



March 31, 2025

George Chimento, Chair
Zoning Board of Appeals
Dover Town House
P.O. Box 250
Dover, MA 02030

Re: Tetra Tech Peer Review Letter 2
81-85 Tisdale Drive 40B
Dover, Massachusetts

Dear Mr. Chairman:

The Applicant has provided revised submission materials addressing comments in our January 16, 2025 letter. This letter provides an update to those comments based on review of the Applicant's February 28, 2026 response and collateral materials received via an email on March 6, 2025 and additional collateral materials received by email from the applicant on March 12, 2025.

Summary of Findings (March 31, 2025 Update)

The Revised Plans and supporting information represent a modest improvement and address many of our prior noted concerns. While the submittals include more project detail what has been submitted is still incomplete, generally disorganized and displays a frustrating disregard for the Board's and our need for clear, complete and organized project information. The Stormwater Management Report which is central to our review and was not provided in the initial submission is missing foundational information so much so that a thorough review of the drainage design isn't possible. There also still appear to be fundamental unaddressed issues with the proposed emergency access and wastewater disposal system. We recommend the applicant address the following critical issues prior to, or in coordination with, submitting any other project related

- (1) Submittal Quality - The Applicant should review all submittals to make sure they are organized, coordinated and contain all the requested information before submitting for review. We find it particularly frustrating that the response letter was submitted almost two weeks before the submittal materials suggesting the letter did not reflect the content of the submittal nor had the applicant conducted a substantive review of the materials.
- (2) Stormwater Management Report – Fix errors and make sure all referenced and required materials are provided, understandable and accurate.
- (3) Emergency Access – Address obvious issues with the proposed access and coordinate a meeting among the Fire Department, the applicant., applicant's engineer, and civil peer reviewer to determine parameters of acceptable access.
- (4) Wastewater Disposal – Provide a system profile showing all required system components and their corresponding elevations. This is needed to address the 10' of grade change across the system and to ensure the site can support the improvements planned above the system

Until the above referenced issues are addressed it is difficult to reach any substantive conclusions regarding the viability of the project from a civil engineering standpoint.

We hope the next submittal is complete, responsive and of substantially higher quality so our review can proceed in a more productive fashion. Despite the issues noted, several of our comments have been addressed and progress made in several other areas all of which are noted in our updated comments below. Text shown in gray represents information taken directly from previous correspondence. Text shown in black is new or updated information. Comments ending with "**Comment Resolved**" will be removed from future correspondence and numbering will be maintained so each issue can be tracked to its conclusion.

Plan Comments

Existing Conditions Plan (C-1)

The Existing Conditions Plan is very rough and lacks important information and professional endorsement. Given the nature of the Project and the extent to which it requests relief from local regulations and standards a clear understanding of existing conditions on the Project Site and the adjacent public way as well as the relative location of key features on abutting properties will be critical. We request of the Existing Conditions Plan be improved as noted below.

1. The Existing Conditions Plan is not endorsed by a licensed land surveyor and does not include labeled property line bearings. Given the proposed project density and extent of work it is critical that the boundary shown is accurately defined by a licensed surveyor and confirmed boundary shown on the plans. Please update the plan to include at a minimum, surveyor reconciled bearing and distances for all property lines, vertical datum reference, scale bar, and endorsement by a Massachusetts licensed surveyor as to the source and reliability of information shown.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

2. The plan does not clearly distinguish which parcels comprise the project assemblage. The subject assemblage should be clearly distinguishable as a single line on all sheets and individual parcels and internal lot lines should be provide as well.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

3. Coverage should be expanded to include at a minimum the approximate location of structures on abutting properties (or any others within 100 feet of the subject parcel), extension of contour coverage at least 10 feet onto abutting property (inferred from MassGIS LIDAR information if necessary), existing tree line and location of specimen trees (or trees greater than 24" in diameter), all utility and roadway infrastructure and topographical information for the complete width of the public right of way including descriptions. All information provided should be assigned to and endorsed by qualified professional.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

4. No information is provided regarding proposed tree clearing, demolition or anticipated methods for pre-construction erosion and sedimentation control. We recommend the applicant include this information on the existing conditions plan to prove that required perimeter controls and temporary basins fit within the available property and proposed construction footprint.

Mar. 31, 2025 Update: Plans have been revised to include some of the information requested. The comment remains open as several related matters are unresolved. The applicant should continue to develop and communicate its plans for managing construction so the Board understands how the site will be used, how subsurface soil conditions will be protected from compaction, and how adjacent property, public way and resource areas will be protected during the construction phase.

5. The plans show an extensive program of subsurface investigation, but no results have been provided. We request the Applicant include test pit logs in the plans and that logs include the performance date as well as the name and qualifications of the person reporting the results. Care should be taken to ensure all elevations reference the same vertical datum and that the datum be referenceable (not assumed for Project).

Mar. 31, 2025 Update: Requested information provided. **Comment Resolved.**

6. Recommend locations of any trees larger than 12" in diameter be shown on the plan.

Mar. 31, 2025 Update: Plans have been updated adequately in response to comment. **Comment Resolved.**

Site Plan Proposed Erosion Control (C-2)

7. We recommend the applicant include this information on the existing conditions as these measures will be installed prior to the start of demolition or construction.

Mar. 31, 2025 Update: Comment will be consolidated with other similar comments. **Comment Resolved.**

8. A separate Layout Plan should be provided showing proposed surface finishes and demonstrating that space allocated to those finishes is sufficient to accommodate the intended objective. At a minimum, we expect the Layout Plan will provide enough information to show how the site will be used and accessed by the residents and that surface improvements shown are coordinated with the construction and maintenance needs of underground infrastructure.

Mar. 31, 2025 Update: Improvements made but more coordination required. The plans and details show conflicting information. Please address further in future submittals.

Site Plan Grading & Drainage (C-4)

9. The legend does not match linetypes used in the drawing. Legend and drawing lines should be fixed in future submittals. Please use consistent and clear labeling and take care to make sure linetypes match those noted in the legend and that all acronyms and abbreviations are defined.

Mar. 31, 2025 Update: Improvements made but more coordination and improvement required. Please address further in future submittals.

10. The plan shows a wall at the east end of the building that is not shown on other plans. Any walls or other substantial site features should be shown on all plans and coordinated among disciplines.

Mar. 31, 2025 Update: Comment not addressed. Please address further in future submittals.

11. Some contours don't appear to tie-out properly and we question if the grading along the "vounatsos" parcel can be constructed within the limits of the subject parcel.

Mar. 31, 2025 Update: Comment unaddressed. Plans show a wall on the property line that retains more than 6 feet of soil but does not afford the space to construct the wall without trespass. Please address in future submittals.

12. No information has been submitted demonstrating the design shown meets applicable standards. Please provide documentation showing intended system performance consistent with performance standards and the Massachusetts Stormwater Handbook.

Mar. 31, 2025 Update: Stormwater Report provided but is missing fundamental information and includes several errors or misrepresentations suggesting the report was not adequately reviewed prior to issuing. Please revise the report and address the comments noted as well as conduct a thorough review of its contents to confirm at a minimum that (1) all information is included, (2) the information is clearly communicated and (3) all work reflects project conditions.

13. Several wall types are shown. Please describe each wall system and ensure space allocated is sufficient to install and maintain the wall.

Mar. 31, 2025 Update: Comment addressed but only partially. Details provided do not match or accurately convey project conditions and the question of type and constructability at each location remains.

14. Provide calculations demonstrating proposed catch basin location are capable of meeting at least the 10-year design storm.

Mar. 31, 2025 Update: Calculation provided for only one basin when several are proposed.

15. Catch basins are shown connected in series which is not allowed per the Stormwater Handbook. Please address in future submittals.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

16. The grading plan suggests underground infiltration systems will be constructed in areas of fill supported by retaining walls. The design documentation will need to address how proposed retaining walls and the noted impervious barrier will manage hydrostatic loads from infiltrating stormwater without allowing breakout or excessive loading of the wall. Please note the impermeable barrier shown does not extend the full length of the wall.

Mar. 31, 2025 Update: Comment not addressed. In our opinion the proposed wall layout is not sufficiently offset from the proposed infiltration system. We expect wall base sections would extend below the infiltration system. Please address comment as requested and thoroughly.

17. Please specify the “Stormwater Treatment Unit” proposed for this application and be sure model can treat volume anticipated and in the orientation shown.

Mar. 31, 2025 Update: Plans are not responsive to comment. Stormceptor Model STC 1200 does not accommodate multiple inlets. Please revise plans accordingly.

18. Grading shown does not appear to comply with requirements for accessible slopes.

Mar. 31, 2025 Update: Plans depict accessible parking spaces adjacent to an entry that are more than 2 feet lower than the noted building finish floor. Please adjust the design to clearly show accessible routes and make sure site grading meets required slopes and that those slopes are reflected consistently in all design documentation (ie. grading plans and sewer/septic profiles). Please note, the original comment included extra text not intended. Intended note is revised above.

19. Note wall heights on plan. Preferably by labeling top and bottom of wall at representative locations.

Mar. 31, 2025 Update: Some noted but several missing and in areas where walls described do not appear constructible. Please review the proposed grading and clearly show the anticipated wall heights and confirm that they are constructible as shown and provided a detail demonstrating so.

Layout and Proposed Utilities (C-4A)

20. Building shown does not match architectural drawings.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

21. It would be helpful to have parking space dimensions and totals provided on the plan along with a comparison to the number of spaces required for the proposed use.

Mar. 31, 2025 Update: Plans revised but include inaccurate information (ie. table indicates 42 spaces required when actual value should be 63). Plans need to be accurate and organized.

22. Please label proposed setbacks and provide a summary comparing proposed setbacks to those that are required under current zoning.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

23. The plan shows a proposed fire system storage tank. Please provide documentation as to its sizing and operation parameters.

Mar. 31, 2025 Update: Response provided is reasonable. **Comment Resolved.**

24. The proposed layout does not appear to provide adequate accommodation for fire trucks to navigate through the site or that the space provided is adequately setback from the building to serve its intended function (access too close to tallest side of building). Applicant should coordinate with the Fire Department and provide access as requested and/or required. A Fire Truck Access Plan should be provided showing how responding apparatus will navigate the Tisdale Drive and the site including areas of proposed vehicle staging during response.

Mar. 31, 2025 Update: Plans show the fire truck exceeding the limits of the proposed access drive and the access drive does not meet minimum standards. It's our opinion that the access shown does not provide adequate space to accommodate the noted vehicle. However, if the building is to be fully sprinklered the rear access may not be required. This issue can only be resolved in coordination with the Dover Fire Department. We suggest the applicant meet with the Fire Department and get written confirmation that the access shown is acceptable or otherwise modify the plan accordingly.

25. The plan shows light fixtures in locations different than shown on the Lighting Plan. Please ensure all information is coordinated among disciplines.

Mar. 31, 2025 Update: Plans still not coordinated.

26. Curb should have a minimum radius of 2'.

Mar. 31, 2025 Update: Comment not addressed in several locations.

27. Please show and describe proposed signage including stop signs and any facility sign.

Mar. 31, 2025 Update: Stop signs noted but no other signs. Given the south entrance will serve as an exit onto Tisdale Drive it should be oriented at a right angle to provide better visibility to traffic on Tisdale originating from the north.

28. All building access points should be shown on the plan. Currently only the main entry is shown.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

29. Snow storage areas are shown on the plans but do not appear to provide adequate space to serve the areas requiring removal. Please provide a justification for the areas provided and including a description of how snow will be managed along the emergency access drive without impact to abutting property.

Mar. 31, 2025 Update: Locations have been added to the plans but clearly have not been coordinated with the landscape plan on which only two small areas are identified. Please coordinate the submittals and provide a description of how the storage areas shown will meet the needs of the site.

Site Plan Proposed Presby System (C-5)

30. This plan and the associated details are not relevant to Comprehensive Permit review, and we recommend removing them from the set.

Mar. 31, 2025 Update: Plan has been removed. **Comment Resolved.**

Site Plan Proposed T5 System (C-6)

The septic system design provided does not appear to meet basic standards and submittal materials lack critical information needed to validate the proposed design. Correction of these issues will likely result in a larger system footprint potentially impacting the proposed facility layout.

31. Lines are barely readable. Recommend all proposed work be shown as black lines and all existing conditions information be shown in gray to assist in review.

Mar. 31, 2025 Update: Plans include the required sizing information of a standard system and show a standard soil absorption system (SAS) can fit on the site but marginally so. However, the grade change above the SAS is significant and steep (10') but no profile or system elevation information is shown demonstrating how the system will be arranged vertically in a way that complies with Title 5. Additionally, the plans suggest distribution boxes will be used when a dosing system is required. In our opinion the plan provided does not adequately demonstrate a Title 5 compliant SAS can be constructed in the space available on the site. At a minimum, please provide a system profile showing the relative position of all system components as well as indicate vent and access locations to confirm there are no conflicts with site uses above.

32. No soil testing logs have been provided to confirm adequate separation from groundwater or other related design information. Please provide a copy of test pit results for all locations shown on the plans.

Mar. 31, 2025 Update: Logs provided as requested. **Comment Resolved.**

33. No Reserve Area is shown on the plan. New septic system designs must include “a reserve area sufficient to replace the primary absorption system” and there does not appear to be adequate space for a reserve area on site. Please provide a design meeting standards.

Mar. 31, 2025 Update: Reserve area is accommodated in the layout provided. **Comment Resolved.**

34. Please clarify why separate septic tanks are proposed for each side of the building and confirm the pump chamber is sized to serve a pressure dose system as required for systems over 2,000 gallons per day.

Mar. 31, 2025 Update: Response provided is acceptable but additional documentation is required to demonstrate the system shown can comply with Title 5. **Comment Resolved.**

Site Plan Proposed Presby Details (C-7)

35. These details are not relevant to Comprehensive Permit review, and we recommend removing them from the set.

Mar. 31, 2025 Update: Sheet C-7 has been removed as requested however an extra copy of Sheet C-2 was inserted in its place whereas the response indicates C-7 Layout and Septic Details should have been inserted instead. Please proof future submittals and provide all sheets intended. To ensure the Board has all plans please provide a plan set cover sheet with future submittals.

Septic Details (C-8)

36. Only details of the Title 5 compliant design should be provided to confirm the Project is eligible for an alternative technology.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

37. Be advised, the separation from Estimated Seasonal High Groundwater (ESHGW) must include consideration of the groundwater mounding. It does not appear the design includes consideration of the groundwater mound. Please provide documentation showing a Title 5 compliant system can be constructed within the available footprint.

Mar. 31, 2025 Update: No information has been provided indicating how the system meets vertical separation from groundwater. Response indicates an “estimated” 1.1-foot mound but provides no documentation showing how that was determined or its impact on system design. Please provide elevations of all SAS components and documentation showing adequate separation to groundwater including mounding. At present the plans do not demonstrate the SAS and site improvements are permittable under Title 5 as shown.

Drainage Details (C-9 & 10)

38. Gray lines are difficult to read. Please use black lines in future submittals.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

39. Confirm rated capacities of the Stormceptor units are not exceeded based on the proposed layout.

Mar. 31, 2025 Update: Response indicates the “treatment model has been upgraded” but provides no documentation that it is adequate to treat the area shown. Nor do the plans accurately reflect the size of the structure or the allowed orientation of inlets. The Project must provide enough design clarity and documentation to demonstrate the drainage system can meet applicable standards. At present the documentation requires a great deal more work and attention to detail.

40. Plans only indicate a Type B structure is proposed. If Type A structure is not proposed, please remove detail from the plan set.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

41. Design documentation is required to confirm details shown meet standard.

Mar. 31, 2025 Update: Details are still poorly prepared and do not provide enough information to verify the design can meet standards. For example, the outlet control structure does not include any elevation information, and the details/plans do not reflect the system modeled in the Stormwater Management Report. The Applicant must provide enough clear and accurate information to facilitate a thorough review. The materials submitted are substantially below the standard of care and do not demonstrate a clear command of the subject matter. Future submittals must be coordinated and more competently presented.

Site Details (C-11 & 12)

42. Gray lines are difficult to read. Please use black lines in future submittals.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

43. Plans should clearly indicate where details apply. For example, a timber guardrail detail is provided but no guardrail is shown on the plans. Please coordinate the details with the plans and ensure plans clearly reference the correct detail.

Mar. 31, 2025 Update: Plans and details are still not coordinated or detailed enough to facilitate review.

44. Details of any proposed wall systems should be provided.

Mar. 31, 2025 Update: Details provided appear to be randomly selected and do not reflect the specific applications shown on the plans. For example, the wall detail notes top of stone wall elevation at 114 when the site is above elevation 200. Notes provided do not correspond to the content of the submittal. In our opinion the information provided demonstrates a frustrating lack of attention to detail and we will not comment on future submittals unless the requisite level of effort and attention to detail are clear in both organization and content.

Landscape Plan (L-1)

The Landscape Plan appeared to be well thought and appropriate to the application and suggests a robust assortment and density of site landscaping. Tree sizes are specified at 3-inch caliper which is also appropriate. However, there is no outdoor recreation space shown suggesting residents will have no programmed or otherwise useable recreation space that is not above a wastewater or stormwater disposal field. This issue will be addressed in detail as part of the architectural review being conducted by Davis Square Architects to which we defer.

45. Plans should show at least 10 feet of abutting property to ensure that as plantings installed along the project boundary grow, they will not impact abutting property.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

46. Show the location and design of the proposed facility sign.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

47. Provide a detail of the “reinforced grass”.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

48. Planting is proposed within an area designated as a drainage swale and near a wall on the Grading and Drainage Plan. Confirm the swale and planting are coordinated or otherwise revise the plan.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

49. Show all proposed walls.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

50. Show proposed light fixtures.

Mar. 31, 2025 Update: Light fixtures not shown.

51. Show proposed snow storage areas.

Mar. 31, 2025 Update: Storage areas noted but not coordinated with other plans and areas shown are not sufficient to serve the needs of the site.

Lighting Plan (L-2)

52. Parking lot light fixtures are proposed at the end of a parking stall. Please coordinate placement so that the fixtures are adequately protected from damage and placement does not reduce effective parking stall dimension.

Mar. 31, 2025 Update: Plans not coordinated

53. The plan shows light fixtures near the property boundary and light levels shown suggest light spill onto abutting property. Design should be modified to ensure no light spill onto abutting property and demonstrated on the photometric plan.

Mar. 31, 2025 Update: The plans do not address the comments noted above. Light still spills onto abutting property.

Stormwater Report

No stormwater report or similar documentation has been provided. As such there is no way to confirm the designs shown meet applicable standards.

54. Provide documentation demonstrating the drainage design meets applicable standards.

Mar. 31, 2025 Update: Although the system shown is relatively consistent with expectations, the Stormwater Report provided is missing foundational information, is not coordinated with information shown on the plans and is poorly organized. We request the Applicant substantially improve the completeness and the quality of the submittal before we will comment further.

Traffic Report

55. The report describes a secondary emergency access not shown on the Site Plans.

Mar. 31, 2025 Update: Response provided adequately addresses the comment. **Comment Resolved.**

56. The report indicates 66 parking spaces will be provided when the Site Plan shows only 64.

Mar. 31, 2025 Update: Response adequately addresses the comment. **Comment Resolved.**

57. The report indicates a pick-up/drop-off area is provided at the front of the building. No such accommodation is shown on the site plan.

Mar. 31, 2025 Update: Response adequately addresses the comment. **Comment Resolved.**

58. We request that sight distance triangles be shown on at least the Project Site Layout Plan along with a note specifying that it must be maintained as necessary to ensure minimum required sight distances are met.

Mar. 31, 2025 Update: Response indicates the sight triangles were added to the landscape plans but they are not shown on the plan we were provided.

59. We recommend the ZBA include a condition requiring implementation of the Transportation Demand Management (TDM) measures listed in the Traffic Report in any Comprehensive Permit approval.

Mar. 31, 2025 Update: Plans revised to address the comment. **Comment Resolved.**

Construction Management Plan

60. The documentation submitted does not include any information on construction staging or temporary controls to manage runoff during construction. We recommend the ZBA request the Applicant to provide a Construction Management Plan clearly describing how construction on such a limited site will be accomplished without risk to abutters or the use of the Tisdale Drive right of way. At a minimum, the CMP should show the proposed building footprint and limit of excavation, construction trailers, contractor parking, construction dumpsters, emergency access, material/soil stockpile areas, delivery/turnaround

area, crane staging area (if applicable) and construction period erosion and sedimentation controls meeting requirements of the USEPA NPDES Construction General Permit.

Mar. 31, 2025 Update: Response indicates the “applicant is happy to provide a CMP at the appropriate time”. Given the limited space available and the potential that construction activity may foul soils beneath the wastewater SAS and/or stormwater infiltration system we recommend the Board require the applicant to show how construction will be managed in a way that protects these critical site features without burdening Tisdale Drive or impacting abutting property.

New Comments (March 28, 2025 Update)

61. The submittals provided show a frustrating lack of attention to detail and we request the applicant to address the comments above and provide clear and thorough submittals which are properly coordinated and reviewed before we are prepared to provide additional comments. In our opinion the materials provided are not of suitable quality to support more detailed review at this time.

As noted above we are frustrated by what appears to be a minimally responsive, incomplete and uncoordinated submittal. We hope the applicant can address the comments noted and provide a complete and more professional submittal so we can complete our review. If you have any questions or comments, please feel free to contact me at (508) 786-2230.

Very truly yours,



Sean P. Reardon, P.E.
Vice President

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