



**TOWN OF ACTON**  
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Engineering Department

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**INTERDEPARTMENTAL COMMUNICATION**

**To: Planning Department**

**Date: October 16, 2012**

**From: Engineering Department**

**Subject: Review of Central Street PCRC – Behind 12 Summer St – 2<sup>nd</sup> Submission**

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We have reviewed the plans for the above mentioned project titled "Central Street PCRC" dated February 23, 2012 with a revision date of September 23, 2012. The following comments in italics are from our memo dated April 9, 2012 and are still applicable unless otherwise noted.

**Property Line**

- 1. The Town met with the surveyor when the ANR Plan for 12 Summer Street was first submitted to the Town. We compared our information to the records that were retrieved by the surveyor for 12 Summer Street. Our information for the property line between these 2 parcels was not consistent with the surveyor's research for 12 Summer Street, but there did not seem to be enough conclusive evidence, at that time, to clearly prove otherwise within the review period as mandated by State law. We continued our research and I believe that this new research demonstrates a slightly different location for the property line between the Mount Hope Cemetery and 12 Summer Street and it should be reflected on the record plans. I've attached my timeline showing the information that I have compiled for these properties.*

*Cemetery Committee*

*Levi W. Stevens, John Fletcher and **Horace F Tuttle** were the 3 members of the Cemetery Committee from 1891-1896.*

*Cemetery Land Purchase*

*The Town acquired this portion of Cemetery from the Hayward family in 1891. Shortly thereafter, **Horace F Tuttle** created a plan entitled "Plan of Mount Hope Cemetery, West Acton, Drawn by Horace F Tuttle, 1893" showing the new property lines at this location. According to Tuttle's 1893 plan, the property line that extends between Parcel 320 on Map G-1 and the property corner on the westerly side of the shed is about 168 feet. The applicant shows this same property line to be about 227.42 feet on Registry Plan 36 of*

2012. The surveyor determined their distances using the deed description for 12 Summer Street.

#### *GAR Plot*

*I would also like to point-out that the alignment of other amenities on the Cemetery Land such as the shed and the granite monuments for the "GAR" plot seems to more closely mirror the property line as depicted on Horace Tuttle's plan in 1893.*

*Based on this new information, it seems as though everyone has been using the property line as depicted by Horace Tuttle. I believe that this new information should be reflected on the applicant's plan.*

The applicant has shown the area in dispute as an area to be conveyed to the Town. The applicant also proposes plantings in this area to separate the cemetery from the proposed homes. We recommend any plantings to be done on the applicant's property and not on Town property.

#### **Roadway**

- 2. The Fire Department should comment on the accessibility of a fire truck. The extents of Central Street aren't shown on the plan so it is difficult to comment on whether an SU-30 truck can enter the driveway without using the entire pavement width of Central Street.*

The applicant hasn't demonstrated that an SU-30 truck can enter the driveway without using the entire pavement width of Central St.

- 3. The turnaround provided for an SU-30 truck uses the driveway for Lot C. A No-Parking sign is required at the turnaround. We will defer further comment on that to the Fire Department.*

The revised plans provide a turnaround separate from the driveway that accommodate an SU-30 truck. We will defer comment to the Fire Department.

- 4. The applicant proposes a gravel edge for the turnaround. Zoning requires the pavement radii to accommodate an SU-30 truck.*

The revised plans provide a turnaround separate from the driveway that accommodates an SU-30 truck. We will defer comment to the Fire Department.

- 5. The length of the driveway is 1,400 feet long and 12 feet wide. The length of the driveway might be an issue for cars to pass each other due to the small width.*

The revised plans provide a turnaround separate from the driveway that accommodates an SU-30 truck. We will defer comment to the Fire Department.

- 6. The applicant has not addressed the sidewalk requirement for the proposed street.*

- 7. The common driveway shoulder should be 3 to 4" of topsoil over the same gravel base as the pavement. One shoulder appears to be 6" of topsoil over an unlabelled gravel base and the other shoulder is the stone trench for the drainage.*

The driveway shoulders on the revised plans are unchanged. The design would require a waiver from the Subdivision Rules and Regulations.

- 8. Any street signs should be MUTCD compliant and explicitly state that the road is a private way.*

The applicant proposes a private way sign at the intersection with Central St. Any street sign should be MUTCD compliant.

- 9. The proposed common driveway interferes with the cemetery driveway. The plan shows no proposal for what will happen with the cemetery driveway.*

The applicant proposes to merge the cemetery driveway with the proposed driveway. This could potentially lead to a conflict with cemetery operations.

- 10. The proposed common driveway is designed to be superelevated the entire length, pitched towards the stone trench. Streets designed using the Acton Subdivision Rules and Regulations are typically crowned.*

The common driveway is crowned on the revised plans.

- 11. The relocated guardrail blocks access to the sidewalk on Central St and no handicapped ramps are shown at the common driveway.*

The applicant proposes to remove the guardrail to allow handicap ramps but doesn't explicitly propose to build ramps at the proposed driveway.

- 12. The applicant should consider using a guardrail at the area of wetland fill.*

The area at the wetland fill is a 2½ foot drop between the common driveway and the bottom of the wall with no guardrail proposed.

## **Drainage/Utilities**

- 13. The applicant shows a note stating that the proposed utilities will be underneath the driveway. The plans should show the proposed utilities in order for the Acton Water District and Fire Department to comment on the proposed location of the water lines. The current plans do not show any fire hydrants.*

The applicant is proposing a 10,000 gallon fire cistern in place of fire hydrants. This would require a waiver from the Subdivision Rules and Regulations. We will defer further comment to the Fire Department.

14. *The applicant should provide calculations for the existing and proposed runoff and volumes in the drainage report and document compliance with the MA Stormwater Regulations.*

The applicant has not documented compliance with the MA Stormwater Regulations in the drainage report or narrative.

15. *The applicant must provide a maintenance agreement stating who will be responsible for the drainage system.*

No maintenance agreement has been provided. The agreement should contain the standard private way language that clearly state that the town will not be responsible for maintaining the road or plowing and that the owners cannot petition to become a public way.

16. *The site is located in Groundwater Protection Zone 3. The applicant proposes directing runoff from the paved areas to a stone trench along the side of the common driveway which will then be infiltrated. The Subdivision Rules and Regulations require that runoff be directed to gas trap catch basins and the first inch of every storm event be directed into clay-lined, vegetated retention ponds exposed to sunlight.*

The drainage design remains unchanged and would require a waiver from the Subdivision Rules and Regulations.

17. *The drainage report states that the common driveway and driveway areas for each lot will drain into the stone trench. The report states that this paved area is 16,920 square feet. The paved area on the plan is approximately 20,000 square feet.*

The paved area shown on the revised plans and drainage report match.

18. *The detail for the stone trench shows the stone trench as 2 feet deep. The drainage report assumes a 2 ½ foot depth.*

The revised drainage report assumes a 2 foot depth, matching the revised plans.

19. *According to the drainage report the available storage in the stone trench is 10,757 cubic feet with 40% voids. The plans show a 3 foot wide trench, 2 feet deep for the entire driveway length of 1,409 feet which gives a volume of 8,454 cubic feet.*

The available storage on the revised drainage report matches the storage shown on the revised plans.

20. *The applicant should clarify where the 0.04 foot/min (28.8 in/hr) infiltration rate, as shown in the drainage report, was obtained from. No soil map was provided however according to the application 30% of the site is well drained soil while the other 70% is poorly drained. According to TR-55, the highest infiltration rate for Type A soil is 2 in/hr.*

The applicant is using an infiltration rate of 2 in/hr in the revised drainage report and has provided a soil map.

## Miscellaneous

21. *The applicant is proposing to fill a portion of the wetlands which is in Floodzone A. The applicant must demonstrate compliance with the flood zone regulations in section 4.1 of the Zoning Bylaws and section 8.4 of the Subdivision Rules and Regulations.*
22. *The retaining wall is proposed along a property line. Any portion of the wall, the backfill needed for drainage and any potential geo reinforcement that falls on the abutting property would require an easement.*
23. *The applicant should show the proposed street addresses.*
24. *The applicant should show the GAR bounds.*
25. *The applicant should show something to separate the proposed lots and common area from the adjacent cemetery.*

The applicant also proposes plantings on the Town's property to separate the cemetery from the proposed homes. We recommend any plantings to be done on the applicant's property and not on Town property.

26. *The applicant should add a note stating that any survey monuments will be protected during construction and that if they are disturbed, they will be reset by a Professional Land Surveyor.*

A note has been added to the revised plans.

27. *The applicant will be responsible for providing an as-built plan that will be certified by a PE/PLS.*