



MEMORANDUM

Date: April 16, 2019

Subject: University Commons Preliminary Site Access and Circulation Review

RS18-3681

The purpose of this memorandum is to document the findings of Fehr & Peers' preliminary site access and circulation review for the proposed University Commons project.

Driveway Throat Depths – Adequate driveway throat depths are necessary to minimize conflicting movements that disrupt on- and off-site circulation. Conflicting movements located within the driveway throat area can cause undesirable circulation effects, including vehicles that queue back into the adjacent public roadway, vehicle conflicts with pedestrians and bicyclists, and congestion within the project site. Common site design features that cause conflicting movements include poorly placed parking stalls, internal intersections, and bicycle and pedestrian pathways.

Generally, driveway throat depths should be sufficiently sized to accommodate maximum queues for outbound vehicular movements. Additionally, driveway throat depths should provide sufficient space to accommodate entering vehicles prior to reaching a conflicting movement. Based on these parameters, the resulting driveway throat depths should be designed to be clear of parking stalls, internal intersections, and drive aisles.

As shown in the attached exhibit, the maximum outbound queues during the PM peak hour would exceed the driveway throat depth at several locations on the project site. This condition could cause queue spillback into the adjacent public roadway at the following locations:

- Southern Sycamore Lane driveway
- Southern Anderson Road driveway
- Western Russell Boulevard driveway

Queue spillback would be particularly problematic at the southern Sycamore Lane driveway and the western Russell Boulevard driveway, since both driveways serve highly desirable parking stalls in close proximity to the Trader Joe's entrance (i.e., motorists would be willing to wait longer to access a convenient parking location).



Potential strategies to minimize the effects of queue spillbacks and on-site circulation include the following:

- Southern Sycamore Lane driveway
 - a. Eliminate parking stalls along the Retail 6 frontage
 - b. Provide exclusive outbound left-turn and right-turn lanes
- Southern Anderson Road driveway
 - a. Eliminate parking stalls along the Retail 1, 2, and 3 frontages
- Western Russell Boulevard driveway
 - a. Align with the drive aisle north into the parking garage, shift further east into the project site (this would also provide additional throat depth for the southern Sycamore Lane driveway), and close off access for the southernmost east-west drive aisle to/from the west (opposite the Trader Joe's loading dock), OR
 - b. Consolidate Russell Boulevard driveways into a single driveway at or immediately west of the eastern Russell Boulevard driveway and provide a driveway throat depth of 150' (the greatest distance that is reasonably feasible given the planned on-site structures). A driveway throat depth of 150' would roughly align with the primary internal east-west drive aisle shown on the site plan.

Pedestrian Conflict Points – Separated pedestrian pathways and clearly marked crossings should be provided at the following locations where pedestrians would mix with automobiles:

- Internal intersection adjacent to Trader Joe's entrance
- Internal intersection at the southeast corner of Retail 5
- Surface parking lot, particularly to facilitate east-west pedestrian travel between Trader Joe's and parking stalls

Additional elements such as raised crossings would further enhance the pedestrian environment.

Bicycle and Pedestrian Access – The project would generate approximately 200 new peak hour bicycle trips and 100 new peak hour pedestrian trips. For comparison, approximately 900 peak hour bicyclists and 580 peak hour pedestrians currently travel through the Sycamore Lane and Anderson Road intersections with Russell Boulevard under existing conditions. Most of the new project bicycle and pedestrian trips would travel to/from the UC Davis campus on the south side of Russell Boulevard. Internal pathways and marked crossings should be provided to facilitate bicycle and pedestrian travel between the surrounding transportation network and on-site building entrances and bicycle storage areas.

Additionally, the construction of a shared-use path on the Russell Boulevard project site frontage would facilitate east-west bicycle and pedestrian travel across and into the project site. This path could be a component of the mitigation required to facilitate north-to-west bicycle travel from the UC Davis campus



to the project site (in addition to yet-to-be-determined potential bicycle improvements at the Russell Boulevard/Anderson Road intersection).

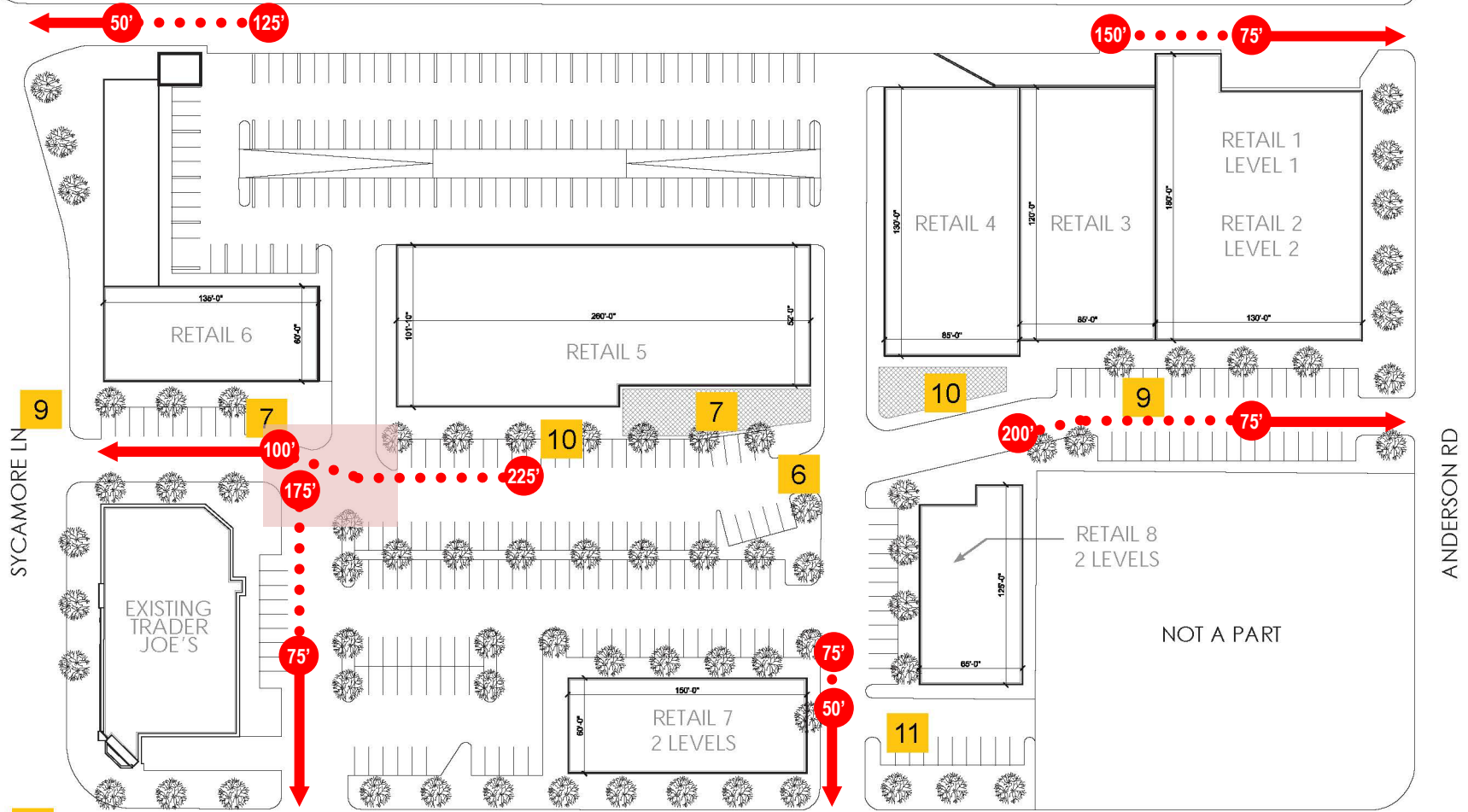
Transit Access – The project would generate approximately 50 new peak hour transit passengers. Most of these passengers would travel between the project site and the UC Davis campus. Outbound passengers would primarily utilize the existing bus stop on southbound Anderson Road north of Russell Boulevard along the project's frontage. Currently, the bus stop has limited capacity to accommodate waiting passengers, as most passengers are required to wait in the sidewalk. In order to sufficiently accommodate project-related transit passengers, this bus stop should be reconfigured to provide additional space for waiting passengers. Additional amenities such as a shelter, benches, and trash receptacles would further enhance the passenger waiting environment.

Additional Information – The following additional information is necessary to complete a more detailed site access and circulation review:

- Location and dimensions of internal pedestrian pathways and crossings.
- Location and dimensions of internal bicycle pathways.
- Location and quantity of long-term (resident and employee) and short-term (retail and residential guest) bicycle parking.
- Large vehicle access needs:
 - Emergency vehicle access route(s)
 - Delivery truck access route(s), frequency, size, and loading docks
- An AutoCAD basemap file of the final project site plan.

SITE ACCESS & CIRCULATION

EXISTING PLUS PROJECT CONDITIONS – PM PEAK HOUR



SKETCH

RUSSELL BLVD

— Average Queue
 Maximum Queue