

INTRODUCTION

The proposed MacInnes Underground Parkade is a part of a multi-phase development along at the University Boulevard that will help support the diverse mix of surrounding buildings and access routes. These include the UBC Life building and the Aquatic Centre to the north, the UBC Bus Exchange bus loop and the War Memorial Gym to the east, the AMS Nest building and the Alumni Center to the west, and the recently completed Central and future Site D (focal) mixed-use development to the south. Due to the need for short term parking on campus, The MacInnes Underground Parkade has been designated for short term use only.

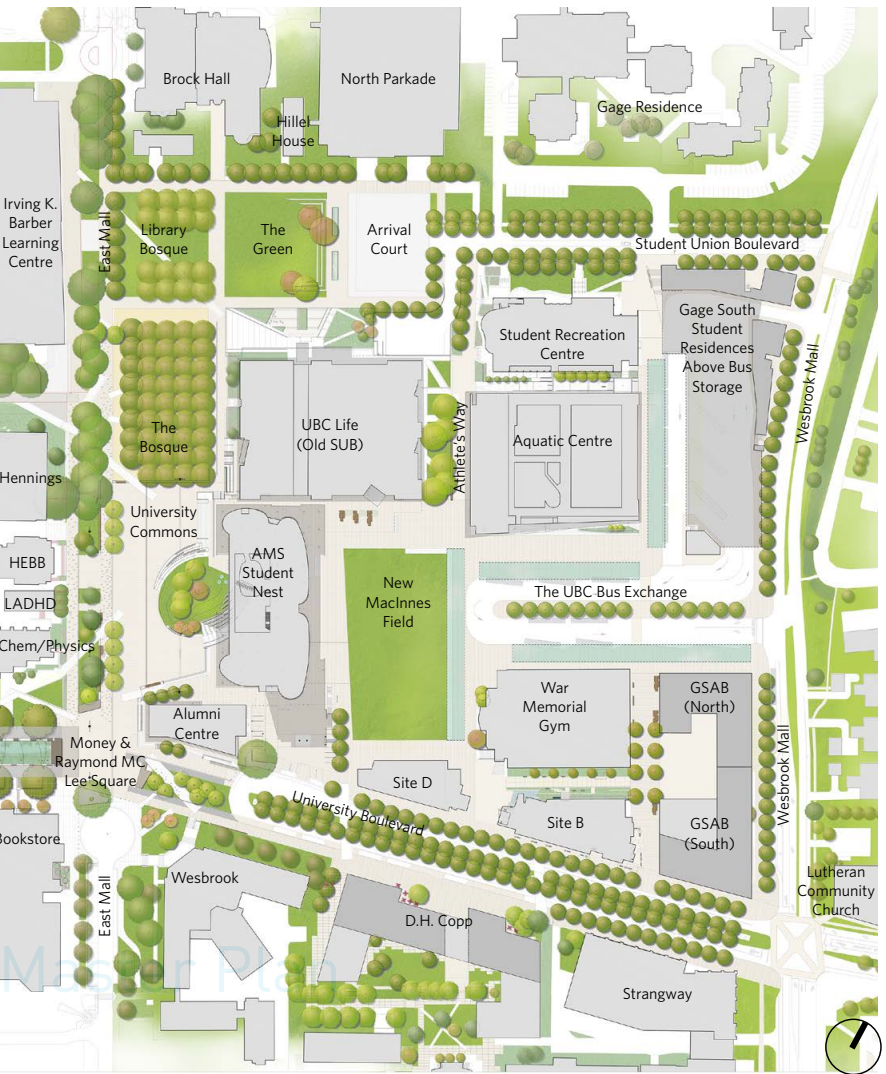
Given it’s central location and collection of significant campus buildings and destinations, the University Boulevard Precinct experiences high traffic demands during the day, with limited parking opportunities for visitors. The proposed MacInnes Field development presents a large well configured site footprint for an underground parkade that would have limited impact to the existing grade conditions. The rectangular geometry allows for a highly efficient triple-drive aisle configuration, maximizing the yield opportunity for the site.

The entry ramp to the parkade is located at the south west corner, tying into the University Boulevard loop and the surface parking and loading operations at the south of the AMS Nest Building. This connection point is intended to minimize any disruption to the existing movements patterns and pedestrian access routes in and around the site.

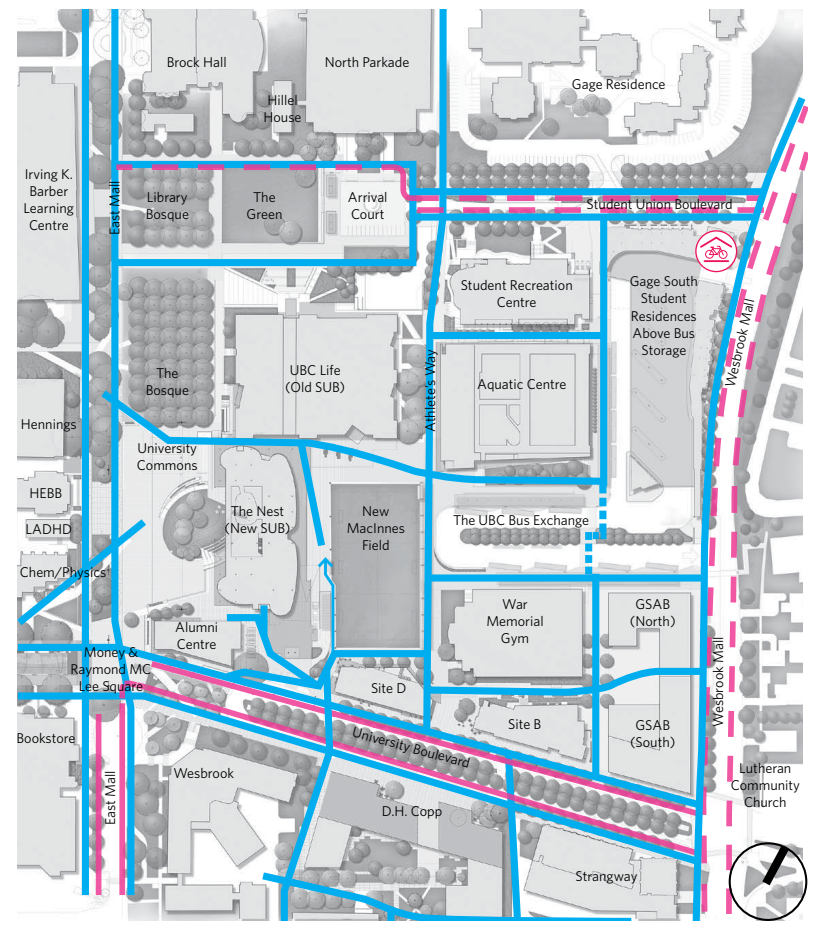
The parkade has four emergency exit stairs at the East and West side, allowing for efficient access to ground level and clear way finding to and from the parking level. For convenience, the parkade is serviced by two elevators at both the north side and south sides of the site.

The MacInnes Parkade is part of the overall site redevelopment, followed in time by the new MacInnes Field at grade, a future multi-purpose mixed-use outdoor space. Please note that the specific details of the MacInnes Field design are shown at a conceptual level and will be developed at future date and coordinated with the design of the parkade.

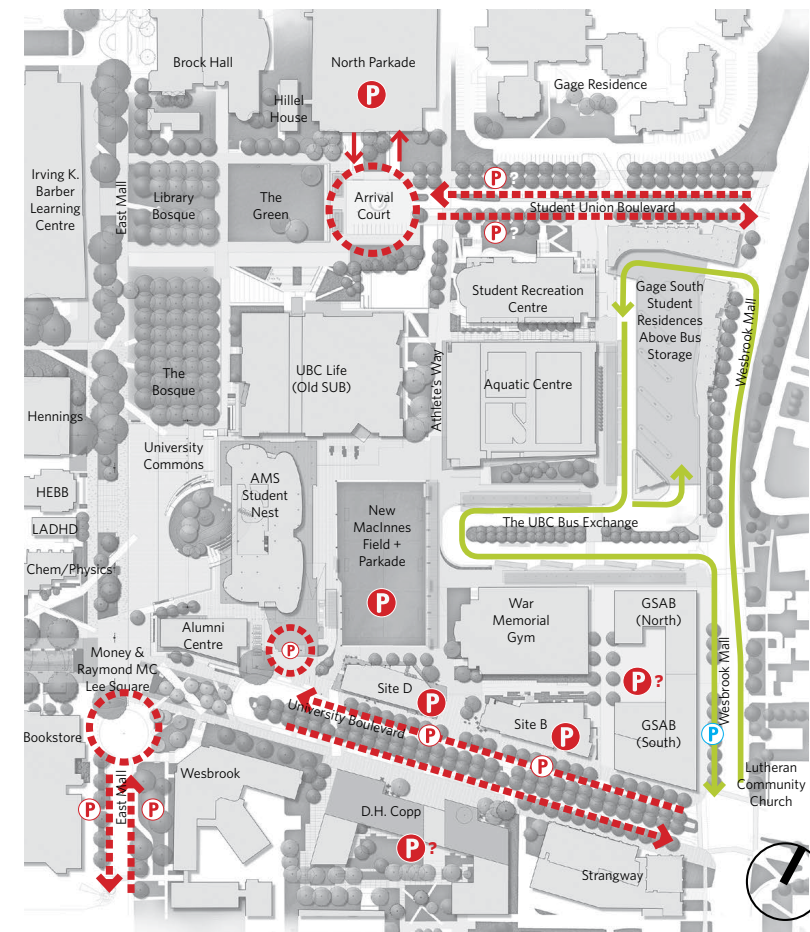
Bunt & Associates Engineering Ltd. Was commissioned by UBC Campus + Community Planning in Early 2017 to assess the anticipated visitor parking demand for a number of key destinations (existing and future) located within the University Boulevard Precinct. The review indicated that there was a lack of nearby short-term parking near University Boulevard Precinct has potential implications on operational and financial viability of the existing and planned facilities in the area, making a case for UBC to consider a proposal that provides proximate, short-term visitor parking for convenient access to the multitude of community-facing UBC facilities and commercial businesses planned for the precinct.



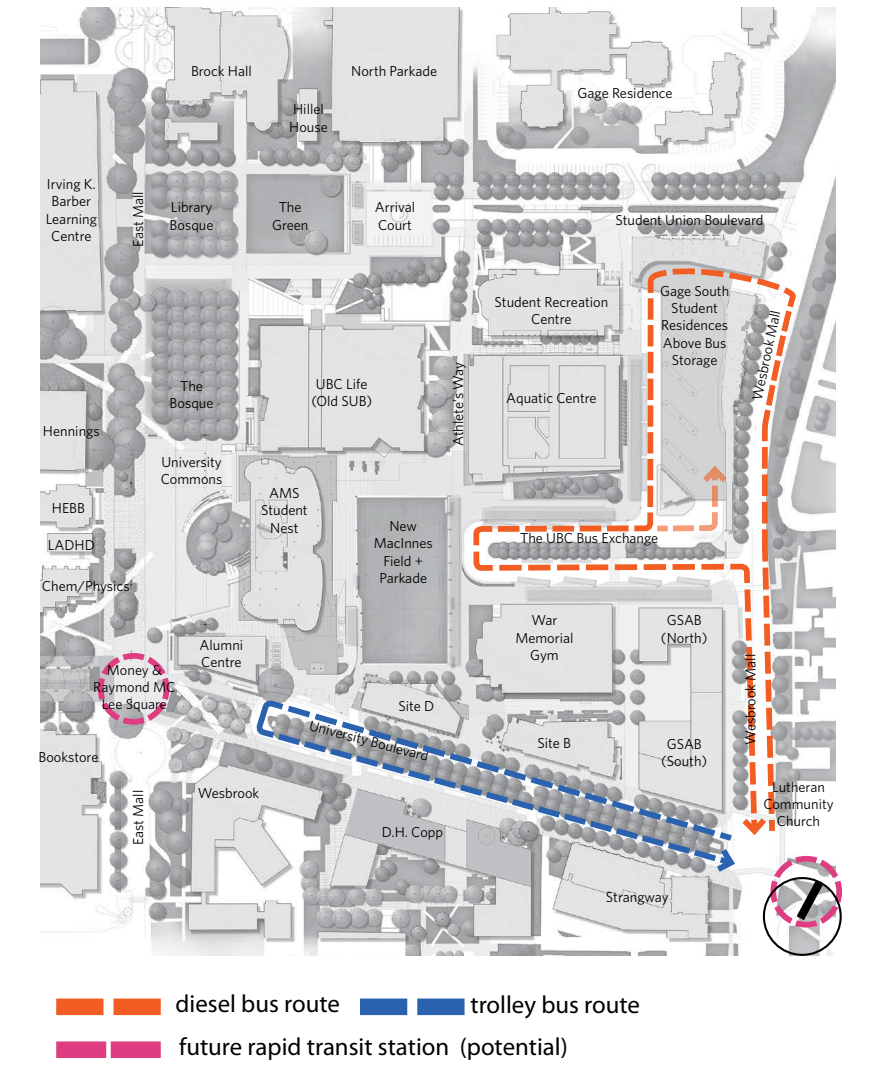
Site Plan



Pedestrian & Bike Circulation



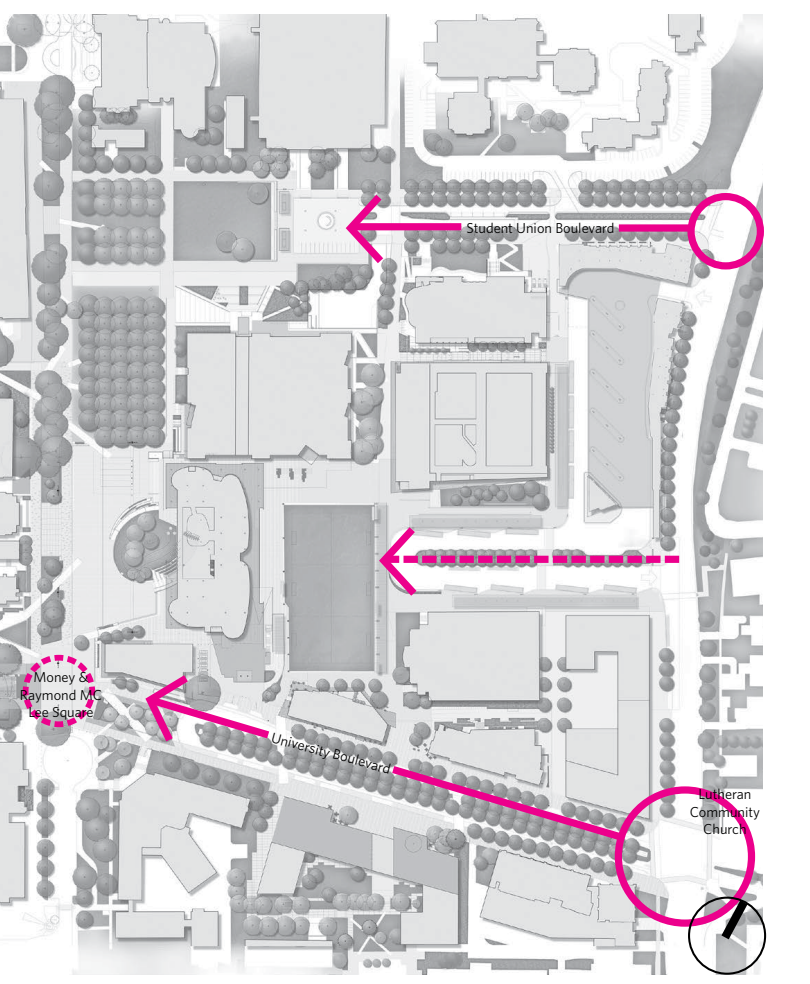
Vehicular Circulation & Parking



Vehicular Circulation & Parking



The Core



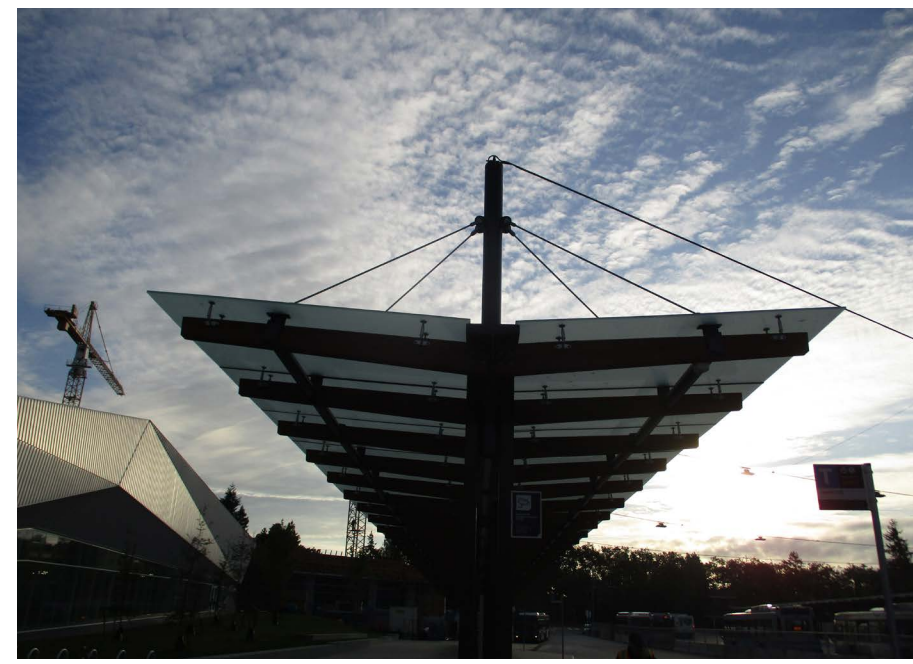
Gateways







17 View looking @ UBC Exchange. Trellis / Canopy



18 View looking @ UBC Exchange. Trellis / Canopy



15 View looking South @ UBC Exchange



16 View looking South @ UBC Exchange



13 View looking West @ AMS BLDG.



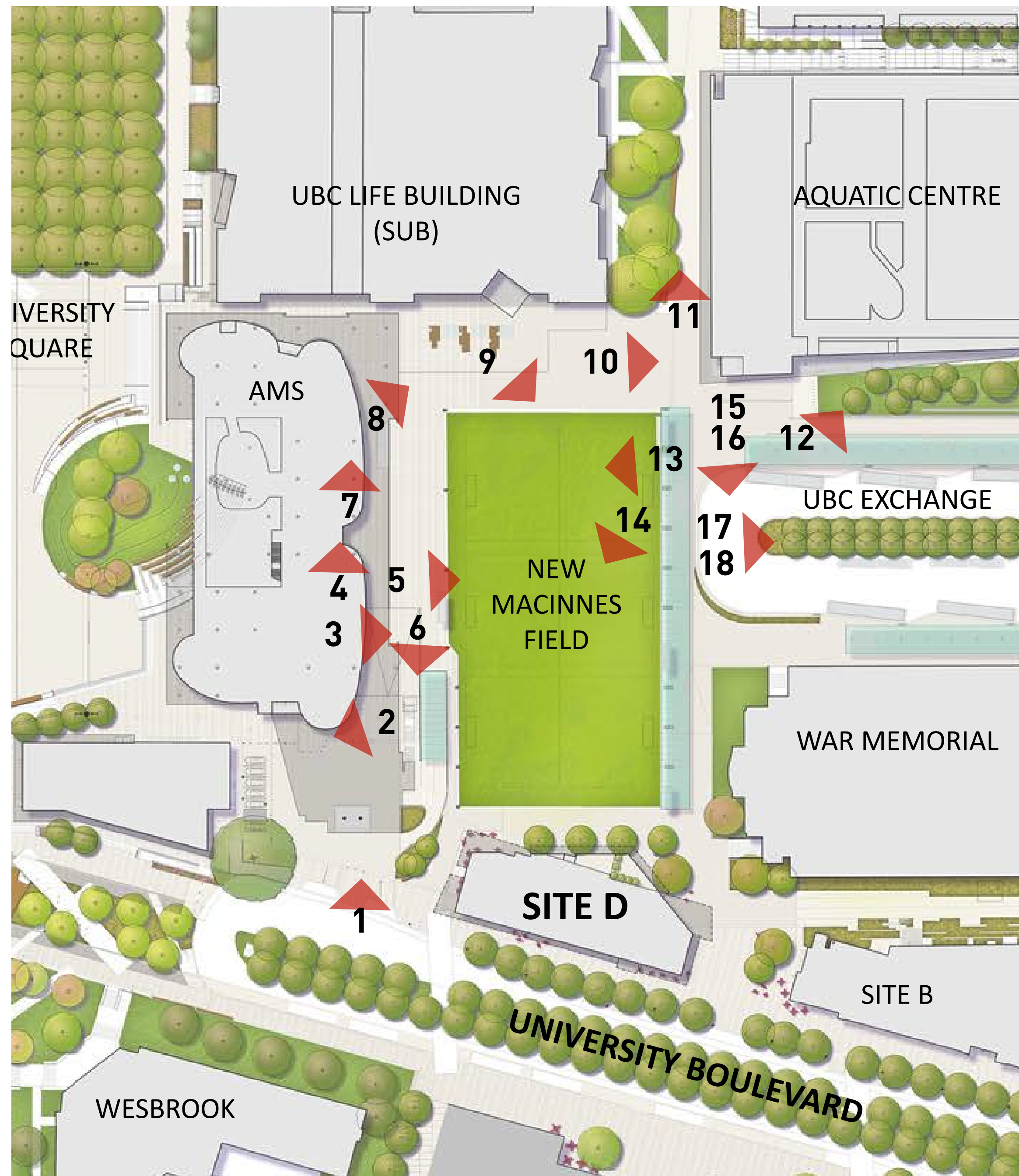
14 View looking West @ AMS BLDG.



12 View from UBC Exchange looking North @ Aquatic Center



11 View Looking North to The Aquatic Center



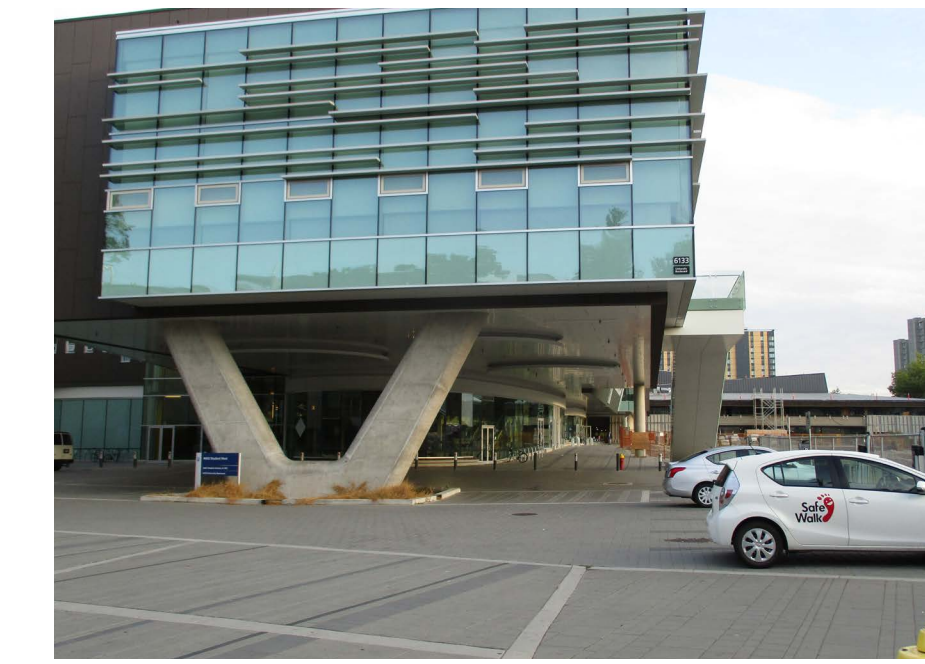
KEY PLAN



10 Aquatic Center Main Entrance



9 View looking East @ UBC Exchange @ War Memorial GYM



1 View from University Boulevard to MacInnes-Field



3 View from University Boulevard to MacInnes-Field



5 View looking East to MacInnes-Field



8 View looking North @ UBC life Building



2 View from east to west below overhang AMS Building



4 View looking North @ AMS BLDG.

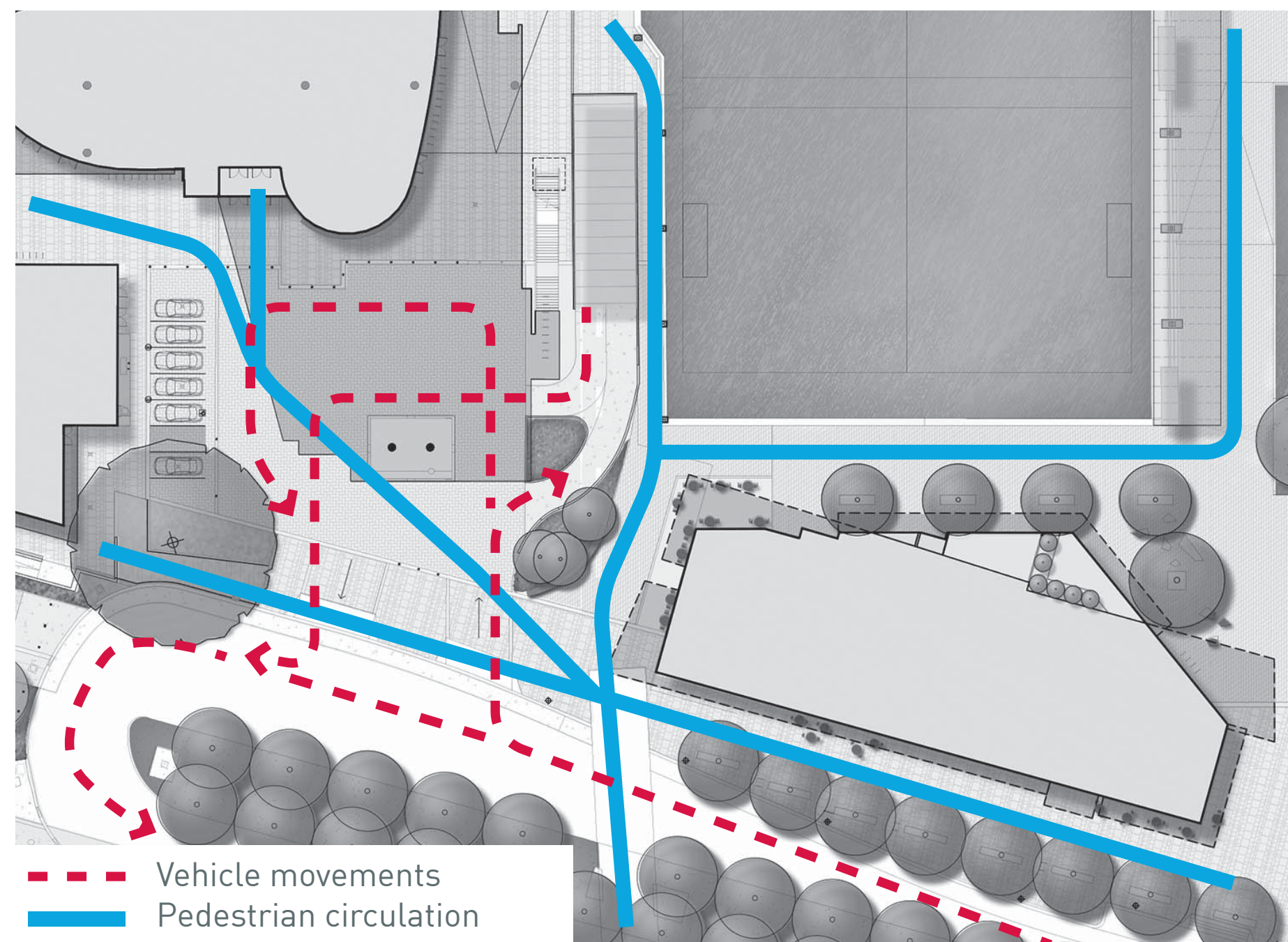


6 View looking at Exterior Stair AMS Building

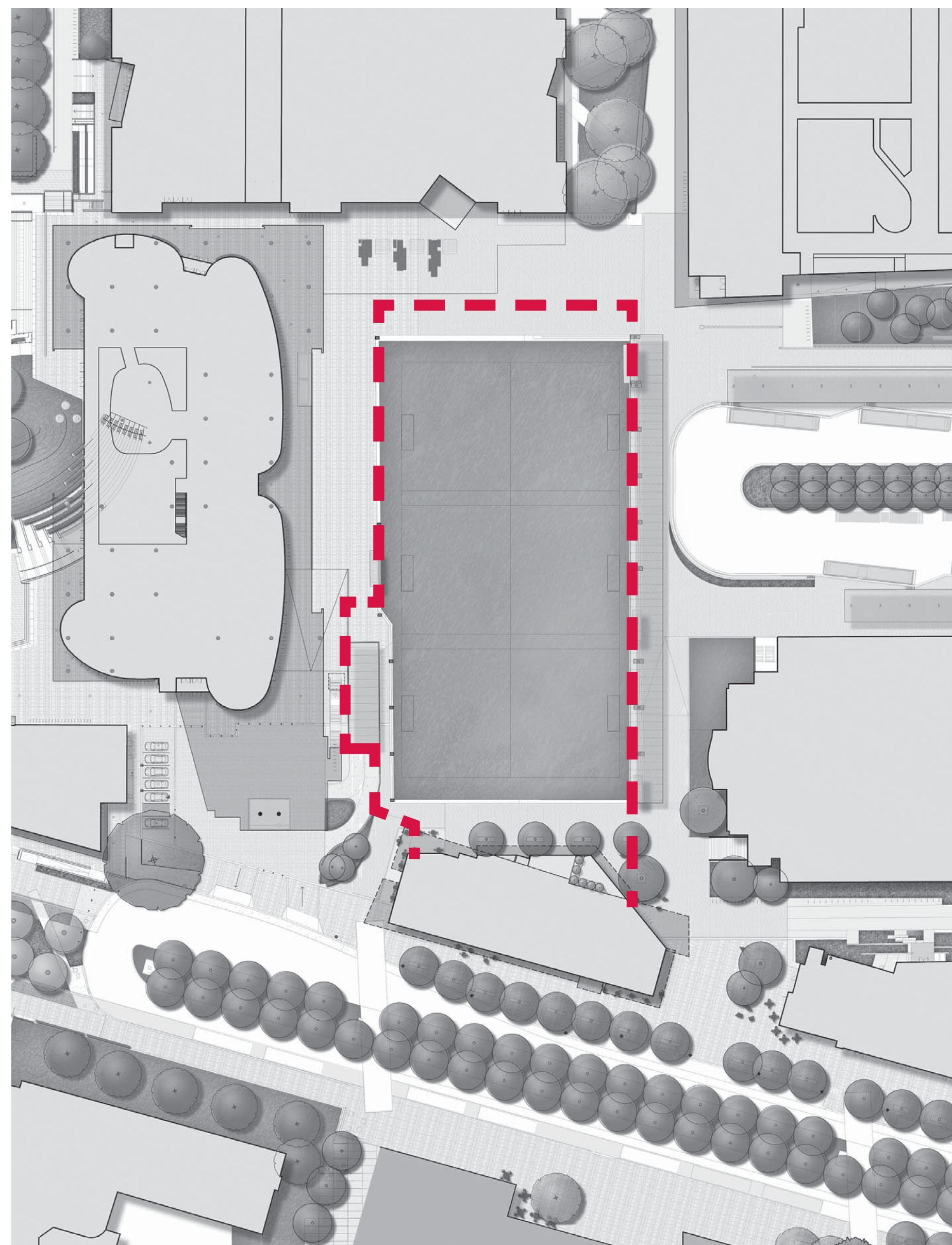


7 View looking North

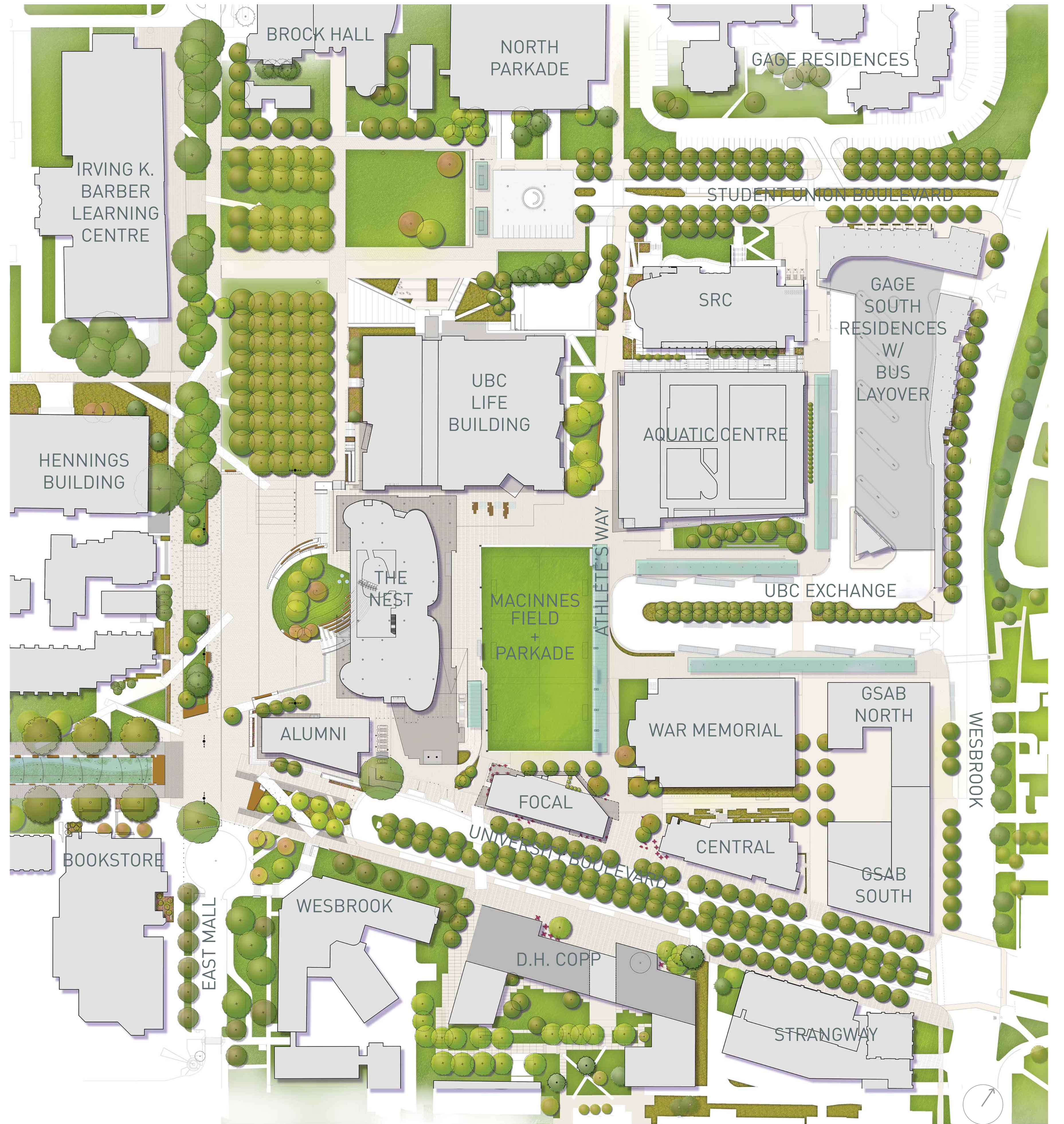




Circulation

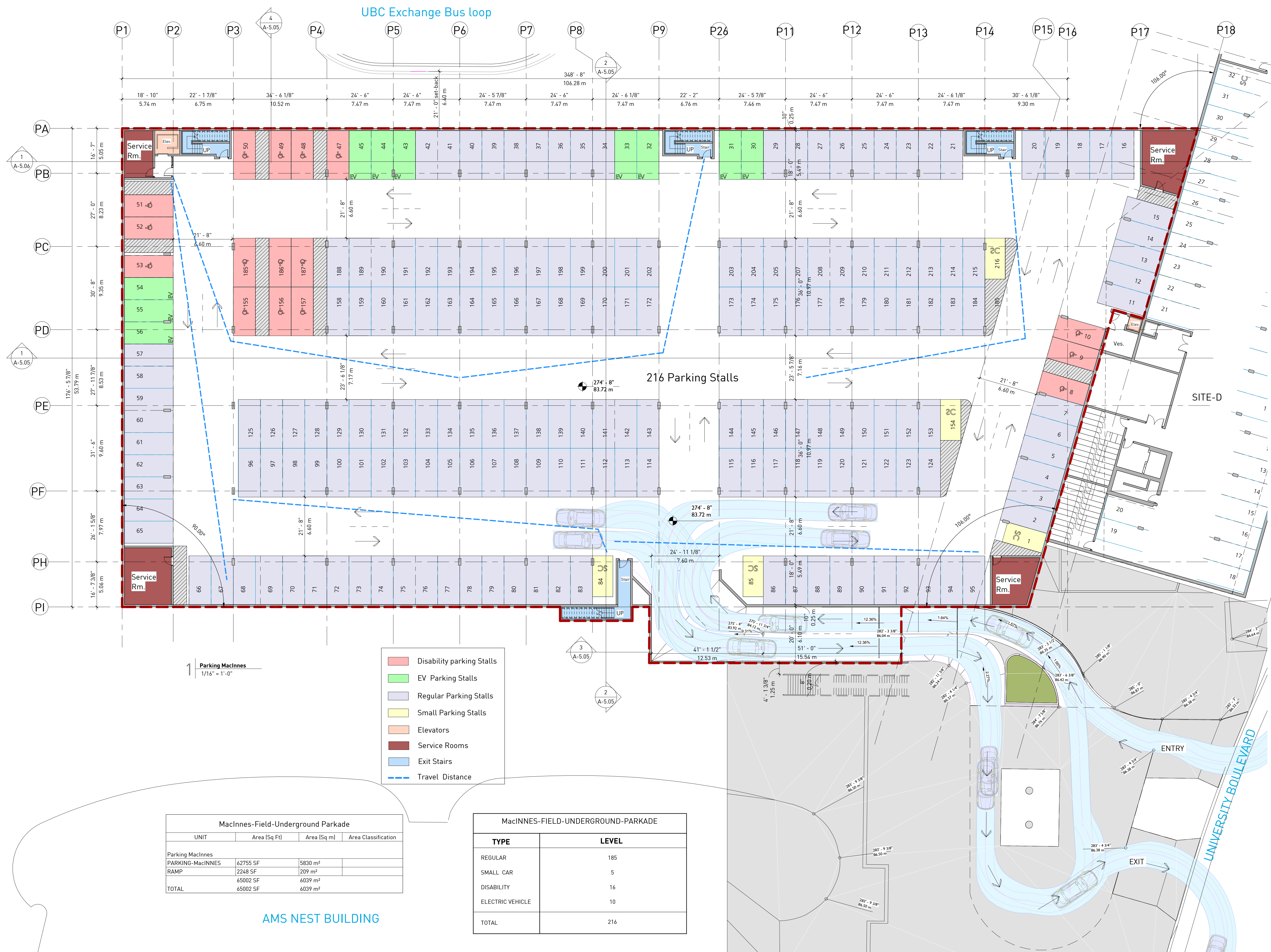


Parkade Extents

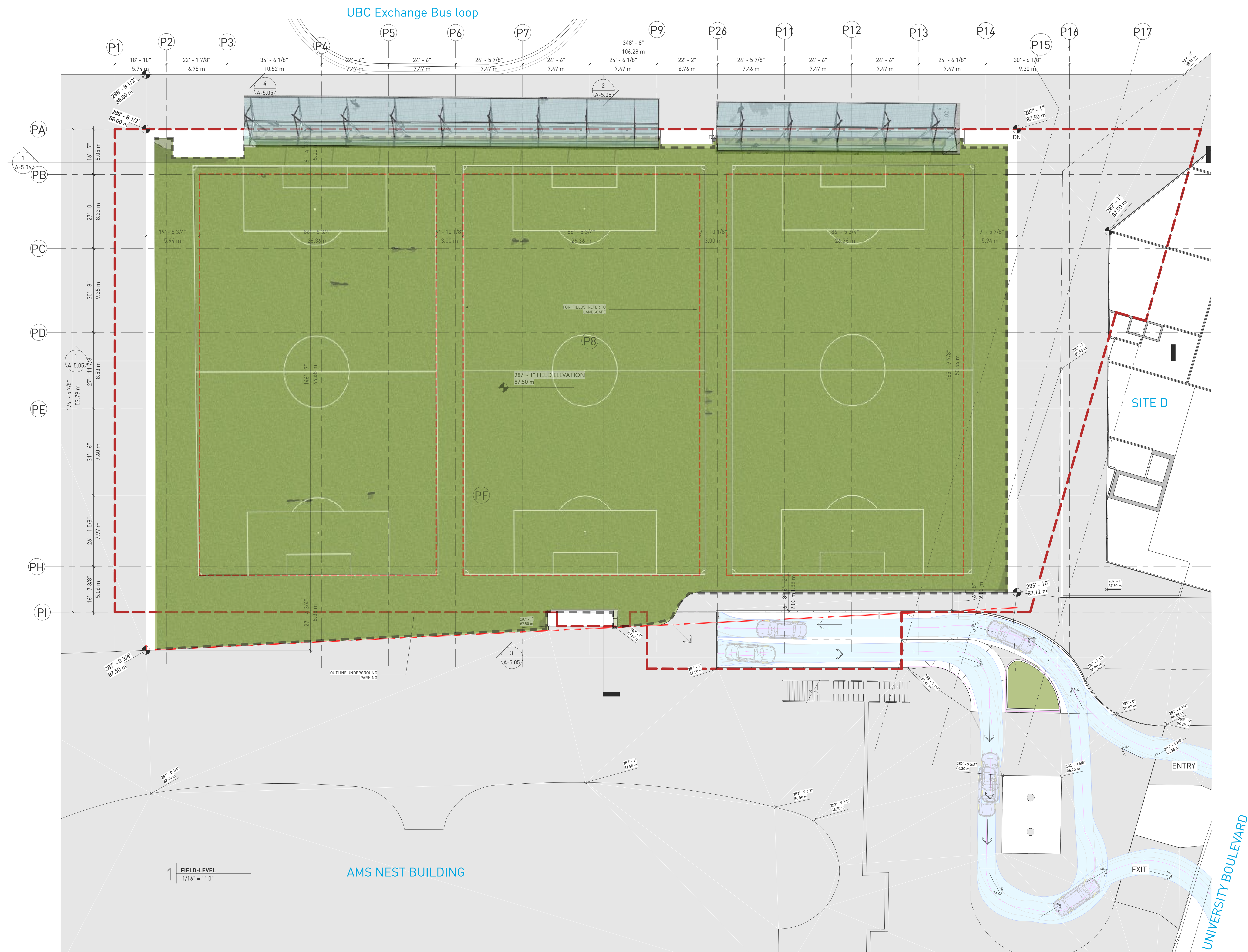


Precinct Plan - 1:1000













Street View Looking North

Please note that specific details of the MacInnes Field Design are shown at a conceptual level and will be developed at a future date and coordinated with the design of the parkade.







Aerial View Looking South

Please note that specific details of the MacInnes Field Design are shown at a conceptual level and will be developed at a future date and coordinated with the design of the parkade.







Aerial View Looking East

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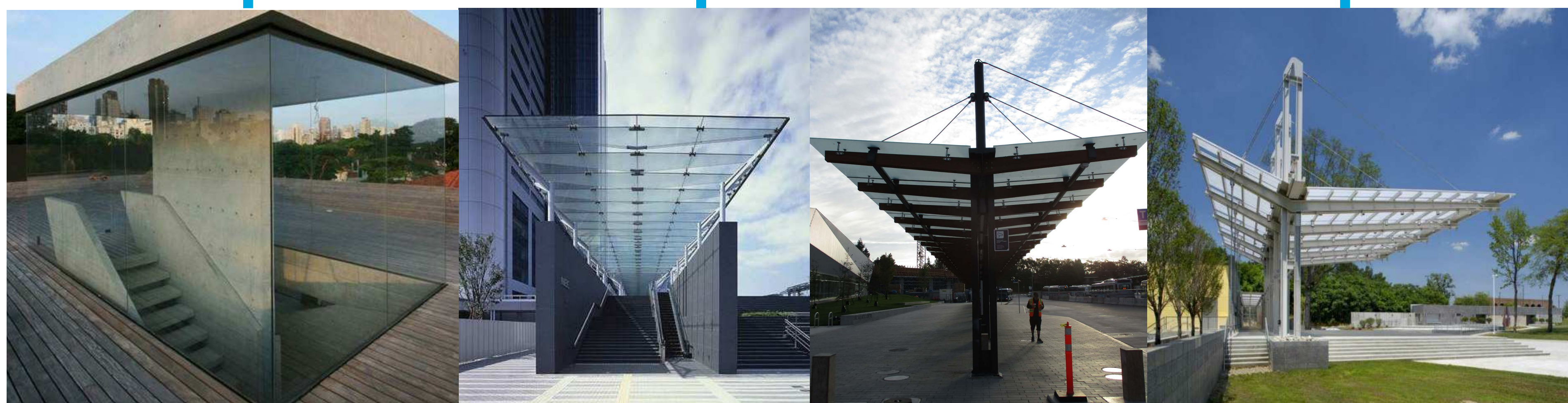




SHADE

WEATHER PROTECTION

TRANSPARENCY







SPACE OPTIMIZATION

COLOUR

DIRECTION



PRIORITIZATION HC/EV

SURFACE TREATMENT

CIRCULATION HIERARCHY



- To estimate the visitor parking demand for the University Boulevard Precinct, Bunt & Associates conducted information interviews with operators and intercept surveys of users from a number of facilities within the precinct, including Alumni Centre, AMS Nest, War Memorial Gym, Aquatic Centre, and UBC Bookstore.
- Visitor parking demand estimates for these facilities were informed by observed vehicle occupancy rates and mode shares from the UBC Vancouver Transportation Status Report. In addition, parking occupancy rates, campus mode share data, and industry standards were applied to estimate the commercial parking demand associated with the mixed-use buildings in the precinct.
- Up to 175 additional parking stalls are expected to be required upon full build-out of the precinct during the peak visitor demand periods.
- To evaluate the impact of the additional traffic on the precinct a worst case scenario was analyzed. The anticipated peak period traffic demand for the proposed MacInnes Underground Parkade is 110 vehicle per hour per direction, which equates to just under 2 vehicles per minute on average.
- A micro-simulation traffic model was prepared to analyze the interaction of pedestrians and vehicles within the east courtyard and along University Boulevard. Of particular interest was the likelihood of vehicles entering the courtyard blocking through traffic on University Boulevard.
- Based on the simulation results and engineering judgement, the additional traffic generated from the MacInnes Underground Parkade is not anticipated to create congestion onto University Boulevard under most conditions.

