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18 June 2020

Mr. Stephen Wallace Westminster Town Planner 11 South Street (Town Hall) Westminster, MA 01473

Re: Betty Joe Way Reduced Subdivision Review 84 State Road West Westminster, Massachusetts

Dear Mr. Wallace:

I have received the review letter from Tetra Tech outlining their comments for the BettyJoe Way reduced standard subdivision project. I have listed the comments in this letter and then have provided responses in italics.

## **CHAPTER 231: SUBDIVISION OF LAND**

The submission was reviewed against the Subdivision Regulations to determine the extent of required waiver requests for the Project.

- 1. An Environmental and Community Impact Analysis has not been submitted. The Applicant has requested a waiver from this Regulation. (§231-12.A.5) *See discussion in the revised list of waivers.*
- 2. Elevations shown on the plan reference an assumed datum. The Regulations require reference to mean sea level. Additionally, benchmarks have not been provided on the Plan. (§231-12.D.1.f)

A waiver has now been requested for using an assumed datum. Benchmarks have been shown on the plan.

3. The Applicant is proposing to use iron pins to mark the boundaries of the proposed Betty Joe Way right-of-way. Typically, concrete or stone bounds are used to demarcate the right-of-way. However, we recommend the Board clarify the requirement if iron pins are sufficient to meet the Subdivision Regulations. (§231-12.D.2.d)

A limited of number of iron pin corner markers are recommended to aid in construction. The proposed locations are now shown on the site plan.

4. Roadway grades and sufficient vertical curve information has not been provided on the profile. (§231-12.D.2.e)

A waiver has now been requested for using the simplified profile currently shown on the site plan.

5. The Applicant has not shown proposed utilities on the plan related to electric, tel/cable and gas. (§231-12.D.2.k)

A location for a proposed utility pole followed by a proposed underground electric utility line to the new house has been shown on the site plan.

6. The Applicant has not shown the 100-foot buffer zone to the wetland resource area located in the northeastern corner of the property. Additionally, the note pointing to the wetland line says that it is approximate, wetlands shall be properly flagged and surveyed to determine actual extent of resource area at the property. (§231-12.D.2.I)

The site plan has been updated to show a wetlands delineation and an associated 100' buffer zone. A NOI has been filed with the Westminster Conservation Commission and a copy of the "Drainage and Erosion Control Plan" has been forwarded to Tetra Tech. This plan was approved at the most recent Conservation Commission meeting.

 There is conflicting information provided on the plan (title block and "References" section of the plan) related to existing zoning district. (§231-12.D.2.m)

The conflicting information has been corrected.

8. The Applicant has not provided the total area of wetlands located at the site. (§231-12.D.2.n.6)

Not all of the wetlands have been delineated or surveyed. The plan notes that there is sufficient uplands within each lot to meet the necessary dimensional requirements.

9. The Applicant has not provided the total number of bounds to be set, this should be shown on the plan for clarity. (§231-12.D.2.n.8)

A limited of number of iron pin corner markers are recommended to aid in construction. The proposed locations are now shown on the site plan. There 5 locations in total.

10. The proposed roadway does not appear to meet the requirements of the "Width and Grade of Ways" table. The Applicant has requested several waivers from this Regulation. (§231-14)

See discussion in the revised list of waivers.

11. The proposed intersection of the subdivision roadway with Route 2A is not at a 90° angle. Additionally, radii are less than the 25' required. The Applicant has requested a waiver from this Regulation. (§231-16.A)

See discussion in the revised list of waivers.

12. It does not appear the Applicant has provided the 2% required "flat area" where the subdivision roadway intersects with Route 2A. Additionally, sight distance triangle has not been provided on the plan to determine if proper sight distance is provided. (§231-16.C)

A waiver has now been requested for the proposed vertical centerline alignment. Two photographs have been included as a visual aid. The sight distances are good and measured in excess of 900'in either direction. The posted speed limit is 45 mph.

13. The Applicant shall provide written correspondence related to access to Route 2A, a state highway. (§231-19)

The project information has been uploaded to MassDOT State Highway Access Permit System and is awaiting review.

14. See Comment 3 related to proposed bounds for the subdivision. The Applicant has requested a waiver from this Regulation. (§231-27.A)

A limited of number of iron pin corner markers are recommended to aid in construction. The proposed locations are now shown on the site plan.

15. The Applicant is proposing to use asphalt grindings as the primary surface for the roadway, the Subdivision Regulations require a paved surface. The Applicant has requested a waiver from this Regulation. (§231-28)

See discussion in the revised list of waivers.

16. The Applicant is proposing greater than one driveway cut per lot. (§231-30)

A waiver has now been requested for three driveway cuts for Lot A.

17. The Applicant has not proposed any street name signage for the proposed roadway. (§231-31)

General Note 5 on the site plan discusses the requirements for a street name sign and leaves the location up to the DPW director.

 The applicant has not proposed any street trees as part of the project. The Applicant has requested a waiver from this Regulation (§231-32)

See discussion in the revised list of waivers.

 The Applicant shall coordinate with the Westminster Fire Department to determine if the driveway is sufficient to accommodate proposed fire apparatus and appurtenant maneuverability throughout the project site. (§231-33)

In a recent phone conversation, the Fire Chief has expressed his satisfaction with the driveway relative to fire equipment access, noting that he did not raise it as a concern in his review letter.

20. The applicant has not provided any erosion controls on the proposed plan. (§231-36)

The site plan has been updated to show a wetlands delineation and an associated 100' buffer zone. A NOI has been filed with the Westminster Conservation Commission and a copy of the "Drainage and Erosion Control Plan" has been forwarded to Tetra Tech. This plan was approved at the most recent Conservation Commission meeting.

21. The Applicant has not provided an Environmental and community impact analysis. (§231-38)

See discussion in the revised list of waivers.

### POLICY-REDUCED ROAD STANDARD SUBDIVISIONS

22. The Applicant is proposing a two-lot subdivision from one master lot which meets criteria for the Policy. Additionally, it appears all other requirements have been met to allow approval of this Project. However, as provided above, we believe additional waiver requests are required to ensure proper administration of the project is adhered to.

### **STORMWATER REVIEW**

The applicant has supplied a Stormwater Report which provides analysis of how the Project is intended to impact stormwater flow as compared to existing conditions and proposed best management practices to mitigate increase in runoff from the site. However, per the Massachusetts Stormwater Handbook, Volume 1, Chapter 1, the MA DEP Stormwater Management Standards (Standards), the Standards do not apply to the project since less than four single-family residential dwellings are proposed and discharge from the site does not impact a critical area. We have provided comments below related to stormwater which are best practices to ensure the overall safety of groundwater and wetland resource areas adjacent to the site.

23. It appears offsite areas may flow onto the property from the southeast and should be included in the analysis to ensure the infiltration basin is designed to accommodate all tributary flow directed to it.

The topography on the adjacent property at the southeasterly corner of the subcatchment drops downward and away from our site. The area between this property line and the subcatchment boundary forms a shallow ridge that sheds water either toward the easterly property or southerly into our site.

24. Existing and proposed drainage areas in the HydroCAD analyses do not match. These areas should match to ensure consistency in the analysis.

The subcatchment area gets larger in post construction because the new house has been located outside of the pre-construction subcatchment and this area needs to be included in the post construction condition. Presently, runoff from this area flows southerly, but the forward facing half of the proposed roof will direct it northerly.

25. We recommend the Applicant provide test pit at proposed infiltration basin location to confirm soils and groundwater elevation.

Soil testing done for septic system purposes yielded consistent results with sandy soils and estimated seasonal watertables at 5'. The SCS soil mapping shows the entire northerly part of the property in one soil unit and the relative locations of the adjacent wetlands flags and water surface elevation confirm the watertable estimate. I believe soil conditions for the riprap sump are adequately characterized.

26. The proposed infiltration basin is located within 100' of the private well on Lot A and 50' from the wetland resource area, both of which are not recommended as shown in the MA DEP Stormwater Handbook. The infiltration basin shall also be located minimum 50' from existing soil absorption system, the existing system has not been shown on the Plan.

As mentioned in the introductory paragraph above, these recommendations are typically applied to much larger projects. The general location for the

riprap sump on this site is somewhat fixed by topography and the location the wetlands and existing driveway. It seems unlikely that there will be impacts on the SDS which is nearly 50' away or the wetlands that are already near the edge of the Route 2A pavement. The well will be tested in the short term as part of an upcoming sale. This information would provide a baseline on its current condition.

#### **GENERAL COMMENTS**

27. We recommend the Applicant confirm with Westminster Fire Chief that the proposed driveways are suitable to ensure proper emergency access and egress from the subdivision.

In a recent phone conversation, the Fire Chief has expressed his satisfaction with the driveway relative to fire equipment access, noting that he did not raise it as a concern in his review letter.

28. The existing shed is shown on the proposed right of way parcel. We recommend the Board determine if this is permissible.

The shed is in good condition and would be useful for the owners of Lot A. Photographs of the shed have been attached to this letter.

Please feel free to contact me if you have any questions.

Sincerely, **Trowbridge Engineering, LLC** By:

Christopher C. Mossman, P.E. Civil Engineer

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# PHOTOGRAPHS



Photograph No.1 View of the existing driveway from across Rte 2A.



Photograph No.2 View of the existing driveway looking easterly along Rte 2A.



Photograph No.3 View of the existing shed looking southerly.



Photograph No.4 View of the existing shed looking northeasterly.