Docket #3602 - Non-compliance with Massachusetts Architectural Access Board Requirements

Last year when Lincoln Architects submitted their plans for a proposed hotel they failed to notice the obvious, that the frontage along Mass Ave is sloped downward from west to east by more than 2%. All of their elevations and visualizations portrayed this frontage as level, ignoring the actual four foot drop.

When they finally carried out a basic topographical survey of the lot this spring and discovered this condition, they failed to adequately correct for all of the problems that exist with their design. This is most evident in the circular driveway and passenger drop off area at the front door.

The most recent visualization continues to perpetuate the false notion that this entrance driveway is level. In fact, it is both steep and canted cross-wise. It has to accommodate a three foot drop from hotel entrance to sidewalk in only 24 feet.





DRIVEWAY DETAIL

The sparsely dimensioned drawing submitted for this area shows a hump, with a driveway slope of 14.8% on one side and 8.2% in the other direction on the other side of the hump crest. This is combined with a cross slope of 5%. At other places along the driveway the cross slope is 7%.

These slopes are completely out of the range allowable by state law for passenger loading zones as specified in 521 CMR which requires a level area of no more than 2% slope in all directions, as well as an accessible zone parallel to the vehicle of at least 20' x 5'.

521 CMR

23.7 PASSENGER LOADING ZONE

If passenger loading zones are provided, at least one of them shall comply with the following:

- 23.7.1 Wherever a passenger loading zone or parking area is provided, an *accessible route* to an *accessible entrance* is required.
- 23.7.2 Passenger loading zones shall provide an *access aisle* at least 60 inches (60" = 1524mm) wide and 20 feet (20' = 6096mm) long, adjacent and parallel to the vehicle pull-up space.
- 23.7.3 If there are curbs between the *access aisle* and the vehicle pull-up space, then a *curb cut* complying with 521 CMR 21.00: CURB CUTS, shall be provided.
 23.7.4 Vehicle standing spaces and *access aisles* shall be level with surface slopes not exceeding 1:50 (2%) in all directions.

• 23.7.5 Vertical Clearance: A minimum of nine feet, six inches (9'6" = 2896mm) of vertical clearance shall be provided at *accessible* passenger loading zones and along at least one vehicle access *route* to such areas from *site entrance(s)* and exit(s).

• 23.8 VALET PARKING

Valet parking *facilities* shall provide a passenger loading zone complying with **521 CMR 23.7**, **Passenger Loading Zone** located on an *accessible route* to the *entrance* of the *facility*.

Besides being a serious barrier to anyone with disabilities, the conditions of this driveway are unsafe for even able-bodied persons. Anyone exiting from the passenger side will find it exceedingly difficult to open their door; it will swing shut on them as they try to exit. On the driver's side, it will be all too easy to simply fall out of the vehicle. The raised island shown in the visualizations is not raised at all. It is actually a sunken pit, almost two feet below the driveway, with no protective railing to protect the unwary visitor.

Additionally, there is the "hump" in the middle of the driveway. The two opposite slopes create a "Breakover Angle" of 13.2°. Many common passenger vehicles do not have sufficient ground clearance to bridge this hump. An unloaded Toyota Camry will bottom out out 11.7°. A Prius at 11°, Hyundai Sonata and Ford Fusion at 10.8°, Chevy Malibu 9.4°. A Mercedes E class sedan can tolerate only 7.4° and will likely incur serious damage trying to bridge the hump. https://en.wikipedia.org/wiki/Breakover_angle



State laws regarding accessible pedestrian access by walkways and ramps also apply. The drawings provided so far are not sufficiently detailed to determine whether the project is compliant with 521 CMR in this respect.