



MEMO

TO: Susan Noyes, Newbury Zoning Board of Appeals
FROM: Jennifer Conley, PE, PTOE
SUBJECT: Peer Review of Proposed Residential Development in Newbury, MA
DATE: November 14, 2017

WSP reviewed the original Transportation Assessment Memorandum prepared by TEPP dated October 20, 2016 for the proposed residential development in Newbury, Massachusetts and provided review comments in a memorandum dated June 23, 2017. WSP is in receipt of the revised Traffic Assessment Memorandum prepared by TEPP LLC. (TEPP) dated October 29, 2017 (TAM) in response to the peer review completed by WSP. WSP has completed the review of the new submittal and the findings are provided below:

OVERALL METHODOLOGY AND STUDY AREA

WSP has reviewed the TAM for its completeness and methodology. The TAM follows all of the typical steps included in a Traffic Impact Study.

PHYSICAL CONDITIONS

The TAM includes a description of the existing geometry at the intersection of Orchard Street at Pearson Drive. WSP verified the intersection description provided with aerial photography available for the area. WSP found the description to be accurate overall with a minor discrepancy related to pedestrian accommodations. Based on available aerial photography, there are no crosswalks provided at the intersection including on the west leg.

TRAFFIC VOLUMES

The TAM presents peak hour traffic volumes during the weekday AM and weekday PM peak hours, which is typical for a residential type land use. WSP confirmed that the traffic volumes found in the Appendix were collected in October 2017 as stated in the text of the TAM.

The traffic volumes data presented in the TAM were not seasonally adjusted. The TAM indicated that October is a higher than average month for traffic volumes, therefore, no seasonal adjustment was made to the volumes to determine the 2017 Existing Conditions. Based on data provided in the Appendix, October data is a higher than average month. WSP researched MassDOT count stations in the area and found that October traffic patterns are predominately above average. WSP concurs that not adjusting the traffic volume data was appropriate.



WSP checked the volumes represented in Figure 1 to determine if they accurately reflect the Turning Movement Count (TMC) data found in the Appendix. WSP found no discrepancies between the volumes represented in the figure and those found in the TMC data in the Appendix.

ACCIDENT HISTORY

Motor vehicle crash data was included in the TAM. WSP spot checked the crash data and verified that there were no crashes along Pearson Drive in the vicinity of the proposed site driveway or at the intersection of Orchard Street at Pearson Drive between 2010 and 2014 as stated in the TAM.

TRIP GENERATION

The TAM determined the trip generation impact of the proposed residential development based on industry standards as a part of the initial submittal. WSP verified the trip generation presented in the TAM is appropriate and conservatively high.

TRIP DISTRIBUTION AND NETWORK ASSIGNMENT

The TAM provided trip distribution analysis for the associated automobile trips based on existing traffic patterns at the intersection of Orchard Street at Pearson Drive. Typically, trip distribution for residential developments are based on US Census journey to work data. Since Pearson Drive is a deadend and the existing developments along Pearson Drive are residential, WSP concurs that using the existing traffic patterns for the proposed trip distribution is appropriate.

WSP checked the trip distribution volumes represented in Figure 2 to determine if they were distributed based on the trip distribution described in the TAM. WSP determined that site related trips were distributed correctly through the study area intersection.

BUILD TRAFFIC VOLUMES

The TAM provided no future projections, no assumptions were made for approved background developments in the area or background traffic growth. Due to the size of the proposed residential development and low trip generation, WSP concurs that no future projections are appropriate. WSP verified that the trip generation was added correctly to the Existing volumes to determine the Build volumes represented in Figure 3.

CAPACITY ANALYSIS

The capacity analysis procedures outlined and used in the TAM follow industry standards. WSP conducted a review finding no discrepancies between the Synchro analysis inputs and the traffic volumes found in the TAM. WSP confirmed the results present in Table 4 with those reported in the Synchro Analysis reports found in the Appendix. The intersection is expected to operate at good levels of service with little delay.

CONCLUSION

As presented, WSP has found that the TAM does follow the industry standard steps for completion of a traffic impact assessment. The additional sections requested in the WSP Peer



Review have been were completed were completed accurately. WSP has no additional outstanding concerns.