



50 WEBSTER AVENUE (D3.1) | P&Z 21-060, 22-073, 21-166
Comment Response | September 15, 2022 | US Union Square D3.1 Owner LLC

COMMENT & DISCUSSION POINT SUMMARY

1. Project Wind Analysis
2. Project Glare Analysis
3. Mobility and Accessibility Analysis
 - a. Alley Traffic Patterns
 - b. Interface with Existing Conditions, Signage and Public Access

PROJECT WIND ANALYSIS

OVERVIEW OF WIND IMPACTS

The Project's wind environment was studied through a wind tunnel test employing 91 sensors, with wind measurements in 36 directions.

Expert Opinion:

1. No dangerous winds are expected
2. No exceedance of Somerville's effective gust criteria (a gust occurring more than 1% of the time)
3. Favorable conditions are expected at the two 'Green Rooms' in the Civic Space – (ref: ●)
4. Most areas are appropriate for the intended pedestrian use (inclusive of public sidewalks adjacent to bicycle travel) – (ref: ●)
5. Less desirable winds observed at select corners but find proposed trees and future development will have mitigating effect – (ref: ●)
6. In the 'Full Build' or completed master plan configuration, wind conditions will improve around the proposed building



Source: RWDI Pedestrian Wind Conditions Letter of Opinion – Predicted Annual Mean Wind Conditions

PROJECT GLARE ANALYSIS

OVERVIEW OF GLARE ANALYSIS

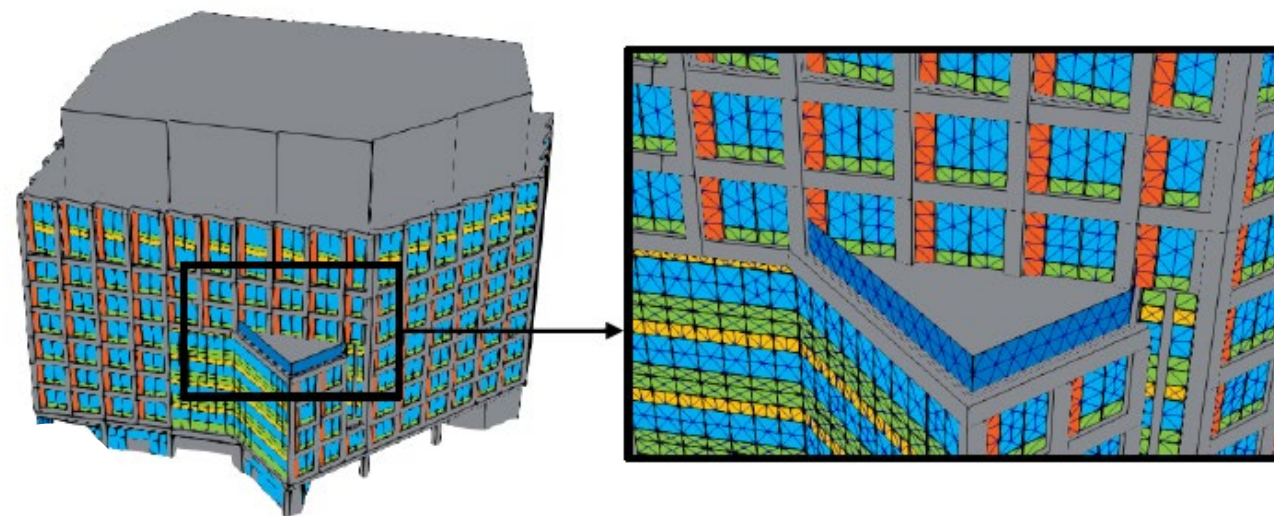
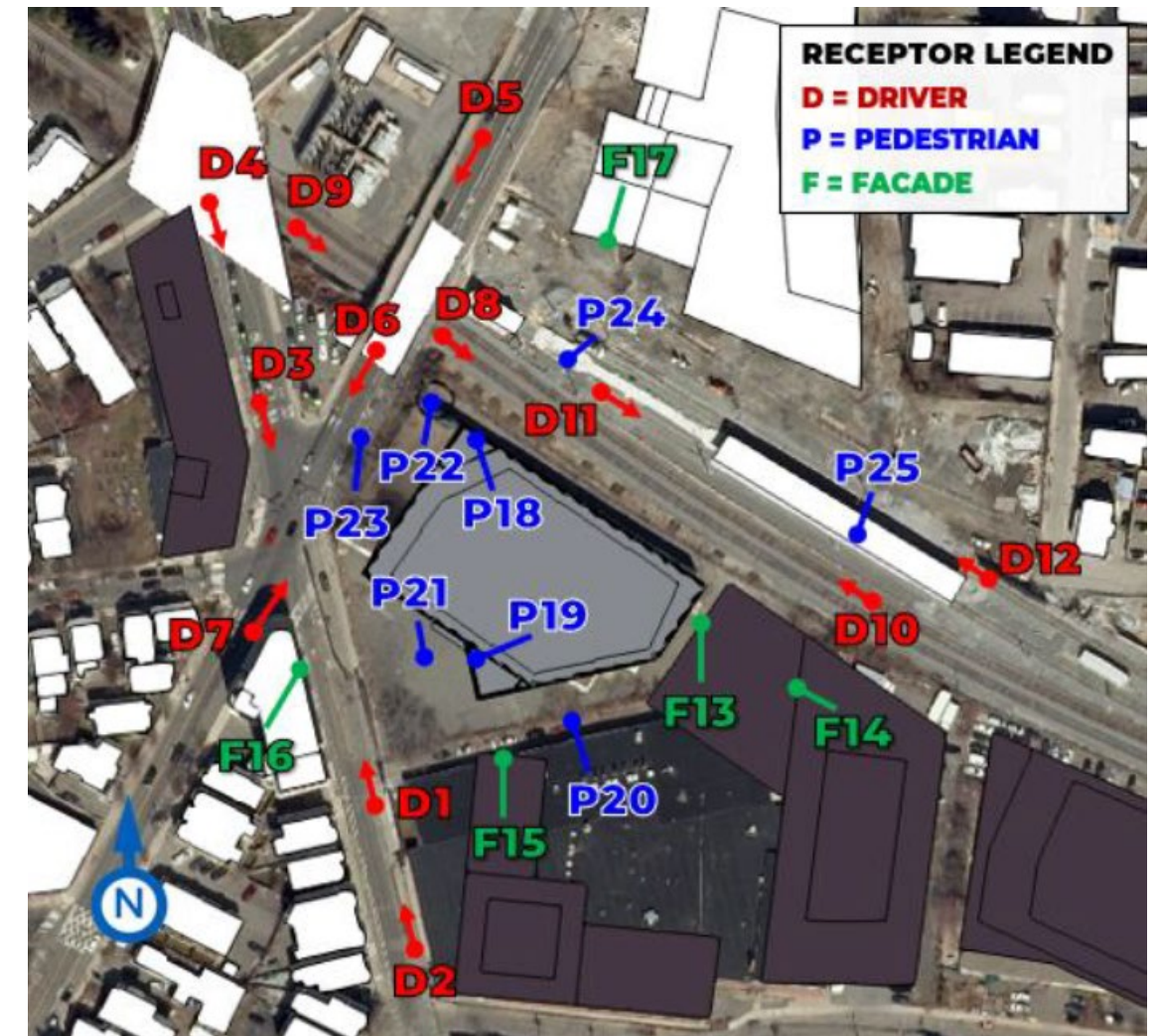
The Project's solar reflections were investigated to understand the effect of glare on the surrounding environment, assessing potential heat and glare impacts on pedestrians, property and motorists.

- Landscape elements were NOT included in the analysis, and their potential for reduction of solar reflections was ignored.
- The south facing portion of the building, detailed to feature the site's glass history, was included in the analysis. The material specification will meet the requisite standards to ensure it does not impose undue glare.



Expert Opinion:

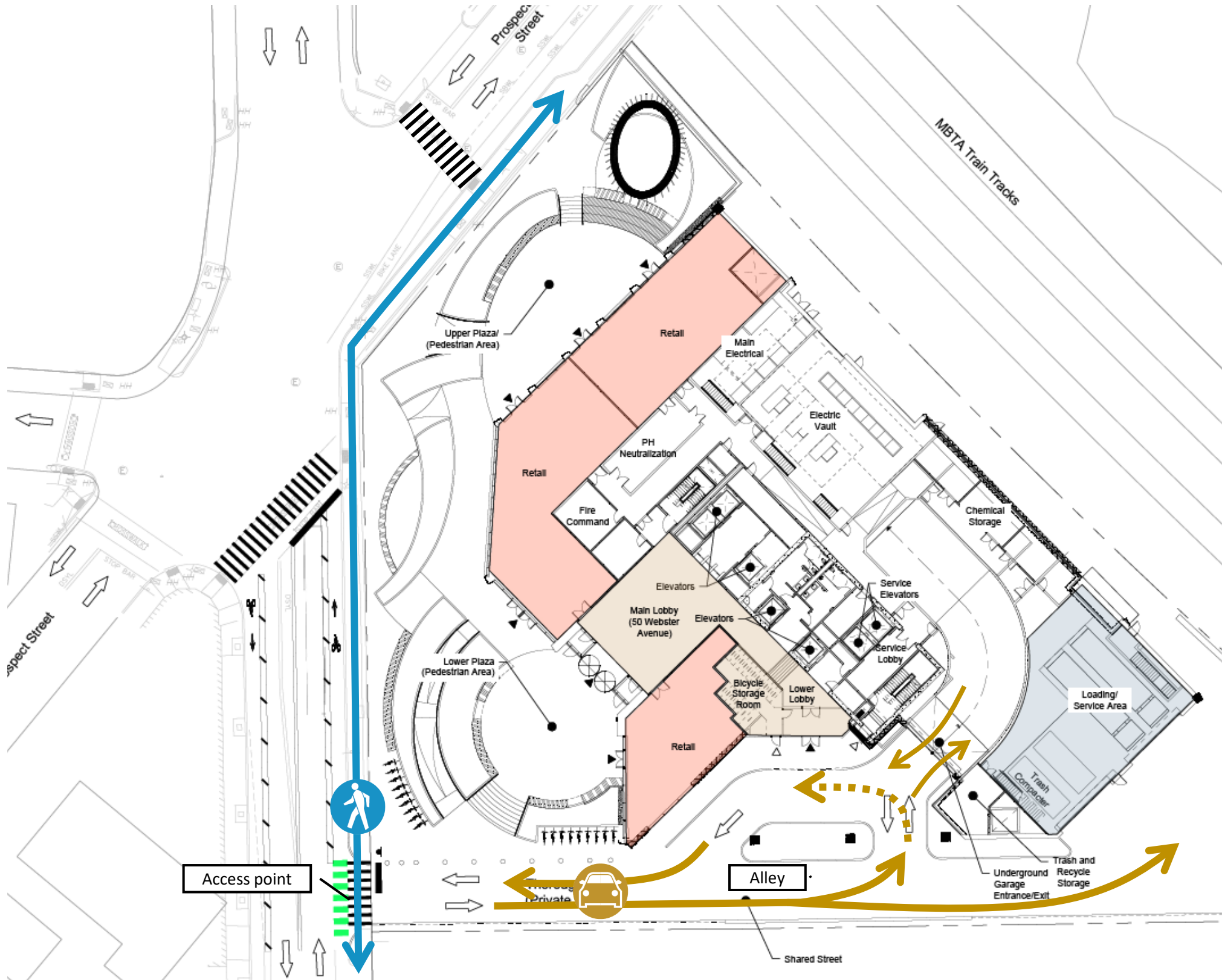
1. The reflections created by the building are typical for a contemporary building in an urban center.
2. No glare impacts are expected to pose safety risks to pedestrians or property.
3. Glare impacts on drivers occur when the sun would already be in driver's view
4. The pavilion was predicted to have some potential to create reflections but can be mitigated with material selection.



Source: RWDI Solar Reflection Study – Close-up View of Model Showing Surface Subdivisions

MOBILITY AND ACCESSIBILITY ANALYSIS

ALLEY TRAFFIC PATTERN

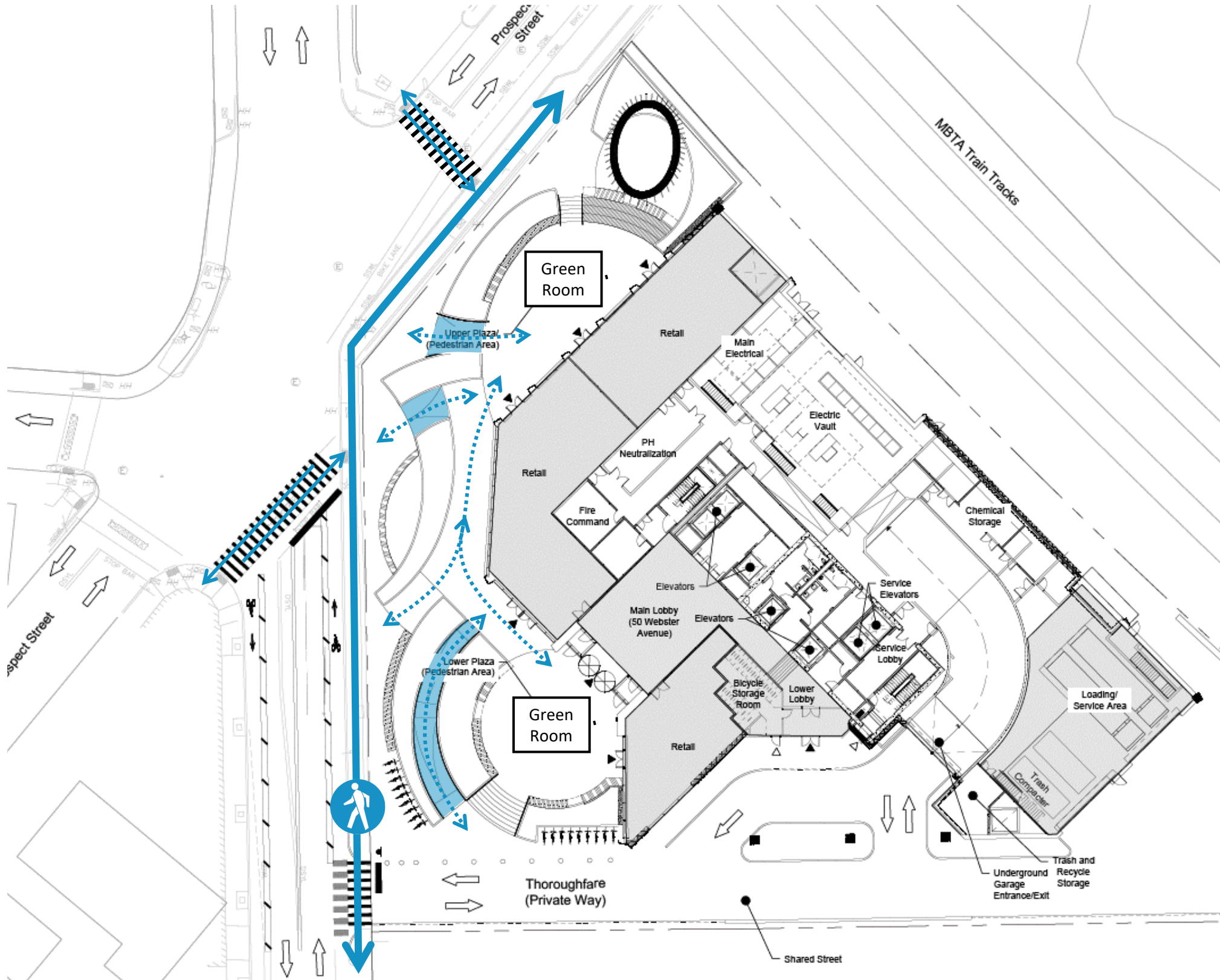


The Alley and vehicular movements are proposed in a manner consistent with the approved master plan (CDSP) and serve as the first phase of the D3 Block thoroughfare.

1. Proposed Alley provides for deliveries and vehicular access off of the public way as required by zoning.
2. The alley access point on Webster is planned in the location of the existing curb cut, as far away from intersection as possible.
3. Vehicular access points are planned remote from the intersection so that any queuing occurs off-street.
4. The internal vehicular drop-off that displaces the building footprint, ensures drop-off's are not occurring on Webster Avenue. (i.e. minimizes mode conflicts)
5. The access point will be improved with a raised crosswalk to prioritize Pedestrian and Bicycle movements.
6. Integration of this interface point will continue to be coordinated with ongoing COS Streetscape redesign efforts.

MOBILITY AND ACCESSIBILITY ANALYSIS

INTERFACE WITH EXISTING CONDITIONS, SIGNAGE AND PUBLIC ACCESS



Plaza accessibility, and promotion of the space as public is central to the proposed design.

1. The plaza is ADA accessible and manages a significant grade change throughout its length along Prospect Street and Webster Avenue.
2. Multiple access paths to the plaza 'Green Rooms' are provided to promote public use.
3. Ramps are introduced where necessary to achieve this objective and are highlighted at left; where applicable, these are aligned with the existing crosswalks.
4. Additionally, the plaza will be signed in accordance with the Division of Public Space and Urban Forestry Park and Playground Signage Standards and Specifications. (name, nature of space as public, hours of operation etc.)
5. Integration of these elements will continue to be coordinated with ongoing COS Streetscape redesign efforts.