Ramp Ideation

SAV Design

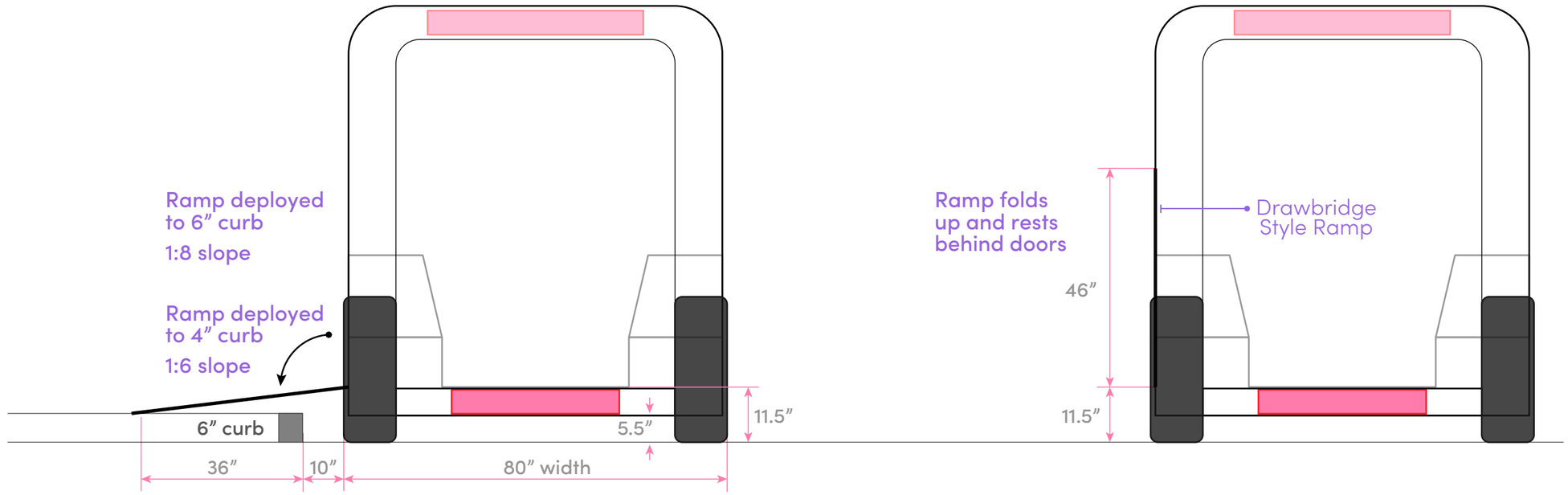
University at Buffalo
Center for Inclusive Design and Environmental Access
School of Architecture and Planning

Ramp Design

Scale: 1 mm = 1 in

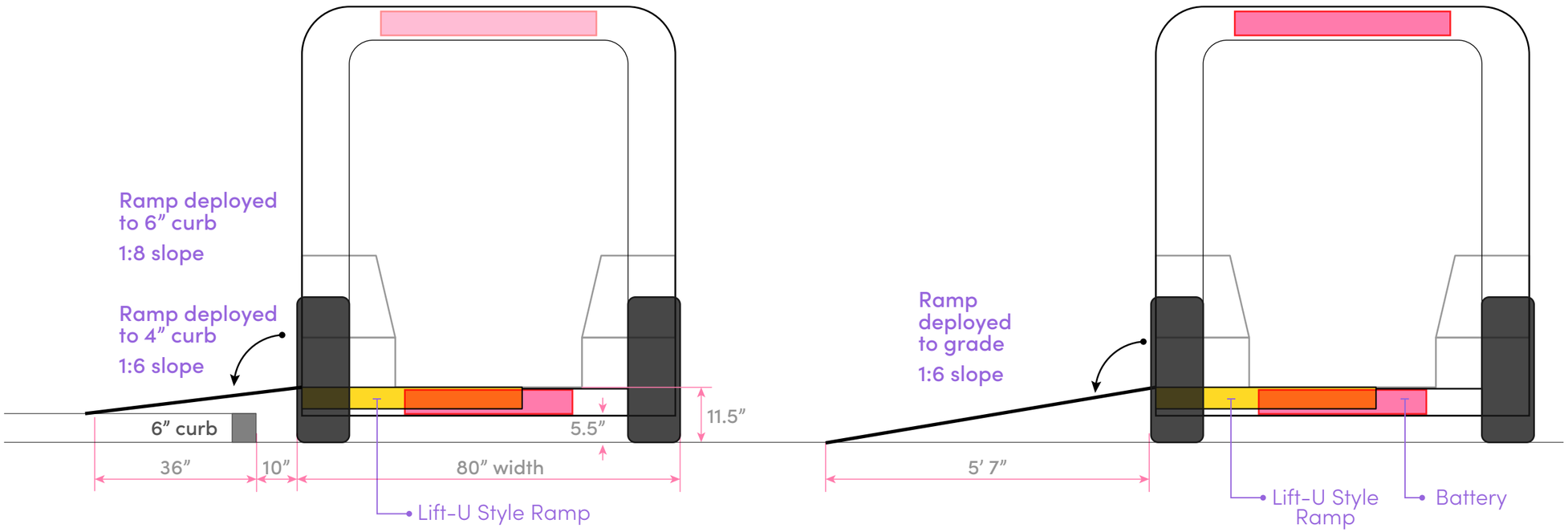
DRAWBRIDGE RAMP

This solution utilizes a drawbridge style ramp. The ramp sits vertically behind the doors. After they open, the ramp deploys.



INLINE RAMP

This solution uses current off-the-shelf ramp options. Lift-U, or a similar product, would rest inline with the battery. The battery would wrap around the ramp.



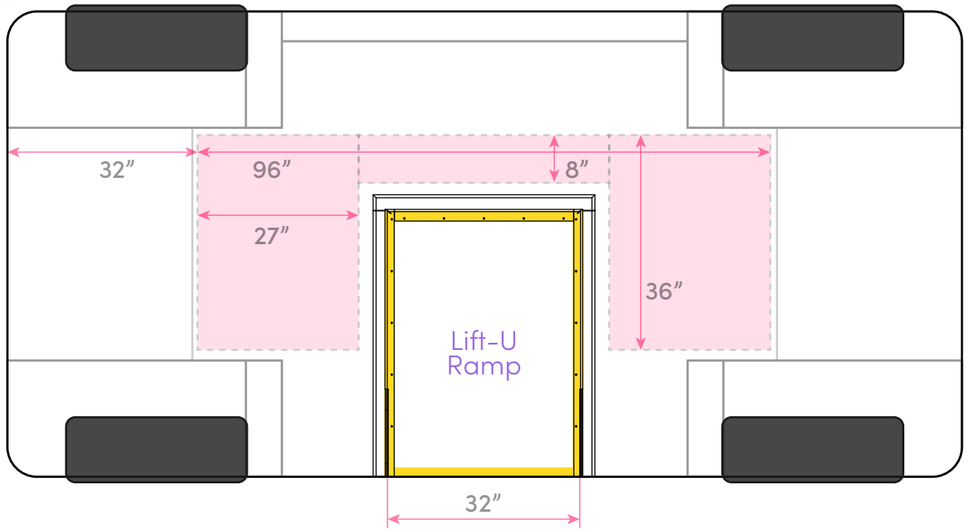
INLINE RAMP

Battery/Ramp Layout Options

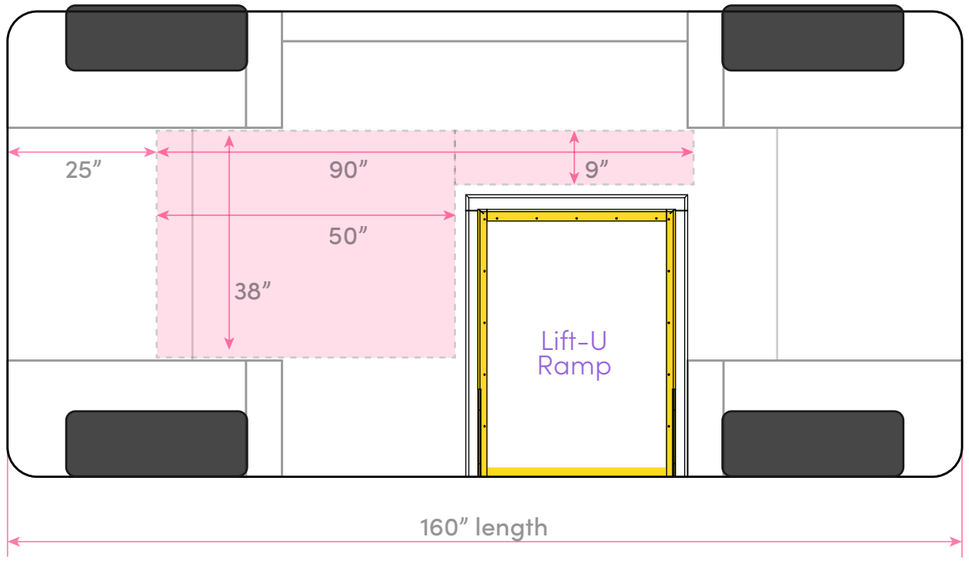
Scale: 1 mm = 1 in

All layouts maintain a similar capacity to the current Olli battery.

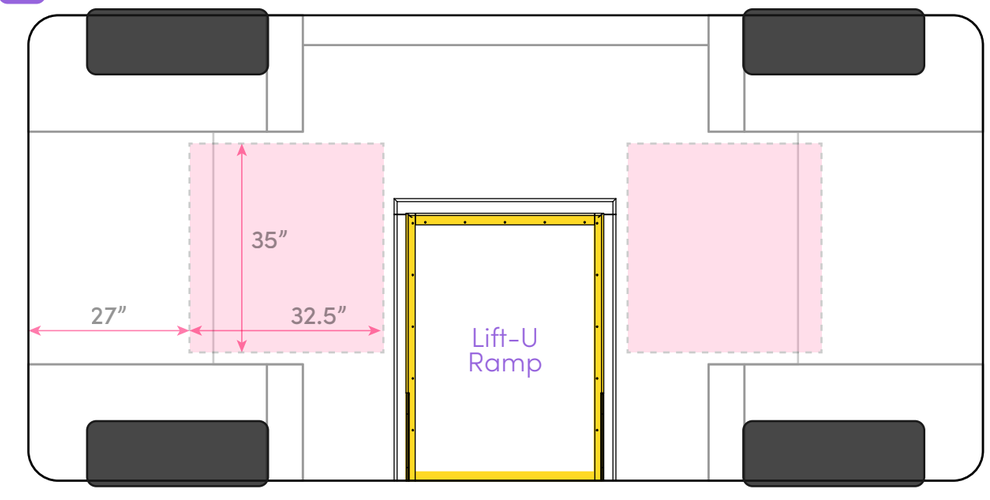
A



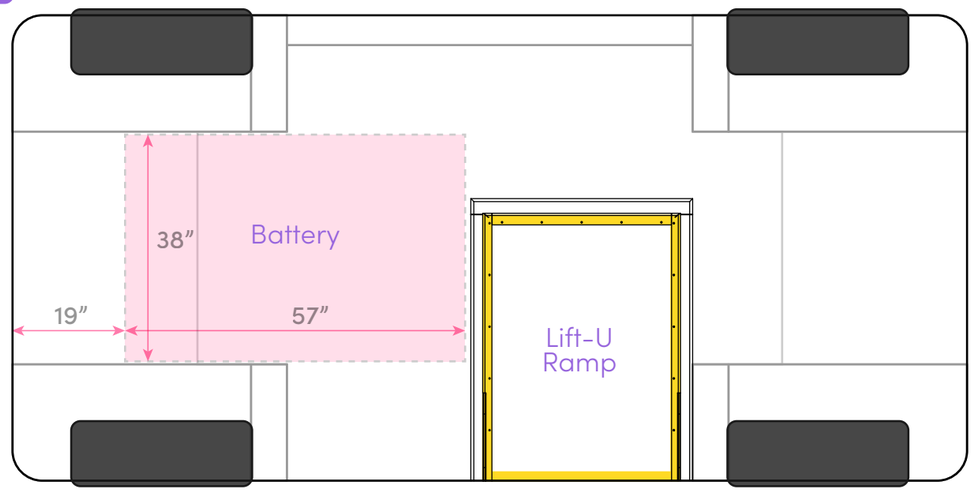
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C



D

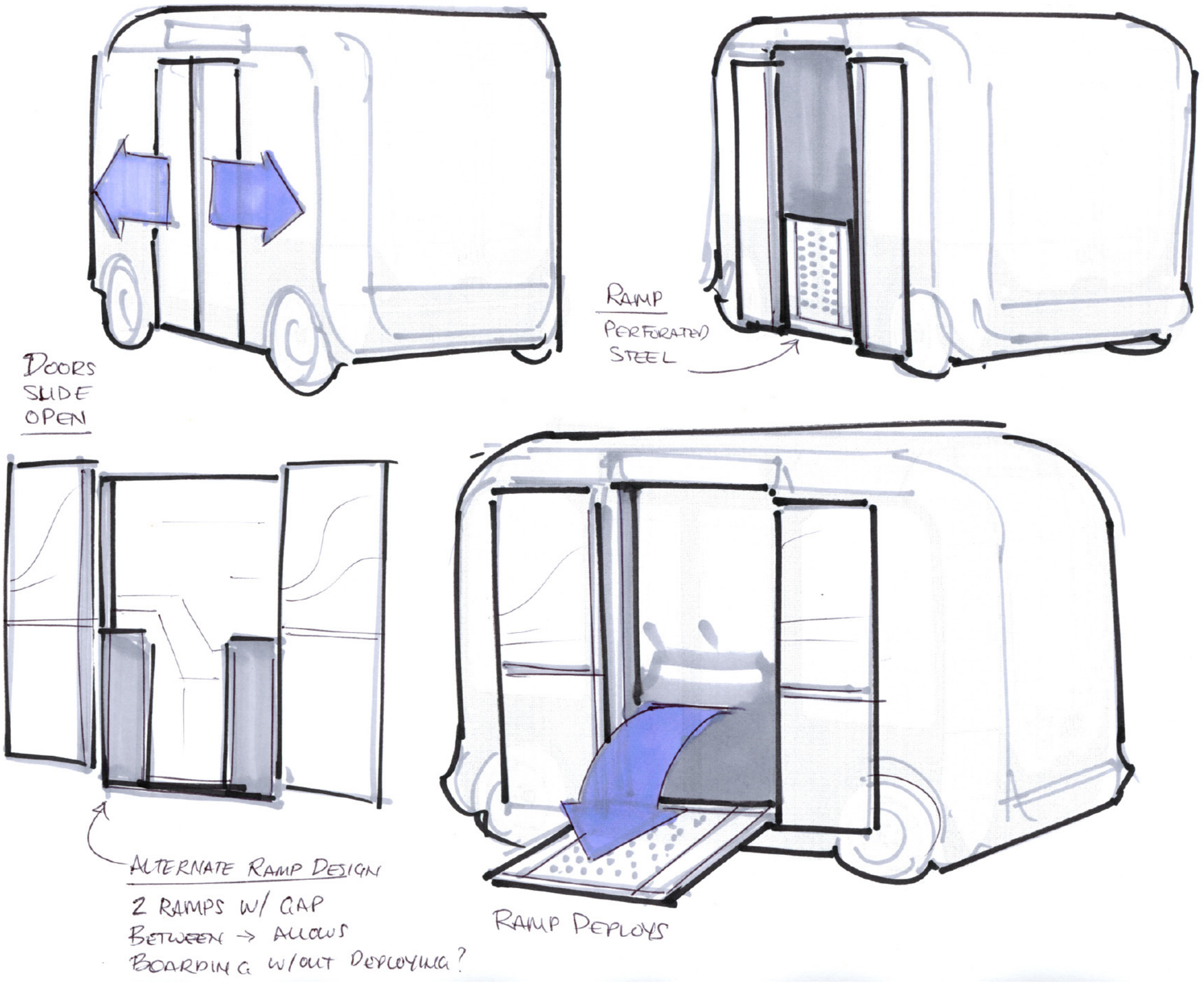


DRAWBRIDGE RAMP

Door/Ramp Options

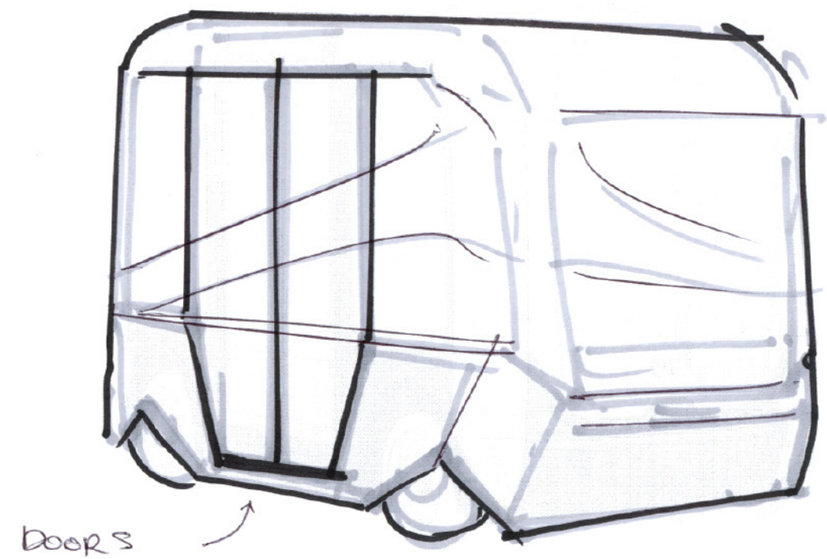
DRAWBRIDGE **V**

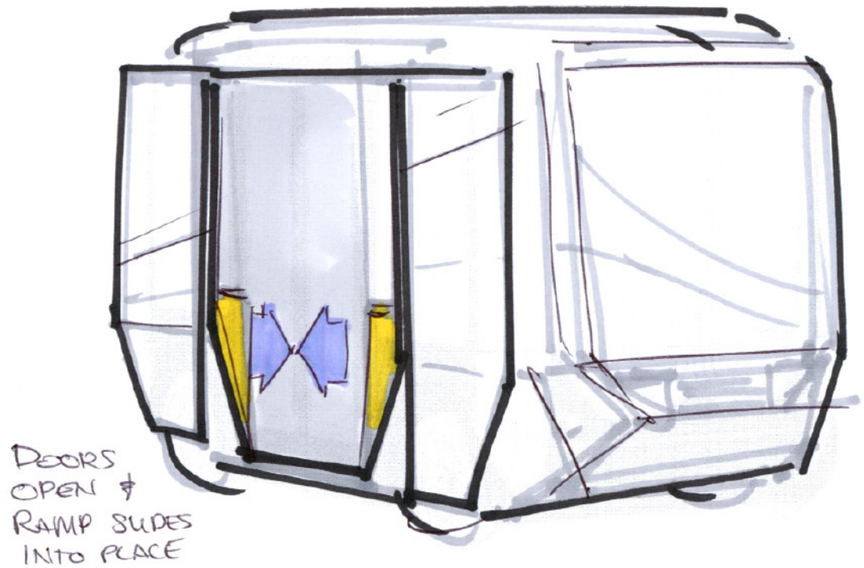
Here the ramp and door are separate parts. The doors slide open, allowing the ramp to deploy. The ramp would have to deploy for a person to enter.

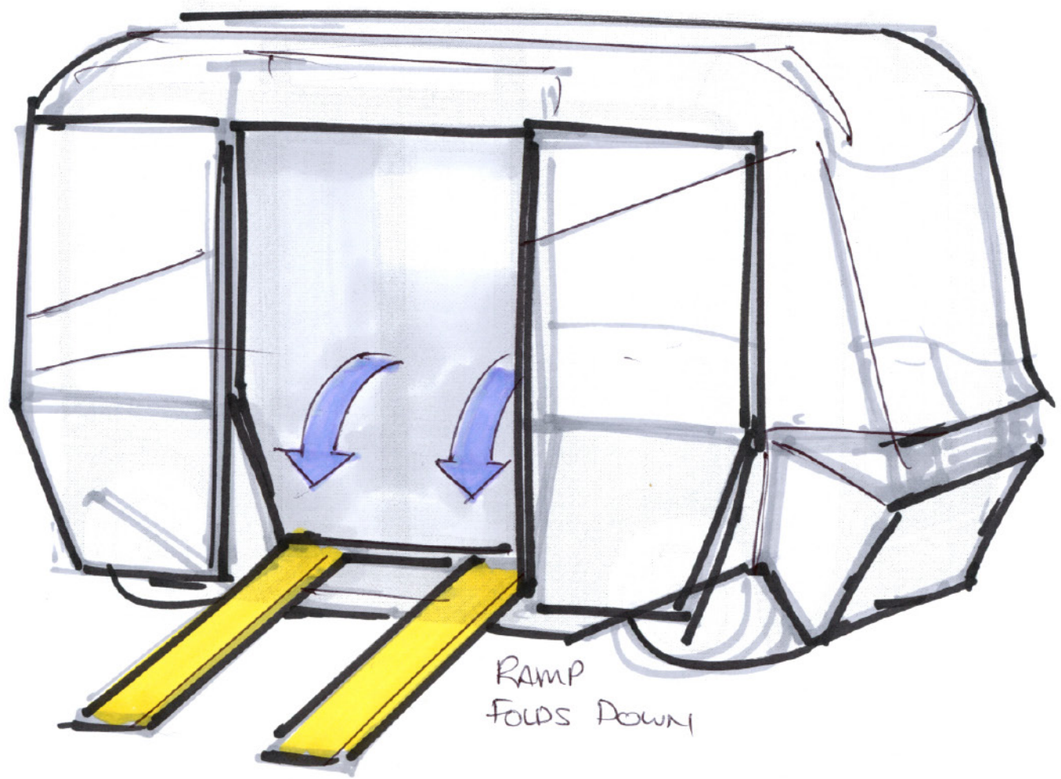


DRAWBRIDGE **W**

In this design, the ramp is split into two separate tracks. These tracks are tucked away, allowing passengers to load without activating the ramp. If the ramp is needed, the tracks slide into place then fold down.

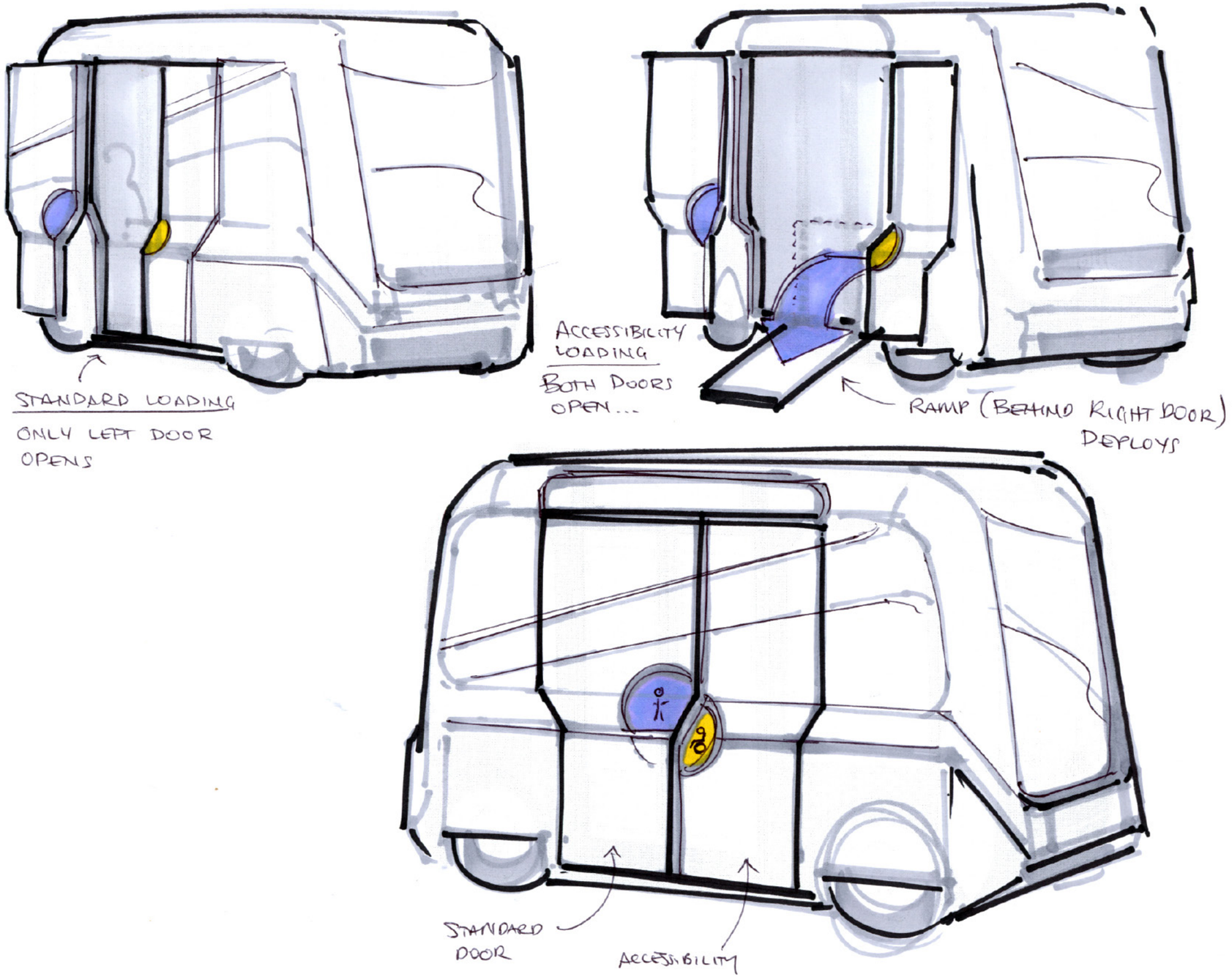






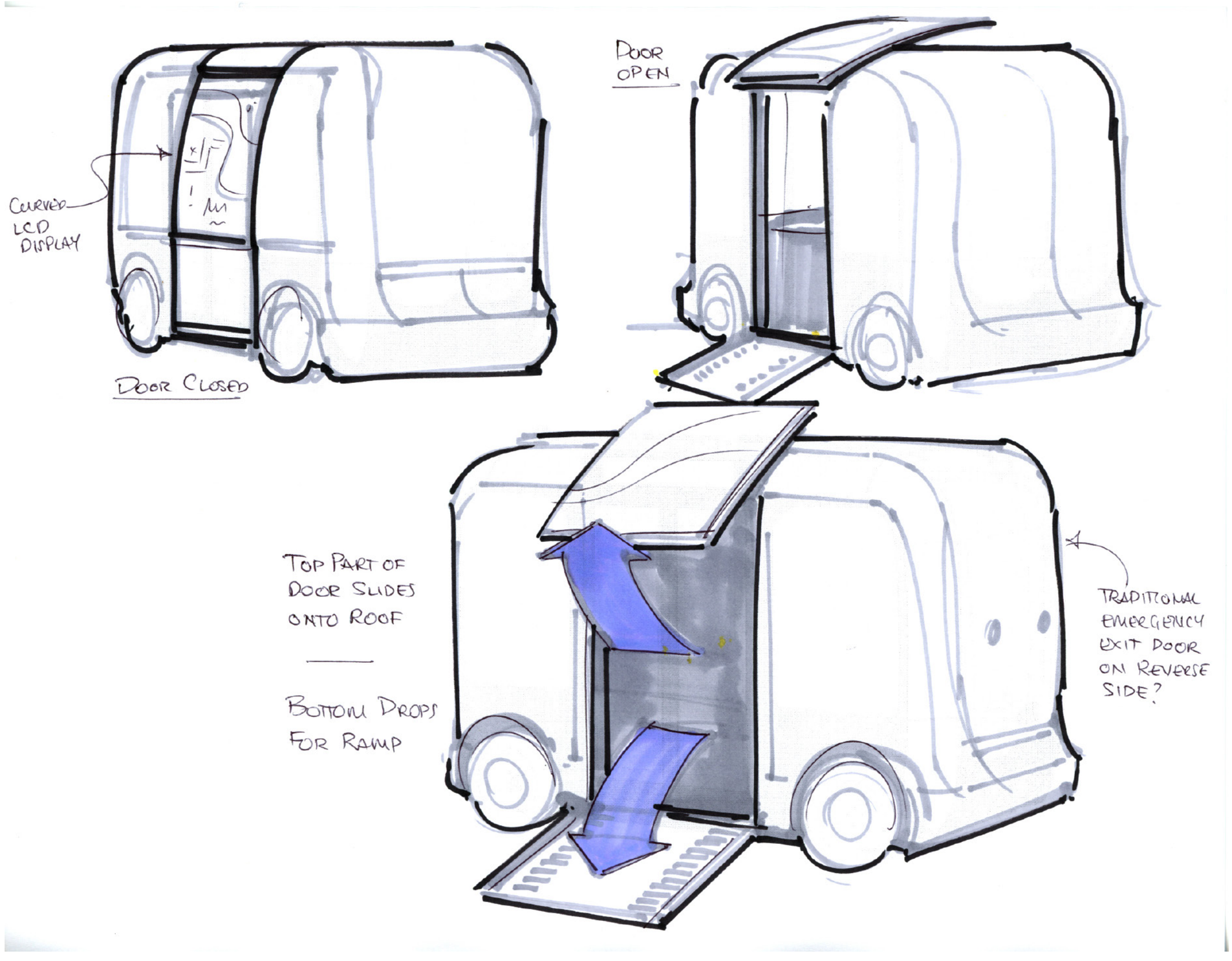
DRAWBRIDGE **X**

This solution has two split doors with a separate ramp. The ramp is stored vertically behind the second door. In typical usage, only the left door would open. In situations requiring a ramp, both doors would open, revealing the ramp. The ramp would then deploy.



DRAWBRIDGE **Y**

In this solution the ramp and door are integrated into one part. The top part of the door lifts, similar to a gull-wing door style. The bottom part of the door folds down, creating a ramp.



DRAWBRIDGE **Z**

This solution is very similar to “Y”. Instead of the top part of the door being a gull-wing style, it is split in half and slides open.

