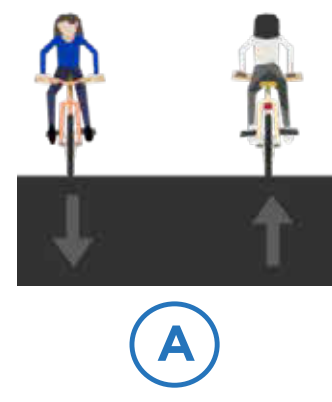


8. RICHARDS STREET UPGRADES

Recommended Transportation Design



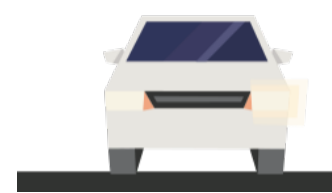
Bike Lane

Based on prior feedback from 2013 and 2016, staff have developed a recommended design for Richards Street which provides for **two-way cycling on the east side of Richards Street**, which minimizes conflicts and provides better connectivity for cycling.



Travel Lane

Typical dimensioned cross-sections of recommended designs are shown in Figure 3 and Figure 4. To provide space for northbound cycling and a landscaped separation with parked cars, Richards Street would operate with **one general travel lane** as volumes are generally low and the parking restrictions during the afternoon peak between Dunsmuir and Nelson allow for increased motor vehicles at that time.



Turning Lane & Parking

To provide turn lanes at intersections, sightlines at driveways, and accommodate other street uses, there would be a net decrease of approximately **fifty parking spaces (15%)** along Richards Street. This decrease is concentrated north of Robson Street, as detailed on the design boards. Approximately 50 more spaces along the right-hand (west) curb from Dunsmuir Street to Nelson Street would be restricted during the afternoon peak period. Similar restrictions near the busy left turns at Georgia and Nelson will be considered in the future to balance parking with peak hour motor vehicle volumes.

Urban Design

The proposed design would create a more pleasant sidewalk and cycling experience with a raised two-way bicycle path. **A treed and landscaped median, integrated with green infrastructure** to collect, and manage rainwater, is proposed to complement the existing street design and Richards' expected role in the cycling network.



Drake St. to Robson St. (Looking North)

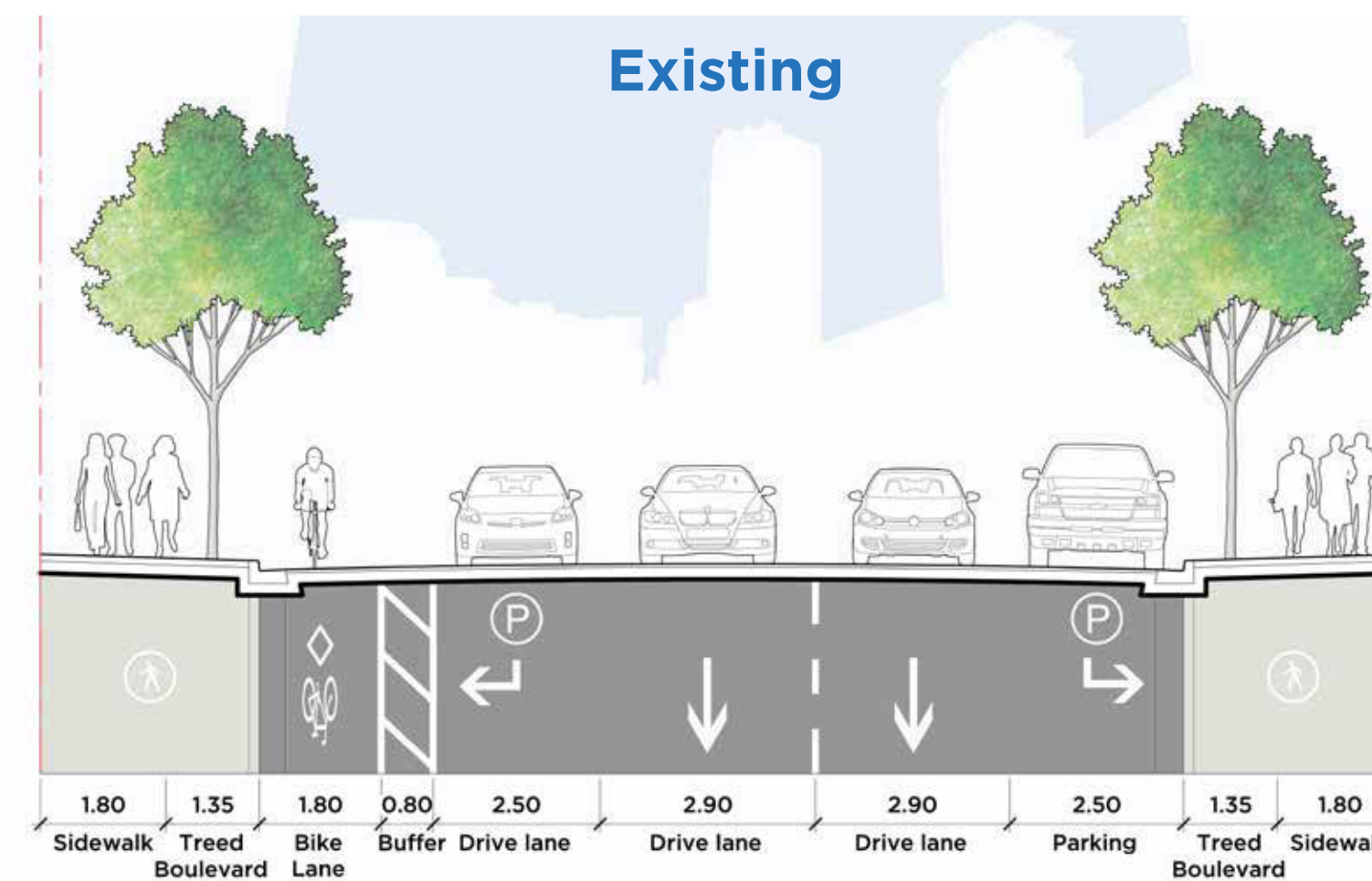


Figure 1

Pacific St. to Robson St. (Looking North)

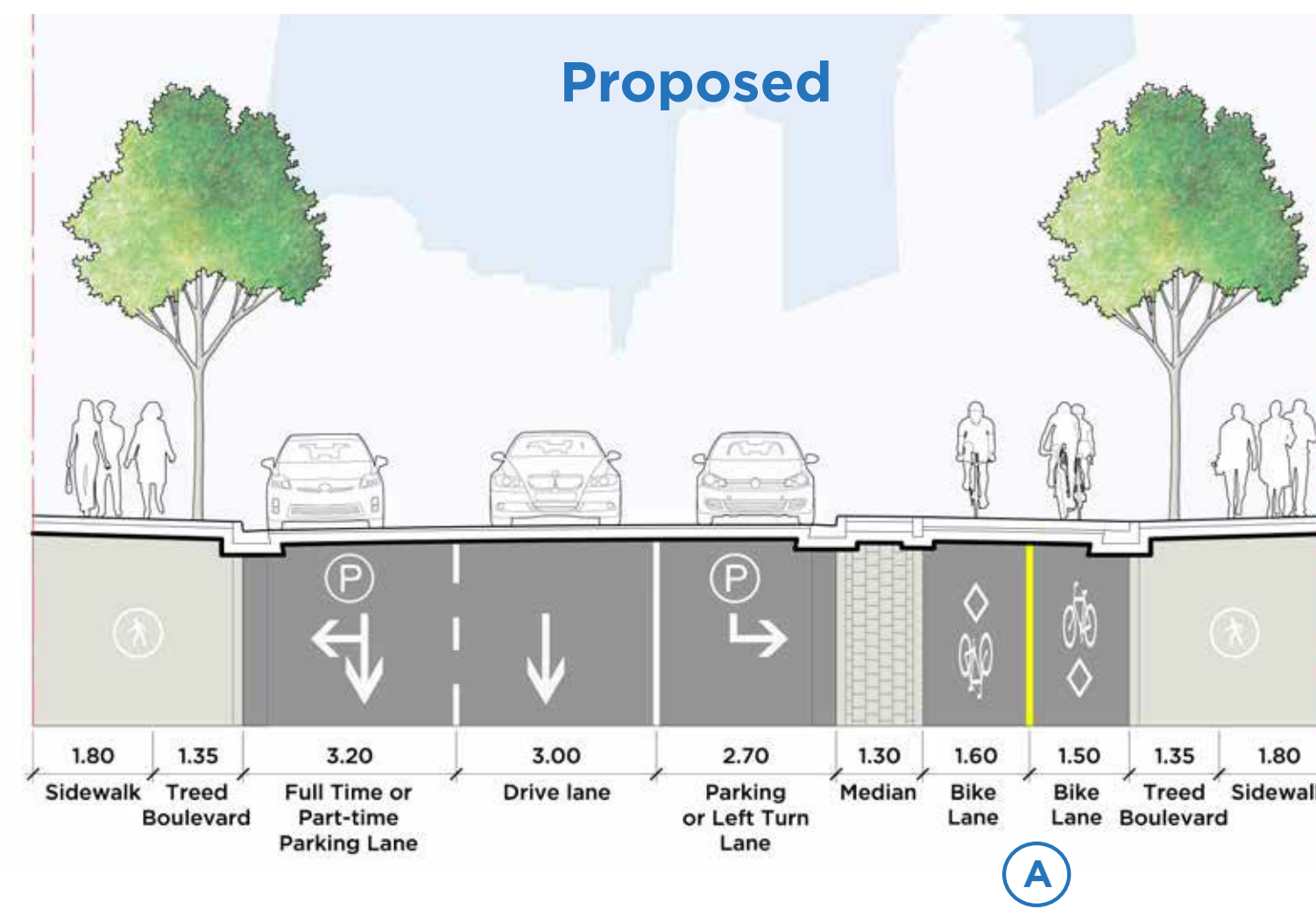


Figure 3

Hastings St. to Robson St. (Looking North)

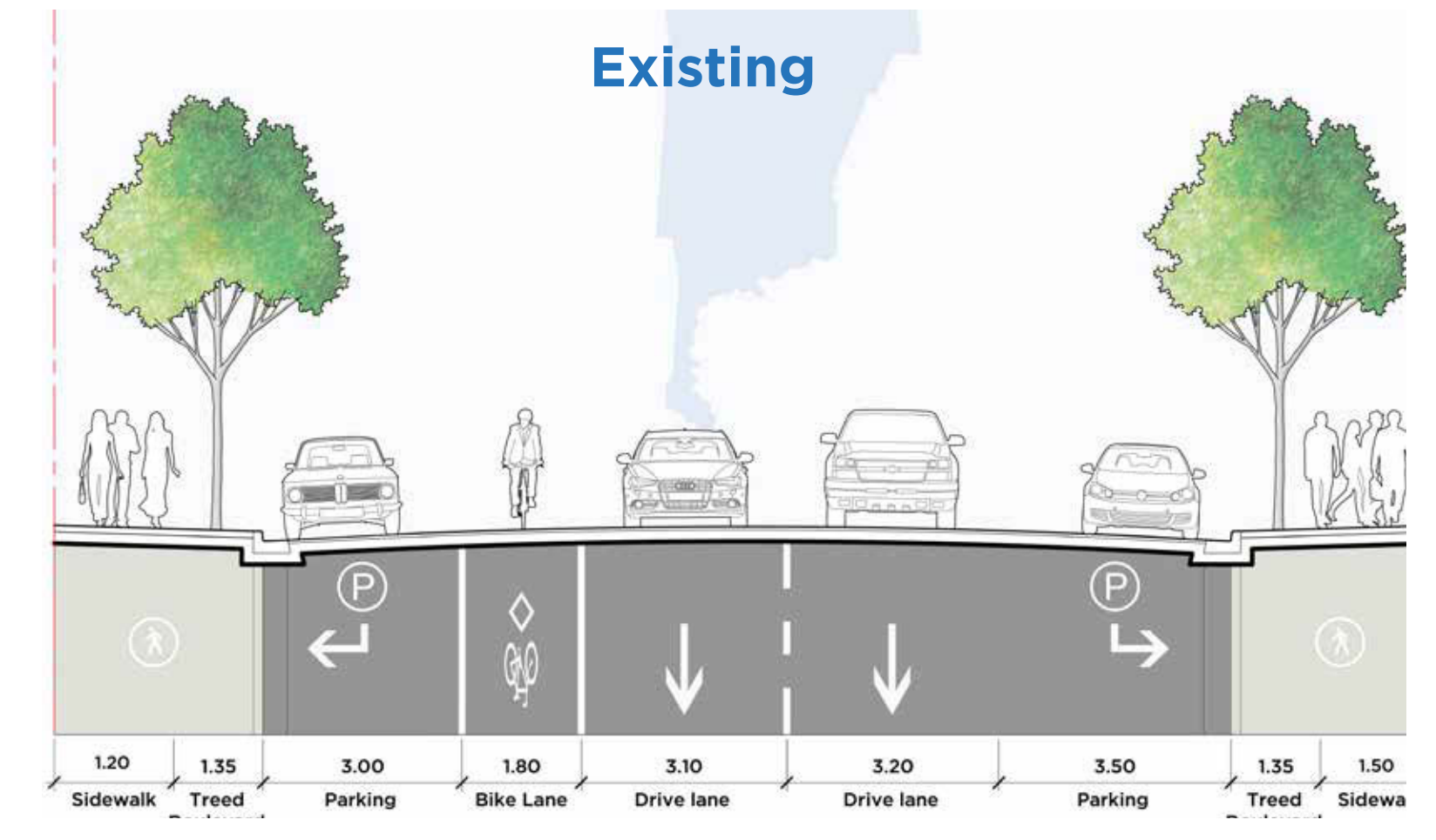


Figure 2

Robson St. to Hastings St. (Looking North)

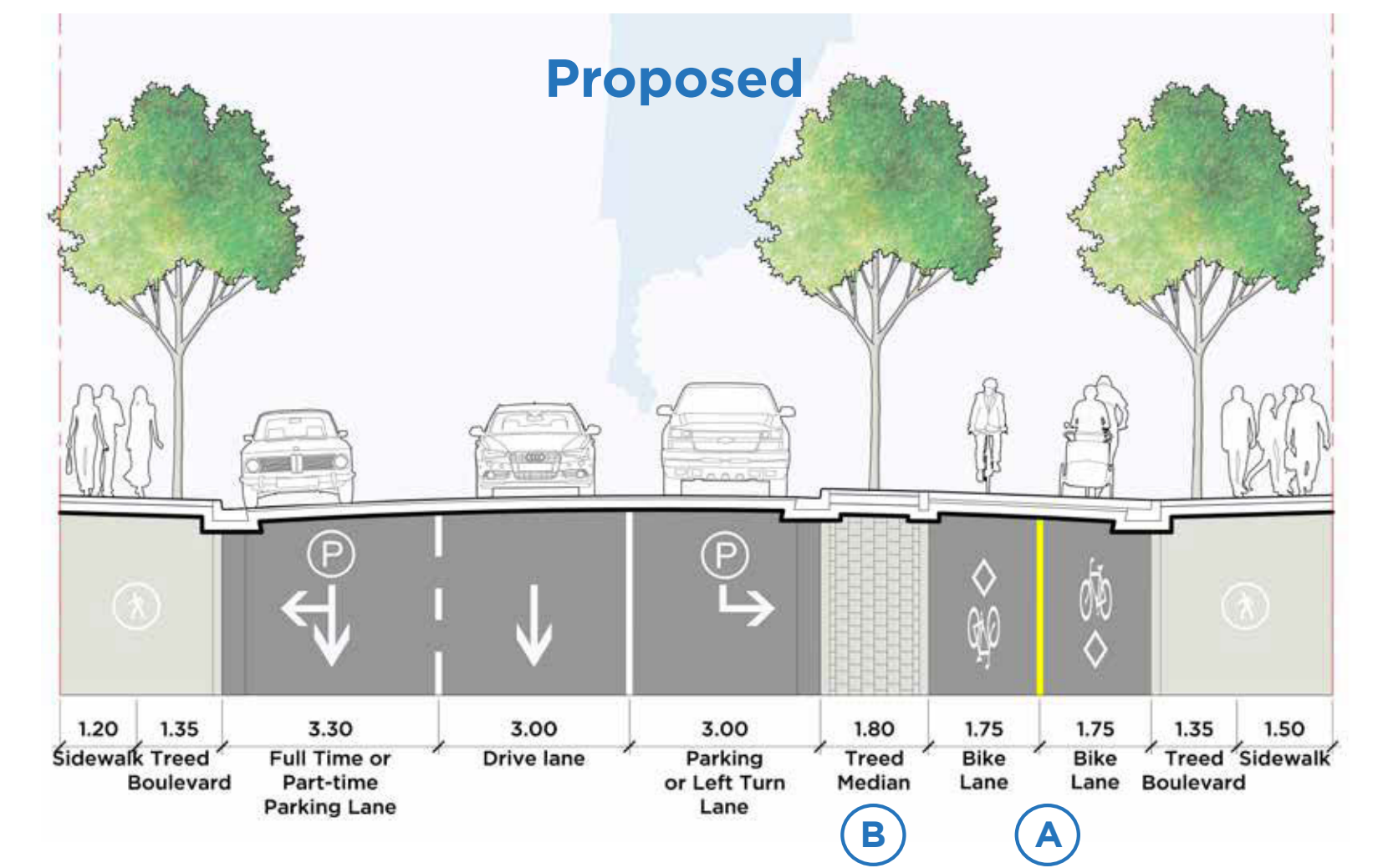


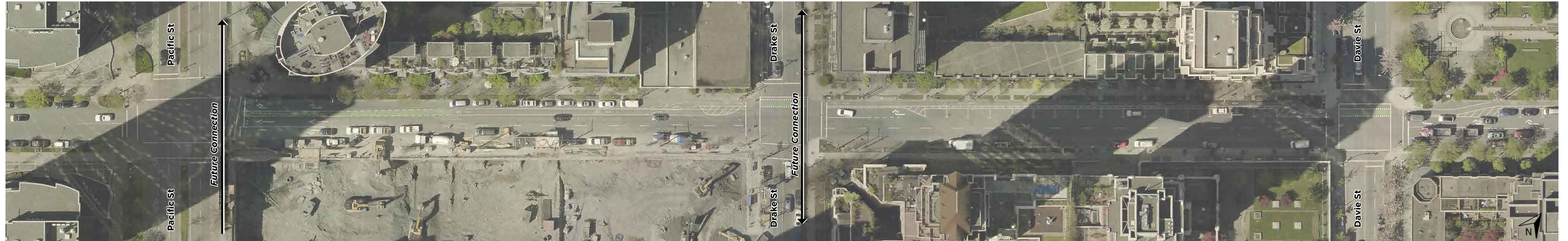
Figure 4



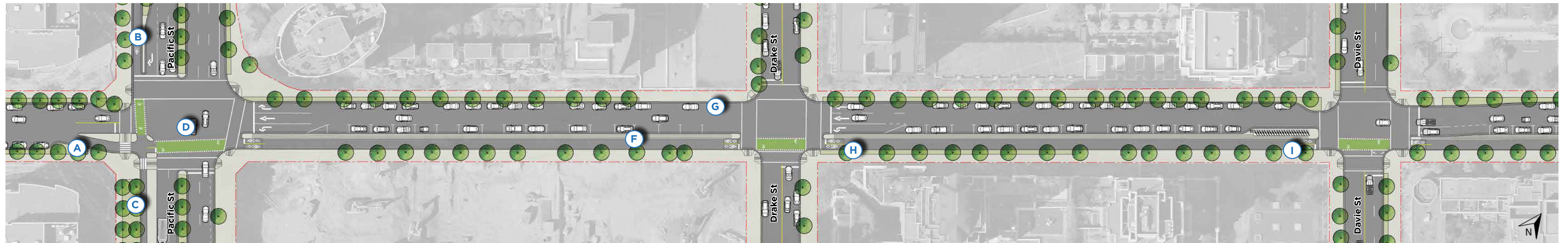
8.1 RICHARDS STREET UPGRADES

Pacific St. to Davie St.

Plan: Existing



Plan: Proposed



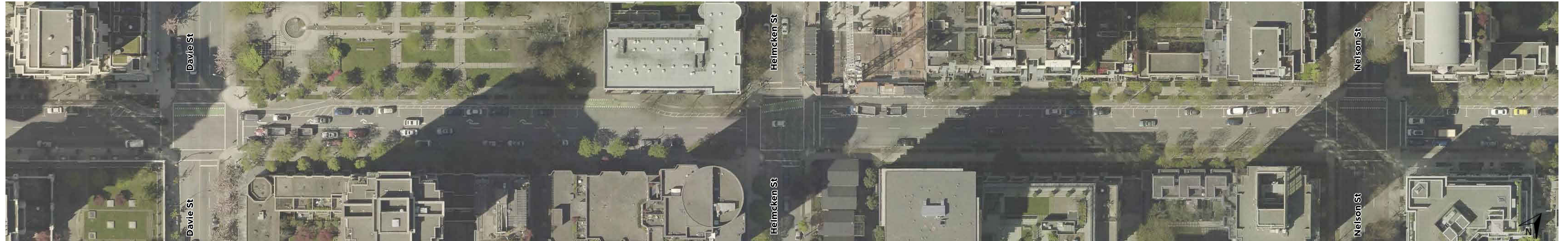
What is different?	Why?
A Remove two to six parking spaces depending on detailed design for end of protected bike lane Remove two trees	To provide a transition for people cycling as the protected bike lane ends
B Remove nine 2-hour parking spaces Add right turn lane and eastbound protected bike lane coordinated with redevelopment to the west	To extend the eastbound protected bike lane from Seymour Mews to Richards St
C Relocate bus stop to an island between roadway and protected bike lane	To accommodate the eastbound protected bike lane and protected intersection
D Protected intersection	To connect bikes from Burrard bridge to Richards St and shorten crossings for people walking
E Approximately to four metered parking spaces outside PM peak	To provide additional parking once the bike lane is relocated, subject to right-turn volume

What is different?	Why?
F Add four metered parking spaces	To restore parking as redevelopment completes
G Potential metered parking and/or passenger zone	To make use of curb space no longer required by the existing Richards bike lane, recognizing potential future changes along Drake Street
H Remove three metered parking space and relocate Modo Remove bulge and add new left turn lane	To improve motor vehicle circulation and safety for people cycling and walking
I Remove two full-time metered parking spaces, shift part-time commercial loading zone/metered parking south	To relocate the Mobi station along the new protected bike lane

8.2 RICHARDS STREET UPGRADES

Davie St. to Nelson St.

Plan: Existing



Plan: Proposed



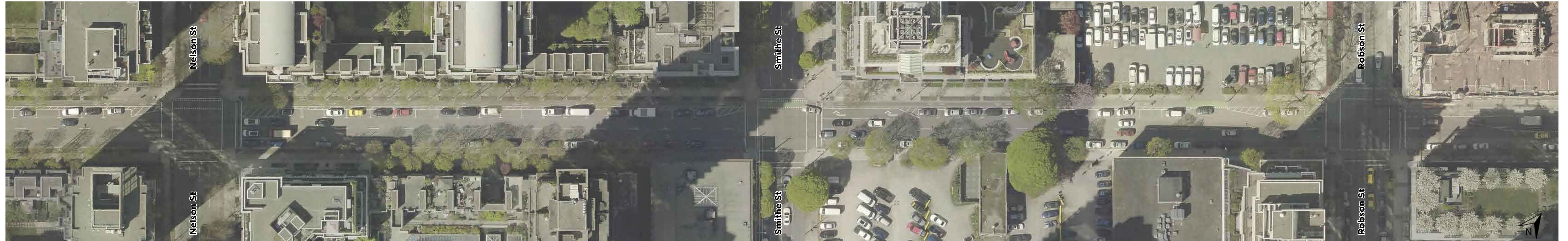
What is different?	Why?
A Add one metered parking space	To use space no longer required for the protected bike lane
B Narrow and lengthen curb bulge	To retain automated public toilet
C Remove one metered parking space	To retain automated public toilet and provide space for left-turning vehicles
D Remove one metered parking space Relocate Mobi station	To provide space for right-turning vehicles and allow for automated public toilet maintenance

What is different?	Why?
E Remove two metered parking spaces	To provide access by bicycle to buildings on the opposite side of Richards
F Possible additional metered parking space(s) depending on construction timeline of adjacent building	To use space no longer required for the protected bike lane
G Remove one metered parking space Add left turn lane	To improve motor vehicle circulation and safety for people cycling and walking
H Remove bike turn box	Direct turns from Richards to Nelson protected bike lanes are now possible

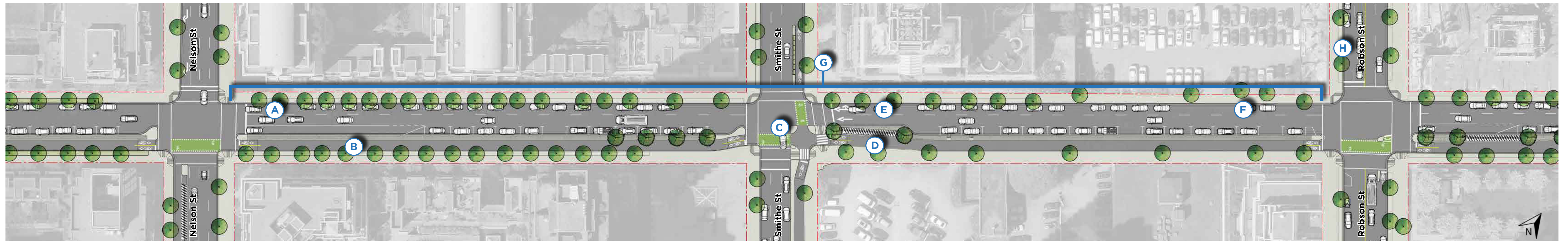
8.3 RICHARDS STREET UPGRADES

Nelson St. to Robson St.

Plan: Existing



Plan: Proposed



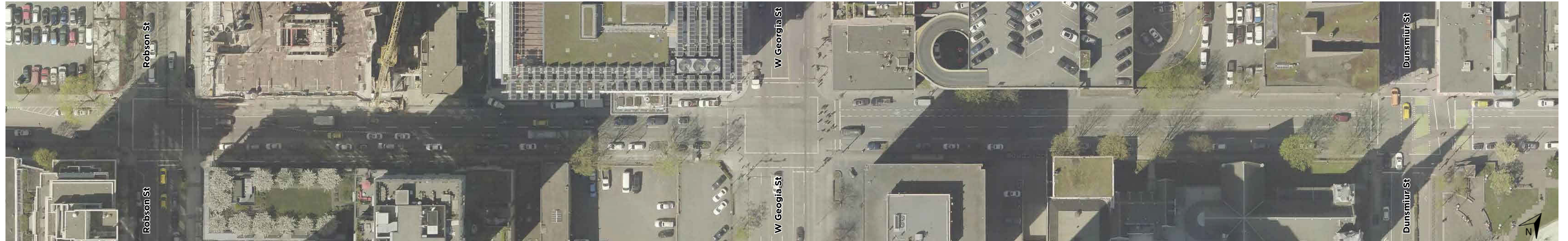
What is different?	Why?
A Add one metered parking space	To make use of space no longer required for the protected bike lane
B Remove three parking spaces	To lengthen left turn lane and allow a separate turning phase
C Protected intersection	To provide a safe cycling connection to and from the protected bike lane on Smithe St
D Remove four metered parking stalls on Richards at Smithe; Add three parking spaces on Homer at Smithe	To provide a Mobi Station at Richards St and Smithe St (relocated from Homer and Smithe)

What is different?	Why?
E Add one metered parking space	To make use of space no longer required for the protected bike lane
F Add one metered parking space	To make use of space no longer required for the protected bike lane
G Remove parking along the right curb lane from 3pm to 7pm	To accommodate traffic volumes during the PM peak period
H Remove one parking space from Robson Street	To accommodate bicycle turns

8.4 RICHARDS STREET UPGRADES

Robson St. to Dunsmuir St.

Plan: Existing



Plan: Proposed

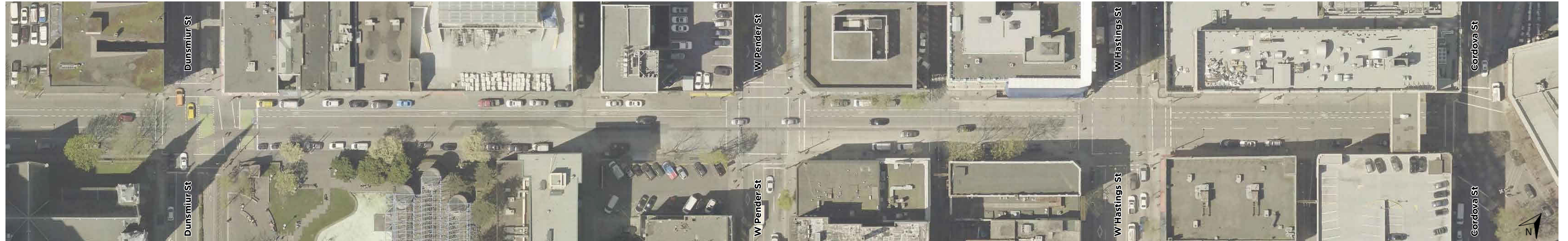


	What is different?	Why?
(A)	Remove four metered parking stalls and one motorcycle stall	To provide a Mobi station at Richards St and Robson St and provide a left turn bay for left turning vehicles
(B)	Remove up to four parking spaces and relocate mobi station	To maintain through and right turn traffic flow, including buses
(C)	Remove four metered parking stalls	To provide bike access to buildings on the opposite side of Richards St
(D)	Protected only left turn phase	To improve safety for people walking and cycling
(E)	Remove six metered parking stalls; Allow parking at all hours for the remainder of the block; new Left turn bay	To provide a left turn bay for vehicles during the AM peak period
(F)	Remove three metered parking stalls	To maintain through and right turn traffic flow, including buses
(G)	Remove parking along the right curb lane from 3pm to 7pm	To accommodate traffic volumes during the PM peak period

8.5 RICHARDS STREET UPGRADES

Dunsmuir St. to Cordova St.

Plan: Existing



Plan: Proposed



What is different?		Why?
(A)	Protected intersection	to provide a safe cycling connection to and from the bi-directional bike lanes on Dunsmuir St
(B)	Remove/Relocate consular parking zone and add Mobi station	To provide a Mobi station at Richards St and Pender St
(C)	Remove one metered parking stall	To maintain through and right turn traffic flow, including buses
(D)	Remove three metered parking stall New left turn bay	To provide a left turn bay for vehicles and To improve circulation and safety for people cycling and walking
(E)	Remove three metered parking stall New left turn bay	To provide a left turn bay for vehicles and To improve circulation and safety for people cycling and walking
(F)	Remove one motorcycle stall Remove four metered parking stalls Add Mobi Station and bicycle parking	To provide a Mobi station at Richards St and Cordova St