

MEMORANDUM

TO: Mr. Frederick Casavant IV
Chairman
Zoning Board of Appeals
Town of Pembroke
100 Center Street
Pembroke, MA 02359

FROM: Mr. Shaun P. Kelly [SPK](#)
Associate
Vanasse & Associates, Inc.
35 New England Business Center Drive
Suite 140
Andover, MA 01810

DATE: July 27, 2021

RE: 8183

SUBJECT: Response to 2nd Traffic Review
Proposed 40B Residential Development
274 Water Street, Pembroke, Massachusetts

INTRODUCTION

Vanasse and Associates, Inc. (VAI) has prepared this technical memorandum in order to respond to comments issued by the Town of Pembroke's transportation peer review consultant, Ron Müller & Associates (RMA), as summarized in their 2nd peer review letter¹ issued on the above-referenced project. As requested by RMA, supplemental information has been provided relative to off-site mitigation commitments associated with the project and the proposed site layout and design.

As documented in this memorandum, based on the supplemental information provided as part of this response, the overall findings of the initial TIA prepared for the Project remain relatively unchanged, with project-related traffic impacts resulting in only minor impacts to vehicle delays and queuing in the majority of instances. The proponent is committed to working with the Town of Pembroke and MassDOT towards the implementation of off-site mitigation measures to enhance traffic operations and safety at locations expected to accommodate the majority of traffic associated with the Project.

The following provides responses to comments issued by RMA on the response to comments on the initial traffic impact assessment. To facilitate your review of this document, only comments where supplemental information was requested have been included in this response. Comments related to the site plan have been addressed and provided to the Town as part of the updated site plan submittal under separate cover.

RESPONSE TO PEER REVIEW COMMENTS

To facilitate your review of this document, the comments and responses provided below follow the general outline of the peer review letter:

Existing Conditions

Comment 1: "While we concur that pavement markings and signage would be beneficial to enhance the safety of the intersection, no specific description of these improvements

¹River March Village – 2nd Traffic Review, Ron Muller & Associates, June 29, 2021



is provided, such as where pavement markings would be applied and where and what signage is recommended. A conceptual plan showing the recommended improvements would be beneficial.”

Response: As requested by the peer review consultant, conceptual improvement plans have been provided for both the intersection of Water Street and Cross Street and Water Street at Church Street (Route 139). Proposed improvements at the intersection of Water Street with Cross Street include installation of centerline pavement markings on both Cross Street approaches on both sides of the delta island, as well as installation of STOP bars and STOP-signs on both approaches. Improvements at the intersection of Water Street with Church Street, which are subject to MassDOT review and approval, also include the installation of new pavement markings to better delineate inbound and outbound turning paths for vehicles turning to and from Water Street, as well as the provision of a short left-turn pocket for vehicles turning left onto Church Street, that will allow right-turning vehicles to bypass on the right. All new pavement markings and signage will be installed in accordance with *Manual on Uniform Traffic Devices (MUTCD)*² design criteria.

Comment 8: “We recommend that the Town of Pembroke require the property owner at 248 Water Street to relocate the fence outside of the Water Street layout so that the proposed southerly driveway can function as a full access/egress driveway without any turn restrictions that would otherwise be difficult to enforce.”

Response: VAI concurs with RMA that the relocation of the fence outside the Water Street layout is a preferred solution to address available sight lines when looking right from the southern driveway location. Should the Town relocate the fence, the proposed restriction on exiting left-turns at this location would not be required.

Comment 10: “The sight triangles shown on the updated site plan should be revised to reflect the minimum requirements as established by VAI and any trees or other obstructions within these sight triangles should be identified to be trimmed or removed to assure that the minimum required sight lines can be maintained without impacting adjacent properties. See also recommendations in Comment 8 above.”

Response: As requested by RMA, sight triangles are provided on the updated site plans that identify areas where trees and other obstructions should be removed and/or regularly maintained to ensure adequate sight distance is provided in both directions.

Comment 13: “Keep Right (R4-7) signs should be installed at both ends of the raised median and the Pembroke proposed stop line on the driveway exit to Water Street should extend across the entire approach width to assure that entering traffic does not turn into the driveway on the wrong side of the median. Review of the updated site plan does not show any No Parking signs along the internal site roadways. These should be shown on the plan set.”

Response: The updated site plan includes Keep Right signs on both ended of the raised median as well as the recommended modifications to the STOP line. No parking signs along the entire length of the project have also been included.

Comment 14: “See recommendations in Comment 8 regarding the proposed turn restriction at the

²*Manual on Uniform Traffic Control Devices (MUTCD)*; Federal Highway Administration; Washington, DC; 2009.



southern site drive.”

Response: See response to Comment 8.

Comment 15: “Based on the above commitments, **we recommend the applicant submit a conceptual plan showing the recommended improvements for review, including how Water Street will be realigned, what signs are proposed, and where vegetation and roadside fixtures will be trimmed and/or removed.** Without such a plan, the specific actions proposed and limits of work cannot be ascertained. If MassDOT approval for these improvements is required, then the applicant should submit the necessary permit application to MassDOT. MassDOT is not likely to deny a request for improvements to their streets.”

Response: As requested by RMA, a conceptual improvement plan for the intersection of Church Street with Water Street is included as an attachment to this document. Proposed improvements, which are subject to MassDOT review and approval, include the installation of new pavement markings to better delineate inbound and outbound turning paths for vehicles turning to and from Water Street, as well as the provision of a short left-turn pocket for vehicles turning left onto Church Street, that will allow right-turning vehicles to bypass on the right. All new pavement markings and signage will be installed in accordance with *Manual on Uniform Traffic Devices* (MUTCD)³ design criteria. The applicant is also committed to cutting back existing vegetation within the Town of Pembroke and MassDOT right-of-way, north of the intersection, to improve sight lines in this direction.

Comment 16: “VAI responded that at this time, a sidewalk is not proposed along Water Street in conjunction with the project. **Our original comment therefore still stands.**”

Response: Comment noted.

SUMMARY

As documented in this memorandum, the applicant is committed to installing new pavement markings and signage at the intersections of Water Street with Cross Street and Church Street to enhance traffic operations and safety at these locations. VAI agrees with RMA that the Town of Pembroke should require the relocation of an existing fence from the Water Street layout that currently obscures sight lines at the proposed southern driveway location, and would eliminate the proposed turn restrictions at this driveway in conjunction with this measure.

³*Manual on Uniform Traffic Control Devices (MUTCD)*; Federal Highway Administration; Washington, DC; 2009.





Figure -

Conceptual Improvement Plan
Church Street at Water Street

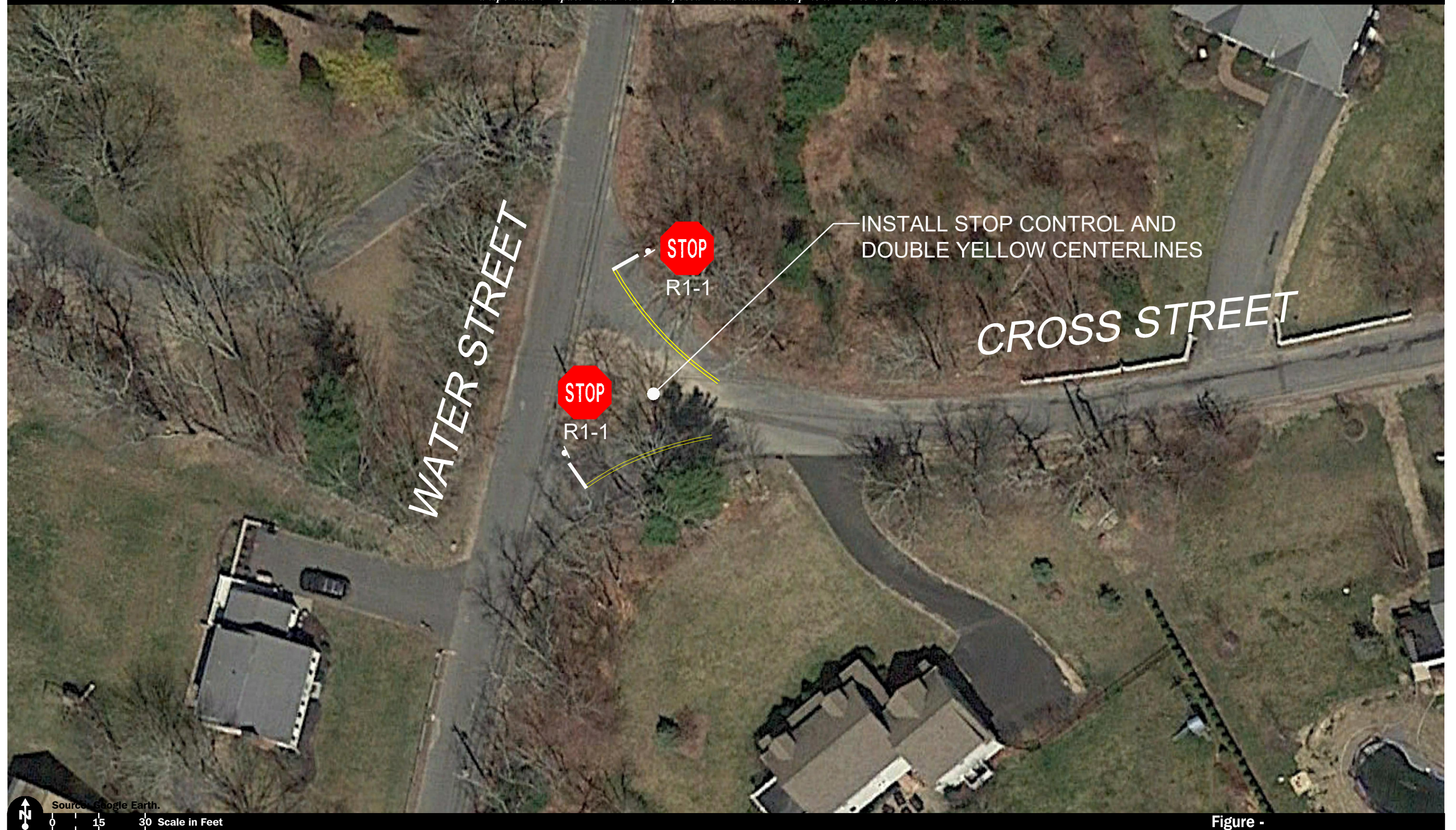


Figure -
Conceptual Improvement Plan
Water Street at Cross Street