TURNING POINT ENGINEERING
CIVIL SITE DESIGN

March 5, 2025

Oxford Planning Board
325 Main Street
Oxford, MA 01540

Subject: Response to TEC-Traffic Peer Review Comments
Ashworth Hills, Oxford MA
Traffic Engineering Peer Review

Dear Planning Board Members:

Turning Point Engineering (TPE) is in receipt of the Board's engineering consultant's (The Engineering Corp (TEC)), traffic engineering peer review letter dated February 12, 2025 regarding the Site Plan Review for the above noted project. On behalf of the Applicant, Eastland Partners, Inc, TPE offers the following in response to the Initial Site Plan Comments portion of the noted review. Please note that the Application's Traffic Consultant, Greenman-Pedersen Inc. (GPI) will be responding to the Traffic Study related Comments of noted comment letter (#1-#16) under a Separate cover. For ease of review, the comments are reiterated with responses immediately following in the order of the original letter.

Initial Site Plan Comments

17. A truck turning analysis should be provided for the Oxford Fire Department design vehicle and a large single-unit (SU) truck (representative of a moving van, trash/refuse truck or similar). The turning analysis should demonstrate that the subject vehicles can access and circulate within the project site in an unimpeded manner.

Response: Please refer to the revised site plan's added sheets C11.1-C11.4 "Truck Turning and Sight Line Plan". The noted plan models a large ladder truck fire apparatus appropriately navigating the site (primarily right turns within the site).

18. A 3-5 ft buffer between the roadway and shared use path should be considered where feasible for increased pedestrian safety.

Response: Incorporating a buffer strip was considered, however not implemented as the intent of the designs was to minimize the footprint of the overall development impact and maximize the proposed dedicated open space and nature walking trail areas. The shared use path's layouts/designs (widths/alignments) were developed to be consistent with designs of the RT20 corridor shared use paths.

19. Trees should be located a minimum of 3 feet away from the shared use path to provide an appropriate clear distance for cyclists. Trees should be located a minimum of 2 feet away from sidewalks to minimize future root damage to sidewalks that may limit accessibility.

Response: The Typical Roadway Cross section was updated to provide the recommended separation notes for the street trees, see sheet C-8.1. Also, an identical note was added to each of the landscape sheets, see sheets C9.0-C9.4. Lastly, the locations of street trees

on the site plan were reviewed and updated to assure the minimum recommended separations are provided.

20. The applicant should consider an additional road name for one or more segments of Road B to avoid having 3 intersections between Road A and Road B that could lead to confusion for visitors and first responders.

Response: The Applicant agrees that modified road names are/will be necessary to avoid confusion of first responders as well as visitors. The Applicant respectively requests that the Board make a condition of the Site Plan Review Approval that requires the Applicant to coordinate final road names with the appropriate Town Officials prior to the issuance of any building/occupancy permits.

21. A stop line should be provided at the intersection of Road A and Road B between units 135 and 161.

Response: See sheet C-4.3 – a stop bar has been added as requested. Additionally, stop signs/bars were added to Road B on the north and southbound approaches to this intersection making it an all stop condition (placard also proposed). These were added as part of the traffic calming measures that have been considered and implemented as part of the response to comment #35 discussed later in the letter.

22. The all-way stop proposed at the intersection of Roads B, C, and D should include "All Way" placards under each stop sign.

Response: See sheet C-8.2 detail 4 "Stop Sign"; an "ALL WAY" sign was added below the primary stop sign with notation to be provided at the all-way stop locations. All way notations are also added to the site plan, see sheet C-4.6.

23. All crosswalks should be a minimum of 8' wide to be consistent with industry standards, 10' wide crosswalks should be considered at shared use path crossings.

Response: Please refer to the sites plans, sheets C-4.1-4.11, all crosswalks have been increased to 8 ft wide, stop bars were adjusted as well to accommodate this revision. 10' wide crosswalks were considered and found not to be necessary along the shared use path.

24. Alternative pedestrian curb ramp type or location should be considered at the intersection of Road E and Road B to reduce the skewed angle of the pedestrian crossing.

Response: See sheet C-4.5, the crosswalk and ramps have been modified slightly to be perpendicular to the cross traffic.

25. At the intersection of Road C and Road D with Road B, two separate ramps should be used on the eastern corner for each of the crossing directions. A shared use path should be provided between the ramps for continuity.

Response: See sheet C-4.6. The curb ramps, sidewalks and shared use paths have been revised to reflect the noted recommendations/requirements.

26. At the intersection of Road F and Road E two separate ramps should be used on the eastern corner for each of the crossing directions.

Response: The crosswalk, sidewalk and curb ramps have been revised to provide separate ramps as recommended/required. Refer to sheet C-4.7.

27. Consider bicycle parking at the clubhouse and a shared use path connection to the clubhouse.

Response: A proposed bicycle rack has been added at the front walk of the club house which has been widened to be consistent with and connected to the shared use path along the main roadway. Refer to sheet C-4.7.

28. TEC recommends that the Applicant consider two-way flow for the clubhouse driveway and a reversal of the flow in the drop-off lane so passengers are discharged on the right side of the vehicle.

Response: See sheet C-4.7, the site plan has been modified to provide the flow of traffic at the club house as well as the drop off lane as recommended. Lane markings and signage have been updated accordingly.

29. A “keep right” sign (MUTCD R4-7) should be considered at the nose of the triangular island on Road C at Station 2+50 on the approach to Route 20. A graphic “right turn only” sign (MUTCD R3-5R) should be considered with the stop sign where Road C meets Route 20.

Response: See sheet C-4.10, the recommended signs have been added to the site plans. Details also provided, see sheet C-8.2.

30. Pedestrian crossing warning signs (MUTCD W11-2 / W16-7p) should be considered at all crosswalks within the development.

Response: The addition of Pedestrian Crossing signs has been reviewed at all locations and have been added at cross walks that have a perpendicular vehicular approach that is not under a stop condition. Please refer to the site plans for locations.

31. The Applicant should provide a narrative regarding waste removal. If waste removal is not to be collected roadside, then dumpster locations should be identified and evaluated for appropriate heavy vehicle turning movements.

Response: Waste removal will be provided by a private waste removal company. Individual bins will be provided for each individual unit for curb site pick up. A community dumpster is not proposed.

32. Sidewalks should be considered on both sides of the proposed roadways to provide accessible pedestrian paths of travel to each unit.

***Response: The option of installing sidewalks on both sides of the street was considered during the design process*, however not implemented as the intent of the designs was to minimize the footprint of the overall development impact and maximize the proposed dedicated open space and nature walking trail areas. The Applicant believes that one sidewalk as proposed will provide safe and appropriate pedestrian access throughout the site**.

33. All pedestrian design features should comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG), Public Right-of-Way Accessibility Guidelines (PROWAG), and the Massachusetts Architectural Access Board (MAAB) requirements or petition the State for a waiver.

Response: Acknowledged.

34. The Applicant's team should identify locations where raised intersections or crosswalks may calm traffic and improve pedestrian accessibility.

Response: Locations for raised intersections/crosswalks were evaluated. The Applicant believes a raised intersection would be beneficial at the primary roadway in (ROAD C) where it interacts with Road E. See sheets C-4.4 (site Plan), C-5.7(grading plan), C-7.9&11 (profile) and detail 14-sheet C-8.2. There are other traffic calming measures discussed below that have been considered and incorporated within the development areas that will help improve pedestrian accessibility.

35. The applicant should clarify the proposed design speed for each roadway within the development and verify that the radius for each proposed horizontal curve and k value for each proposed vertical curve provides sufficient stopping sight distance for the design speed. Traffic calming measures should be considered for lower design speeds.

Response: Below is the summary of the design speeds for the proposed roadway system along with the proposed minimum stopping sight distances, centerline radius and k values provided in the designs. Designs have been verified with one minor revision required, that being a modification to the sag curve Road B station sta 32+00 +/-, where the vertical curve length was lengthened to provide the minimum k value.

<u>Roads A, B (station12+00 to end), C, D, E</u>

- Design Speed = 30 MPH
- Min. Stopping Sight Distance required/provided = 200'
- Min. C.L. Radius required = 200'; Provided = 200'
- Min. k values
    - Sag Required/provided = 37
    - Crest Required/provided = 19

<u>Roads B (station 0+00 to12+00), F and G</u>

- Design Speed = 25 MPH
- Min. Stopping Sight Distance required/provided = 155'
- Min. C.L. Radius required = 125'; Provided = 150'
- Min. k values
    - Sag Required/provided = 26 ; provided = 37
    - Crest Required = 12, provided=19

<u>Traffic Calming/Mitigation for Lower Speeds:</u>

Road A:

- Proposed access to Ashworth to be emergency gated preventing potential for cut through traffic.

Road B:

- Added Speed Limit signs (20 mph) to the approach (both directions) of this section of roadway.
- Incorporated reverse curves to assist with calming of traffic
- Added all way stop at Road B (12+00) and Road A.

Road C:

- Added Raised Intersection at intersection with Road E.
- Added pedestrian crossing signs

Road E:

- Raised interaction with Road C
- Pedesarin Crossing Signs

Road F:

- Gated roadway-dead end
- Serving only 12 residents.

Road G:

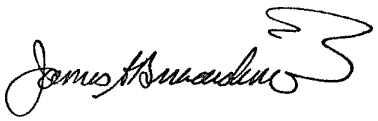
- Cul-de-sac -dead end

36. All sight line triangles should be shown for all proposed intersections on the Site Plans based on AASHTO criteria along with a general note in the plan set to indicate: “Signs, landscaping and other features located within sight triangle areas shall be designed, installed, and maintained so as not to exceed 2.5- feet in height. Snow windrows located within sight triangle areas that exceed 36 inches in height or that would otherwise inhibit sight lines shall be promptly removed.”

Response: Refer to Site Plans, sheet C4.1-C-11 and the Truck Turning and Sight Line Plans sheets C11.1thru C11.4. Sight Lines and the appropriate notes have been added.

We look forward to continuing to work with the Board as this project moves forward. Feel free to contact this office if you have any questions or comments.

Very truly yours,
Turning Engineering.



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