 30% of the watershed area is owned by the public water system

More than 30% of the land in the watershed area exists as preserved open space

Public water system has a comprehensive source protection program.

POTENTIAL RISK FACTORS

Potential contaminant sources present in the watershed

Local regulations or zoning initiatives for the protection of public drinking water sources do not exist

Susceptibility Rating

Rating	Environmental Sensitivity	Potential Risk Factors	Source Protection Needs
Low	X		X
Moderate		X	
High			

Overall Susceptibility Rating: Low

This rating indicates susceptibility to potential sources of contamination that may be in the source water area and does not necessarily imply poor water quality.

Detailed information about the specific factors and information used in establishing this rating can be found in Table 2. Information about opportunities to improve protection in the Easton Reservoir System is also presented in Table 2.

DEPARTMENT OF PUBLIC HEALTH

Keeping Connecticut Healthy

State of Connecticut Department of Public Health
Drinking Water Division
410 Capitol Avenue – MS# 51WAT
P.O. Box 340308 Hartford, CT 06134
(860) 509-7333

Produced With Funding Provided By The United States Environmental Protection Agency - May 2003

OVERVIEW - The Easton Reservoir System watershed encompasses some 10,766 acres of land in Easton, Monroe, Newtown, Redding, and Trumbull. Approximately 31.6% of this watershed is owned by the Aquarion Water Company of Connecticut. Public drinking water sources in this system include Easton Lake Reservoir and West Pequonnock Diversion. State-wide satellite imagery developed by the University of Connecticut indicates that undeveloped land and residential properties presently account for approximately 86.7% percent of the land cover in the Easton Reservoir System. Commercial development at 3.4% and agricultural land use at 9.9% account for the remainder of the land coverage in the source water area. Approximately 36.4% of the land in the watershed area is preserved including all watershed land owned by the Aquarion Water Company of Connecticut, state forest and parklands, and municipally or privately held land designated as open space. Information about drinking water quality and treatment is available in the Aquarion Water Company of Connecticut's annual Consumer Confidence Report.

ASSESSMENT METHODS.

The drinking water source assessment methods used by the Department of Public Health Drinking Water Division to evaluate the susceptibility of public drinking water sources to contamination are based on criteria individually tailored to surface water and groundwater sources. The criteria are keyed to sanitary conditions in the source water area, the presence of potential or historic sources of contamination, existing land use coverage's, and the need for additional source protection measures within the source water area. Source-specific data for community and non-community systems were used to determine whether a particular criterion should be rated as low, moderate or high, relative to the risk of potential contamination at the drinking water source. Further, a ranking system was used to compute an average rank for each community drinking water source based on its environmental sensitivity, potential risk of contamination and source protection needs. Watersheds and reservoirs rated as having a low, moderate or high susceptibility to potential sources of contamination generally exhibit the characteristics summarized in Table 1.

Table 1 – General Watershed Area Characteristics and Susceptibility Ratings

Susceptibility Rating	General Characteristics of the Watershed Area*
Low	Low density of potential contaminant sources Lower intensity of land development
Moderate	Low to moderate density of potential contaminant sources Moderate intensity of land development
High	Moderate to high density of potential contaminant sources Higher intensity of land development No local watershed protection regulations Detectable nitrates and/or volatile organic chemicals in the untreated source water during the past three years that are below the maximum contaminant levels allowed by state and federal drinking water regulations

** Note: Not all characteristics may be present for a given susceptibility rating*

Readers of this assessment are encouraged to use the attached glossary to assist in the understanding of the terms and concepts used throughout this report.

Maps representing the location and features of the Easton Reservoir System source water area have not been included with this assessment report because of homeland security concerns.

EASTON RESERVOIR SYSTEM ASSESSMENT RESULTS.

Based on a combination of current reservoir and watershed area conditions, existing potential contaminant sources, and the level of source protection measures currently in place, the source water assessment for this watershed system indicates that it has an overall Low risk of contamination from any identified potential sources of contamination. The assessment findings for the Easton Reservoir System are summarized in Table 2, which lists current conditions in the source water area and recommendations or opportunities to enhance protection of this public drinking water source. A listing of potential contaminant source types in the area, if present, can be found in Table 3. A summary of source water area features is shown in Table 4. It should be noted that this rating does not necessarily imply poor water quality or ongoing violations of the Connecticut Public Health Code.

The assessment of this and other comparable watershed areas throughout Connecticut generally finds that adopting recommendations similar to those presented in Table 2 could reduce the susceptibility of most surface water sources to potential sources of contamination.

Table 2 **Source Water Assessment Findings and Source Protection Opportunities For the Easton Reservoir System**

Assessment Category	Conditions as of June 2002	Recommendations and Source Protection Opportunities
Environmental Sensitivity Factors	Predominant watershed topography characterized by gentle slopes Reservoirs have moderate capacity to support excessive growths of algae and plankton	Monitor runoff during heavy precipitation events Monitor reservoir nutrient levels for source waters classified as eutrophic or mesotrophic.
Contaminants Detected in Untreated Source Water	None Click here to review EPA's current drinking water standards	Encourage homeowners to adopt residential best management practices that minimize the use of hazardous materials or generation of hazardous waste in the watershed.
Potential Risk Factors	Potential contaminant sources present in the watershed More than 50% of land for this source water area is undeveloped, which could present a risk if developed inappropriately. Major state or interstate roadways present in the watershed Known contaminant release points present in the watershed	Periodically inspect these sites and maintain a water quality monitoring program consistent with the level of potential risk Proactively work with local officials and developers to insure that only low-risk development occurs within the watershed area Monitor road salt and herbicide usage along these roadways and address potential for hazardous material spills resulting from vehicular accidents Maintain an adequate level of surveillance around contaminant release point sites to insure that surface water contamination is not occurring Encourage residential property owners to inspect and regularly cleanout onsite septic systems and replace underground fuel storage tanks with above ground tanks.
Source Protection Needs Factors	More than 30% of the watershed area is owned by the public water system Local regulations or zoning initiatives for the protection of public drinking water sources do not exist Comprehensive plans and policies for the protection of public drinking water sources do not exist at the local government level Point source pollution discharge points not present in this watershed area	Establish local watershed protection regulations to protect public drinking water sources Develop or enhance local governmental plans and policies that favor the protection of public drinking water sources Support environmental awareness and education within the community.

Inventoried significant potential contaminant sources present in the Easton Reservoir System source water area are listed in Table 3. While these facilities, if present, have the potential to cause surface water contamination; there is no indication that they are doing so at this time.

Table 3 – Summary of Significant Potential Contaminant Types in the Easton Reservoir System Source Water Area

Category	Subcategory	Number of SPCS Types
Waste Storage, Handling, Disposal	Hazardous Waste Facilities	8
	Solid Waste Facilities	0
	Miscellaneous	3
Bulk Chemical, Petroleum Storage	Underground Storage Tanks	0
	Tank Farms	0
	Warehouses	1
Industrial Manufacturing / Processing	Chemical & Allied Production	0
	Chemical Use Processing	1
	Miscellaneous	0
Commercial Trades and Services	Automotive and Related Services	4
	Chemical Use Services	0
	Miscellaneous	0
Miscellaneous	No Identifiable SPCS Type	0
Agricultural Operations	Animal or Livestock Waste Handling	1
	Pesticide Storage or Application	1
Total Number of Contaminant Types		19

Prominent features of the Easton Reservoir System source water area are summarized in Table 4.

Table 4 - Features of the Easton Reservoir System

Location of Watershed Area	Easton, Monroe, Newtown, Redding, and Trumbull
Name of Reservoir(s) and Diversion(s)	Easton Lake Reservoir and West Pequonnock Diversion
Number and Type of Public Drinking Water Reservoirs or Diversions in the Watershed	1 Distribution and 1 Transfer
Trophic Status of Reservoir(s)	2 Mesotrophic
DEP Surface Water Classification	AA
Watershed Area (total acreage)	10,766 acres
Preserved Land in the Watershed [a]	3,919 acres
Predominant Watershed Topography	gentle slopes
General Land Use and Land Cover in the Watershed [b] -Urban - Commercial or Industrial -Urban - Residential -Agricultural -Undeveloped Land	 3.4% 11.3% 9.9% 75.4%
Significant Potential Contamination Sources -Number of inventoried facilities in source water area [c] -Count of inventoried facilities per square mile -Number of contaminant types within inventoried facilities	 20 1.19 per sq mile 19
Number of Contaminant Release Points Inventoried by CTDEP [d]	1

[a] Preserved land includes any combination of land owned by the public water supply, state forest and parklands, and municipally or privately held land designated as open space.

[b] Based on statewide data layer of land use and land cover developed by UCONN Dept of Natural Resource Management Engineering and Connecticut DEP satellite imagery averaged across the entire watershed.

[c] Inventoried facilities reflect the actual number of SPCS sites present in the source water area, which may have more than 1 type of contaminant present at the facility.

[d] Sites or locations with documented accidental spills, leaks or discharges. While these sources, which are cataloged and tracked by the Connecticut DEP, may fall within a public drinking water supply source water area, they may or may not presently be discharging to the environment or causing contamination of a public drinking water source.

SOURCE WATER ASSESSMENT REPORT

AN EVALUATION OF THE SUSCEPTIBILITY OF PUBLIC DRINKING WATER SOURCES TO POTENTIAL CONTAMINATION

CT0150011

Aquarion Water Company of Connecticut
Hemlocks Reservoir System

The State of Connecticut Department of Public Health (DPH) in cooperation with the Department of Environmental Protection (DEP) recently completed an initial assessment of the Hemlocks Reservoir System, which is a source of public drinking water that is maintained and operated by the Aquarion Water Company of Connecticut. This one-time assessment is part of a nationwide effort mandated by Congress under the Safe Drinking Water Act Amendments of 1996 to evaluate the susceptibility of all public drinking water sources in Connecticut to potential sources of contamination. DPH began working in partnership with the DEP in 1997 to develop Connecticut's Source Water Assessment Program, which was approved by the U.S. Environmental Protection Agency in 1999. Sources of potential contamination that are of concern to public drinking water supplies here in Connecticut are generally associated with historic waste disposal or commercial, industrial, agricultural and residential properties that store or use hazardous materials like petroleum products, solvents or agricultural chemicals.

The assessment is intended to provide Aquarion Water Company of Connecticut consumers with information about where their public drinking water comes from, sources of potential contamination that could impact it, and what can be done to help protect it. This initial assessment complete will also assist the public water supply system, regional planners, local government, public health officials and state agencies in evaluating the degree to which the Hemlocks Reservoir System may be at risk from potential sources of contamination. The assessment can be used to target and implement enhanced source water protection measures such as routine inspections, protective land use regulations, acquisition of critical land, proper septic system maintenance, and public education. General sources of contamination with the potential to impact the Hemlocks Reservoir System include properties with underground fuel storage tanks, improperly maintained on-site septic systems, improper waste disposal, or commercial/industrial sites that store or use chemicals or generate hazardous wastes.

Hemlocks Reservoir System Source Water Assessment Summary

STRENGTHS

Point source pollution discharge points not present in this watershed area

20 to 30 percent of watershed area is owned by public water system

More than 30% of the land in the watershed area exists as preserved open space

Public water system has a comprehensive source protection program.

POTENTIAL RISK FACTORS

Potential contaminant sources present in the watershed

Local regulations or zoning initiatives for the protection of public drinking water sources do not exist

Susceptibility Rating

Rating	Environmental Sensitivity	Potential Risk Factors	Source Protection Needs
Low	X	X	
Moderate			X
High			

Overall Susceptibility Rating: Low

This rating indicates susceptibility to potential sources of contamination that may be in the source water area and does not necessarily imply poor water quality.

Detailed information about the specific factors and information used in establishing this rating can be found in Table 2. Information about opportunities to improve protection in the Hemlocks Reservoir System is also presented in Table 2.

DEPARTMENT OF PUBLIC HEALTH

Keeping Connecticut Healthy

State of Connecticut Department of Public Health
Drinking Water Division
410 Capitol Avenue – MS# 51WAT
P.O. Box 340308 Hartford, CT 06134
(860) 509-7333

Produced With Funding Provided By The United States Environmental Protection Agency - May 2003

OVERVIEW - The Hemlocks Reservoir System watershed encompasses some 36,946 acres of land in Bethel, Danbury, Easton, Fairfield, Newtown, Redding, Ridgefield, and Weston. Approximately 25.7% of this watershed is owned by the Aquarion Water Company of Connecticut. Public drinking water sources in this system include Aspetuck, Hemlocks, and Saugatuck reservoirs and the Morehouse Brook Diversion. State-wide satellite imagery developed by the University of Connecticut indicates that undeveloped land and residential properties presently account for approximately 87.6% percent of the land cover in the Hemlocks Reservoir System. Commercial development at 0.5% and agricultural land use at 11.9% account for the remainder of the land coverage in the source water area. Approximately 36.8% of the land in the watershed area is preserved including all watershed land owned by the Aquarion Water Company of Connecticut, state forest and parklands, and municipally or privately held land designated as open space. Information about drinking water quality and treatment is available in the Aquarion Water Company of Connecticut's annual Consumer Confidence Report.

ASSESSMENT METHODS.

The drinking water source assessment methods used by the Department of Public Health Drinking Water Division to evaluate the susceptibility of public drinking water sources to contamination are based on criteria individually tailored to surface water and groundwater sources. The criteria are keyed to sanitary conditions in the source water area, the presence of potential or historic sources of contamination, existing land use coverage's, and the need for additional source protection measures within the source water area. Source-specific data for community and non-community systems were used to determine whether a particular criterion should be rated as low, moderate or high, relative to the risk of potential contamination at the drinking water source. Further, a ranking system was used to compute an average rank for each community drinking water source based on its environmental sensitivity, potential risk of contamination and source protection needs. Watersheds and reservoirs rated as having a low, moderate or high susceptibility to potential sources of contamination generally exhibit the characteristics summarized in Table 1.

Table 1 – General Watershed Area Characteristics and Susceptibility Ratings

Susceptibility Rating	General Characteristics of the Watershed Area*
Low	Low density of potential contaminant sources Lower intensity of land development
Moderate	Low to moderate density of potential contaminant sources Moderate intensity of land development
High	Moderate to high density of potential contaminant sources Higher intensity of land development No local watershed protection regulations Detectable nitrates and/or volatile organic chemicals in the untreated source water during the past three years that are below the maximum contaminant levels allowed by state and federal drinking water regulations

** Note: Not all characteristics may be present for a given susceptibility rating*

Readers of this assessment are encouraged to use the attached glossary to assist in the understanding of the terms and concepts used throughout this report.

Maps representing the location and features of the Hemlocks Reservoir System source water area have not been included with this assessment report because of homeland security concerns.

HEMLOCKS RESERVOIR SYSTEM ASSESSMENT RESULTS.

Based on a combination of current reservoir and watershed area conditions, existing potential contaminant sources, and the level of source protection measures currently in place, the source water assessment for this watershed system indicates that it has an overall Low risk of contamination from any identified potential sources of contamination. The assessment findings for the Hemlocks Reservoir System are summarized in Table 2, which lists current conditions in the source water area and recommendations or opportunities to enhance protection of this public drinking water source. A listing of potential contaminant source types in the area, if present, can be found in Table 3. A summary of source water area features is shown in Table 4.

The assessment of this and other comparable watershed areas throughout Connecticut generally finds that adopting recommendations similar to those presented in Table 2 could reduce the susceptibility of most surface water sources to potential sources of contamination.

Table 2 Source Water Assessment Findings and Source Protection Opportunities For the Hemlocks Reservoir System

Assessment Category	Conditions as of June 2002	Recommendations and Source Protection Opportunities
Environmental Sensitivity Factors	Predominant watershed topography characterized by moderate slopes Reservoirs have moderate or unknown capacity to support excessive growths of algae and plankton	Monitor runoff during heavy precipitation events Monitor reservoir nutrient levels in eutrophic or mesotrophic sources and determine trophic status of source waters listed as unknown
Contaminants Detected in Untreated Source Water	None Click here to review EPA's current drinking water standards	Encourage homeowners to adopt residential best management practices that minimize the use of hazardous materials or generation of hazardous waste in the watershed.
Potential Risk Factors	Potential contaminant sources present in the watershed More than 50% of land for this source water area is undeveloped, which could present a risk if developed inappropriately. Major state or interstate roadways present in the watershed Known contaminant release points present in the watershed	Periodically inspect these sites and maintain a water quality monitoring program consistent with the level of potential risk Proactively work with local officials and developers to insure that only low-risk development occurs within the watershed area Monitor road salt and herbicide usage along these roadways and address potential for hazardous material spills resulting from vehicular accidents Maintain an adequate level of surveillance around contaminant release point sites to insure that surface water contamination is not occurring Encourage residential property owners to inspect and regularly cleanout onsite septic systems and replace underground fuel storage tanks with above ground tanks.
Source Protection Needs Factors	20 to 30 percent of watershed area is owned by public water system Local regulations or zoning initiatives for the protection of public drinking water sources do not exist Comprehensive plans and policies for the protection of public drinking water sources do not exist at the local government level Point source pollution discharge points not present in this watershed area	Establish local watershed protection regulations to protect public drinking water sources Develop or enhance local governmental plans and policies that favor the protection of public drinking water sources Support environmental awareness and education within the community.

Inventoried significant potential contaminant sources present in the Hemlocks Reservoir System source water area are listed in Table 3. While these facilities, if present, have the potential to cause surface water contamination; there is no indication that they are doing so at this time.

SOURCE WATER ASSESSMENT REPORT

AN EVALUATION OF THE SUSCEPTIBILITY OF PUBLIC DRINKING WATER SOURCES TO POTENTIAL CONTAMINATION

CT0150011

Aquarion Water Company of Connecticut
Trap Falls Reservoir System

The State of Connecticut Department of Public Health (DPH) in cooperation with the Department of Environmental Protection (DEP) recently completed an initial assessment of the Trap Falls Reservoir System, which is a source of public drinking water that is maintained and operated by the Aquarion Water Company of Connecticut. This one-time assessment is part of a nationwide effort mandated by Congress under the Safe Drinking Water Act Amendments of 1996 to evaluate the susceptibility of all public drinking water sources in Connecticut to potential sources of contamination. DPH began working in partnership with the DEP in 1997 to develop Connecticut's Source Water Assessment Program, which was approved by the U.S. Environmental Protection Agency in 1999. Sources of potential contamination that are of concern to public drinking water supplies here in Connecticut are generally associated with historic waste disposal or commercial, industrial, agricultural and residential properties that store or use hazardous materials like petroleum products, solvents or agricultural chemicals.

The assessment is intended to provide Aquarion Water Company of Connecticut consumers with information about where their public drinking water comes from, sources of potential contamination that could impact it, and what can be done to help protect it. This initial assessment complete will also assist the public water supply system, regional planners, local government, public health officials and state agencies in evaluating the degree to which the Trap Falls Reservoir System may be at risk from potential sources of contamination. The assessment can be used to target and implement enhanced source water protection measures such as routine inspections, protective land use regulations, acquisition of critical land, proper septic system maintenance, and public education. General sources of contamination with the potential to impact the Trap Falls Reservoir System include properties with underground fuel storage tanks, improperly maintained on-site septic systems, improper waste disposal, or commercial/industrial sites that store or use chemicals or generate hazardous wastes.

Trap Falls Reservoir System Source Water Assessment Summary

STRENGTHS

Point source pollution discharge points not present in this watershed area

Public water system has a comprehensive source protection program.

POTENTIAL RISK FACTORS

Potential contaminant sources present in the watershed

Less than 20% of watershed area owned by public water system

Local regulations or zoning initiatives for the protection of public drinking water sources do not exist

Susceptibility Rating

Rating	Environmental Sensitivity	Potential Risk Factors	Source Protection Needs
Low	X		
Moderate		X	
High			X

Overall Susceptibility Rating: Moderate

This rating indicates susceptibility to potential sources of contamination that may be in the source water area and does not necessarily imply poor water quality.

Detailed information about the specific factors and information used in establishing this rating can be found in Table 2. Information about opportunities to improve protection in the Trap Falls Reservoir System is also presented in Table 2.

DEPARTMENT OF PUBLIC HEALTH

Keeping Connecticut Healthy

State of Connecticut Department of Public Health
Drinking Water Division
410 Capitol Avenue – MS# 51WAT
P.O. Box 340308 Hartford, CT 06134
(860) 509-7333

Produced With Funding Provided By The United States Environmental Protection Agency - May 2003

OVERVIEW - The Trap Falls Reservoir System watershed encompasses some 9,883 acres of land in Monroe, Shelton, and Trumbull. Approximately 17.6% of this watershed is owned by the Aquarion Water Company of Connecticut. Public drinking water sources in this system include Far Mill, Means Brook and Trap Falls reservoirs. State-wide satellite imagery developed by the University of Connecticut indicates that undeveloped land and residential properties presently account for approximately 86.7% percent of the land cover in the Trap Falls Reservoir System. Commercial development at 1.6% and agricultural land use at 11.6% account for the remainder of the land coverage in the source water area. Approximately 19.7% of the land in the watershed area is preserved including all watershed land owned by the Aquarion Water Company of Connecticut, state forest and parklands, and municipally or privately held land designated as open space. Information about drinking water quality and treatment is available in the Aquarion Water Company of Connecticut's annual Consumer Confidence Report.

ASSESSMENT METHODS.

The drinking water source assessment methods used by the Department of Public Health Drinking Water Division to evaluate the susceptibility of public drinking water sources to contamination are based on criteria individually tailored to surface water and groundwater sources. The criteria are keyed to sanitary conditions in the source water area, the presence of potential or historic sources of contamination, existing land use coverage's, and the need for additional source protection measures within the source water area. Source-specific data for community and non-community systems were used to determine whether a particular criterion should be rated as low, moderate or high, relative to the risk of potential contamination at the drinking water source. Further, a ranking system was used to compute an average rank for each community drinking water source based on its environmental sensitivity, potential risk of contamination and source protection needs. Watersheds and reservoirs rated as having a low, moderate or high susceptibility to potential sources of contamination generally exhibit the characteristics summarized in Table 1.

Table 1 – General Watershed Area Characteristics and Susceptibility Ratings

Susceptibility Rating	General Characteristics of the Watershed Area*
Low	Low density of potential contaminant sources Lower intensity of land development
Moderate	Low to moderate density of potential contaminant sources Moderate intensity of land development
High	Moderate to high density of potential contaminant sources Higher intensity of land development No local watershed protection regulations Detectable nitrates and/or volatile organic chemicals in the untreated source water during the past three years that are below the maximum contaminant levels allowed by state and federal drinking water regulations

** Note: Not all characteristics may be present for a given susceptibility rating*

Readers of this assessment are encouraged to use the attached glossary to assist in the understanding of the terms and concepts used throughout this report.

Maps representing the location and features of the Trap Falls Reservoir System source water area have not been included with this assessment report because of homeland security concerns.

TRAP FALLS RESERVOIR SYSTEM ASSESSMENT RESULTS.

Based on a combination of current reservoir and watershed area conditions, existing potential contaminant sources, and the level of source protection measures currently in place, the source water assessment for this watershed system indicates that it has an overall Moderate risk of contamination from any identified potential sources of contamination. The assessment findings for the Trap Falls Reservoir System are summarized in Table 2, which lists current conditions in the source water area and recommendations or opportunities to enhance protection of this public drinking water source. A listing of potential contaminant source types in the area, if present, can be found in Table 3. A summary of source water area features is shown in Table 4. It should be noted that this rating does not necessarily imply poor water quality or ongoing violations of the Connecticut Public Health Code.

The assessment of this and other comparable watershed areas throughout Connecticut generally finds that adopting recommendations similar to those presented in Table 2 could reduce the susceptibility of most surface water sources to potential sources of contamination.

Table 2 Source Water Assessment Findings and Source Protection Opportunities For the Trap Falls Reservoir System

Assessment Category	Conditions as of June 2002	Recommendations and Source Protection Opportunities
Environmental Sensitivity Factors	Predominant watershed topography characterized by gentle slopes Reservoirs have moderate to high capacity to support excessive growths of algae and plankton	Monitor runoff during heavy precipitation events Monitor reservoir nutrient levels for source waters classified as eutrophic or mesotrophic.
Contaminants Detected in Untreated Source Water	None Click here to review EPA's current drinking water standards	Encourage homeowners to adopt residential best management practices that minimize the use of hazardous materials or generation of hazardous waste in the watershed.
Potential Risk Factors	Potential contaminant sources present in the watershed More than 50% of land for this source water area is undeveloped, which could present a risk if developed inappropriately. Major state or interstate roadways present in the watershed Known contaminant release points present in the watershed	Periodically inspect these sites and maintain a water quality monitoring program consistent with the level of potential risk Proactively work with local officials and developers to insure that only low-risk development occurs within the watershed area Monitor road salt and herbicide usage along these roadways and address potential for hazardous material spills resulting from vehicular accidents Maintain an adequate level of surveillance around contaminant release point sites to insure that surface water contamination is not occurring Encourage residential property owners to inspect and regularly cleanout onsite septic systems and replace underground fuel storage tanks with above ground tanks.
Source Protection Needs Factors	Less than 20% of watershed area owned by public water system Less than 20% of the land in the source water area exists as preserved open space Local regulations or zoning initiatives for the protection of public drinking water sources do not exist Comprehensive plans and policies for the protection of public drinking water sources do not exist at the local government level Point source pollution discharge points not present in this watershed area	Increase ownership or control of watershed area whenever land becomes available for purchase or support land acquisition by public or private conservation/preservation organizations Support and encourage the acquisition of open space land within the watershed area Establish local watershed protection regulations to protect public drinking water sources Develop or enhance local governmental plans and policies that favor the protection of public drinking water sources Support environmental awareness and education within the community.

Inventoried significant potential contaminant sources present in the Trap Falls Reservoir System source water area are listed in Table 3. While these facilities, if present, have the potential to cause surface water contamination; there is no indication that they are doing so at this time.

Table 3 – Summary of Significant Potential Contaminant Types in the Trap Falls Reservoir System Source Water Area

Category	Subcategory	Number of SPCS Types
Waste Storage, Handling, Disposal	Hazardous Waste Facilities	4
	Solid Waste Facilities	1
	Miscellaneous	0
Bulk Chemical, Petroleum Storage	Underground Storage Tanks	8
	Tank Farms	0
	Warehouses	0
Industrial Manufacturing / Processing	Chemical & Allied Production	0
	Chemical Use Processing	1
	Miscellaneous	0
Commercial Trades and Services	Automotive and Related Services	2
	Chemical Use Services	0
	Miscellaneous	1
Miscellaneous	No Identifiable SPCS Type	1
Agricultural Operations	Animal or Livestock Waste Handling	0
	Pesticide Storage or Application	1
Total Number of Contaminant Types		19

Prominent features of the Trap Falls Reservoir System source water area are summarized in Table 4.

Table 4 - Features of the Trap Falls Reservoir System

Location of Watershed Area	Monroe, Shelton, and Trumbull
Name of Reservoir(s) and Diversion(s)	Far Mill, Means Brook and Trap Falls reservoirs
Number and Type of Public Drinking Water Reservoirs or Diversions in the Watershed	1 Distribution and 2 Storage
Trophic Status of Reservoir(s)	1 Mesotrophic and 2 Eutrophic
DEP Surface Water Classification	AA
Watershed Area (total acreage)	9,883 acres
Preserved Land in the Watershed [a]	1,948 acres
Predominant Watershed Topography	gentle slopes
General Land Use and Land Cover in the Watershed [b] -Urban - Commercial or Industrial -Urban - Residential -Agricultural -Undeveloped Land	 1.6% 19.7% 11.6% 67.1%
Significant Potential Contamination Sources -Number of inventoried facilities in source water area [c] -Count of inventoried facilities per square mile -Number of contaminant types within inventoried facilities	 13 0.84 per sq mile 19
Number of Contaminant Release Points Inventoried by CTDEP [d]	2

[a] Preserved land includes any combination of land owned by the public water supply, state forest and parklands, and municipally or privately held land designated as open space.

[b] Based on statewide data layer of land use and land cover developed by UCONN Dept of Natural Resource Management Engineering and Connecticut DEP satellite imagery averaged across the entire watershed.

[c] Inventoried facilities reflect the actual number of SPCS sites present in the source water area, which may have more than 1 type of contaminant present at the facility.

[d] Sites or locations with documented accidental spills, leaks or discharges. While these sources, which are cataloged and tracked by the Connecticut DEP, may fall within a public drinking water supply source water area, they may or may not presently be discharging to the environment or causing contamination of a public drinking water source.

DECLARATION
OF
EASTON CROSSING

ARTICLE I
SUBMISSIONS; DEFINED TERMS

Section 1.01. Submission of Real Estate. (a) Saddle Ridge Developers, Inc., a Connecticut corporation with an office at 68 Soundview Drive, Easton Connecticut, (the "Declarant"), does hereby submit the real property in the Town of Easton, Connecticut, described in Schedule A, and shown on a map entitled Easton Crossing, Sport Hill Road, Silver Hill Road, Cedar Hill Road & Westport Road, Easton Connecticut which map is recorded in the Office of the Town Clerk of Easton as map number _____ (the "Survey") to the provisions of the Connecticut Common Interest Ownership Act, §47-20 et. seq. of the Connecticut General Statutes, as amended (the "Act"), for the purpose of creating Easton Crossing.

Section 1.02. Defined Terms. Each capitalized term not otherwise defined in this Declaration or in the Survey shall have the meanings specified or used in the Act.

ARTICLE II
NAME, TYPE, AND DESCRIPTION OF COMMON INTEREST COMMUNITY AND ASSOCIATION

Section 2.01. Common Interest Community. The name of the Common Interest Community is Easton Crossing. Easton Crossing is a planned community.

Section 2.02. Association. The name of the Association is Easton Crossing Homeowners Association, Inc., a non-stock Connecticut Corporation ("Association").

Section 2.03. Description of Land. The Common Interest Community is situated in the Town of Easton, Connecticut, and is located on land described in Schedule A.

ARTICLE III
THE ASSOCIATION

Section 3.01. Authority. The business affairs of the Common Interest Community shall be managed by the Association. The Association shall be governed by its Bylaws, Rules and Regulations as amended from time to time.

Section 3.02. Powers.

(a) The Association shall have all of the powers, authority and duties permitted pursuant to the Act necessary and proper to manage the business and affairs of the Common Interest Community.

(b) The Association may assign its future income, including its rights to receive Common Expense assessments, only by the affirmative vote of Lot Owners which at least 51 percent of the votes in the Common Interest Community are allocated, at a meeting called for the purpose.

Section 3.03. Declarant Control. The Declarant shall have all the powers reserved in Section 47-245(d) of the Act to appoint and remove officers and directors of the Executive Board of the Association.

ARTICLE IV
LOTS

Section 4.1. Number of Lots. The number of Lots in the Common Interest Community is 48. The Declarant reserves no rights to create or add additional Lots.

Section 4.2. Identification of Lots. The identification of each Lot is the lot number shown on the Survey.

Section 4.3. Lot Boundaries. The boundaries of each Lot are the lot lines as shown on the Survey.

Section 4.4. Common Elements. The Common Elements shall consist of all portions of the Common Interest Community other than the Lots and the Easton town roads.

ARTICLE V
DEVELOPMENT RIGHTS AND OTHER SPECIAL DECLARANT RIGHTS

Section 5.01. Special Declarant Rights. The Declarant reserves the following Special Declarant Rights:

(a) the right to complete or make improvements indicated on the Survey;

(b) the right to maintain sales offices, management offices and models on one or more of the Lots or on the Common Elements;

(c) the right to maintain signs on the Common Interest Community to advertise the sale of Lots and/or homes in the Common Interest Community;

(d) the right to use, and permit others to use, easements through the Common Interest Community as may be reasonably necessary for the purpose of discharging its obligations under the Act and this Declaration; and

(e) the right to appoint or remove any officer of the Association or the Executive Board during the period of Declarant control to the extent permitted by Section 47-245(d) of the Act.

Section 5.02. Reservation of Development Rights. The Declarant reserves the right to construct underground lines, pipes, wires, ducts, conduits and other facilities across the Lots on the Survey for the purpose of furnishing utility and other services to other Lots. The Declarant also reserves the right to grant easements to public utility companies and to convey improvements within those easements anywhere in the Community for the above-mentioned purpose. If the Declarant grants any such easements, Schedule A shall be amended to include reference to the recorded easement(s).

Section 5.03. Special Declarant Rights.

(a) *Models, Sales Offices and Management Offices.* As long as the Declarant owns a Lot, the Declarant and its duly authorized agents, representatives and employees may maintain any Lot owned by the Declarant or any portion of the Common Elements as a model home, sales office or management office.

(b) *Construction; Declarant's Easement.* The Declarant reserves the right to perform warranty work, and repairs and construction work, and to store materials in secure areas and Common Elements, and further the right to control all such work and repairs, and the right of access thereto, until its completion. All work may be performed by the Declarant without the consent or approval of the Association. The Declarant has such an easement through the Common Elements as may be reasonably necessary for the purpose of discharging the Declarant's obligations or exercise Special Declarant Rights, whether arising under the Act or reserved in this Declaration, as amended.

Section 5.04. Limitation on Special Declarant Rights. Unless sooner terminated by a recorded instrument signed by the Declarant, any Special Declarant rights may be exercised by the Declarant for the period of time authorized by the Act, but in no event for more than 7 years from the recording of this Declaration.

ARTICLE VI
ALLOCATED INTERESTS

Section 6.01. Determination of Allocated Interests. The interests allocated to each Unit or Lot are calculated as follows:

(a) the percentage of liability for Common Expenses is 1/48 for each Lot; and

(b) each Lot in the Common Interest Community shall have an equal vote.

ARTICLE VII
RESTRICTIONS ON USE, ALIENATION AND OCCUPANY

Section 7.01. Use and Occupancy Restrictions. Subject to the Special Declarant Rights reserved under Article V, the following use restrictions apply to all Units or Lots and to the Common Elements:

(a) Each Lot is restricted to residential use as a single-family residence including home professional pursuits not requiring regular visits from the public or unreasonable levels of mail, shipping, trash or storage. No sign indicating commercial or professional uses may be displayed outside a Lot. A single-family residence is defined as a single housekeeping Lot, operating on a non-profit, non-commercial basis between its occupants, cooking and eating with common kitchen and dining area.

(b) The use of Lots and Common Elements is subject to the Bylaws and the Rules of the Association.

Section 7.02. Restraints on Alienation. A Lot may not be conveyed pursuant to a time-sharing plan as defined under Chapter 734b of the Connecticut General Statutes.

ARTCILE VIII
EASEMENTS AND LICENSES

Section 8.01. Encumbrances. All easements and licenses to which the Common Interest Community is presently subject are recited in Schedule A. In addition, the Common Interest Community may be subject to other easements and licenses granted by the Declarant pursuant to Section 5.01 of this Declaration.

Section 8.02. Easement of Enjoyment, Use and Access. The Declarant does hereby grant, transfer and convey to each Lot Owner the non-exclusive right and easement, subject to the terms and conditions of this Declaration and any rules promulgated by the Association:

(a) In the Common Elements for the purposes of access to his or her Lot; and

(b) To use the Common Elements for all other lawful purposes.

ARTICLE IX
LIMITATION ON ASSESSMENTS

Section 9.01. Limitation. The average annual common expense liability of all Lots, and any insurance premiums paid by the Association, shall not exceed the amount specified in Connecticut General Statutes § 47-215(a)(2) as adjusted pursuant to Section 47-213 of the Connecticut General Statutes, as it may be amended. It is the intention of this section that neither the public offering statement nor a resale certificate need be prepared or delivered in connection with the disposition of a Lot in the Common Interest Community in accordance with Section 47-262(b)(8) of the Connecticut General Statutes.

ARTICLE X
ASSESSMENT AND COLLECTION OF COMMON EXPENSES
TRANSFER ASSESSMENT UPON SALES

Section 10.01. Assessment of Common Expenses.

(a) Common Expense assessments shall begin on the first day of the month in which conveyance of the first Lot to a Lot Owner other than the Declarant occurs. Thereafter, assessments shall be made at least annually by the Association.

(b) Except as provided elsewhere in this Article, all Common Expenses shall be assessed against all the Lots in accordance with their percent of interest in the

Common Elements as set forth in the Declaration. The Common Expenses shall include, among other things, the costs of repairs and maintenance of the Common Elements and the cost of all insurance premiums on all policies of insurance required to be or which have been obtained by the Association. The Common Expenses may also include such amounts as the Association may deem proper for the operation and maintenance of the property, including without limitation an amount for a working reserve fund for replacements, and to make up any deficit in the Common Expenses for any prior year.

(c) All Lot Owners shall be obligated to pay the Common Charges and Common Expenses assessed by the Association monthly on the first day of each month.

Section 10.02. Collection of Common Expenses.

(a) The Association has a statutory lien on a Lot for any assessment levied against that Lot from the time the assessment becomes due. If an assessment is payable in installments, the full amount of the assessment is a lien from the time the first installment thereof becomes due.

(b) Recording of this Declaration constitutes record notice and perfection of the lien. No further recordation of any claim of lien for assessment under this Article is required.

(c) This Article does not prohibit actions to recover sums for which subsection (a) of this Article creates a lien (which actions shall not be deemed to constitute a waiver of such lien or the right to foreclose it) or prohibit the Association from taking a deed in lieu of foreclosure.

(d) A judgment or decree in any action brought under this Article shall include costs and reasonable attorney's fees for the prevailing party.

(e) The Association's lien may be foreclosed in like manner as a mortgage on real property.

(f) No Lot Owner may exempt himself from liability for payment of the Common Expenses by waiver of the use or enjoyment of any of the Common Elements or by abandonment of the Lot against which the assessments are made.

ARTICLE XI
MISCELLANEOUS

Section 11.01. Conflicts. The Declaration is intended to comply with the requirements of the Act. In the event of any conflict between this Declaration and the provisions of the Act, the provisions of the Act shall control.

In Witness Whereof, the Declarant has caused this Declaration to be executed this _____ day of _____, 2015.

Signed, sealed and delivered
in the presence of:

SADDLE RIDGE DEVELOPERS, INC.

_____ By: _____

Its President, Duly Authorized

_____

STATE OF CONNECTICUT)
) ss: Easton _____, ___, 2015
COUNTY OF FAIRFIELD)

Personally Appeared _____, duly authorized officer of Saddle Ridge Developers, Inc, a Connecticut corporation, signer and sealer of the foregoing Instrument, and acknowledged the same to be his free act and deed of said corporation, before me.

_____

Commissioner of the Superior Court

Easton Crossing Homeowners Association, Inc.

MAINTENANCE POLICY

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DRAFT

MAINTENANCE POLICY

I. INTRODUCTION

This policy statement defines the diverse responsibilities of the Association to the Lot Owners and Manager with regard to the maintenance of the Common Elements. Because during the period of interim management by the developer as Manager, the Manager intends to provide these services on a fixed fee basis and must operate within the budget established, the standards outlined below, which are to be considered a measure of the sole responsibility of the Association, are to be interpreted in the sole discretion of the Manager. The duties of the Association have been delegated to the Manager under the management contract.

It is important also that the Lot Owners be familiar with the provisions of the Declaration and the Declaration of Restrictions and Covenants.

The Association will endeavor to maintain the Common Elements which are the responsibility of the Association in a manner consistent with the Instruments. The Association is responsible for outdoor landscaping maintenance of the Common Elements. The Lot Owner shall be responsible for outdoor maintenance for the exterior of buildings and grounds located within Home Sites.

II. MAINTENANCE

A. GENERAL POLICY

It is the policy of the Association to maintain the elements that are a part of the Common Elements. Cycle periods have been established for items, which require maintenance at regular intervals.

B. SPECIFIC POLICY

1. Common Elements

(a) Front Entrance, Private Roadways and Open Spaces. The following elements will be the responsibility of the Manager for Maintenance: Entrance flowers, bushes and grass areas. Manager will mow grass, and will trim grass edges of

paved and landscaped areas, but not edges of woodlands or natural areas.

2. Catch Basins and Storm Drainage System

(a) Catch Basins and Storm Drainage Systems. Catch basins shall be inspected twice annually. Sediment shall be removed when it extends to within six inches of the outlet pipe invert. Catch basins will be pumped out by the Association not less than once annually. Storm drainage systems consisting of detention basins, weirs and infiltration galleries shall be inspected twice annually will be de silted by the Association when necessary and trash and obstructions removed by the Association from weirs and dam overflows. Pipe and outfalls will be cleared by the Association so they can perform their function. The side slopes of the detention basins are to be mowed twice annually to discourage growth of woody vegetation.

3. Private Roadways (Bridle Bend and Bradford Place)

The roadway will be swept twice annually. Typically, sweeping should occur in the spring after winter sanding and in the fall after leaves have fallen.

4. Snow Removal Private Roadways

The Association will endeavor to clear snowfalls prior to 6:00 AM on the next day following such fall. In major storms, interim clearing (Open Up) will be provided. Sanding will be done in anticipation of and during icing conditions on those areas where needed. Large quantity snow removal shall be provided as needed to ensure clear sitelines, proper traffic flow and access for emergency vehicles.

III. LANDSCAPING

In general, it will be the policy of the Association to maintain the landscaped areas in the common areas such as the front entry, storm drainage detention basins. Lawn mowing will normally be scheduled as needed during the growing season. Clippings will be allowed to fall on the grass and will not be picked up. Lawns within the Home Sites / Lots will not be mowed and are the responsibility of the Lot Owner.

IV. TRASH COLLECTION

Trash collection will be performed by a private contractor on a regular schedule and will be the responsibility of the Lot Owner.

V. MISCELLANEOUS

A. FRONT ENTRY LIGHTING

The Association shall maintain the operation of the front entry decorative and landscape lighting.

RECYCLED

Engineering, Planning,
Landscape Architecture
and Environmental Science

MILONE & MACBROOM®

November 3, 2014

Matthew Ranelli, Esq.
Shipman & Goodwin, LLP
One Constitution Plaza
Hartford, CT 06103

RE: Easton Crossing
Easton, Connecticut
MMI #2683-01-27

Dear Mr. Ranelli:

We are in receipt of a letter from Steven D. Trinkaus, P.E., to the Coalition to Save Easton, c/o Ms. Leslie Minasi, dated October 15, 2014 concerning the above-referenced project. We offer the following responses to each of his comments.

Many of Mr. Trinkaus's review comments below attempt to portray pieces from the 2004 Connecticut *Stormwater Quality Manual* as individual requirements or regulations. However, this is not the case as is acknowledged in Chapter 1, Page 1 of the manual, where it states, "The information and recommendations in this Manual are provided for guidance and are intended to augment, rather than replace, professional judgement." The Manual provides a number of alternatives and techniques that can be used alone or in combination. The stormwater management system complies with the Manual.

Stormwater Management

C1. The applicant shows a generic foot print of 50'x40' for each of the proposed building lots, however, in their submittal, there are three specific residential house designs. The Federal with overall dimensions of 45'x78'; the Georgian with overall dimensions of 60'x65' and lastly, the Greek Revival with overall dimensions of 47.5'x61.5'. As the unit footprints are not fully dimensioned on the submitted architectural plans, it is not possible to verify the actual impervious footprint of each of the three home types. Without knowing the specific location and type of residential unit on each of the proposed 48 lots, it appears that the extent of impervious area could be under estimated for the stormwater analysis as there are variable unit sizes being proposed. By underestimating the impervious, all aspects of the stormwater management plan from the water quality volume, groundwater recharge volume and peak rate attenuation are affected.

R1. We have increased the impervious coverage in our drainage and hydrology analysis for each lot. We took a very conservative approach by taking the largest house

footprint 2,864 SF, plus 175 SF for a 50-foot-long front walk, and we added another 500 SF for possible miscellaneous coverage on each lot. This is in addition to the proposed road coverage and driveway coverage. The revised drainage system, revised for minor increases in runoff attributed to additional coverage on each lot, will convey the runoff from the 100-year storm, and the stormwater basins will still provide a zero increase in runoff for all the storm events from the 2- through 100-year storms. All of the hydrologic sizing criteria, groundwater recharge volume, water quality volume, etc. have also been adjusted. The proposed house and driveway locations have been shown to indicate how the lot could possibly be developed but not necessarily how the lot will be developed. The final size, shape, and location of the house and driveway, etc. may vary as long as the approved PAAAC zoning criteria are maintained. It is understood that a detailed plot plan will be submitted for the development of each lot.

C2. Each of the proposed footprints have various garage locations, some are front loading, some are side loading, both in the middle of at the rear of the unit. Similar to the issue with the house footprints, the extent of impervious area associated with the driveways is variable depending upon the house footprint chosen and the generic plans currently submitted can also be under estimating the extent of impervious area which has been used in the stormwater management analysis.

R2. It is our experience that builders try to keep driveways as short as possible. We believe our analysis is very conservative and overestimates the amount of impervious coverage. Our stormwater analysis accounts for all of the proposed impervious coverage.

C3. The plans do not appear to have adequate exterior parking spaces for both the market rate unit and affordable unit. The proposed regulations submitted by the applicant state that 2 parking spaces will be provided for each single family unit and one for each affordable unit. On all of the proposed lots, if a car was parked in the back up/turning area, it appears that it would impede the ability of a car to back out of the garage and then exit the property. If additional parking areas are needed, then the extent of impervious area will also increase which then affects the stormwater management plan.

R3. Twenty-four of the homes shown on the project plans have three-car garages, as indicated by the 36-foot-wide paved entrance to the garage. If additional exterior parking spaces are needed, they will be constructed with permeable pavers to minimize impervious coverage.

C4. While the applicant claims reductions in the peak rate of runoff for the analyzed storms, the stormwater management practices are not providing the Channel Protection Flow (CPF) as stated in the 2004 CT DEP Storm Water Quality Manual. The CPF is a standard used to protect natural streams from increased runoff volumes and increased

duration of flow as a result of using detention basins. The CPF requires the reduction of the post-development peak rate for the 2-yr rainfall event to be reduced to 50% of the pre-development peak rate for the 2-yr rainfall event. This has the result of lowering the nominal water surface in the stream, which is the more stable section of the channel as the flow duration increases due to detention basin discharges. Without complying with the CPF, the receiving streams will experience increased runoff volumes and durations of flow which results in the erosion of the channel and downstream sedimentation.

R4. The proposed design satisfies the criteria. The stormwater basins control the stormwater runoff from the site, and each of the basins shows a discharge of 0 cubic feet per second (CFS) for the 2-year storm.

C5. The applicant claims that several of the proposed stormwater basins will infiltrate runoff through the bottom at a minimum. The basins shown on this plan are not designed in accordance with the requirements found in the CT DEP Manual for infiltration basins. Infiltration basins according to the CT DEP Manual are off-line basins, designed to handle the flow rate associated with the water quality storm event only. Excessive flows greater than the water quality storm event will cause an infiltration basin to fail.

R5. The reviewer's comment is irrelevant since no credit was taken for the infiltration of stormwater in our hydrologic computer models. We only mentioned that infiltration could occur. The revised basins have been lined with an impermeable layer, and the proposed roof runoff infiltration systems have been increased. The reviewer's comment is also incorrect. The over 350 soil test pits were performed on site in addition to the soil percolation tests. The Town Sanitarian and/or the independent sanitarian hired by the town observed each of these test pits. In the Town Sanitarian's review memo dated November 10, 2008, she commented that "The soils throughout the parcel are generally well-draining and suitable for on-site septic systems." The results of the percolation tests were also remarkably consistent with over 95% of the percolation test results falling in the 5-10 minutes per inch and 10-20 minutes per inch range. Based on the soil testing results, the proposed Cultec infiltration units proposed for the clean roofwater runoff will drain into the ground, assuming they are full, in 7 to 11 hours. On page 11-P3-6 of the 2004 Connecticut *Stormwater Quality Manual* it states, "Infiltration basins should be designed as off-line practices, unless used as combined infiltration and flood control facilities..."

C6. The outlet protection calculations found in the stormwater report are not valid. The CT DEP 2002 Guidelines for Soil Erosion and Sediment control require the sizing of the outlet protection to be for the 25-yr storm event and not the 10-year event (page 5-10-7 of the Guidelines). Additionally, the Guidelines are the controlling document for outlet protection and not the CT DOT manual. The local regulations make reference to the Guidelines and not the DOT manual.

R6. The reviewer's comment is incorrect. The Town of Easton Subdivision Regulations, Section IV, j. (5) clearly states, "Drainage should be designed in accordance with the Connecticut DOT's Drainage Manual." The DOT *Drainage Manual* recommends a 10-year design storm; however, we have revised the outlet protection for all pipe outfalls so they are now capable of handling the 100-year discharge since that is our new design storm.

C7. The applicant proposes to hold the required Water Quality Volume (WQV) below the lowest invert elevation within each proposed stormwater basin. The plans (LA-1) call for the basin bottoms to be planted with New England Erosion Control/Restoration mix. This mix has mostly upland species in it. As the bottom of the basins will be under a minimum of 12" of water and up to 60" of water, this seed mixture will not survive this level of inundation. This seed mixture is in conflict with the plants shown in the generic basin detail shown on sheet D-4. What information is correct? Plants for stormwater management systems must be chosen which are appropriate for the anticipated hydrologic conditions.

R7. The seed mix has been removed from the plans, and the planting plan shown on the detail on Sheet D-4 has been specified for each of the basins.

C8. Due to the small scale of the plans and the amount of information shown on them, it is impossible to read some of the contour data to determine if the plans conform to the calculations provided in the report. While some of the basins are shown on the road profile sheets, none of the proposed contours are labeled rendering these plans inadequate to review. Existing contours have been left off these plans so it is not possible to assess the potential earthwork.

R8. The contour labels on the plans have been increased in size.

C9. Basin 140 will have a permanent pool of 24" of water all of the time. This will result in stagnant water conditions during periods of the year. Additionally, a permanent pool of this depth poses a safety risk to children in the development. This has not been addressed on the plans.

R9. The basin design has been revised to conform to general requirements of the *Stormwater Quality Manual* for a "Pocket Pond." This basin was previously proposed and approved with standing water and is no more of a hazard than the large existing pond located 300' to the south. The proposed pool areas will be planted with aquatic vegetation so that they will function similarly to a natural wetland/marsh by providing nutrient uptake and habitat for dragonflies, which control mosquito populations.

C10. Basin 140 has a level bottom and a riprap berm which will create a forebay according to the stormwater management report. A riprap berm does not create a forebay. A forebay is defined in the CT DEP 2004 Storm Water Quality Manual and this basin is not in compliance with this requirement of the Manual. It is not clear as to what type of stormwater management practice is Basin 140, it does not meet any of the specific criteria in the Manual. The applicant must define what type of stormwater basin it is and then ensure that it complies with all of the specific necessary components for that particular type of treatment system. Due to the location of the outlet pipe, a portion of the basin will effectively never be used as the flows will short circuit between the inlet and outlet.

R10. The *Stormwater Quality Manual* states "A forebay is a separate cell within the pond formed by a barrier such as an earthen berm, concrete weir, or gabion baskets." A gabion basket is simply a rock-filled wire basket that functions in a similar fashion to the previously proposed riprap filter berm that is constructed with a 1¼" stone core armored with riprap. The riprap filter berm will provide better stormwater filtration than a gabion basket. Furthermore, the previously proposed riprap filter berm is taken from the design of a Temporary Sediment Trap as shown in the *Connecticut Soil Erosion and Sediment Control Manual.* However, we revised the berm to be an earth berm with a riprap overflow section as shown in the manual. Basin 140 will be a lined Pocket Pond. The flows through the revised basin will flow the full length of the basin and fill the entire basin during storm events.

C11. Basin 150 has the identical problems as Basin 140 (undefined type of basin and no forebay). Additionally, a 60" permanent pool is a significant safety issue for children. The proposed plants for this basin will also not survive this level of inundation. The outlet structure for Basin 150 is located in the northern portion of the basin and the southern portion of the basin is located substantially south of the outlet structure approximately 350' away. If the narrow conveyance swale directly runoff to the south, how will it ever get back to the outlet pipe? The water in the southern end of the basin will become a stagnant pool.

R11. Basin 150 will be a lined Micropool Extended Detention Pond; however, the southern end of Basin 150 will be left unlined since it is located in deep, well drained soils.

C12. Basin 210 has the identical problems as Basin 140 (undefined type of basin and no forebay). There is one Basin 210 on the plan, however in the stormwater management report, there are two sets of volume calculations for Basin 210. There is no 397' contour shown in Basin 210, yet the report calls out a volume for it. Something is not correct here.

R12. Basin 150 will be a lined Micropool Extended Detention Pond with an earth berm to form the forebay. The grading has been detailed as noted. The Retention Basin 210A is located immediately upgradient of the Basin 210.

C13. Basin 220 has the same problems as Basin 140 (undefined type of basin, no forebays as there are two inlets, and short circuiting of flows within the basin).

R13. Basin 220 will be a lined Micropool Extended Detention Pond with an earth berm to form the forebay. The flows through the revised basin have been redirected to take the longest possible path.

C14. Basin 230 has the same problems as Basin 140 (undefined type of basin, no forebay and short circuiting of flow within the basin).

R14. Basin 230 will be a lined Pocket Pond with an earth berm to form the forebay. The flows through the revised basin have been redirected to take the longest possible path.

C15. Summary of stormwater basin designs is that the basins proposed for Easton Crossing are NOT in compliance with the requirement of the CT DEP 2004 Storm Water Quality Manual at all. As they are not in compliance with the design requirements found in the Manual which are necessary to reduce pollutant loads in non-point source runoff, claims that water quality is being addressed are also not valid.

R15. Minor design adjustments have been made to the stormwater basins. They will provide the required stormwater renovation. This project will provide a significant overall improvement in the quality of the runoff over the current agricultural use.

C16. The applicant proposes to use Cultec units for the roof runoff from each of the proposed residences. First, a review of plans fails to find results of any type of soil test in the areas proposed for the Cultec Units. Without a thorough investigation and the performing of appropriate soil tests, the ability of the Cultec units to actually infiltrate runoff back into the soil is unknown. The soil conditions are variable throughout the site and therefore, the functionality of each Cultec system will be different. The applicant is assuming a one size fits all approach which is not correct. The applicant further claims that they can adjust the Runoff Curve Number (RCN) for the roof areas by effectively removing the first 1" of rain from the equation. This is not correct. The roof area is always impervious and therefore, the RCN is 98 for all storm events period.

R16. The clean runoff from each roof will be reduced by capturing the first inch of runoff and holding it in the underground Cultec retention/infiltration units. The reviewer's comment concerning the soil conditions is incorrect. The over 350 soil test pits were performed on site in addition to the soil percolation tests. The Town

Sanitarian and/or the independent sanitarian hired by the town observed each of these test pits. In the Town Sanitarian's review memo dated November 10, 2008, she commented that "The soils throughout the parcel are generally well-draining and suitable for on-site septic systems." The results of the percolation tests were also remarkably consistent, with over 95% of the percolation test results falling in the 5-10 minutes per inch and 10-20 minutes per inch range. Based on the soil testing results, the proposed Cultec infiltration units proposed for the clean roofwater runoff will drain into the ground, assuming they are full, in 7 to 11 hours.

C17. The applicant claims that the Groundwater Recharge Volume will be met by the Cultec systems, but there is no evidence to support this statement as noted above.

R17. Over 350 soil test pits were performed on site in addition to the soil percolation tests. The Town Sanitarian and/or the independent sanitarian hired by the town observed each of these test pits. In the Town Sanitarian's review memo dated November 10, 2008, she commented that "The soils throughout the parcel are generally well-draining and suitable for on-site septic systems." The results of the percolation tests were also remarkably consistent, with over 95% of the percolation test results falling in the 5-10 minutes per inch and 10-20 minutes per inch range. Based on the soil testing results, the proposed Cultec infiltration units proposed for the clean roofwater runoff will drain into the ground, assuming they are full, in 7 to 11 hours.

C18. The TR-20 printouts are impossible to understand. The applicant should provide a clear routing analysis result for each pond for each of the analyzed storm events. The routing analysis should provide easily understood data showing peak inflow rate and time, peak outflow rate and time, storage volume utilized and the maximum water surface elevation. The DOS based version of TR-20 is rarely used in stormwater analysis as programs such as *HydroCAD* are much more user friendly and provide easily understood results for not just reviewing engineers but land use commissioners themselves.

R18. The Natural Resources Conservation Service (NRCS) TR-20 Computer Program for Project Formulation Hydrology computer model is recommended in Chapter 7 of the 2004 *Connecticut Stormwater Quality Manual.* In fact, it is the only hydrologic computer model recommended in the manual and, furthermore, it is also recommended in the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control.*

C19. A detail for a rain garden is shown on Sheet D-2. What is "free draining material" as specified on the detail? How will a contractor know how to build this system? Most importantly, where will the rain gardens be constructed on the site and for what purpose? A review of the site plans failed to identify one rain garden on the site.

R19. This detail has been removed from the plans.

Erosion & Sediment Control/Site Design

C1. The small scale of the site plans makes it impossible to read the numbering of soil test result and labelling of existing and finish contours. 40' scale plan sheets should be provided for review and comment showing all of the information on the 100' scale sheets.

R1. The site plans are the same scale as the previously approved subdivision site plans. As mentioned above, the size of the contour numbers has been increased.

C2. There are no clearing limits defined on the plans so it is highly likely additional clearing will take place by the end user, which will not only increase the extent of lawn, but may also occur within the regulated upland review area from delineated wetlands.

R2. A limit of clearing line has been added to the plans.

C3. The stormwater management report provides calculations sizing temporary sediment traps per the Guidelines, however, there is insufficient information provided on the plan to allow a contractor to construct a temporary sediment trap. Square dimensions are provided on the site plan (SE-1), but the sediment traps have an elliptical shape to them, so what specification does the contractor follow?

R3. The detail for the Temporary Sediment Trap provided on Sheet D-1 of the plans shows how it is to be built.

C4. The erosion narrative for the project is not in compliance with the CT DEP 2002 Guidelines. The Guidelines require a specific format and detailed phasing plans for a project of this size. The information submitted does not provide this information. A phasing plan has been provided, but the areas of each phase are not defined. Depending upon the size of the active construction area, more significant and detailed erosion control plans are required by the Guidelines.

R4. The phasing plan has been provided on sheet PH-1, and detail sheet D-1 provides the Sediment and Erosion Control Specifications.

Should you have any questions, please do not hesitate to call me.

Very truly yours,

MILONE & MACBROOM, INC.

J Ted Hart

Ted Hart, P.E., Vice President
Director of Civil Engineering

2683-01-27-o3114-1-ltr