July 20, 2023

Mr. Christian Klein, Chairperson Arlington Zoning Board of Appeals 23 Maple Street Arlington, MA 02476

Re: Tetra Tech Comment Letter 1 Comprehensive Permit (40B) Peer Review 10 Sunnyside Avenue Arlington, Massachusetts

Dear Mr. Chairman:

Tetra Tech (TT) has reviewed the most recent submittal materials for the above-referenced Project to assist the Town of Arlington Zoning Board of Appeals (ZBA) in its Comprehensive Permit review.

Our review is based on materials available on the ZBA's online 40B document file sharing site including the specific documents listed below.

- A plan set titled "10 Sunnyside Ave. Comprehensive Permit" (Project Plans), dated March 9, 2023, under Cover Sheet by Utile Architecture-Urban Design (Utile)
- Set of revised sheets from above submittal dated June 9, 2023 hereafter referred to as "Revised Site Plans"
- An "Impact Analysis Report" for 10 Sunnyside Avenue, Arlington, MA 02474 dated March 9, 2023 prepared by the Project Team.
- A "Supplemental Traffic Impact Study" for 10 Sunnyside Avenue Arlington, MA dated December 8, 2022, prepared by Nitsch Engineering (Nitsch).
- Project Presentation Slides dated June 13, 2023.

In our opinion the Project, as presented in the above-referenced submittals, represents a well thought and reasonable application of the Comprehensive Permit process resulting in negligible long-term traffic impacts and net improvement to stormwater quality over the existing use.

Our principal concerns relate to the uncertainty of how the Project will address the challenges of constructing a multi-story structure which occupies nearly the entire site leaving little or no room for areas and activities typically required to support construction. Based on information presented during the public hearing, the project has shown an awareness of those challenges and a strategy for addressing most, if not all of them and we expect most can be resolved prior to applying for a building permit. In anticipation of that we have provided recommendations for permit conditions addressing our concerns should the Board consider. approving the Project.

Given the possibility that resolving some of those concerns may result in noticeable changes to the Project, we recommend any decision approving the Project include <u>a condition requiring the applicant to submit a set of "Final Site Plans" to the ZBA for review prior to, or concurrent with submitting a building permit application. The "Final Site Plans" will be reviewed to (1) confirm compliance with Comprehensive Permit conditions, (2) confirm the Project has received required state/federal/local permits and (3) confirm any resulting changes are consistent with the approved Preliminary Plans. The Final Plans should, at a minimum:</u>

- 1. Include any proposed site plan and/or building changes (elevation/floor plan) made at the discretion of the Applicant.
- 2. Incorporate any changes resulting from subsequent review with Town Departments.
- 3. Demonstrate compliance with applicable provisions of the Town's Stormwater Management Bylaw.
- 4. Include a Construction Management Plan detailing proposed staging and phasing of construction and addressing the scope described in the related comment below.
- 5. Address comments noted in this letter to the satisfaction of the Board.

The following are our specific comments for consideration by the Board. The comments are organized by submittal and include a recommended condition where applicable. In our opinion the Project has adequately demonstrated consistency with Comprehensive Permit design criteria and any outstanding technical comments can be addressed in a Final Plan submittal without substantially affecting the as-submitted Project design. However, it's our understanding the Board may wish to discuss several of these points further in the public hearing.

# **Project Plans**

Cover Sheet (G0.00)

1. Suggest applicant review the Zoning Summary table to confirm status of items noted and add notation for any additional relief requested.

**Applicant Response:** Noted.

Locus Map (G0.01)

No Comments

**Building Renderings (G0.02-G0.03)** 

No Comments

**ALTA/NSPS Land Title Survey (Sheets 1 and 2)** 

2. Plan is not endorsed by Professional Land Surveyor however information shown is suitable for review of the Preliminary Plan. Recommend any decision approving the Project include <u>a condition requiring the Project to submit an existing conditions plan stamped by a Massachusetts licensed surveyor prior to filing an application for building permit.</u> No further action required for Preliminary Plan.

## Applicant Response: Noted.

3. Plan does not show any easement rights to drain line on abutting property. Project should confirm its right to connect to and/or utilize the off locus drain line prior to filing an application for a building permit. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Noted. Further analysis by Samiotes indicates the drain line may be municipal, confirmation of this analysis and easement condition pending conversation with Town Engineer.

## Site Prep and Erosion Control Plan (C1.00)

4. The plan provides very little relevant or reliable information demonstrating how walls actively retaining soil on abutting properties can be removed or how soils disturbed during construction will be prevented from tracking onto the street or being discharged to the drainage system. The plan shows an erosion control line proposed within the public way and a stabilized construction entrance that extends into the proposed building footprint, neither of which is a viable option. Nor are any access controls such as construction fence or access gates shown. Based on information provided by the Project's construction manager at the last public hearing, we expect the Project will need to secure space on an adjacent or nearby parcel to support construction and that a specific and thorough plan can be provided once those accommodations are known. We recommend any decision approving the Project include a condition requiring the Project to provide a detailed Construction Management Plan (CMP) including plans, details and narrative demonstrating adequate measures to protect the public and abutters from construction and minimize potential for sediment transport during construction as required in the Arlington Stormwater Bylaw. No further action required for Preliminary Plan.

<u>Applicant Response:</u> The project team will provide a detailed CMP during the building permitting process.

5. Proposed tactile warning panels appear to have been inadvertently shown on the plan. Please address in Final Plans. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> As presented to the board in previous hearings, tactile warning panels are to be provided where pedestrian traffic crosses driveways per the towns standard details.

6. Indicate limits of pavement removal for utility trenches will be sawcut and show limits clearly on Final Plans. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> The plans have been updated to include utility trenching limits.

7. Wall demolition shown will likely result in at least short-term instability of retained soils on adjacent property. We recommend any decision approving the Project include <u>a condition</u> requiring the CMP to address temporary support of soils during construction and any proposed measures be endorsed by a licensed Massachusetts engineer. No further action required for Preliminary Plan.

<u>Applicant Response:</u> Agreed. The project team will provide a detailed CMP at building permitting process that will address support of excavation.

# Site Layout Plan (C2.00)

8. The parking spaces at the end of each aisle are difficult to access. The space at the south end lacks any area in which to turn when backing out of the stall and the spaces at the east end are not sufficiently offset from the entrance. We recommend these spaces be re-designed to provide adequate access or otherwise designated exclusively for compact vehicle use and that those changes be clearly shown on Final Plans to be submitted to the Bard for review prior to filing a building permit application. **No further action required for Preliminary Plan.** 

# <u>Applicant Response:</u> Noted. The project team will continue to evaluate the parking layout.

9. Although emergency vehicles can only access the site along the Sunnyside Avenue boundary, the Project seems reasonably well served for emergency access due to the relatively shallow depth of the building/lot, low traffic volume on Sunnyside Avenue and given the abutting properties offer multiple means of alternate access in case of emergency. While we note no obvious issues, we defer to the Arlington Fire and Police Departments and recommend any decision approving the Project include a condition requiring approval by the Arlington Fire and Police Departments prior to submitting a building permit application. No further action required for Preliminary Plan.

<u>Applicant Response:</u> Noted. The project team notes that no concerns were raised about access to the site by the Fire and Police departments during the project meeting with town officials in January.

10. No dedicated space is provided for delivery or service vehicles. However, given the relatively low traffic volume on Sunnyside Avenue and the high percentage of aisle space within

the garage there appears to be reasonable accommodations available for such needs. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Noted. The project team intends to provide a short term parking & loading area at the curb in front of the main entrance to facilitate these uses. The project team has requested input from the town for requirements and details to designate these spaces.

11. The plan appears to show a structural column within the accessible space's required access aisle. It is our understanding this condition would not comply with accessibility standards and should be addressed prior to applying for a building permit. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Noted. The project will review and make adjustments as necessary to ensure code compliance.

12. Layout plan should clearly indicate all surface finishes. Surface finishes are not identified on the plan for several areas, and it is unclear which areas are proposed to be "cement" concrete and which areas are intended to be "bituminous" concrete. Please address on Final Plans. **No further action required for Preliminary Plan.** 

Applicant Response: The plans have been updated to indicate all surface finishes.

13. Final Plans should include notation calling for a construction joint at the property line clearly differentiating between site improvements and those within the public way and should show location of driveway apron joints. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> The plans have been updated to call out for a construction joint at the property line.

14. Plan indicates a 6" concrete riser between the front door and the sidewalk. It's unclear if/how this step would impact accessibility. We expect a ramp or similar accommodation may be required to provide access from the sidewalk to the facility entrance and elevators. Please address in Final Plans. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Flush access is provided adjacent to the step, on the south side of the column, where the sidewalk grade meets the ground floor elevation. This will be clearly annotated on the final plans.

15. Plan (and renderings) suggest a garage door is proposed approximately 2 feet from the back of public sidewalk and 9 feet from the Sunnyside Avenue travel way. Although traffic volume on Sunnyside Avenue is very light, the proposed door location will likely cause entering vehicles to occupy the public way while the door opens or while waiting for exiting vehicles to

pass through the 14-foot opening. Suggest the Board consider requiring the project to move the door into the building on the Final Plans. **No further action required for Preliminary Plan.** 

Applicant Response: The garage door had originally been inset further into the garage plan but was moved to its present location in response to safety concerns raised at abutter meetings who felt that the recessed garage door provided out-of-view spaces to hide. Moreover, it is felt that there would be negligible impact to the traffic flow as Sunnyside is a low-volume street, and the garage door would be high-speed and radio controlled to minimize wait time at the door.

16. Plan shows a proposed transformer along the north property line. Project should confirm that any required electrical setbacks do not extend onto the abutting property and that adequate protection is installed along the boundary given the use of the adjacent parcel by fuel oil delivery trucks. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Project team will coordinate with Utility company on the sizing of equipment and bollard locations based on project-specific conditions. Pending utility company feedback, minor adjustments to the pedestrian walkway at grade and the roof deck edge at level 2 may be required to accommodate specific equipment sizes and clearances.

17. Doors along the south side of the building swing into the walkway. Any doors opening into the walkway should at a minimum be able to swing to a completely open position so as not to preclude/limit access along the walkway. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Noted. The project team will make door swing adjustments in conformance with code requirements.

# Site Utility Plan (C3.00)

18. The flow direction of the municipal sewer in Sunnyside Avenue is unclear. Project should confirm flow direction of the existing sewer and modify the proposed connection if needed to ensure flow is directed along the path of flow and not against. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> The direction of flow has been shown to flow south towards Broadway in the survey data and record plans.

19. No information is provided on the size or slope of the existing sewer. Given the project replaces an existing use with significantly lower water/sewer demand we recommend any decision approving the Project include a condition requiring the Project to demonstrate adequate water and sewer capacity is available prior to issuance of a building permit. No further action required for Preliminary Plan.

<u>Applicant Response:</u> Noted. A sewer flow test report and "Title 5" Calculation memo have been provided within the submittal. The project team is currently conducting visual inspection of the sewer.

20. Plan references details and drawings not included in the submittal. Recommend such references be removed or re-worded to avoid confusion on the Final Plans. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> The plans have been updated to reference details and drawings that pertain to the project.

21. Plan shows sewer line routed through building column/foundation. It's understood that is not the intent but please address on Final Plans. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Plans have been updated to avoid routing the sewer line through a building column.

22. Confirm transformer setbacks will not extend onto abutting property as noted in prior Layout Plan comment. **No further action required for Preliminary Plan.** 

Applicant Response: Refer to applicant response above, item #16.

23. Proposed hydrant is shown approx. 1 foot from the face of building which could restrict fire department access in an emergency. Recommend hydrant be relocated closer to the street and away from the building so fire department has easier and more reliable access. Confirm acceptability of location with Fire Department and note approved location on the Final Plans prior to submitting building permit application. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Noted. The project team will review the hydrant location with the fire department and adjust based on their feedback.

## **Grading Plan (C4.00)**

24. Proposed grading appears to direct garage runoff to "Mini Drywell 1" rather than to the proposed floor drains. Runoff from the garage floor must discharge to sewer and cannot be discharged to the stormwater system. We recommend any decision approving the Project include a condition requiring the garage grading be modified to direct all garage runoff to floor drains and any potential pathways to the stormwater system be eliminated. No further action required for Preliminary Plan.

# <u>Applicant Response:</u> The plans have been updated to direct all garage runoff to the proposed floor drains.

25. Grading of south alley/walkway does not appear sufficient to convey runoff to the proposed area drain (AD#1). This area must be sloped enough to ensure no accumulation of water on the walking surface given it is exposed to the outside temperature and prone to freezing. Please address on Final Plans. No further action required for Preliminary Plan.

<u>Applicant Response:</u> The plans have been updated to provide sufficient grading to the area drains (AD#1 and AD#2).

26. Plan suggests bike parking area floor will be pitched to the northeast corner of the room/enclosure however no floor drain is shown. Please address in Final Plans. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> The design intention is to provide an open air enclosure that drains into open drain in the garage. Project team will review detail as the design progresses.

27. Proposed exterior grade in the north corner of the building appears to extend above the noted top of wall elevation. Please address in Final Plans. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> The grades in the north corner of the building have been updated to show the bottom of wall and top of wall elevations.

28. Grading indicated runoff will collect and flow along the northwest side of the building, wrap around the corner and then be directed onto the abutting property to the north. Similarly, runoff from west corner of the site will flow to the abutting property to the south. Neither of which occurs under current conditions. We recommend any decision approving the Project include a condition requiring the Project to demonstrate no additional runoff will be directed onto abutting property and that the Final Plans be modified accordingly prior to submitting a building permit application. No further action required for Preliminary Plan.

<u>Applicant Response:</u> Condition noted. The grading issues are minor and localized. The design team intends to address these areas through targeted local solutions including micrograding, area drains, and trench drains where needed. The plans have been updated to show the grades at the perimeter of the site directed towards the stormwater conveyance within the site.

**Stormwater Management Plan (C5.00)** 

29. The Project proposes a substantial stormwater infiltration system beneath the proposed building which in our opinion does not comply with Massachusetts Stormwater Handbook requirement to maintain at least 10 feet separation between building foundations and infiltration systems. Nor has any documentation been provided demonstrating system performance or adequate separation from estimated seasonal high groundwater (ESHGW). That being said, the Project does not within Massachusetts Wetlands Regulations jurisdiction, leaving only the local Stormwater Bylaw requiring compliance with the Handbook which is waivable under the Comprehensive Permit process. In replacing an existing industrial use, the Project will improve stormwater water quality and reduce phosphorous without any additional mitigation and aerial photos clearly show the site was completely impervious as recently as 2019 suggesting the Project would result in less runoff. Given these expected benefits, we recommend the Project consider amending its analysis and/or expanding its waiver requests to avoid the need for the infiltration system. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> The applicant is in the process of providing an updated waiver from the Town's stormwater bylaw requirements. In parallel the project team is developing what the appropriate stormwater management on the site will be.

30. The Project proposes connection to an existing drain that runs through the abutting property rather than in the public way and there is no indication of an easement or similar right providing access to it. We recommend any decision approving the Project require the applicant demonstrate the right to connect as part of its building permit application. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> The project engineer is in the process of reviewing record materials and performing on-site observations to be reviewed by town engineer to make a determination on appropriate connection.

31. Proposed Mini Drywell#1 drains internal garage area which is not allowed. Please address as previously noted. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> The plans have been updated to direct all garage runoff to the proposed floor drains.

32. No information has been provided demonstrating the performance of the stormwater collection system. We recommend any decision approving the Project include <u>a condition</u> requiring analysis be provided demonstrating the system is capable of safely conveying runoff from the 100-year storm event without surcharge or discharge to garage floor drains. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Per item #29 above, the applicant will seek a waiver to the stormwater bylaws.

**Civil Details (C6.00 – C6.02)** 

33. See prior comments regarding consistency with information shown on the plans. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Plans have been updated to include details and drawings relevant to the project.

Floor Plans (A1.01 – A1.03, A1.05, A1.07)

34. See prior comment regarding proposed location of garage door, swing of doors in alley and vestibule accessibility (step). **No further action required for Preliminary Plan.** 

**Applicant Response: Noted.** 

Exterior Elevations (A3.00 – A3.03)

35. The elevations do not show how the project intends to transition grade at the property boundary and the south elevation does not reflect conditions shown on the grading plan and potentially conflicts with existing grades on the abutting property. It's understood these details will be addressed in later design. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> Noted. Plans show preliminary approach of a retaining wall, the specific design will be developed and coordinated with an approach towards support of excavation and coordination of construction easement terms with abutting property owners.

**Building Axons (A3.10)** 

No Comments

**Building Sections (A3.50 – A3.51)** 

No Comments

### **Impact Analysis Report**

36. The Impact Analysis Report adequately describes the Project but some of the information noted as being provided in an Appendix (Soil Report, O&M Plan) was not found in the materials provided and some of the information may change if the design changes. We recommend any decision approving the Project include <u>a condition requiring an updated narrative summarizing the Project, its impacts, and any related mitigation prior to submitting an application for a</u>

<u>building permit.</u> The narrative should include all documentation required by applicable sections of the Stormwater Bylaw. **No further action required for Preliminary Plan.** 

<u>Applicant Response:</u> The report has been updated to provide the required documentation.

## **Supplemental Traffic Impact Study**

37. Town guidelines recommend that traffic studies include intersections within 1,000 feet of the development site. The traffic study did not include all intersections within 1,000 feet. However, capacity analyses of additional intersections beyond those evaluated in the traffic study are not expected to be beneficial as the residential development project is anticipated to increase traffic volumes on Broadway beyond the study area by less than 1 percent relative to existing conditions. Additionally, traffic increases generated by the proposed project north of the site on Sunnyside Avenue are anticipated to be negligible. This nominal increase in traffic is not anticipated to materially change peak hour levels of service at the intersections that were not included in the study. **No further action required for Preliminary Plan.** 

# **Applicant Response:** Noted.

38. The traffic study is inconsistent in describing which intersections are included in the study area. Tetra Tech recommends that the Applicant clarify the discrepancies among the text, figures and capacity analyses in future submittals if needed. **No further action required for Preliminary Plan.** 

#### **Applicant Response: Noted**

39. The Applicant submitted a waiver request for reducing more than 20 percent of the parking supply to compact-sized. The site plans show 18-foot by 8.5-foot parking spaces. Tetra Tech recommends that the Final Plans show which spaces will be limited to compact-sized vehicles and provide appropriate signage and pavement markings. **No further action required for Preliminary Plan.** 

#### <u>Applicant Response:</u> Noted.

40. The traffic study included a crash analysis of the study intersections which indicated that the signalized Broadway/Alewife Brook Parkway intersection experiences an above-average crash rate including one collision resulting in a fatality. This location has also been identified by MassDOT as a Highway Safety Improvement Program (HSIP) cluster indicating a high crash experience. However, the Project is not expected to materially impact function or safe operation at the intersection. **No further action required for Preliminary Plan.** 

### Applicant Response: Noted.

41. The proposed on-site parking will be secured using a garage door. Tetra Tech recommends that the Applicant explore the feasibility of implementing safety measures (i.e., auditory warning systems, visual warning systems/signage, etc.) to enhance safety for pedestrians using the sidewalk adjacent to the garage and of recessing the garage door further into the building to provide more off-street queuing space and include feasible improvements on the Final Plans. **No further action required for Preliminary Plan.** 

# <u>Applicant Response:</u> Noted regarding additional safety measures. Please refer to applicant response on item #15 regarding the location of the garage door.

42. The trip generation rates used in the traffic study do not match the current industry-standard trip rates published by ITE on their Trip Generation Manual, 11th Edition web-based app for the weekday morning peak hour and there are minor discrepancies between the trip generation summary table and the site generated trip graphic. We do not expect these discrepancies to materially impact the results of the study but should be addressed in future submittals if needed. **No further action required for Preliminary Plan.** 

# **Applicant Response:** Noted.

43. The trip distribution patterns were primarily based on existing travel patterns. Although residential trip distribution calculations typically include US Census Journey to Work Data, any change in trip distribution patterns is not anticipated to materially change the results of the traffic study. **No further action required for Preliminary Plan.** 

#### **Applicant Response: Noted.**

44. We agree with the proposed site access improvements to provide a Stop bar at the site driveway approach to Sunnyside Avenue. Tetra Tech recommends that a Stop sign be installed for vehicles exiting the garage and that all proposed traffic signage and pavement markings for the project be MUTCD-compliant. **No further action required for Preliminary Plan.** 

# **Applicant Response:** Noted.

45. We recommend Applicant coordinate with the Town to provide a Transportation Demand Management (TDM) program consistent with the Town's Sustainable Transportation Plan. Examples of potential TDM measures include, but are not limited to providing a TDM coordinator, post alternative transportation options in a common area on-site, fees for on-site parking, fund a nearby Blue Bikes bikeshare station, transit subsidy, provide electric vehicle (EV) parking, etc. **No further action required for Preliminary Plan.** 

**Applicant Response: Noted.** 

46. The sidewalk extending from the Project site to Broadway appears to be in deteriorated condition. Given residents of the Project are most likely to travel that section of walkway we recommend any decision approving the project include a condition requiring the sidewalk be repaired prior to occupancy. No further action required for Preliminary Plan.

## **Applicant Response:**

### Landscape Plans

47. A slide "Ground Plane – Planting Plan" was included in the Landscape Architecture portion of the Applicant's June 13, 2003 presentation. We recommend any decision approving the Project include a condition requiring site landscaping as shown on the Ground Plan – Planting Plan be installed prior to issuing a Final occupancy Permit. No further action required for Preliminary Plan.

## Applicant Response: Noted.

As noted above, the only comment we consider as a "must" to address prior to the Board closing the public hearing is Comment 1. The other comments, in our opinion, can be addressed on the Final Plans and/or by imposing the recommended condition. However, we recognize and respect the Board's review responsibility under 40B and would certainly support its request/requirement for additional discussion or information from the applicant to better inform their deliberations on any of the points raised above. We thank the applicant and its design team for the work provided and are available to discuss our comments at the next public hearing. 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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