

May 30, 2018

Mr. David R. Consigli
Zoning Board of Appeals
Town of Milford
Town Hall
52 Main Street
Milford, MA 01757

RE: Transportation Peer Review

Dear Mr. Consigli:

BSC Group (BSC) has been retained as a sub-contractor to Comprehensive Environmental Inc., to provide peer review services regarding traffic and transportation impacts for the proposed residential development entitled “Birch Street Place”. The Proponent, 88 Corp, proposes to construct 162 residential apartment units, to be located at Birch Street in Milford, Massachusetts.

BSC has performed the peer review based on the following information:

- Comprehensive Permit Application, Birch Street Place, Milford, MA, dated April 6, 2018
- Traffic Impact and Access Study, Apartment Development, Birch Street, Milford Massachusetts, Ron Muller & Associates, October 4, 2017
- Preliminary Site Design Plans, Birch Place March 29, 2018
- Various letters from Town of Milford representatives in response to the Comprehensive Permit Application:
 - Engineering Office
 - Planning Office
- Field visit performed on Friday, May 18, 2018

BSC offers the following comments:

Study Area

1. The Traffic Impact and Access Study (TIAS) noted that three intersections, including the proposed driveway were analyzed, and that the project was expected to have minimal impacts beyond the selected study area. The intersection of Medway Road (Route 109) and Beaver Street is a major intersection through which more than half of the project site trips would travel either to or from the site. BSC recommends that the Proponent evaluate impacts of the project at this location.

Engineers

Environmental
Scientists

Custom Software
Developers

Landscape
Architects

Planners

Surveyors



Traffic Volumes

2. Turning movement counts were collected in August 2017, and November 2016 during the weekday morning (7-9AM) and afternoon (4-6PM) commuter peak hours. These times are consistent with standard procedures. The November 2016 traffic volumes were seasonally adjusted and grown by one percent to 2017 existing conditions; BSC concurs with this action.

Accidents

3. The TIAS provides crash information for the study area intersections of Route 109 at Birch Street and Beaver Street at Birch Street and states that the calculated crash rates at these locations are below the statewide and district-wide averages. BSC agrees with this finding, but requests that the Proponent review crash data at the intersection of Route 109 at Beaver Street.

Sight Distance Analysis

4. During the field visit on May 18, 2018, BSC performed independent sight distance measurements at the approximate location of the proposed driveway, to be located adjacent to the Birchler Automotive driveway. BSC measured stopping sight distances (SSD) of over 500 feet on each approach to the proposed site drive location, and concurs with SSD measurements by Ron Muller and Associates.
5. BSC recommends that the minimum intersection sight distance (ISD) requirements be recalculated based upon the 85th percentile speeds recorded (43 mph northbound, and 41 mph southbound) on Birch Street. BSC also recommends that sight triangles for the driveway at Birch Street be shown on the site plan.
6. The Proponent should show how existing guard rails near the site driveway would be reconstructed so as not to impact the available ISD for drivers exiting the project site.

Future Conditions

7. The future conditions were projected under a seven-year planning horizon. BSC concurs with this timeline, which is consistent with current MassDOT standards.
8. Future No Build conditions were estimated by applying a one-percent annual growth rate and adding vehicle trips from specific known developments in the area. BSC concurs with this methodology.

Trip Generation

9. Table 5 summarizes the estimated number of vehicle trips for the proposed development. Trips for the proposed development were estimated using rates from the Institute of Transportation Engineers (ITE) Trip Generation, which is the standard methodology used by traffic engineers to estimate trips.
10. Please review and resolve the discrepancy between number of proposed apartments. The Comprehensive Permit application stated that the project would comprise of 162 units,



while the TIAS used 159 units in the trip generation calculation.

Trip Distribution

11. BSC generally concurs with the Journey-to-Work methodology and existing roadway network used to estimate the trip distribution patterns.

Traffic Increases

12. The intersection of Route 109 and Beaver Street would experience the largest increase in project traffic. As noted earlier, the Proponent should evaluate traffic impacts at this intersection.

Site Access

13. The project site driveway is on Birch Street south of the Birchler's Automotive driveway. The TIAS indicates that an emergency access would be located on an easement on the Fire Department's property. The Proponent should show this on the site plans.

Capacity Analysis

14. BSC agrees with the methodology used to evaluate the operating conditions at the study area intersections. The TIAS has identified capacity deficiencies at Route 109 westbound left onto Birch Street, and Birch Street left turn onto Beaver Street.
15. As part of the mitigation for the project, the Proponent proposes to modify traffic signal timing for Route 109 westbound left-turn traffic onto Birch Street. Please confirm if the changes would affect pedestrian signal timing at the intersection.

Pedestrian Safety

16. The Proponent is proposing a sidewalk along the project driveway, terminating at Birch Street. Additionally, a bus shelter is proposed on the south side of the site driveway.
17. Please consider extending proposed sidewalk along the site driveway northwards along Birch Street.

Plan Review

18. Street sign legend is provided on Sheet 13 of 14 but no signs are shown on the site plans. Please show proposed signs on the site plans
19. Please provide detail of how the site driveway will connect to Birch Street.
20. It is not clear if the three parallel parking spaces on the southside of Building #2 are of standard length. Please show dimensions on the plans and confirm if the spaces provided are adequate for three vehicles to park along that section of the building.



Mr. David R. Consigli
May 30, 2018
Page 4

Please do not hesitate to contact our office with any inquiries you may have.

Sincerely,

BSC Group, Inc.

A handwritten signature in black ink, appearing to read "Sam Offei-Addo".

Sam Offei-Addo, P.E., PTOE
Senior Project Manager/Senior Associate

\\bscbos\bos\Projects-BOS\2836701_PrjCtrl\Reports\2836701_PeerReview_Birch
Place.docx