



Memorandum

To: Mobility Division
Mayor's Office of Strategic Planning and
Community Development
City of Somerville
93 Highland Avenue
Somerville, MA 02143

Date: April 12, 2022

Project #: 15590.00

From: Hugh G. Hahn, PE
Senior Project Manager

Lourenço Dantas, EIT, AICP
Senior Transportation Planner/ Project Manager,
Transportation Planning & Operations

Re: **Transportation Access Plan (TAP)**
Davis Square Lab
231-249 Elm Street and 6-8 & 12 Grove Street
Somerville, Massachusetts

The following information documents the *draft* Transportation Access Plan (TAP) for the proposed Davis Square Lab (the "Project"), located 231-249 Elm Street and 6-8 & 12 Grove Street in Somerville, Massachusetts (the "Development Site"). The TAP will be issued as a final document upon review and approval by the City of Somerville (the "City"), following any required revisions and/or additional information from that review. This document and accompanying information depict the proposed Development Site access for automobiles, service/delivery trucks, bicyclists, and pedestrians.

Project Overview

The Project will be developed on an approximately 0.78-acre project site in Somerville's Davis Square neighborhood. The Project Site is bounded by apartment buildings to the northeast, Grove Street to the southeast, Elm Street to the southwest, and the 255 Elm Street building to the northwest. The proposed project includes the construction of an approximately 184,000 SF building (including the parking garage and mechanical space/penthouse) consisting of three stories of lab space, ground floor retail/restaurant space, and an underground parking garage and a bike parking room.

Parking Supply

The Project is providing a two-level below-grade parking structure under the proposed building, with 77 vehicle parking spaces. The parking garage will have 4 ADA accessible spaces (including one van space); 4 preferential carpool/vanpool parking spaces; and 20 spaces equipped with electric vehicle (EV) charging stations. The parking garage will be access-controlled (through gating, ticketing, and/or reader cards).

Site Plans

Illustrative Site Plan (Figure 1)

Refer to Figure 1 for a Conceptual Site plan depicting the ground floor level and site landscaping/streetscape.

No changes are proposed to the street curb line along Elm Street or Grove Street. The existing sidewalks surrounding the Site will be expanded within the property line, and street trees, landscaping and furnishings will be organized to provide safe and interesting through-travel and gathering zones. Curb locations along the Site frontage will not be

moved, but additional sidewalk and landscaping width will be provided by increasing the building setback. Along Elm Street, the building setback will allow for a minimum six-foot sidewalk with an additional six-foot landscaped zone containing street trees and other furniture. The curb bump-out by the door of the Burren will be preserved, allowing a generous zone for restaurant seating adjacent to the sidewalk. Along Grove Street, the building setback will allow for a minimum eight-foot sidewalk with a six-foot landscape zone. Streetscape furnishings will include short-term bicycle parking racks, which are currently not provided along the Site segments of Elm Street and Grove Street.

Transportation Elements Plan (Figure 2)

Refer to Figure 2 for the plan depicting the on-site transportation elements, including the Development Site driveway, the Project's sidewalks, and related bicycle and pedestrian accommodations.

Multimodal Site Access and Circulation Plans

To supplement the Project's Site plans, the following series of graphics are provided to highlight the planned access and circulation paths for bicyclists, pedestrians, and motor vehicles.

Pedestrian Access Plan (Figure 3)

Refer to Figure 3 for a plan depicting the Project sidewalk network and primary building entrance locations.

Bicycle Parking Access Plan (Figure 4)

Refer to Figure 4 for a plan depicting bicycle access to parking. The Project is providing a bike parking room with 26 interior secured bicycle parking spaces located in the underground parking garage (also accessible via elevator located in the building lobby, off Grove Street) and 7 bike parking spaces in a ground level bike parking room. (See Figure 7.1, for details.) The Project will also provide racks for 28 bicycle spaces for short-term parking along Elm Street and Grove Street, with the precise locations to be confirmed and coordinated with the City of Somerville.

Parking Garage Access (Figure 5)

The existing vehicle access to the Development Site consists of two curb cuts on the southeastern boundary of the Site along Grove Street, leading to an existing municipal surface parking lot. The proposed site access is provided for passenger vehicles at a curb cut located on the southeastern corner of the building. This entrance will connect to the below-grade parking garage situated under the building, which will replace the existing surface lot and support the new development. Passenger vehicles will exit the Development Site via the same curb cut, then proceed either left or right onto Grove Street.

Tenants arriving by motor vehicle to park on-site are expected to use the Grove Street driveway to access the parking garage entrance on the east side of the building. Those employees and visitors arriving by motor vehicle for curbside drop-off/pick-up are expected to use the on-street drop-off/parking area along Elm Street. (Refer to Figure 5.)

Motor Vehicle Parking Plan (Figures 6, 7.1 and 7.2)

Please refer to Figure 6 for a turning movement diagram showing how passenger vehicles are expected to access the parking garage.

Individual plans of each floor of the proposed below-ground parking garage are provided in Figure 7.1 and Figure 7.2. These figures depict the vehicle movement tracking paths that demonstrate the ability of a standard passenger vehicle to pull in to and out of a typical parking spot in the garage.

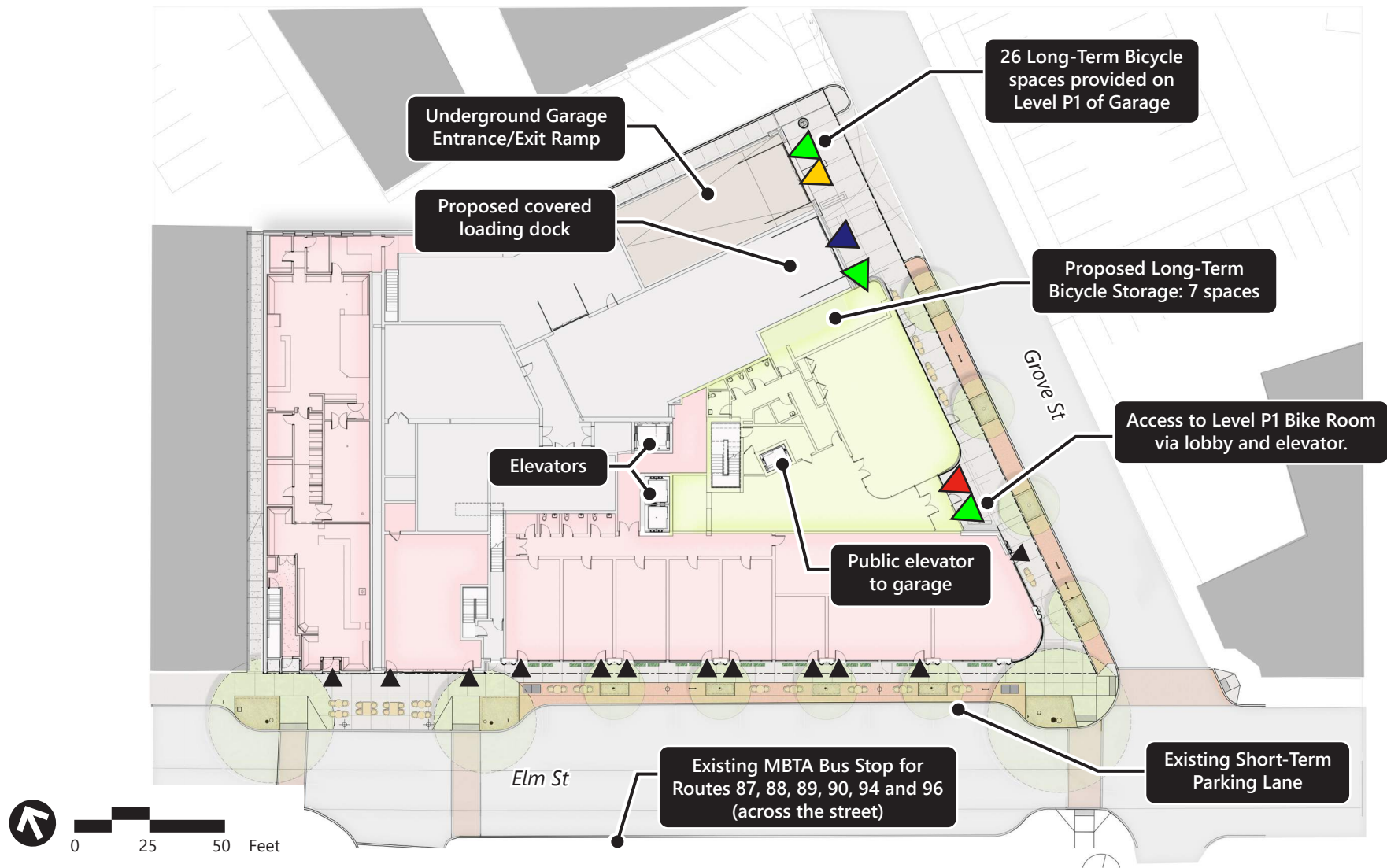
Loading and Services Vehicle Tracking (Figures 8.1 and 8.2)

The site plan is oriented such that service vehicles serving the Project will enter the Development Site and access the loading dock via Grove Street, at a new curb cut located on the southeastern corner of the building. Service vehicles will back into the loading dock entrance and pull forward to exit the Site using the same curb cut onto Grove Street.

Refer to Figure 8.1 and Figure 8.2 for vehicle movement tracking diagrams that demonstrate the ability of a large vehicle to navigate in and out of the Project site from the building's loading facilities. A WB-40-sized intermediate tractor trailer is the largest vehicle accommodated with the site's dimensions.

FIGURES

1. Illustrative Site Plan
2. Transportation Elements Plan
3. Pedestrian Access Plan
4. Bicycle Parking Access Plan
5. Motor Vehicle Parking Access Plans
6. Vehicle Movement Tracking Diagram: Parking Garage Access
7. Vehicle Parking Plan (Garage) and Passenger Car Movement Tracking Diagram
 - a. Level P1 (upper)
 - b. Level P2 (lower)
8. Truck Movement Tracking Diagram: Loading Dock Access
 - a. SU-40
 - b. WB-40



Source: Base Image / Site Plan by Utile

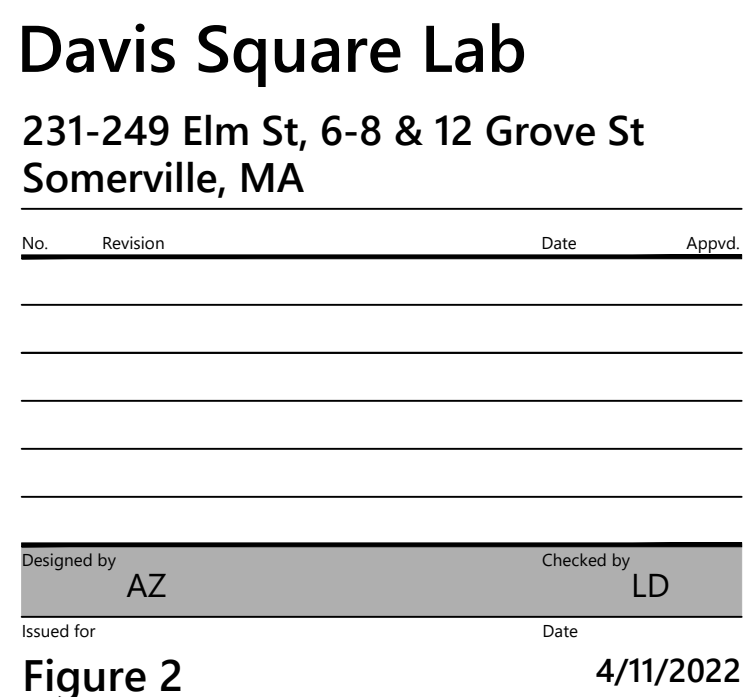
- ▲ Lab Space Pedestrian Access / Building Lobby Entrance
- ▲ Retail, Food & Beverage Space Entrance
- ▲ Garage Access
- ▲ Loading Dock
- ▲ Bike Room Access

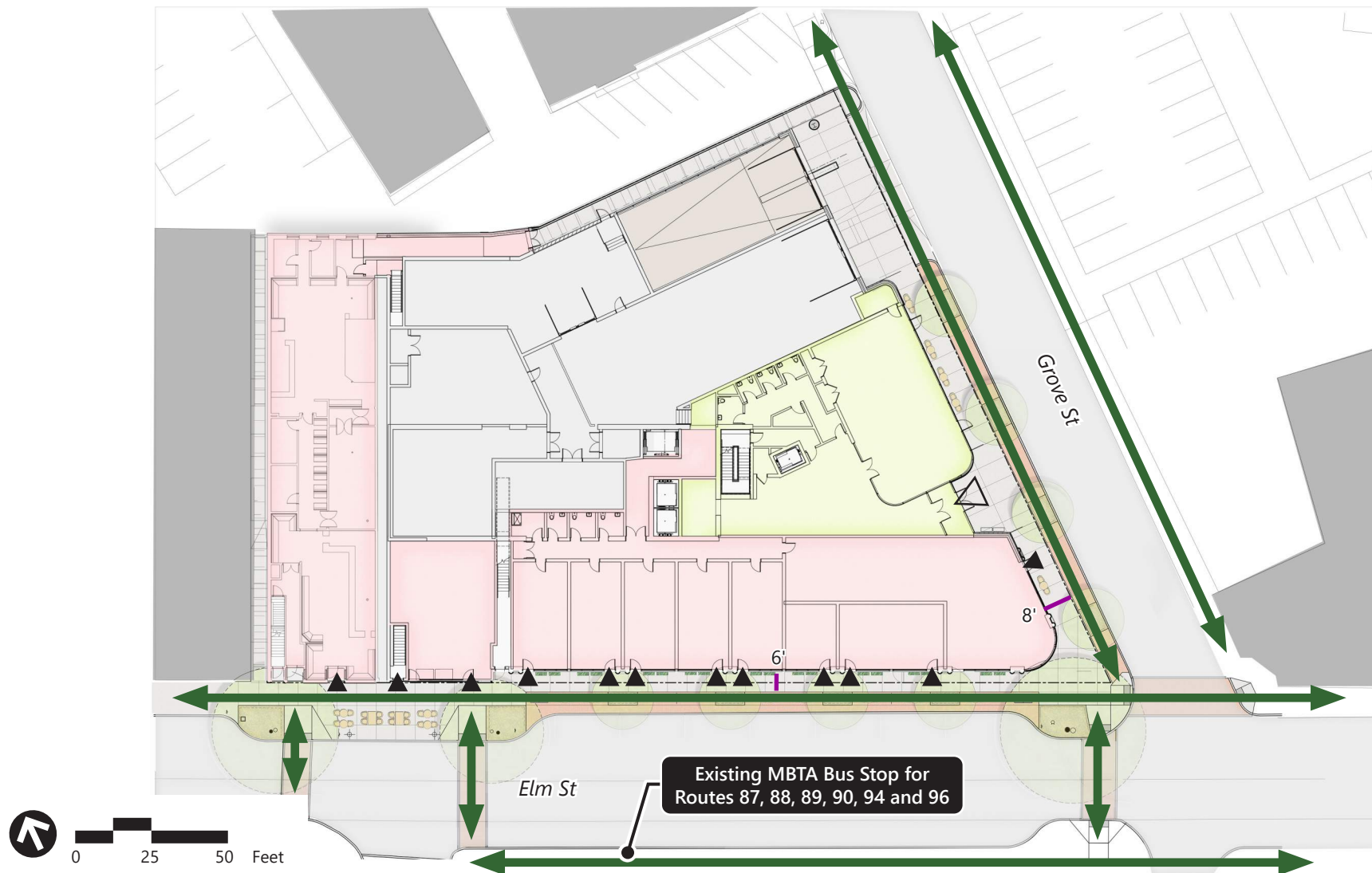
- Retail, Food & Beverage Space
- Lobby/Multi-Purpose Room
- Back of House / Building Operations



Figure 1
Conceptual Site Plan

Davis Square Lab
Somerville, Massachusetts








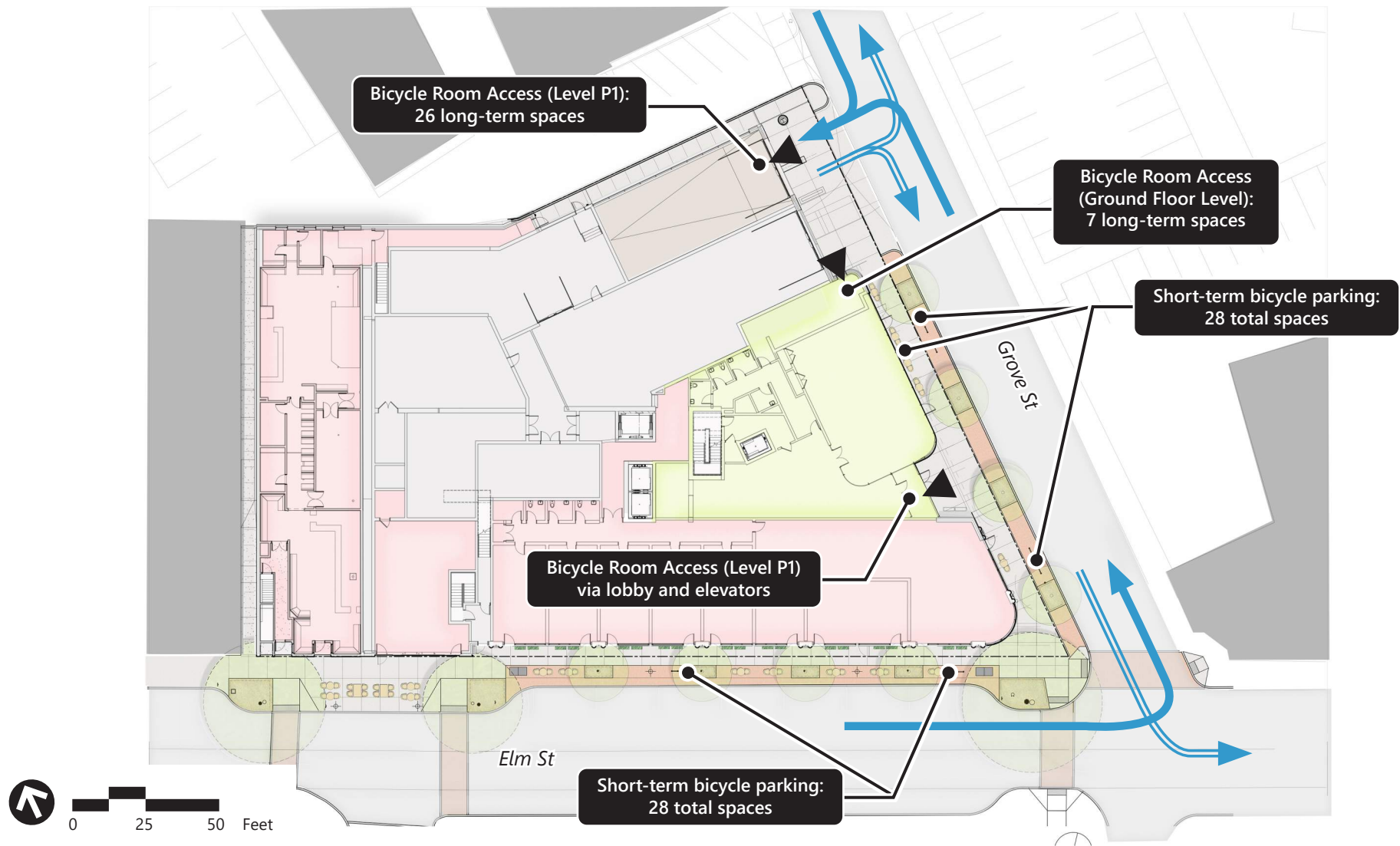
Source: Base Image / Site Plan by Utile



Figure 3
Pedestrian Access Plan

-  Lab Space Pedestrian Access / Building Lobby Entrance
-  Retail, Food & Beverage Space Entrance
-  Pedestrian Pathway




Davis Square Lab
Somerville, Massachusetts



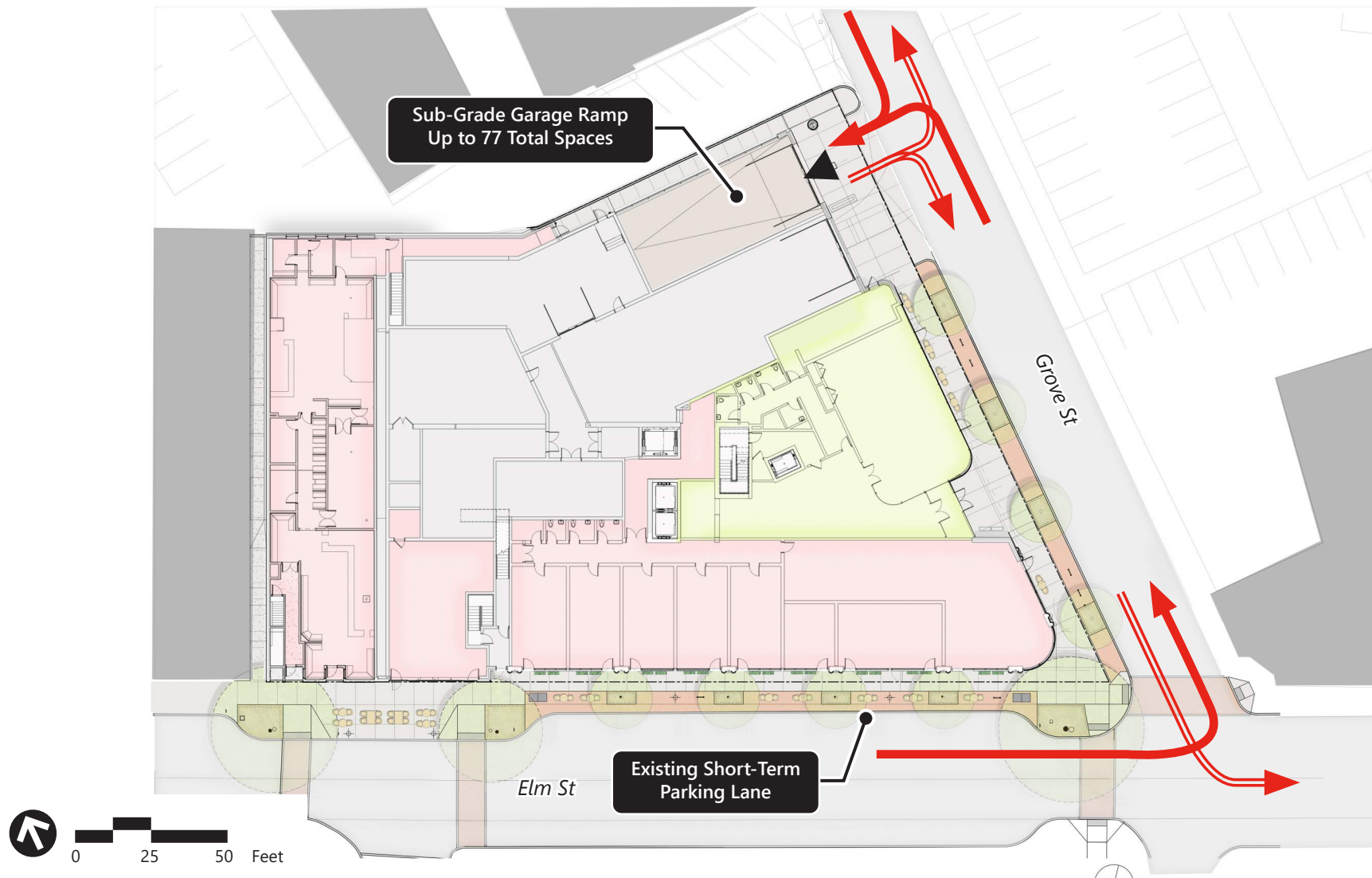
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Figure 4
Bicycle Parking Access Plan

-  Access to Bicycle Room
-  Bicycle Access to Site
-  Bicycle Egress from Site




Davis Square Lab
Somerville, Massachusetts



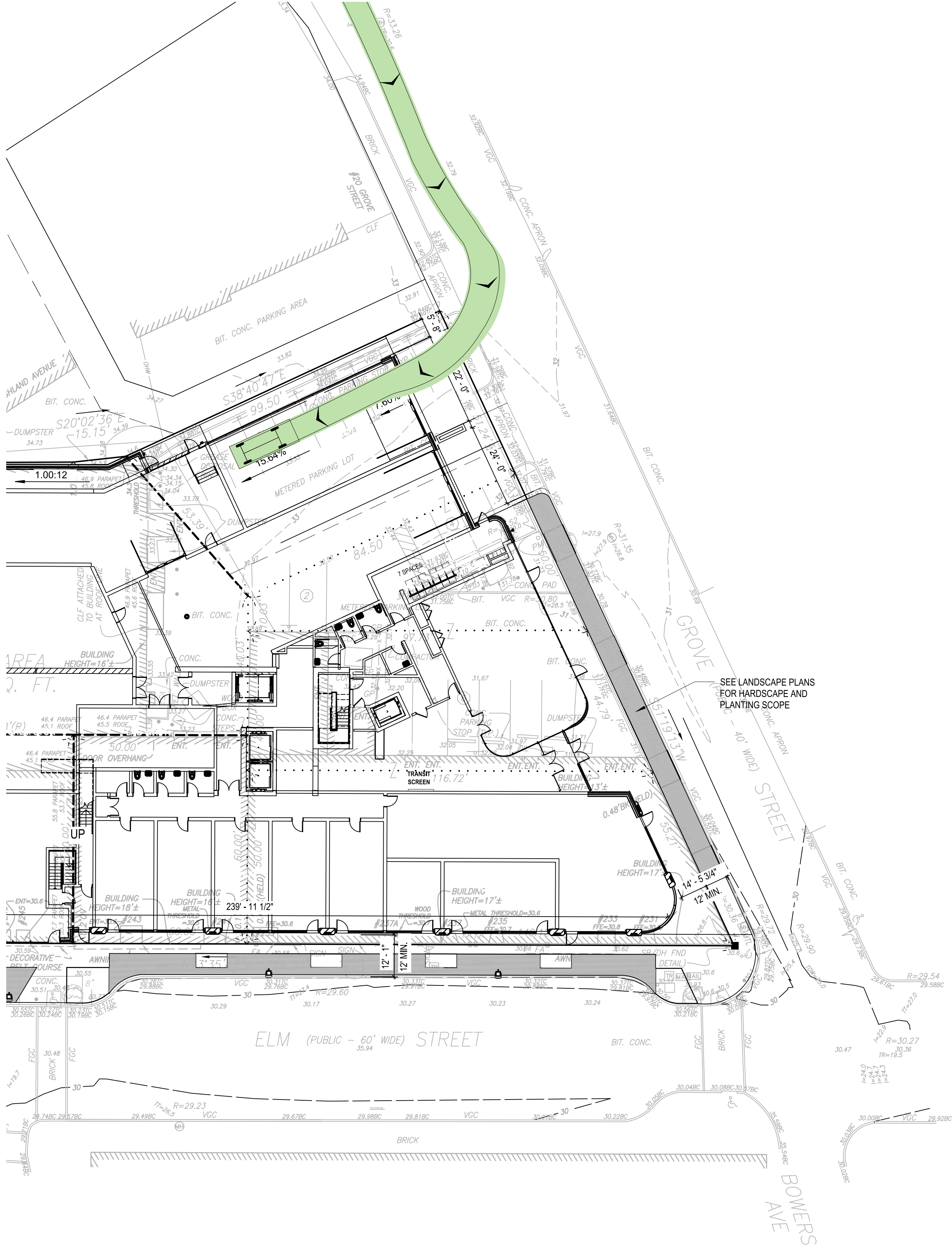
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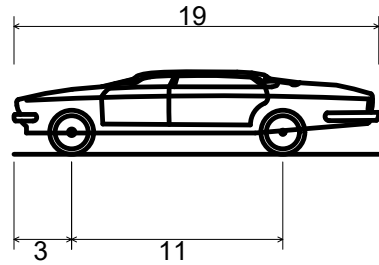
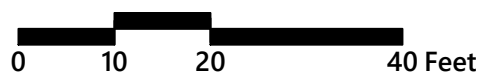
Figure 5
Motor Vehicle Access Plan

-  Parking Garage Entrance
-  Vehicle Access to Site Parking
-  Vehicle Egress from Site Parking

Davis Square Lab
Somerville, Massachusetts

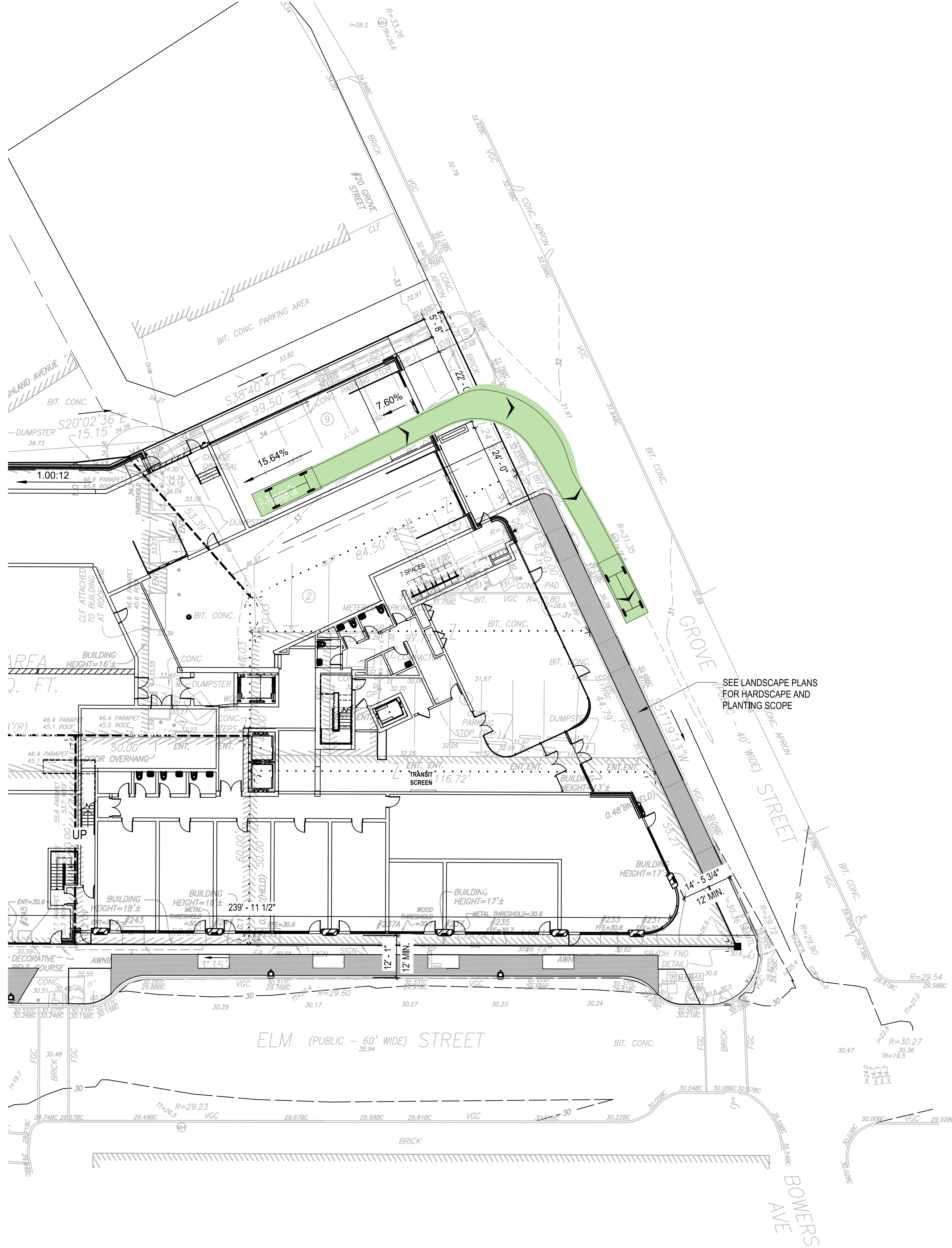


PASSENGER VEHICLE ENTERING
GARAGE FROM GROVE STREET

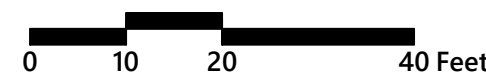


NOTE: ONLY SHARPEST TURN (RIGHT-TURN)
SHOWN FOR BOTH MOVEMENTS

P - Passenger Car
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock-to-lock time
Max Steering Angle (Virtual)



PASSENGER VEHICLE EXITING
GARAGE TO GROVE STREET



LEGEND

- FORWARD MOVEMENT
- BACKING IN

19.000ft
7.000ft
4.300ft
1.115ft
6.000ft
4.00s
31.60°

Davis Square Lab

231-249 Elm St
Somerville, MA

No.	Revision	Date	Appvd.

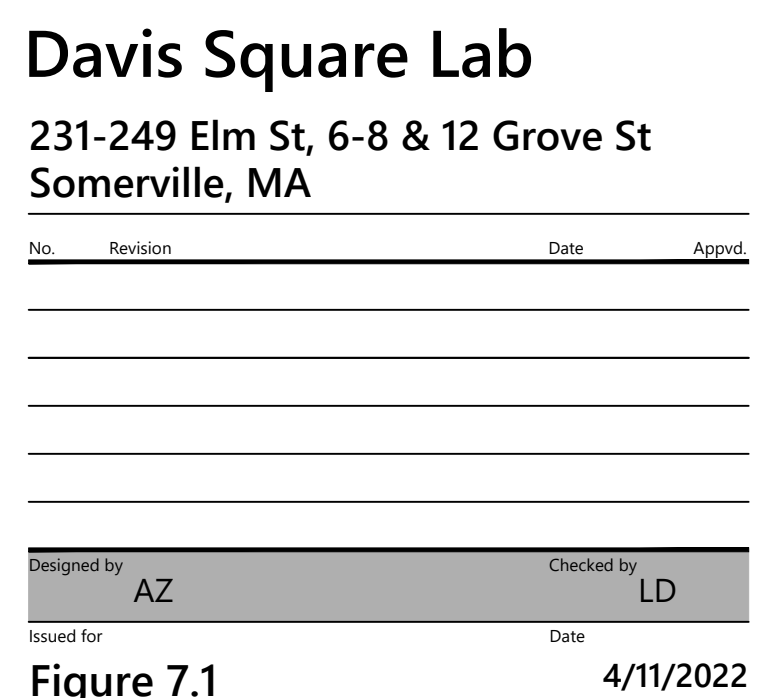
Designed by	AZ	Checked by	LD
Issued for		Date	

Figure 6

4/11/22

Drawing Title
Vehicle Turning Analysis
Passenger Car

Drawing Number



Drawing Title

Vehicle Parking Analysis

Passenger Car Entering

Parking Level P1

Drawing Number

Sheet 1 of 2

Project Number
15590.00



Davis Square Lab
231-249 Elm St, 6-8 & 12 Grove St
Somerville, MA

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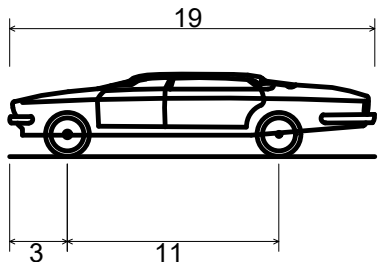
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AZ	LD

Issued for
Figure 7.2

Date
4/11/2022

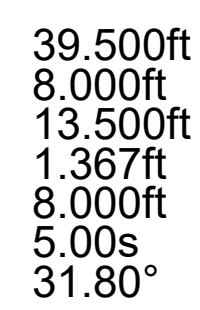
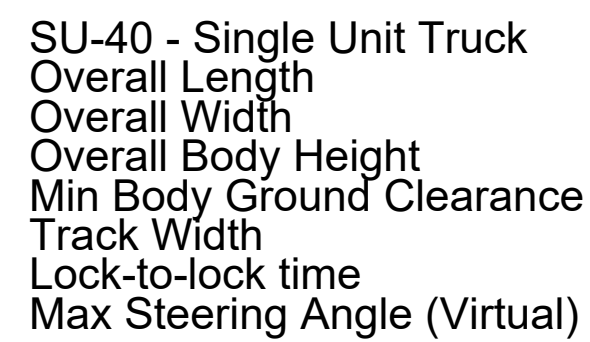
Drawing Title

Vehicle Parking Analysis
Passenger Car Exiting
Parking Level P2



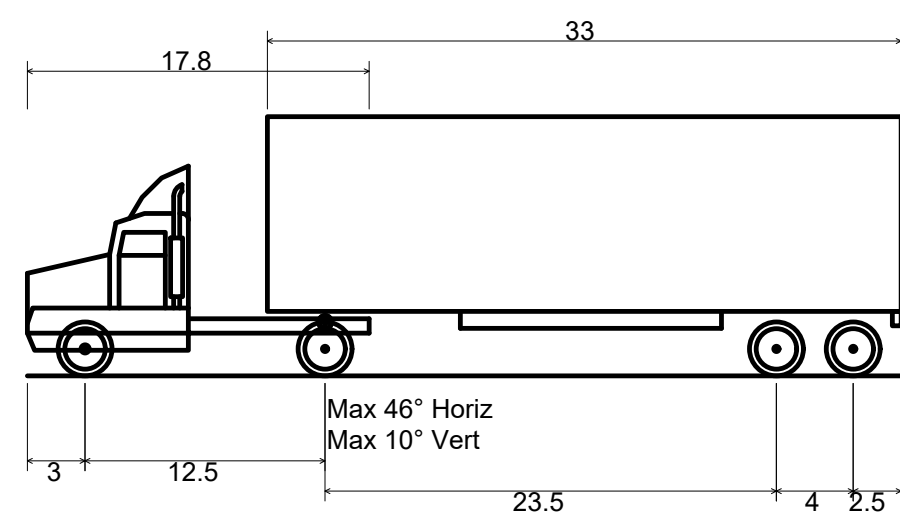
P - Passenger Car	19.000ft
Overall Length	7.000ft
Overall Width	4.300ft
Overall Body Height	1.115ft
Min Body Ground Clearance	6.000ft
Track Width	4.00s
Lock-to-lock time	31.60°
Max Steering Angle (Virtual)	

- LEGEND
- FORWARD MOVEMENT
- BACKING IN



Sheet 1 of 2

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[illegible]

WB-40 EXITING LOADING DOCK TO ELM STREET



 **FORWARD MOVEMENT**
 **BACKING IN**

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