37 STREET SW
STREETSCAPE MASTER PLAN

The City of Calgary
Main Streets Program

MAIN STREETS PROGRAM

37 STREET SW STREETSCAPE MASTER PLAN

Owner:
Urban Strategy Implementation

Prepared by:
ISL Engineering and Land Services Ltd.

Status:
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Web:
www.calgary.ca/mainstreet

EXECUTIVE SUMMARY

The City of Calgary (The City) is working to address the conditions of the existing public realm with the creation of a streetscape master plan for each of the 24 Council approved Main Street corridors. 37 Street SW from Bow Trail SW to Richmond Road SW is one of these corridors, one which is continuing to evolve as a primarily residential street connecting a number of community and transit-oriented mixed-use nodes. In March 2018, approximately 215 stakeholders participated through in-person and online engagement opportunities to discover the character and opportunities to improve to 37 Street SW in areas of public realm, community enhancement, cycling, transit, parking, street furniture, pedestrian safety features, and more.

When asked to share their stories of 37 Street SW, many participants described their experiences of moving to the area and meeting their neighbours, as well as back yard weddings and raising families. Some described growing up in the area and visiting neighbourhood destinations (e.g. treat nights, Bookmobiles, friends' houses, schools, etc.) by riding their bikes or taking the bus, which stopped "right outside [their] door." These descriptions contrasted sharply with participant descriptions of a scary, wider, faster, and difficult to cross 37 Street SW that feels like an uninviting place to wait for a bus or navigate as either a pedestrian or a cyclist.

Additional engagement opportunities in December 2018 and May 2019 allowed the community to explore potential streetscape improvements to 37 Street SW, and then reveal the resulting Master Plan. The 37 Street SW Streetscape Master Plan vision will establish 37 Street SW as a series of vibrant urban destinations connected by a modern, pedestrian-first, streetscape in Calgary's Main Streets network. Many voices guided the transformation rooted in community character and focused on safety, inclusion and integration of modes of transportation. 37 Street SW will be a recognizable place for both the community and all Calgarians to socialize, shop and explore.

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1.0 INTRODUCTION

STREETSCAPE MASTER PLAN

The 37 Street SW Streetscape Master Plan provides an overall vision for the re-imagination of one of Calgary's 24 main streets. It takes the big picture macro-scale ideas of Calgary's Municipal Development Plan and applies them in a local scale plan that links land use, place making and transportation.

This Master Plan is intended as a high-level design guideline for public realm improvements such as sidewalks, landscaping, lighting, public furniture, pedestrian crossings, and other areas of urban design.

It is a once-in-a-generation opportunity to re-think the existing public realm on 37 Street SW between Bow Trail and Richmond Road from a place viewed primarily as a through-route for vehicles to a vibrant place to stay and linger; a place that becomes an essential part of, and strengthens the social, economic, and ecological fabric of the city.

This plan can be viewed as a catalyst for 'activating' the street to its full potential and envisioning a future as a vibrant, urban residential street linking a number of higher-density mixed-use nodes. It is an opportunity to make the city more equitable by ensuring best practices in accessibility are implemented and a range of transportation choices are available that are supportive of mode-shift and a more sustainable lower-carbon future.

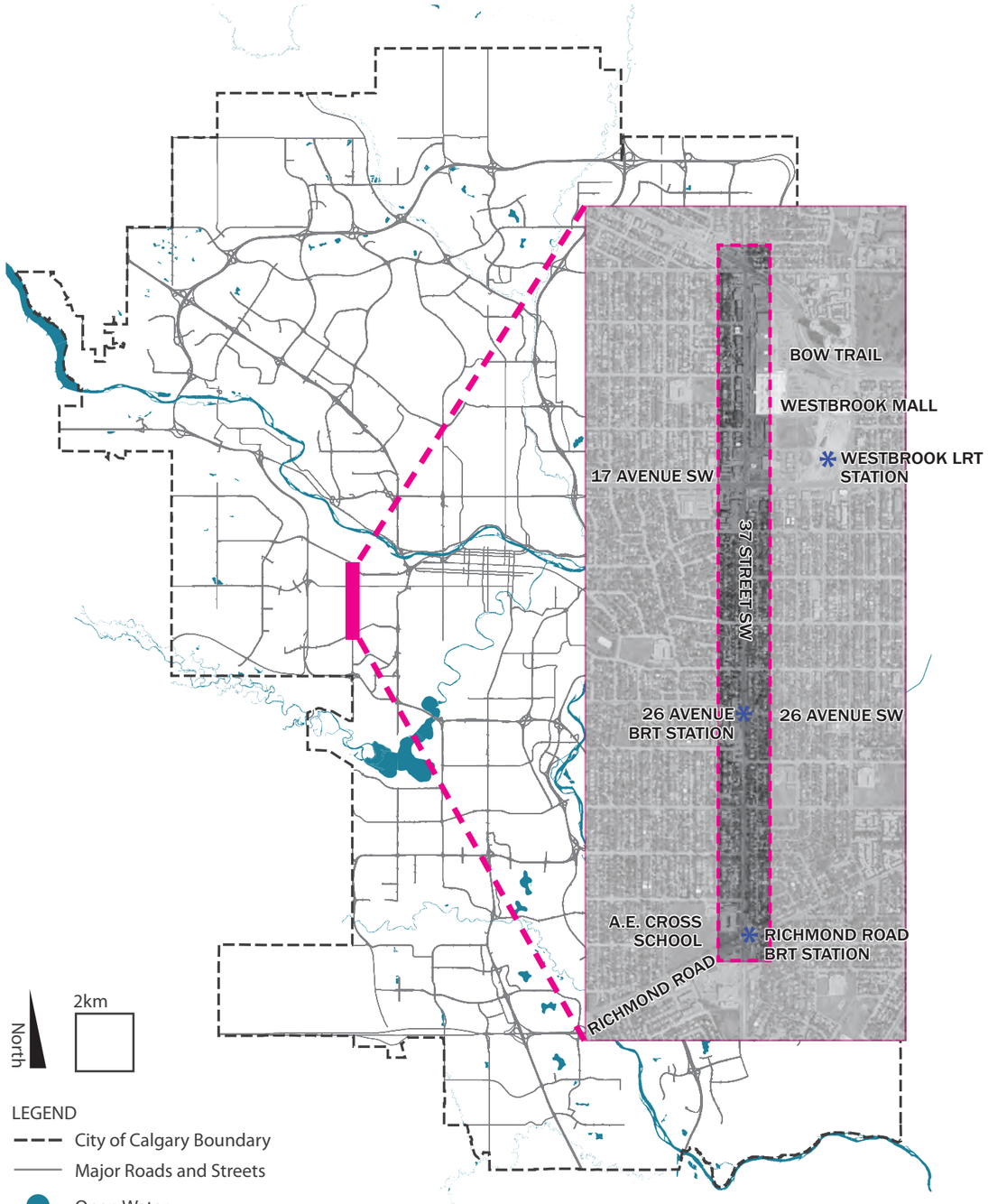
It represents a shift in thinking from a city that builds outwards to one that looks inwards and builds upward; a more connected and compact city where people have more choices for where they live and work and how they travel.

USE OF THE PLAN

The 37 Street SW Streetscape Master Plan:

- Developed a vision, objectives and goals for the street through meaningful community engagement and application of City policy
- Provides a concept plan that meaningfully improves the public realm through strategic and cost-effective public investment, which in turn can act as a catalyst for private investment
- Provides a guideline to inform future development interface with the street
- Identifies short- and long-term priorities for implementation
- Provides an outline and Class 5 cost estimate for effective construction and implementation of the plan

The location of the Master Plan in relation to the Calgary context is illustrated in Map 1.1.



MAP 1.1 - MASTER PLAN LOCATION

1.1 MASTER PLAN CONTEXT AND PURPOSE

The 37 Street SW Streetscape Master Plan area is located on the western side of the city, south of the Bow River running through the Rosscarrock, Glendale, Killarney/ Glengarry, and Glenbrook neighbourhoods. The Master Plan area extends 2.5 kilometres from Bow Trail to Richmond Road, intersecting 17 Avenue SW south of the Westbrook Mall area which anchors the northern portion of the street.

The Master Plan is one step of a multi-year collaborative and interdisciplinary city-building process which has included engagement, market analysis, land-use re-designations, local plan amendments, and infrastructure capacity assessments.

FIGURE 1.1 - MAIN STREET PROCESS

The purpose of this Master Plan is to create a unified long-term vision that incorporates technical analysis and stakeholder feedback into an implementable design. The plan communicates the big moves and provides information on design decisions being made. It can continue to be refined in detailed design.

The overall timeline for the Main Street implementation process on 37 Street SW is illustrated in Figure 1.1.

1.2 BACKGROUND REVIEW

The Master Plan was developed in the context of existing plans, policies, and data. Table 1.1 outlines the primary sources of background information that were reviewed and incorporated:.

Report/Policy	Key Takeaways for 37 Street SW
Pedestrian Strategy – Step Forward (2016)	Identifies a range of actions and priorities for improving pedestrian comfort and safety, many of which can directly inform design choices for 37 Street SW.
West LRT to Mount Royal University Rail Connection - Scoping and Options Feasibility Report (2016)	Identifies low-floor, in-street mixed traffic service along 37 Street SW as the most feasible option for development of a long-term rail connection to Mount Royal University.
Complete Streets Guide (2014)	Gives guidance on how to incorporate Complete Streets concepts (including enhanced public realm) in the reconstruction of existing streets, which can directly inform design choices for 37 Street SW.
Westbrook Village Area Redevelopment Plan (2014)	Provides a vision and policy for development of a transit-oriented development node around Westbrook LRT Station. Identifies significant opportunity for enhanced development and interface along 37 Street SW.
Calgary Transit – Route Ahead (2012)	Identifies the need for a bus rapid transit (BRT) corridor linking Mount Royal University and Westbrook Station, which subsequently supported implementation of the MAX Teal BRT service along 37 Street SW.
Calgary Pathways and Bikeways Implementation Plan (2011)	Identifies a possible future bike lane / wide curb lane along 37 Street SW.
Cycling Strategy (2011)	Identifies a range of actions for improving the development and maintenance of bicyle-friendly infrastructure, some of which can directly inform design choices for 37 Street SW.
Municipal Development Plan (2009)	Identifies 37 Street SW as a Neighbourhood Main Street anchored by the Community Activity Centre at Westbrook Village.
Calgary Transportation Plan (2009)	Identifies 37 Street SW as a Neighbourhood Boulevard north of 26 Avenue SW, and as a primary transit corridor from Mount Royal University to Westbrook Station.
engage! Policy CS009	Identifies guiding principles and procedures for meaningful public engagement, recognizing the decisions are improved by engaging citizens and stakeholder groups.

TABLE 1.1 - POLICY TAKEAWAYS

A Technical Background Conditions Report for 37 Street SW was completed in March 2018 and submited separately from this Master Plan document. Key highlights are summarized in the following sections.

1.3 EXISTING CONDITIONS

The site is an existing roadway located at 37 Street SW between Richmond Road and Bow Trail, intersecting a variety of different neighbourhoods.

1.3.1 NEIGHBOURHOOD CONTEXT

37 Street SW is a central link in a group of communities bound by Sarcee Trail to the west, Crowchild Trail to the east, Glenmore Trail to the south, and the Bow River to the north. These major roadways and natural features create breaks in the street network which limit active transportation mobility outside of this zone to select designated locations. The site location relative to this larger context gives it the potential to become the heart of its surrounding neighbourhoods.

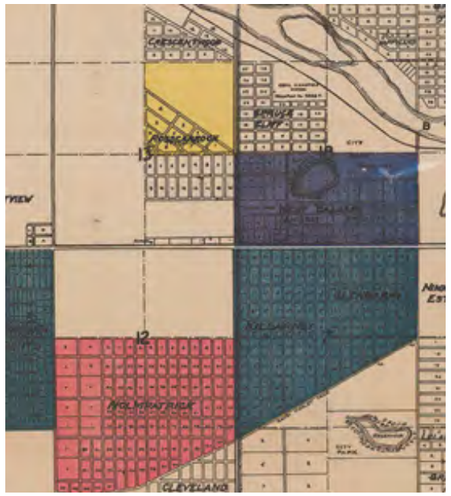


FIGURE 1.2 - 1910 SUBDIVISION MAP

FIGURE 1.3 - 1924 AERIAL 37 STREET SW

FIGURE 1.4 - 1948 AERIAL 37 STREET SW

FIGURE 1.5 - 1952 AERIAL 37 STREET SW

Figure 1.2 shows a 1910 plan for future block subdivisions in the study area. 37 Street SW is the main north-south road and 17 Avenue SW the main east-west road, in the middle of the plan.

Figure 1.3 is a 1924 map of the western neighbourhoods along the project corridor. The future 37 Street SW is centreed in the photo and 17 Avenue SW is the prominent east-west thoroughfare. The zig-zagging road north of 17 Avenue SW is Old Banff Coach Road, which would evolve in future to become Bow Trail. The diagonal South Morley Trail is also visible in the bottom right – the future Richmond Road.

Figure 1.4 is a 1948 aerial photo of the project area with 37 Street SW in the centre of the image and Richmond Road visible on the bottom right corner of the photo. Rapid urban expansion is taking place in Killarney-Glengarry in these post-war years.

Figure 1.5 is a 1952 aerial photo of the project area with 37 Street SW in the centre of the image and Richmond Road visible on the bottom right corner of the photo. Killarney-Glengarry is now largely built out including the frontage along 37 Street SW. Development is also beginning to the west of 37 Street SW.

Figure 1.6 is a 1960 street map of the project area with 37 Street SW running north south through the centre of the image. Most of the surrounding urban area is now built out including the community schools. Area amenities include the 17 Avenue Drive-in Theater (today the AMA Office) and the Calgary Gun Club (future Westbrook Mall site).

Figure 1.7 is a 1979 aerial photo of the project area with 37 Street SW in the centre of the image and Westbrook Mall visible on the east side of the corridor. With the exception of continuing commercial development around 17 Avenue SW and the development of the West LRT in the late 2000s, things here are largely as they are known today.

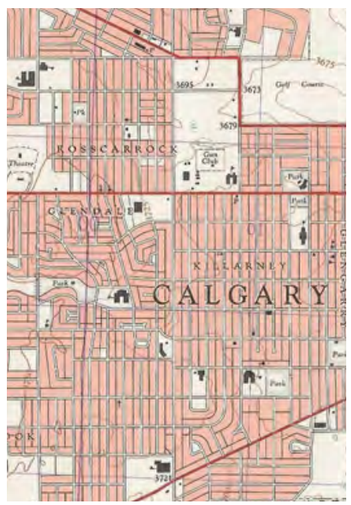


FIGURE 1.6 - 1960 STREET MAP 37 STREET SW

FIGURE 1.7 - 1979 AERIAL 37 STREET SW

1.3.2 OPEN SPACE

37 Street SW is surrounded by park networks, open space and natural areas. With the Bow River and Edworthy Park to the north, North Glenmore Park and Currie Barracks to the south, and major through-ways to parks and natural open space, 37 Street SW is a key residential connection to the greater Calgary Open Space network. Current streetscape infrastructure limits pedestrian and bicycle access to these open space networks. Creating access to open space through linkages in circulation and infrastructure will greater connect 37 Street SW to open space and natural features.

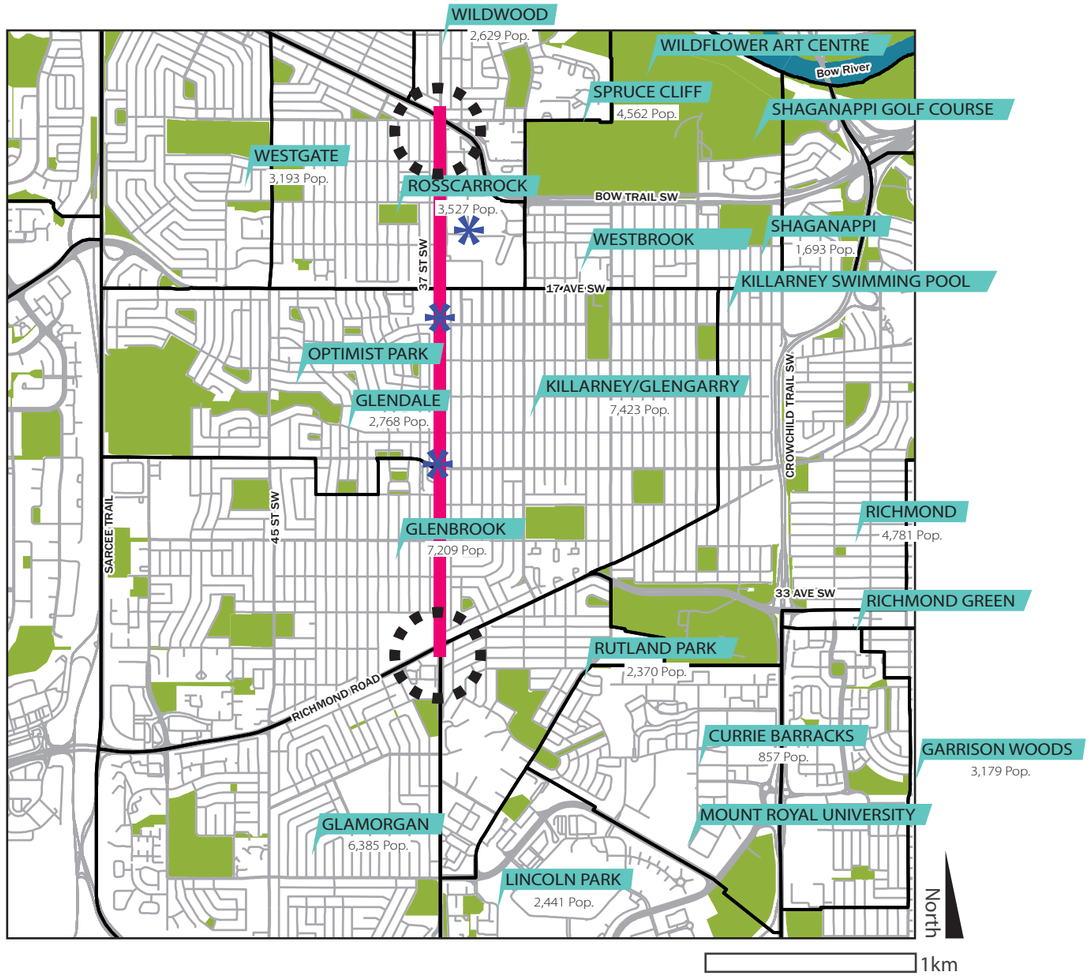
The following are the parks and green spaces in close proximity to the 37 Street SW corridor:

- North of 8 Avenue SW between 39 Street SW and 41 Street SW – Two parcels designated as Recreation Districts
- Rosscarrock School, 1406 40 Street SW – Sports fields and playground
- Glendale School, 2415 Kelwood Drive SW – Sports fields and playground
- Glendale and Glendale Meadows Community Hall and Rink, 4500 25 Avenue SW – Skating rink, tennis courts, and playground
- St. Thomas Aquinas School, 4540 26 Avenue SW – Sports fields and playground
- Glenpark Crescent SW – Green space
- North of 28 Avenue SW between 41 Street SW and 42 Street SW – Green space
- South west corner of Graham Drive SW and 45 Street SW – Playground and green space
- Killarney Glengarry Community Association, 2828 28 Street SW – Tennis courts and green space
- Killarney Elementary School, 3008 33 Street SW – Full-size baseball field and playgrounds
- Holy Name School, 3011 35 Street SW – Sports fields and playground
- Kildare Crescent SW – Playground and green space;
- A.E. Cross School, 3445 37 Street SW – Tennis courts and sports fields; and
- Glenbrook Community Association, 3524 45 Street SW – Skating Rink, playground and green space

Other parks, recreation areas, and green spaces in the area include:

- Glamorgan Off-Leash Dog Park, 4015 37 Street SW
- Edworthy Park, 5050 Spruce Drive
- Lowery Gardens, 175 Bow River pathway
- North Glenmore Park, 7305 Crowchild Trail SW
- Optimist Athletic Park, 5020 26 Avenue SW and
- Shaganappi Golf Course, 1200 26 Street SW

Neighbourhood and open space context is illustrated in Map 1.2.



MAP 1.2 - NEIGHBOURHOOD AND PARKS AND OPEN SPACE CONTEXT

LEGEND

- Neighbourhood Boundary
- Major Roads and Streets
- Open Water
- 37 Street SW Main Street
- Parks and Open Space
- Gateway
- Existing Commercial Node

Trees and Vegetation

The majority of the trees along the 37 Street SW corridor are in the residential areas between 19 Avenue SW and Richmond Road SW. On the west side of the street between 21 Avenue and 26 Avenue SW, and on the east side of street between 26 Avenue SW and 30 Avenue SW there are regularly spaced mature trees, mainly elm and ash, with singular shrubs planted between them in the boulevards. These trees are generally in fair to good condition. There are several trees that have been severely pruned, especially on the street side and where there are overhead power lines.

FIGURE 1.8 - MATURE TREES WITH ALTERNATING SHRUBS BETWEEN 23 AVENUE SW AND 25 AVENUE SW

There are few trees offering little buffering between the sidewalks and the parking lots along the commercial parcels between Bow Trail and 19 Avenue SW. These trees are mainly younger ash trees, and are generally in poor conditions compared to the trees in the southern half of the corridor. This poor condition is especially clear with dieback and damage to the trunks of those trees located immediately beside the sidewalk on the northeast portion of the corridor. Typical tree conditions are illustrated in Figures 1.8 and 1.9. The highlighted tree protection zones for the Master Plan are illustrated in Figure 1.10.

FIGURE 1.9 - TREES IN POOR CONDITION BETWEEN BOW TRAIL SW AND 10 AVENUE SW

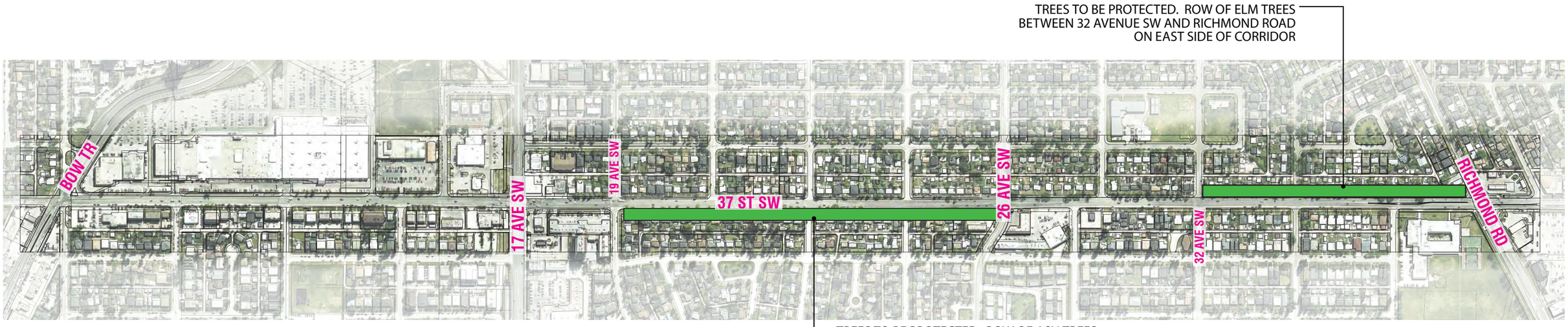


FIGURE 1.10 - MASTER PLAN TREE PROTECTION ZONES ALONG 37 STREET SW

1.3.3 CIRCULATION AND TRANSIT

37 Street SW has served as a local-scale arterial street since the earliest days of its development. It primarily connects and serves its adjoining Neighbourhoods and is not part of the City-wide skeletal road network. Major north-south traffic flows in this area of Calgary are primarily accommodated on Sarcee Trail and Crowchild Trail, each located within 1.6 km of 37 Street SW to the west and east, respectively. The role of 37 Street SW in the transportation network is summarized in Table 1.2. Existing transit routes and local bike circulation along 37 Street SW are illustrated on Map 1.3.

37 Street SW is not part of the primary cycling network but does connect with a number of east-west cycling routes including:

FIGURE 1.11 - 17 AVENUE SW WITH MUP ON NORTH SIDE LOOKING EAST FROM 37 STREET SW

- 13 Avenue SW: Signed bikeway with shared lane use.
- 17 Avenue SW: multi-use pathway on north side (see Figure 1.8)
- 19 Avenue SW: Signed bikeway with shared lane use.
- 26 Avenue SW: Marked on-street bikeway on the west side of 37 Street SW. Marked on-street bike lane east of 37 Street SW.

The intersection of the 17 Avenue SW Multi-use Pathway (MUP) and 37 Street SW is illustrated in Figure 1.11.

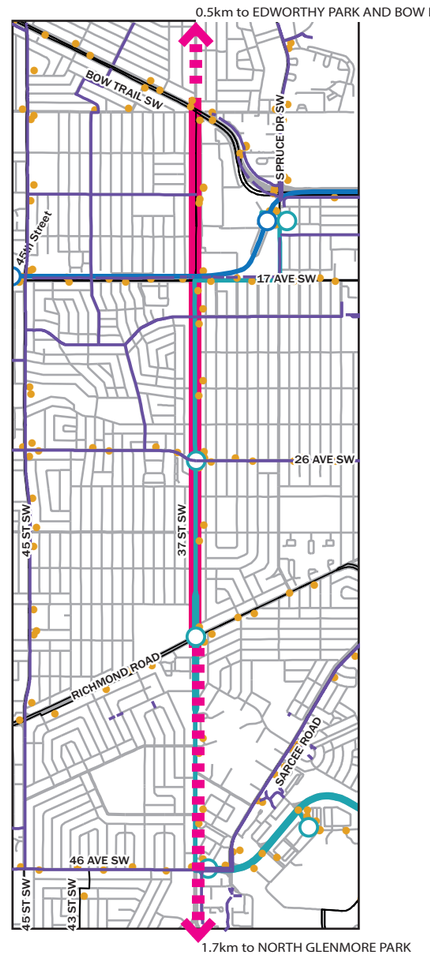
CTP Plan	Plan Topic	37 Street SW Classifications
1	Primary Cycling Network	Not part of the Network
2	Primary Transit Network	Primary Transit Network from 17 Avenue SW to 46 Avenue SW
3	Primary Goods Movement Network	Not part of the Network
4	Primary HOV Network	Not part of the Network
5	Road and Street Network	Neighbourhood Boulevard from Bow Trail to 26 Avenue SW. Arterial Street from 26 Avenue SW to Glenmore Trail

TABLE 1.2 - CTP RELATIONSHIPS TABLE

37 Street SW is a major transit corridor, notably featuring the MAX Teal BRT line that began service in November 2018. The MAX Teal BRT connects destinations across south Calgary including Westbrook LRT Station, Mount Royal University, Rocky View Hospital, Heritage Park, Heritage LRT Station, Deerfoot Meadows and Quarry Park.

The MAX Teal BRT travels along 37 Street SW from 17 Avenue SW to south of Richmond Road, with stations at 26 Avenue SW and Richmond Road. Other routes along 37 Street SW provide local connections along the corridor and include:

- Route 6 (Killarney / 26 Avenue) provides service from Westbrook LRT Station to downtown via 37 Street and 26 Avenue SW
- Route 9 (Dalhousie / Chinook) replaced part of the former Circle Route and connects major destinations in northwest and southwest Calgary including the University of Calgary and Mount Royal University via 37 Street SW
- Route 94 (Strathcona / Westbrook) provides service from Westbrook LRT Station to Signal Hill / Strathcona via 37 Street and 26 Avenue SW



MAP 1.3 - EXISTING TRANSIT ROUTES AND BIKE CIRCULATION

LEGEND

- Major Roads and Streets
- Open Water
- 37 Street SW Main Street
- Existing Bike Network
- Future North-South Bike Route
- Blue Line LRT Station
- Blue Line LRT
- MAX Teal BRT Station
- MAX Teal BRT
- Transit Stop
- Transit Route

1.3.4 LAND USE

As a result of the prior Main Streets plan development and strategy, land use along 37 Street SW was ammended in 2017, creating potential for higher density residential and commercial dwellings along the streetscape as well as the potential for streel level retail and urban hubs at key nodes. Greater urban density evokes the need for public access and infrastructure to support safe, comfortable commuting and navigation. The land use, policy plan and land use districts are a snap shot at the time of the Master Plan and are subject to change.

Existing Residential Land Use

The majority of the project area is zoned for multi-residential use. Currently, north of 17 Avenue SW there are mainly 3 to 4 storey multi-family residences. South of 17 Avenue SW, the residential areas are mainly single-story single family homes with some infill beginning to taking place. The change in the zoning is geared towards developments that respond to the context of the Neighbourhood. Specific districts include:

- R-C2 – Residential - Contextual One/Two Dwelling District
- R-CG – Residential – Grade-Oriented Infill District
- M-C1 – Multi-residential – Contextual Low Profile District
- M-C2 – Multi-residential – Contextual Medium Profile District

Existing Commercial Land Use

Westbrook Mall is situated on the northwest corner of the project area. The shopping centre's anchor stores are Safeway and Walmart and it is adjacent to the Westbrook LRT Station. Just outside of the southern limits of the project area is a strip mall including a Safeway. There are other commercial nodes at 17 Avenue SW and 26 Avenue SW. Specific districts include:

- Existing C-COR1 – Commercial Corridor 1 District
- Existing C-C1 Commercial – Community 1 District
- Existing C-N2 Commercial – Neighbourhood 2 District

Existing Mixed-Use

Several areas adjacent to existing commercial properties are zoned for mixed-use along the corridor. There are limited lots currently under mixed-use at this time. Specific districts include:

- MU-1 Mixed Use – General District
- MU-2 Mixed Use – Active Frontage District

Existing Direct Control District

The direct control district for the area around the Westbrook Mall area on the northeast side of the street includes commercial and residential uses in promotion of Transit Oriented Development (TOD) for the area around the Westbrook LRT Station. There are some undeveloped lots in this area.

Existing Institutional

A.E. Cross School is located on the northwest corner of Richmond Rd and 37 Street SW. This area has been reassigned to a residential district. Holy Name School and Glendale School are also close by, located within two blocks of the project area.

Proposed Land Use

The Westbrook Village Area Redevelopment Plan (ARP) provides a framework for the implementation of TOD objectives. The plan area boundary includes 37 Street SW from 19 Avenue SW to Bow Trail. New developments are expected to include higher density and mixed-use projects that promote walkability and active streets. A design concept of 37 Street SW for this area is provided in the ARP.

Development Setbacks

New land use designations along 37 Street SW will generally provide for more direct frontage to the street as lots redevelop over time. Development Setbacks are taken from the property line of the parcel. This allows for opportunities of animation at the street level, like patio spaces or event spaces. Setback requirements for each land use type are summarized in Table 1.3.

LAND USE DISTRICT	SETBACK REQUIRED
R-C2	Minimum front setback required, the greater of contextual front setback less 1.5m, or 3.0m
R-CG	Minimum front setback required, the greater of contextual front setback less 1.5m, or 3.0m
M-C1	Minimum front setback required, the greater of contextual multi-residential building setback less 1.5m, or 3.0m
M-C2	Minimum front setback required, the greater of contextual multi-residential building setback less 1.5m, or 3.0m
C-COR1	No minimum front setback required, 3.0m maximum
C-C1	Minimum 3.0m front setback required, but not more than 3.0m for parcels sharing a side property line with a C-N1 or C-COR1 parcel
C-N2	Minimum 3.0m front setback required
MU-1	No minimum setback required, but a maximum of 4.5m for 60% of length of the building façade facing the street
MU-2	No minimum setback required, but a maximum of 4.5m for 60% of length of the building façade facing the street
DC 64D2009	Minimum of 1.5m setbacks required along 37 Street SW, maximum of 3.0m
DC 66D2009	No minimum setbacks required , maximum of 3.0m
DC 67D2009	Minimum of 1.5m setbacks required along 37 Street SW, maximum of 3.0m

TABLE 1.3 - SETBACKS BY LAND USE DISTRICT

1.3.5 EXISTING TRAFFIC AND CROSS SECTION

Existing traffic volumes along 37 Street SW are moderate and decline from south to north, from about 19,000 vehicles per day north of Richmond Road to about 12,000 vehicles per day at Bow Trail. A typical four-lane arterial street can carry volumes up to 35,000 vehicles per day, hence the moderate volumes suggest that there is excess capacity along the road, particularly outside peak periods. This in turn supported options to reduce the number of travel lanes during off-peak periods, as recommended in the Master Plan.

The street right-of-way (ROW) varies in width between 25.25m and 30.40m; Generally the existing cross section has two through lanes and a parking lane in each direction with additional leftturn lanes at primary intersections. The intersections at Richmond Road, 26 Avenue SW, and 17 Avenue SW also have a left-turn lane in each direction in addition to the four through lanes. 37 Street SW is undivided except for the jersey barriers with chain link fencing on the concrete median at Richmond Road extending approximately 50m north of 33 Avenue SW.

In the Land Use Bylaw there are two types of setbacks. The first is a setback from the property line for a building within a given land use district (Development Setback). The second is ROW property line setback (Bylaw Setback) identified in Part 3, Division 1 of The City of Calgary Land Use Bylaw. As shown in Table 1: Road Rights of Way within Part 3, Division 1 of the City of Calgary Land Use Bylaw, 37 Street SW has a Bylaw Setback of 5.182m in varying locations between Bow Trail SW to 17 Ave SW and 28 Ave SW to 33 Ave SW. The intent of the Bylaw Setback is for future public realm improvements which could include but not be limited to safer and wider sidewalks, boulevards for tree planting and roadway for multiple modes of transportation.

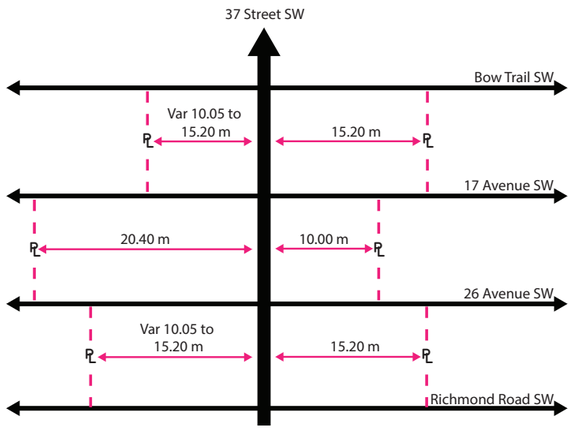


FIGURE 1.12 - 37 STREET SW RIGHT-OF-WAY DIAGRAM

A key challenge in design of 37 Street SW is the variable ROW. The alignment of 37 Street SW has significant jogs across the 17 Avenue SW and 26 Avenue SW intersections, as illustrated in Figure 1.12. Using the entire ROW width is also impractical in some areas, notably on the west side of 37 Street SW between 17 Avenue SW and 26 Avenue SW. Although there is ROW available in this section, existing front yards with steep slopes intrude several METRES into the road ROW. Hence, use of the ROW would require construction of retaining walls and other impacts to private property.

In most places where ROW is less than 30 m wide, there is a Bylaw Setback identified in the Land Use Bylaw that restricts development on the west side of 37 Street SW in the event that The City would seek to purchase and use the remaining ROW space.

1.3.6 TRAFFIC SAFETY AND WALK AUDIT

The City of Calgary 2012 - 2016 Collision Study shows a prevalence of collisions at intersections along the corridor. Two fatalities were observed in the four-year span of the study at the Bow Trail and 17 Avenue SW intersections with additional collisions with vulnerable road users occurring at the17 Avenue SW and 26 Avenue SW intersections. Collision frequency along 37 Street SW is illustrated in Figure 1.13.

In March 2018, The City of Calgary completed a Walk Audit of 37 Street SW in parallel with the Streetscape Master Plan. The audit included the participation of community members and students from A.E. Cross School. It identified a number of challenges for pedestrians along 37 Street SW including narrow sidewalks, poor snow removal, poor drainage and little accommodation for wheelchair access. Observations from the Walk Audit are referenced in the Master Plan.

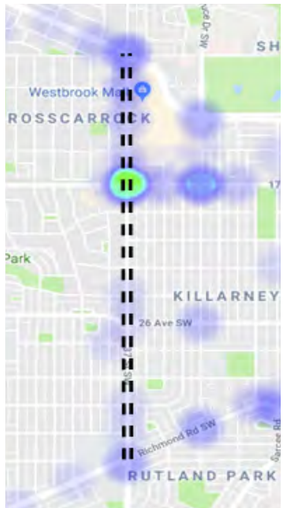


FIGURE 1.13 - 37 STREET SW TRAFFIC

FIGURE 1.14 - A.E CROSS SCHOOL STUDENTS

1.3.7 EXISTING ON-STREET PARKING

The majority of the corridor has on-street parking. North of 15 Avenue SW there is parking only on the west side of 37 Street SW. Between 10 Avenue SW and 13 Avenue SW this parking is reserved for residents with permits. South of 17 Avenue SW there is on-street parking on both sides of 37 Street SW except for the west side of one block south of 26 Avenue SW. There is no street parking between Richmond Road and 33 Avenue SW. 37 Street SW is designated as part of the Snow Route Network, with 72-hour parking bans for snow clearing when declared by The City. Existing on-street parking permittance is illustrated in Figure 1.16.

1.3.8 HERITAGE RESOURCES AND ELEMENTS

There is one building recognized as a Community Historic Resource along 37 Street SW:

- Plateau Farm/Patrick Residence (3303 37 Street SW), built in 1910

There is one other building in the area adjacent to the corridor that is also a Community Historic Resource:

- Ukrainian Cultural Centre (3316 28 Avenue SW), built in 1953

FIGURE 1.15 - COMMUNITY HISTORICAL RESOURCE PLATEAU FARM/PATRICK RESIDENCE, CONSTRUCTED 1910

ON STREET PARKING
PERMIT PARKING
NO PARKING

FIGURE 1.16 - EXISTING ON STREET PARKING

1.3.9 CHALLENGES

- There are 57 points of access into front parking lots, commercial buildings, and residences off 37 Street SW. A reduction in the number of access points is desirable to reduce the number of conflict points with pedestrians along the street, particularly where properties have rear lanes or other alternative access opportunities
- In the short to medium term the interface between the street and the existing Westbrook Shopping Centre does not align with the intent of this Master Plan. Over time this will change with the implementation of the Westbrook Village ARP
- There are grading challenges where pedestrian access and driveways meet the ROW at some existing single family homes. Many properties and front yards also have steep slopes or retaining walls adjacent to the street. Close attention will need to be paid to how the new street ties in to meet these grades

Inventory and Analysis Challenges

- Lack of walkable Main Street that creates a strong centre and anchor in the community
- Isolated parks and open spaces do not form a well connected network
- Lack of existing bicycle infrastructure along 37 Street SW
- Need to maintain high priority for transit
- Lack of overall identity, sense of place, and reasons to visit the 37 Street SW public realm
- The neighbourhood is changing and evolving; Recently updated zoning allows for higher density residential and mixed-use nodes

Inventory and Analysis Opportunities

- The enhanced Main Street can create a catalyst for development and a community destination or node that over time stitches together adjacent neighbourhoods through an active, vibrant public realm.
- Treat the street as part of the green network by maximizing pervious surfaces for water infiltration.
- Provide the framework for healthy long-lived street trees by adopting best practices for minimum soil volumes; Plant ground covers that provide ecological benefit and beauty
- Include bicycle facilities for all ages and abilities as part of the streetscape plan; Over the long term there is potential to create a north-south cycling spine that connects North Glenmore Park to Edworthy Park
- Support and enhance pedestrian access to the new MAX Teal Bus Rapid Transit (BRT) and bus network; Focus public realm investment dollars at transit nodes; e.g., high quality materials, public art and amenities such as seating and site furnishings
- Strengthen commercial nodes by concentrating public realm amenities around existing nodes.
- Utilize existing gateways onto the street as an opportunity to use design to create memorable placemaking experiences that signify arrival onto 37 Street SW
- The 37 Street SW Master Plan is an opportunity for public realm improvements to act as a catalyst for future infill development

FIGURE 1.17 - EXISTING ACCESSIBILITY CONDITIONS

FIGURE 1.18 - EXISTING TRANSIT STOP CONDITIONS

FIGURE 1.19 - EXISTING STREET CROSSING CONDITIONS

1.4 COMMUNITY AND STAKEHOLDER ENGAGEMENT

Stakeholders and The City participated in three phases of public engagement with the overall goal of listening and learning about each others' views, plans, concerns, and expectations. The promise made to the public as part of this engagement process was that the project team would consult with stakeholders to obtain feedback, ensuring their input is considered or incorporated to the maximum extent possible, and reporting back on how engagement impacted the decisions and outcomes.

In the Discover Phase, the project team listened and learned about public views, plans, concerns, and expectations for 37 Street SW.

In the Explore Phase, public feedback was obtained on preliminary design ideas and options developed from the technical analysis and input obtained in the Discover Phase, ensuring issues and concerns were understood and considered prior to design resolution of the Master Plan. Ideas were grouped around four nodes at each of the major intersections along 37 Street SW, and in three zones for connecting between the nodes.

The Reveal Phase focused on communicating the proposed Streetscape Master Plan and showing the complete unified plan for development and enhancement of the corridor. The information at this phase included report back on how public input influenced the design.

The Master Plan engagement process is illustrated in Figure 1.20.

What We Heard reports and presentation materials for each phase of engagement are provided in Appendix A.

PHASE 1 - DISCOVER

In March 2018, approximately 215 people participated through in-person and online engagement opportunities to discover the character and opportunities to improve 37 Street SW in areas of public realm, community enhancement, cycling, transit, parking, street furniture, and pedestrian safety.

Key takeaways from the Discover Phase taken forward by the project team included:

- Bicycle connections for safer travel between North Glenmore and Edworthy Parks and safe route to/from Mount Royal University
- Improvements to pedestrian comfort by providing greater separation between vehicular traffic and the sidewalk, wider sidewalks, and curb bump-outs to make pedestrian crossings easier
- Place-making improvements to create a unique community identity
- Clearer demarcation of vehicular travel lanes
- Concern with high traffic speeds
- Improvements to lighting along the corridor
- More trees and other plantings
- Improvements to transit stops
- The creation of community gathering places at key nodes
- Suggestions for parking permits or other restrictions to manage on-street parking
- Traffic speeds

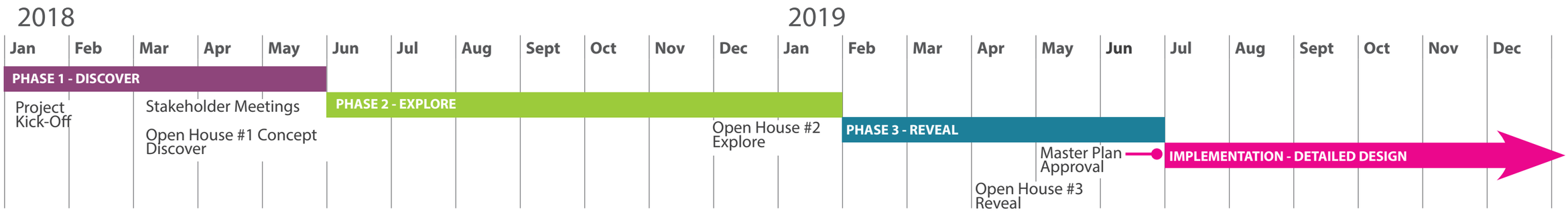


FIGURE 1.20 - ENGAGEMENT PROCESS

PHASE 2 - EXPLORE

In the Explore Phase, public feedback was obtained on preliminary design ideas and options were developed from the technical analysis and input obtained during the Discover Phase. Ideas were grouped around four nodes at each of the major intersections along 37 Street SW, and in three zones for connecting between the nodes.

The City held a joint open house for the 37 Street SW and 17 Avenue SW Streetscape Master Plans with Calgarians on December 3, 2018. From December 4, 2018, through January 9, 2019, The City hosted online tools on its engagement portal at engage.calgary.ca to solicit feedback from Calgarians. Engagement opportunities sought evaluation of how well the highest ranked design option met the project principles and objectives which had been developed incorporating Discover Phase engagement feedback. Approximately 150 people participated in the engagement opportunities.

Project principles were developed based on feedback received in previous engagement, and people were asked to comment on how these principles aligned with the presented plans. 96% of respondents indicated they were highly or somewhat supportive of the principles, with 79% responding as being highly supportive.

Key takeaways from the Explore Phase taken forward by the project team include:

- Exploring raised pedestrian crossings to improve the pedestrian experience and calm traffic
- Participants liked a multi-use pathway, but articulated some concerns about a shared space for bikes and pedestrians, and ensuring connections to the rest of the cycling network
- Making improvements to the pedestrian and bicycle crossings at Bow Trail
- The need to maintain transit priority
- More could be done to provide opportunities to increase social interactions and gatherings for pedestrians

Do the Project Principles support What We Heard from the community in previous engagements?

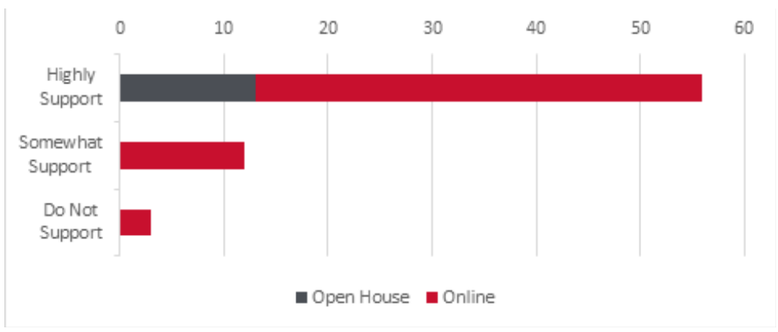


FIGURE 1.21 - PHASE 2 ENGAGEMENT SUMMARY

PHASE 3 - REVEAL

In the Reveal Phase, engagement focused on communicating the short- and long-term strategies and design elements on 37 Street SW from the draft Master Plan. The information communicated included: (a) the proposed design; (b) what is different from existing; (c) why it is different; and (d) how engagement input influenced the design.

The City held a joint open house for the 37 Street SW and 17 Avenue SW Streetscape Master Plans with Calgarians on May 30, 2019, and conducted online engagement from May 31, 2019, through June 14, 2019, to solicit feedback from Calgarians. The engagement was an opportunity for the public to review the recommended plan and sought comments on the proposed design which incorporated the Explore Phase engagement feedback. Approximately 131 people participated in the engagement opportunities.

Participants were asked if they understood how public feedback had been incorporated into the design and how well the design met the project objectives. Overall, the majority of participants who provided input indicated that the design met and achieved the objectives created in collaboration with the community.

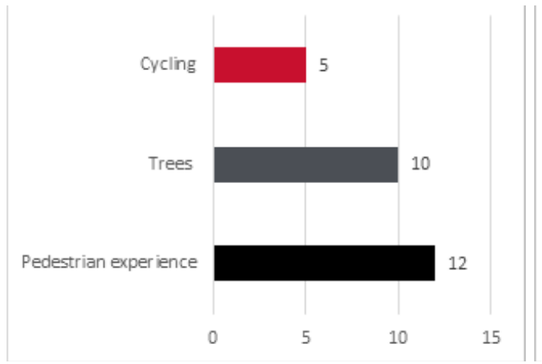
Key elements stakeholders were most excited about were:

- The pedestrian experience, safety, walkability, improved connections and a sense of community
- Tree coverage, greenery and boulevards
- Improved bike paths and crossings for cyclists

A few key elements of the plan participants expressed concern about were:

- Existing traffic in the area and the potential of increased congestion
- Concerns over reduced parking with the proposed plan
- Cost concerns for taxpayers

Most Excited About



Project Concerns

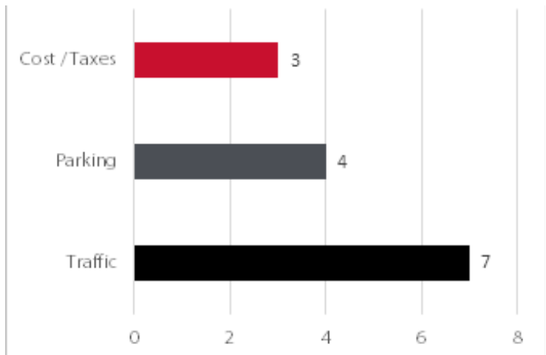


FIGURE 1.22 - PHASE 3 ENGAGEMENT SUMMARY

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2.0 DESIGN FRAMEWORK AND RATIONALE

2.1 VISION STATEMENT

Main Streets are places where citizens come together. They allow us to travel less and live more by providing the things we need right in our own communities. Main Streets are places where citizens come together. They allow us to travel less and live more by providing the things we need right in our own communities.

Main Streets are resilient, adaptable, and attractive public spaces that:

- » Celebrate the character of the community
- » Encourage diversity of local businesses, buildings and residents
- » Create a vibrant destination

2.2 PRINCIPLES AND OBJECTIVES

Based on what we heard from the community combined with our design analysis, we developed nine key objectives in three focus areas. These objectives were used to evaluate options and guide design of the 37 Street SW Streetscape Master Plan. These are as follows:

PRINCIPLE 1 - SOCIAL + ECONOMIC: *Support for a design for positive social and economic impact*

Objectives

1.1 Inclusive design for the needs of users from all demographics in all seasons and all times of day.
1.2 Create a flexible and adaptable streetscape design that attracts longer-term investments.
1.3 Improve pedestrian comfort on the street to increase interactions and social gatherings.

PRINCIPLE 2 - MOBILITY + FUNCTION: *Mobility and function that will support healthy living and sustainability*

Objectives

2.1 Prioritize the pedestrian experience with improved walkways, amenities, crossing opportunities and interface with local businesses.
2.2 Design for all modes of travel including walking, taking transit, cycling, driving and parking; in particular, leverage recent City investment in the MAX Teal BRT service.
2.3 Design for a slower street and safe place for everyone.

PRINCIPLE 3 - CHARACTER + IDENTITY: *Recognize and enhance the unique character and identity of each community*

Objectives

3.1 Include the necessary biodiversity, resiliency and physical space for vegetation to thrive.
3.2 Reflect and provide opportunity for showcasing the diversity of adjacent communities, residents and businesses.
3.3 Incorporate long-lasting high quality materials that provide an enjoyable and comfortable user experience for years to come.

2.3 KEY OUTCOMES

The following are key design decisions and outcomes achieved by the Master Plan:

PRINCIPLE 1 - SOCIAL + ECONOMIC

Outcomes

- » Retention of on-street parking during off-peak hours
- » Wider sidewalks, separated from the curbs by a landscaped boulevard
- » Addition of a new multi-use pathway on the east side
- » New unique streetlights, including pedestrian scale luminaires

PRINCIPLE 2 - MOBILITY + FUNCTION

Outcomes

- » Curb extensions
- » Narrower vehicle lanes
- » Addition of a new multi-use pathway on the east side
- » Enhanced pavement markings at crosswalks to improve visibility
- » Retaining four lanes of vehicle traffic during peak hours
- » Remove driveways at high-conflict locations, if properties have adequate alternative access

PRINCIPLE 3 - CHARACTER + IDENTITY

Outcomes

- » Wider landscaped boulevards
- » Preserve existing street trees where feasible
- » New street trees along length of corridor
- » New unique streetlights, including pedestrian scale luminaires
- » New site furnishings along length of corridor
- » Enhanced pavement markings at crosswalks to improve visibility

The table in Appendix A provides additional commentary about each key design decision including its relationships back to the project goals and objectives.

2.4 37 STREET SW CROSS SECTION

With the key opportunity identified to reduce the space used for vehicle lanes on 37 Street SW, a comprehensive evaluation was undertaken to review and provide recommendations on the best use of that space. While the reduction in lane space did provide the essential opportunity needed for improved public realm and enhancement for all modes of transportation, there were still some trade-offs inherent in the plan.

The recommended cross-section for 37 Street SW would remove the existing 24-hour parking lanes to provide space for the enhanced public realm, with a basic four-lane road remaining. The outer lanes will provide peak capacity for transit and vehicles on weekdays, but then are available for on-street parking during off-peak periods. Cycling will be significantly enhanced by provision of a continuous multi-use pathway on the east side of 37 Street SW, and walking and pedestrians will be prioritized by providing both the multi-use pathway on the east side and a wide, separate sidewalk on the west side.

Existing cross section conditions at eye level are illustrated in Figure 2.1 and proposed cross section conditions at eye level are illustrated in Figure 2.2.

A detailed technical memorandum about the 37 Street SW cross section was prepared in support of the Master Plan and is provided in Appendix B.

FIGURE 2.1 - TYPICAL EXISTING STREETSCAPE

FIGURE 2.2 - TYPICAL PROPOSED STREETSCAPE

3.0 THE MASTER PLAN

3.1 MASTER PLAN ORGANIZATION

The Master Plan is organized in three zones from north to south: Zone 1: Westbrook Mall Commercial from Bow Trail SW to 17 Avenue SW; Zone 2: Neighbourhood Boulevard from 17 Avenue SW to 26 Avenue SW; and Zone 3: Local Arterial from 26 Avenue SW to Richmond Road. Within and across these three zones, gateways and commercial nodes are identified as part of the site analysis as areas of importance along the corridor.

Nodes are strategic focus points such as points of intersection or where increased activity takes place. Commercial nodes are located at the 17 Avenue SW and 26 Avenue SW intersections. Identified nodes warrant a higher level of public realm investment in both design and materials to create a unique sense of place within the length of the Main Street.

Gateways represent threshold conditions where a place gives access to another place. They are landmarks that help us to identify where we are in a city. They are considered the beginning of something new, and the point where a space changes from one condition to another. Gateway conditions have been identified at Bow Trail in the north and Richmond Road in the south. The 17 Avenue SW intersection is also a gateway to the 17 Avenue SW Main Street extending east from 37 Street SW.

This site design section will move from the board scale of individual zones to gateways and nodes, and individual streetscape elements that make up a design toolkit that can be applied across the Master Plan.

The Master Plan organization is illustrated in Figure 3.1 and the Master Plan Zone and Node characteristics are illustrated in Figure 3.2.

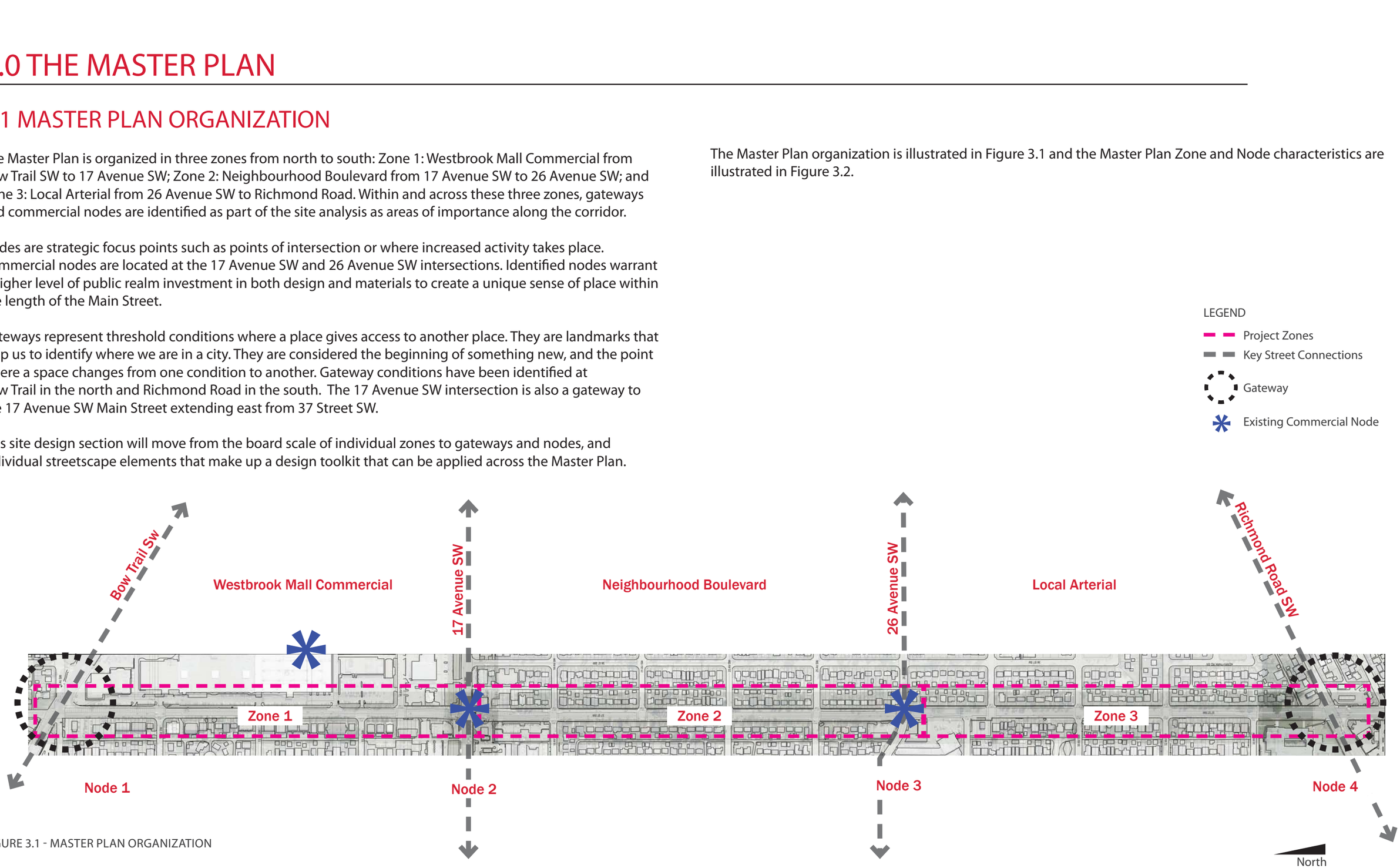


FIGURE 3.1 - MASTER PLAN ORGANIZATION

Zone 1
Blends multi-modal infrastructure with treed boulevards for a functional, pedestrian-first condition. Improve connectivity to LRT station. Balance pedestrian safety and business access.

Zone 2
Multi-modal infrastructure with separate sidewalk boulevards for a functional, pedestrian-first residential condition. Retain existing mature trees where possible.

Zone 3
Multi-modal residential street. Separate sidewalk and treed boulevard. Retain mature existing trees where possible.

Node 1
Main entry to 37 Street SW from the north. Opportunity to improve wayfinding strategies and to create sense of place.
Improve pedestrian safety and comfort, including crossing Bow Trail commercial interface.

Node 2
Opportunity to connect the streetscape to the transit hub and to the proposed 17 Avenue SW Main Street. Improve urban interface with businesses and activate SE and NE corner.
Improve/update pedestrian and bicycle crossings.

Node 3
Local business meets residential function. Strategic interfacing for future development.
Potential for future activation and urban interface. Improve access and pedestrian safety around BRT hub.

Node 4
Main entry to 37 Street SW from the south. Opportunity to improve public realm.
Improve wayfinding strategies and create sense of place. Opportunity to improve unique school site interfacing, connectivity and safety.

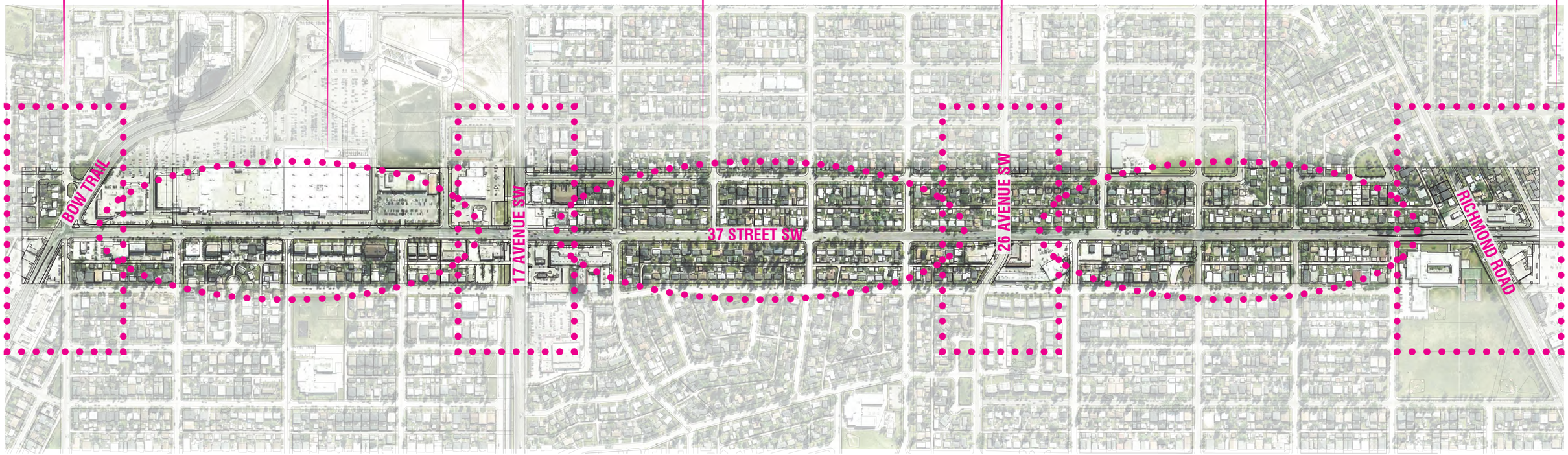


FIGURE 3.2 - NODE AND ZONE CHARACTERISTICS

3.2 MASTER PLAN ZONES

ZONE 1 - WESTBROOK MALL COMMERCIAL (BOW TRAIL TO 17 AVENUE SW)

Zone 1 extends from Bow Trail to 17 Avenue SW. It is located within the Westbrook Village ARP, which provides a detailed policy framework for the implementation of TOD objectives specific to the Westbrook Village Plan area. Over time, the area will become a major mixed-use commercial node in West Calgary.

The vision developed as part of the ARP process is that:

"Westbrook Village will be an attractive, interesting, walkable, safe and complete urban community. Families with children, seniors, young couples and singles will all find a place to call home within the Village – a place where all of one's daily needs can be met within walking distance of home. Village streets will be framed by interesting, well-proportioned buildings and street trees that offer beauty, shade and separation from vehicles. Pedestrian and cycling connections will be abundant and convenient both within the Village but also to regional amenities such as the Shaganappi Golf Course and the Bow River Valley and its parks…"
(Westbrook Village Area Redevelopment Plan, 2009 - Updated 2014, p.13).

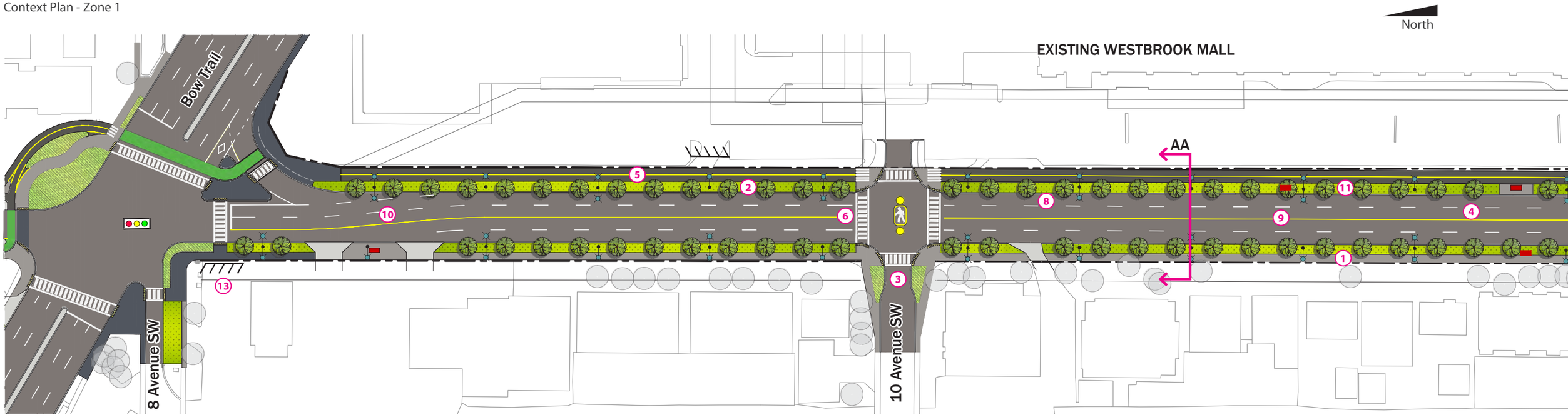
Zone 1 is illustrated in Map 3.1 and Zone 1 site improvements are summarized in Table 3.1.
The 37 Street SW Master Plan is a step in the process of implementing this vision laid out in the ARP. Public realm upgrades including the multi-use pathway, new street trees in a widened boulevard, widened sidewalks, investments in street furnishings, and new lighting provide the framework and for future investment in the area.

Six objectives in the Westbrook ARP are directly and indirectly impacted by this plan; they include:

Objectives being met directly:
- Greater mobility choice through improved walking, transit and cycling options
- Health benefits of walkable communities

Objectives being met indirectly:
- Reduced greenhouse gas emissions through reduced vehicle trips
- Increased housing, employment and service choices within existing communities
- Promoting a better jobs/housing balance
- TOD as a catalyst for economic development

Context Plan - Zone 1



MAP 3.1 - ZONE 1

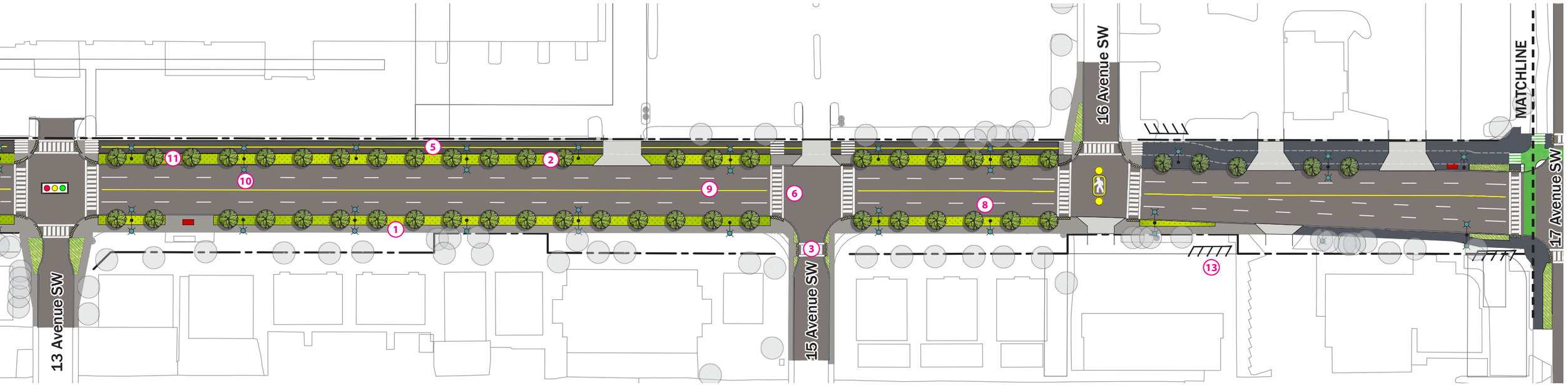
	Design Decision
1	Wider sidewalks, separated from the curbs by a landscaped boulevard
2	Wider landscaped boulevards
3	Curb extensions on side streets
4	Narrower vehicle lanes
5	Addition of a new multi-use pathway on the east side
6	Enhance pavement markings at crosswalks to improve visibility

	Design Decision
7	Preserve existing street trees where feasible
8	Retention of on-street parking during off-peak hours
9	Retaining four lanes of vehicle traffic during peak hours
10	New unique streetlights, including pedestrian scale luminaires
11	New street trees along length of corridor
12	New site furnishings along length of corridor
13	Remove driveways at high-conflict locations, if properties have adequate alternative access

TABLE 3.1 - ZONE 1 SITE IMPROVEMENTS

LEGEND

- New Trees
- Existing Trees to Remain
- Vehicular Lighting With Pedestrian Scale Luminaries
- Pedestrian Scale Lighting
- MAX Teal BRT Station
- Bus Stop
- Driveway Closure
- Enhanced Paving
- Asphalt Multi-use Pathway
- Concrete Sidewalks
- Sod Boulevard
- Enhanced Planting



5m 10m 15m 25m North

ZONE 1 - SECTION AA

Site analysis of this area indicated several constraints that influenced the streetscape plan.
These included a need to:

- » Interface with the existing Westbrook Mall parking lot on the east side
- » Retain existing back-of-sidewalk edge on the west side to avoid property impacts
- » Address the uncomfortably narrow, monolithic sidewalk on the west side
- » Replace existing unhealthy poplar trees
- » Avoid utility conflicts with new street trees in some localized areas (west side)
- » Remove or consolidate some existing driveways to minimize streetscape interruptions

Public realm streetscape improvements in this area include:

PRINCIPLE: MOBILITY & FUNCTION

- (A) Providing wider separate sidewalks to create a more comfortable walking experience
- (B) Adding wider landscaped boulevards between sidewalks and vehicle lanes to:
  - » increase walking safety
  - » make waiting at transit stops more comfortable
  - » provide space for snow storage and clearing
  - » promote a healthy tree canopy by adding soil and supporting water filtration
- (C) Adding curb extensions on side streets to reduce pedestrian crossing distances and improve visibility at intersections
- (D) Enhancing marking and signage for all crosswalks to improve their visibility and accessibility, including the addition of Rectangular Rapid Flash Beacons (RRFB) at unsignalized intersections
- (E) Providing safer off-street cycling space on a multi-use pathway on the east side
- (F) Retaining roadway capacity so traffic flow is not impeded, particularly by maintaining all lanes open during peak traffic hours

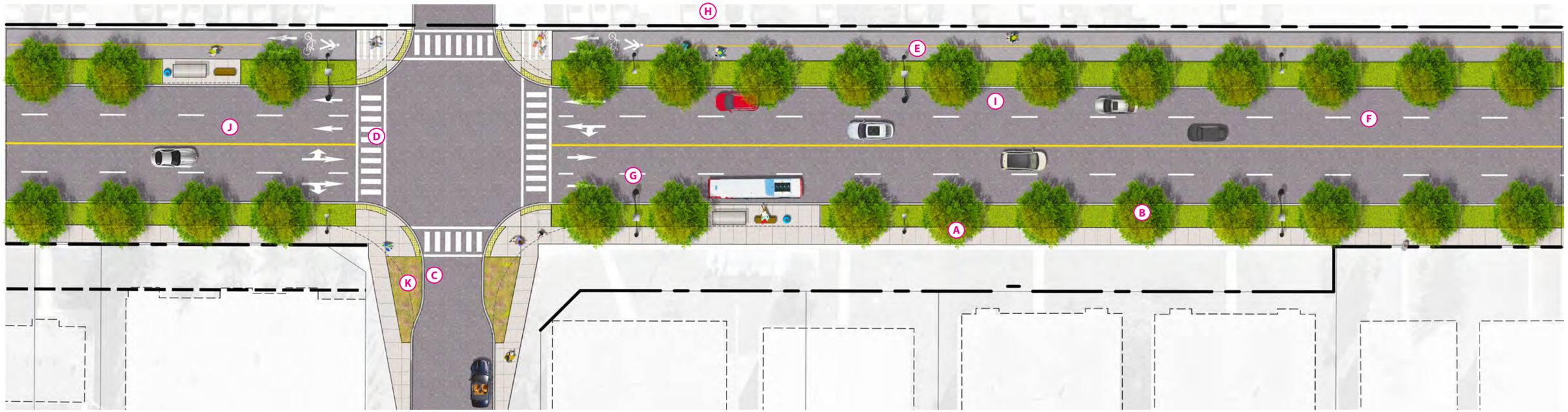
PRINCIPLE: SOCIAL & ECONOMIC

- (G) Upgrading streetlights to provide a consistent, aesthetic and comfortable environment during evening hours
- (H) Allowing for easy integration of the public realm with redevelopment or expansion of commercial sites (particularly Westbrook Mall)

PRINCIPLE: CHARACTER & IDENTITY

- (I) Retaining some on-street parking in the outer lanes during off-peak hours to help reduce speed and provide additional separation between pedestrians and vehicle traffic
- (J) Encouraging slower and safer traffic speeds and safety for all through right-sizing vehicle lanes. Slower traffic speeds through the integration of trees and space separation provides the opportunity to the community to take ownership of the right of way
- (K) Enhancing planting on side street bump outs to increase visual aesthetics and create softened barriers between pedestrians and vehicles

The typical plan of Zone 1 is illustrated in Map 3.2, the typical section of Zone 1 is illustrated in Figure 3.3 and the existing section of Zone 1 is illustrated in Figure 3.4.



MAP 3.2 - ZONE 1 TYPICAL

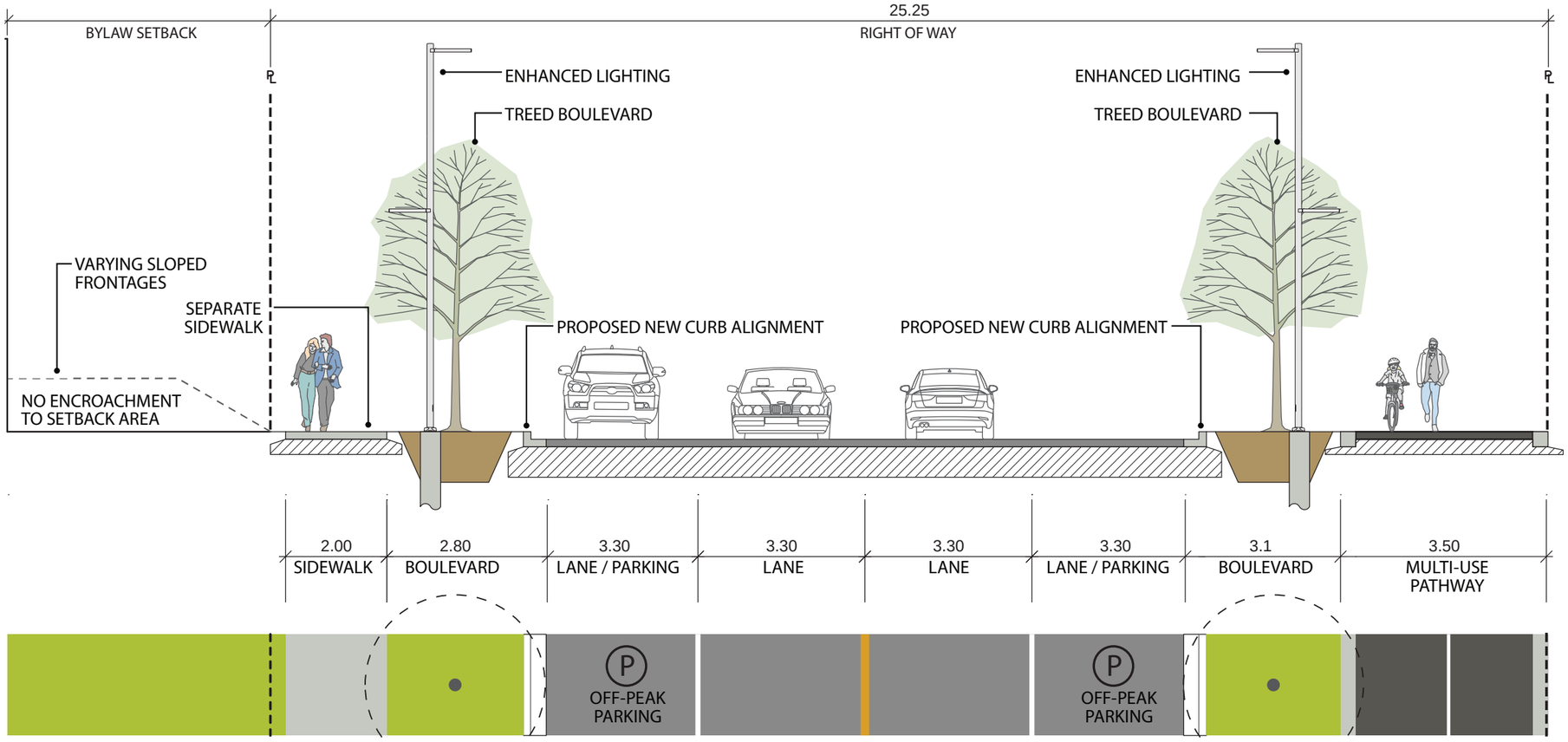


FIGURE 3.3 - ZONE 1 PROPOSED SECTION

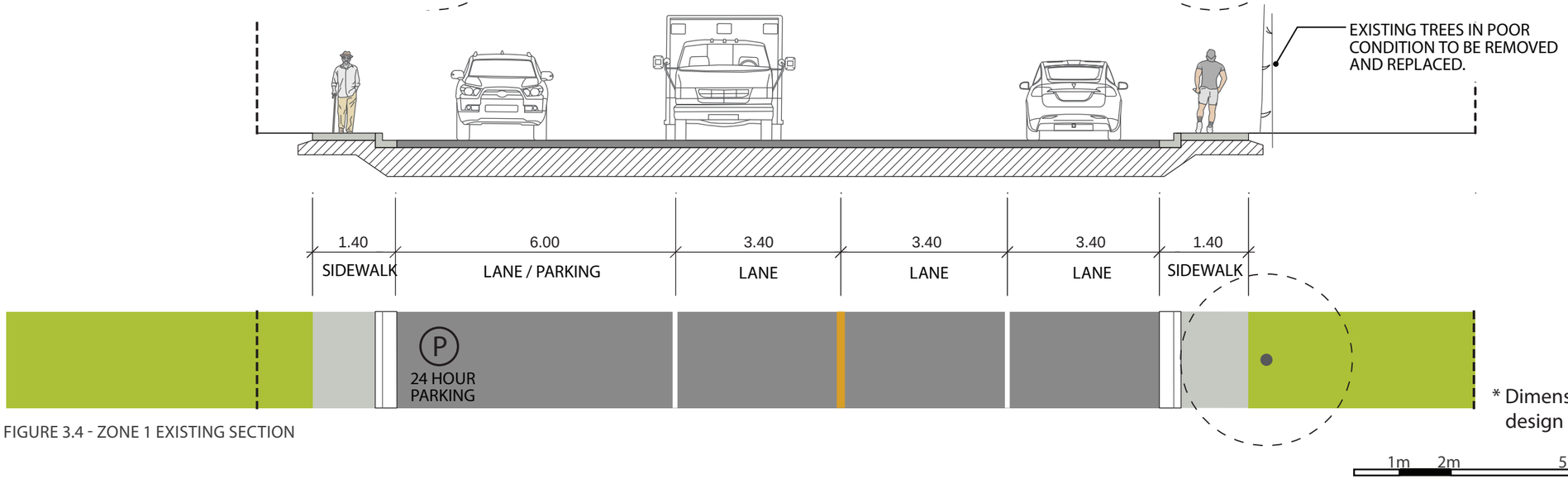


FIGURE 3.4 - ZONE 1 EXISTING SECTION

* Dimensions to be finalized during detail design

ZONE 2 - 17 AVENUE SW TO 26 AVENUE SW (NEIGHBOURHOOD BOULEVARD)

Zone 2 extends from 17 Avenue SW to 26 Avenue SW. The northern-most block between 17 Avenue SW and 19 Avenue SW falls within the Westbrook Village ARP described in Zone 1. The remainder of this zone is informed by policies in the Killarney/Glengarry ARP.

For the purposes of this plan, this zone is envisioned as a Neighbourhood Boulevard interfacing with residential uses. Pedestrian safety and comfort for families living on and around 37 Street SW is a key priority, as is the protection of mature trees. Landscaped boulevards, wider separate sidewalks and a multi-use pathway are proposed by reducing lane widths on 37 Street SW. Front yard interfaces can be respected by keeping the street improvements within the existing footprint from back-of-sidewalk to back-of-sidewalk.

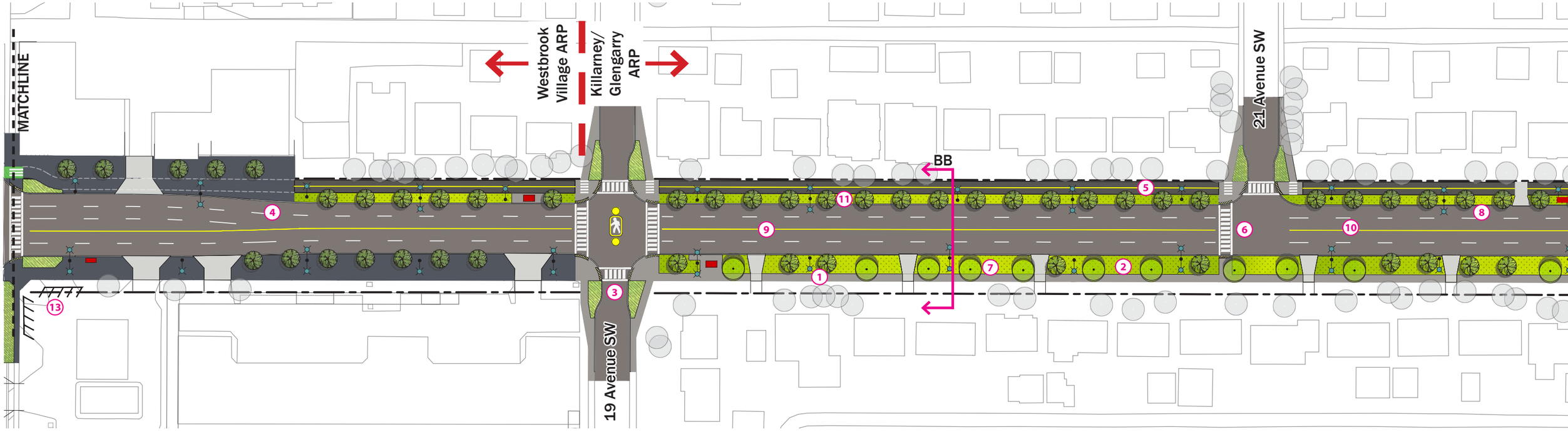
The land use policy in the ARP for the majority of this zone (between 19 Avenue SW and 25 Avenue SW) is supportive of medium-density residential uses (townhomes through low-rise apartments), with driveways and garage locations to be to the rear of the property whenever possible.

The implementation of this plan has the potential to act as a catalyst for future development in the area that will help to achieve the planning goals and objectives laid out in the Calgary Municipal Development Plan and Killarney/Glengarry ARPs.

Zone 2 is illustrated in Map 3.3 and Zone 2 site improvements are summarized in Table 3.2.

Context Plan - Zone 2

North



MAP 3.3 - ZONE 2

5m 10m 15m 25m North

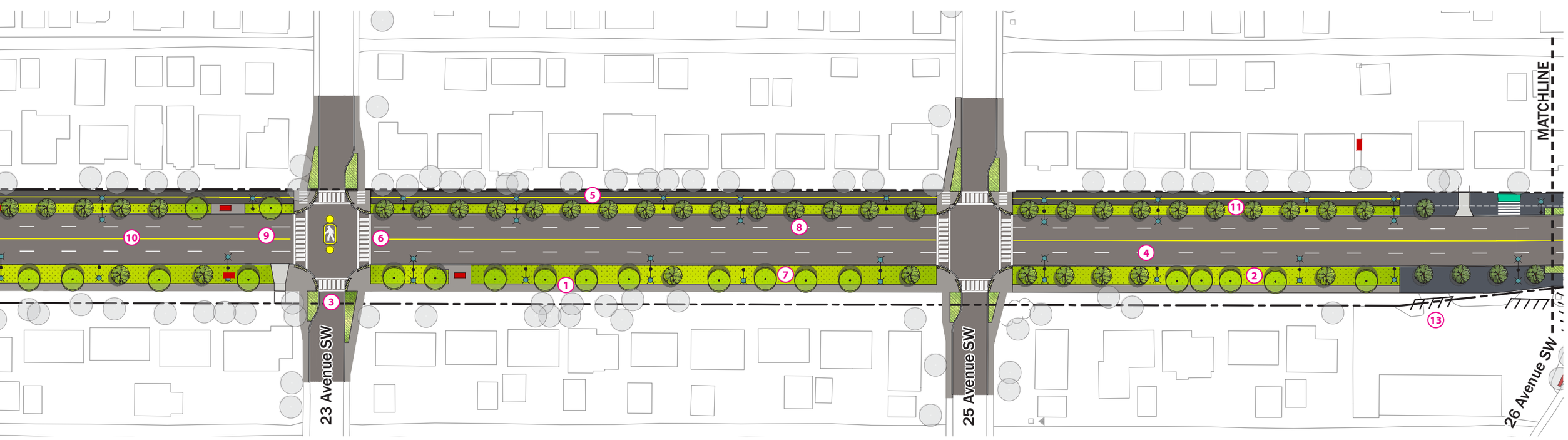
	Design Decision
1	Wider sidewalks, separated from the curbs by a landscaped boulevard
2	Wider landscaped boulevards
3	Curb extensions on side streets
4	Narrower vehicle lanes
5	Addition of a new multi-use pathway on the east side
6	Enhance pavement markings at crosswalks to improve visibility

	Design Decision
7	Preserve existing street trees where feasible
8	Retention of on-street parking during off-peak hours
9	Retaining four lanes of vehicle traffic during peak hours
10	New unique streetlights, including pedestrian scale luminaries
11	New street trees along length of corridor
12	New site furnishings along length of corridor
13	Remove driveways at high-conflict locations, if properties have adequate alternative access

TABLE 3.2 - ZONE 2 SITE IMPROVEMENTS

LEGEND

- New Trees
- Existing Trees to Remain
- Vehicular Lighting With Pedestrian Scale Luminaries
- Pedestrian Scale Lighting
- MAX Teal BRT Station
- Bus Stop
- Driveway Closure
- Enhanced Paving
- Asphalt Multi-use Pathway
- Concrete Sidewalks
- Sod Boulevard
- Enhanced Planting



5m 10m 15m 25m North

ZONE 2 - SECTION BB

Site analysis of this area indicated several constraints that influenced the streetscape plan. These included a need to:

- » Interface with steeper slopes and front yard retaining walls on the west side of 37 Street SW
- » Retain existing back-of-sidewalk edge on both sides to avoid property impacts
- » Avoid utility conflicts with new street trees in some localized areas (east side)

Public realm streetscape improvements in this area include:

PRINCIPLE: MOBILITY & FUNCTION

- (A) Providing wider separate sidewalks to create a more comfortable walking experience
- (B) Adding wider landscaped boulevards between sidewalks and vehicle lanes to:
  - » increase walking safety
  - » make waiting at transit stops more comfortable
  - » provide space for snow storage
  - » promote a healthy tree canopy by adding soil and supporting water filtration
- (C) Adding curb extensions on side streets to reduce pedestrian crossing distances, improve visibility at intersections and improve street intersection alignment for added traffic turn movement safety
- (D) Enhancing marking and signage for all crosswalks to improve their visibility and accessibility, including new Rectangular Rapid Flash Beacons (RRFB) at all unsignaled intersections
- (E) Providing safer off-street cycling space on a multi-use pathway on the east side
- (F) Retaining roadway capacity so the MAX Teal BRT service and traffic function are maintained, particularly by maintaining all lanes open during peak traffic hours

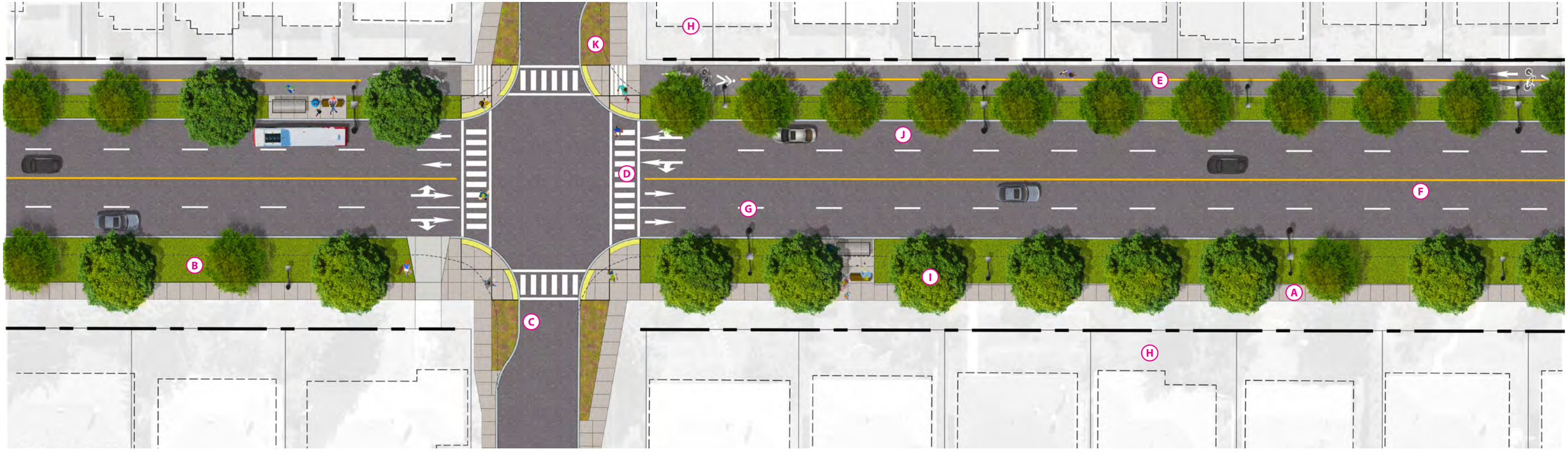
PRINCIPLE: SOCIAL & ECONOMIC

- (G) Upgrading streetlights to provide a consistent, aesthetic and comfortable environment during evening hours
- (H) Allowing for flexibility and evolution of the street with future redevelopment or residential infill

PRINCIPLE: CHARACTER & IDENTITY

- (I) Preserving mature ash trees on the west side (supports healthy air, water absorption, bird habitat, comfortable walking environment and area property values)
- (J) Retaining some on-street parking in the outer lanes during off-peak hours to help reduce speed and provide additional separation between pedestrians and vehicle traffic
- (K) Enhancing planting on side street bump outs to increase visual aesthetics

The typical plan of Zone 2 is illustrated in Map 3.3, the typical section of Zone 2 is illustrated in Figure 3.5 and the existing section of Zone 2 is illustrated in Figure 3.6.



MAP 3.4 - ZONE 2 TYPICAL

1m 2.5m 5m 10m North

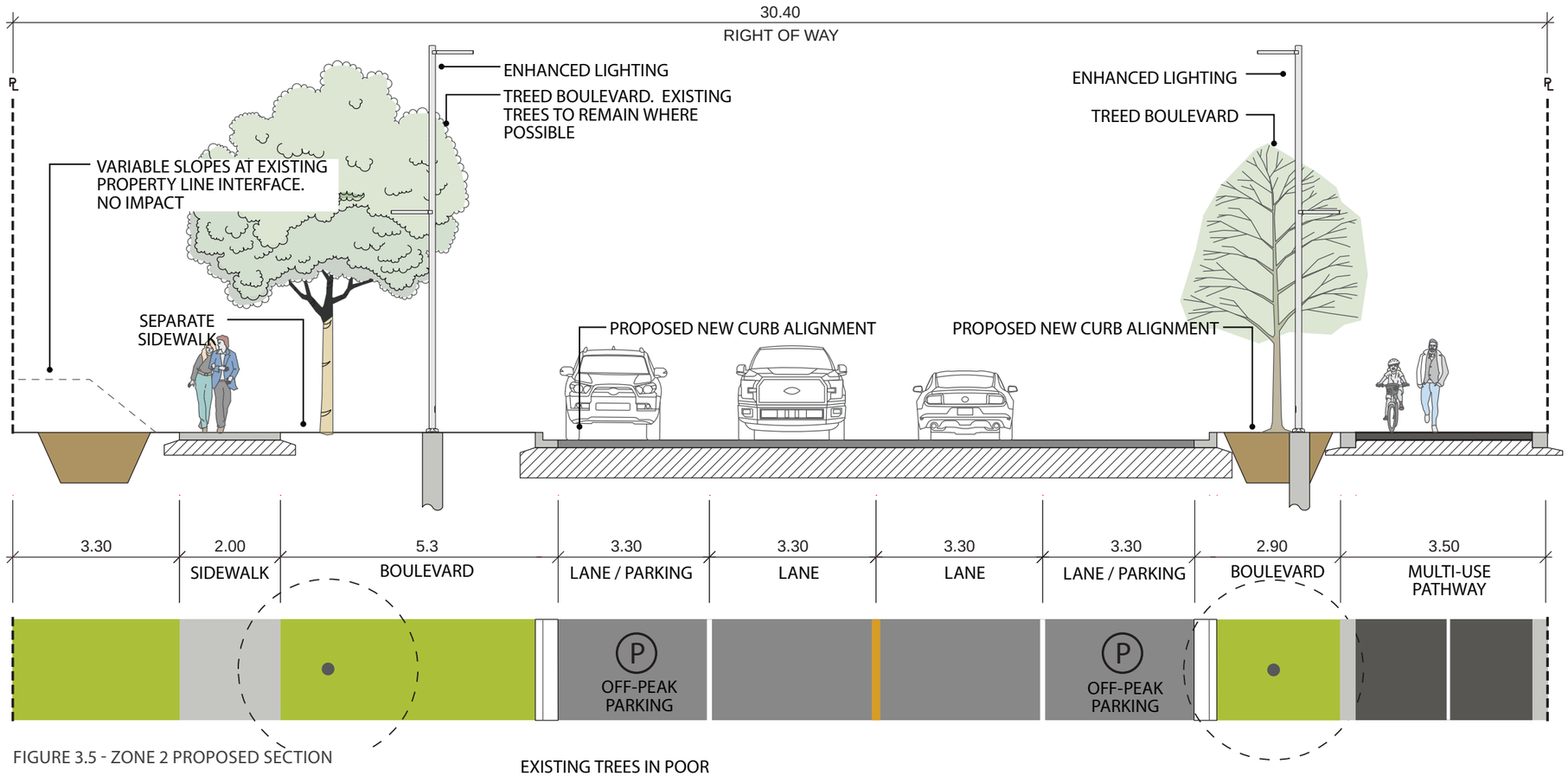


FIGURE 3.5 - ZONE 2 PROPOSED SECTION

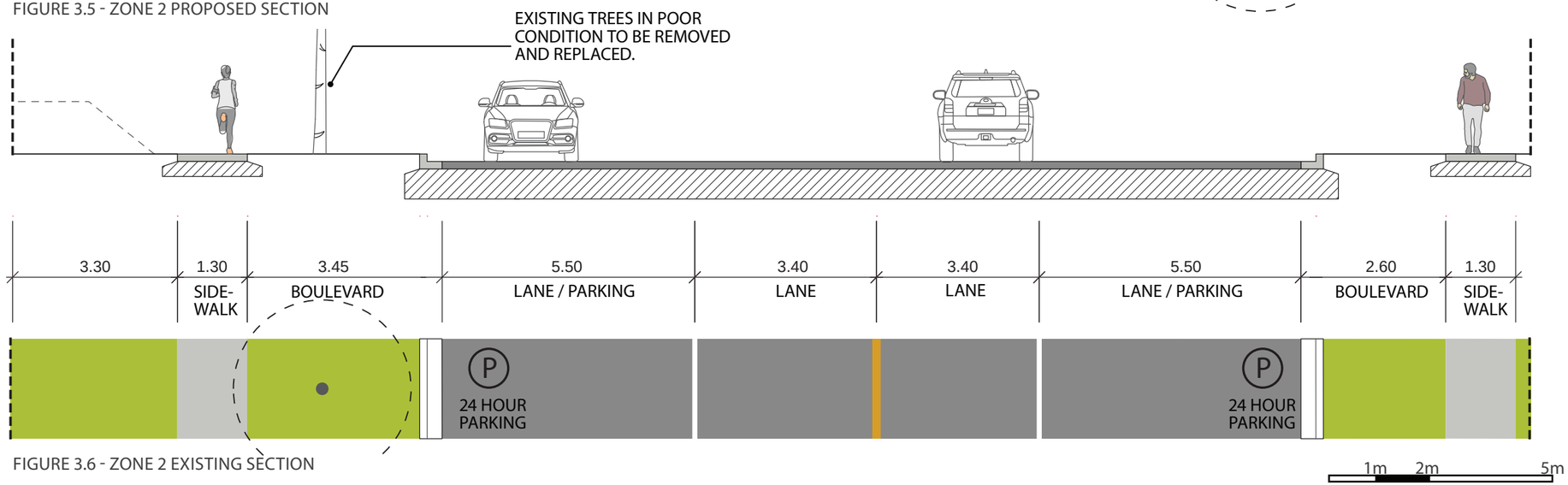


FIGURE 3.6 - ZONE 2 EXISTING SECTION

* Dimensions to be finalized during detail design

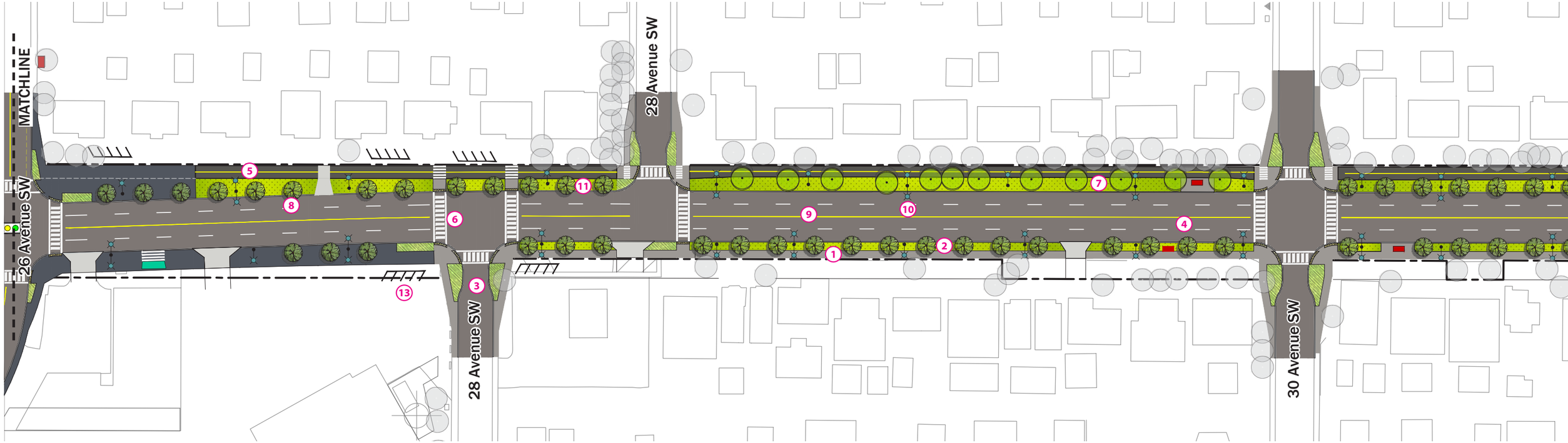
ZONE 3 - 26 AVENUE SW TO RICHMOND ROAD (LOCAL ARTERIAL)

This section continues the residential character of the street from north of 26 Avenue SW with recent zoning changes allowing for development of medium-density housing including townhomes or low-rise apartments. For the purposes of this plan, the zone is envisioned as a Local Arterial street interfacing with residential uses. Pedestrian safety and comfort for families living on and around 37 Street SW is a key priority, as is the protection of mature trees. Landscaped boulevards, wider sidewalks and a multi-use pathway can be incorporated by reducing lane widths on 37 Street SW. Both new and existing homes including one with a historic designation are respected by keeping the improved street within the existing footprint from back-of-sidewalk to back-of-sidewalk.

MAX Teal BRT Stations are located on either side of the 26 Avenue SW intersection, allowing for TOD to take place; this is supported by recent land use amendments supporting a mixed-use commercial node. A higher level of public realm investment is recommended in these areas of more intensive land use.

Zone 3 is illustrated in Map 3.5 and Zone 3 site improvements are summarized in Table 3.3.

Context Plan - Zone 3



MAP 3.5 - ZONE 3

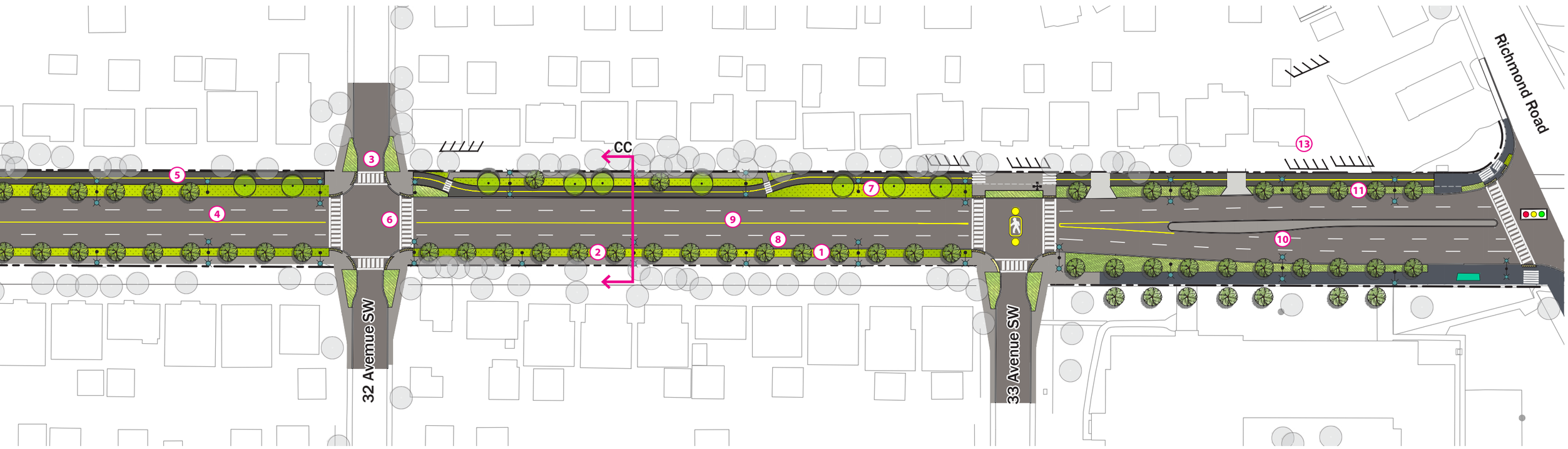
	Design Decision
1	Wider sidewalks, separated from the curbs by a landscaped boulevard
2	Wider landscaped boulevards
3	Curb extensions on side streets
4	Narrower vehicle lanes
5	Addition of a new multi-use pathway on the east side
6	Enhance pavement markings at crosswalks to improve visibility

	Design Decision
7	Preserve existing street trees where feasible
8	Retention of on-street parking during off-peak hours
9	Retaining four lanes of vehicle traffic during peak hours
10	New unique streetlights, including pedestrian scale luminaries
11	New street trees along length of corridor
12	New site furnishings along length of corridor
13	Remove driveways at high-conflict locations, if properties have adequate alternative access

TABLE 3.3 - ZONE 3 SITE IMPROVEMENTS

LEGEND

- New Trees
- Existing Trees to Remain
- Vehicular Lighting With Pedestrian Scale Luminaries
- Pedestrian Scale Lighting
- MAX Teal BRT Station
- Bus Stop
- Driveway Closure
- Enhanced Paving
- Asphalt Multi-use Pathway
- Concrete Sidewalks
- Sod Boulevard
- Enhanced Planting



ZONE 3 - SECTION CC

Site analysis of this area indicated several constraints that influenced the streetscape. These included a need to:

- Retain existing back-of-sidewalk edge on both sides to avoid property impacts
- Address the uncomfortable narrow, monolithic sidewalk on the west side
- Protect existing trees by narrowing and re-routing the proposed multi-use pathway between 28 Avenue SW and 30 Avenue SW and between 32 Avenue SW and 33 Avenue SW
- Avoid utility conflicts with new street trees in some localized areas (east side)

Public realm streetscape improvements in this area include:

PRINCIPLE: MOBILITY & FUNCTION

- (A) Providing wider separate sidewalks to create a more comfortable walking experience
- (B) Adding wider landscaped boulevards between sidewalks and vehicle lanes to:
  - increase walking safety
  - make waiting at transit stops more comfortable
  - provide space for snow storage
  - promote a healthy tree canopy by adding soil and supporting water filtration
- (C) Adding curb extensions on side streets to reduce pedestrian crossing distances and improve visibility at intersections
- (D) Enhancing marking and signage for all crosswalks to improve their visibility and accessibility, including Rectangular Rapid Flash Beacons (RRFB) at all unsignaled intersections
- (E) Providing safer off-street cycling space on a multi-use pathway on the east side
- (F) Encouraging slower traffic speeds and safety for all through right-sizing vehicle lanes

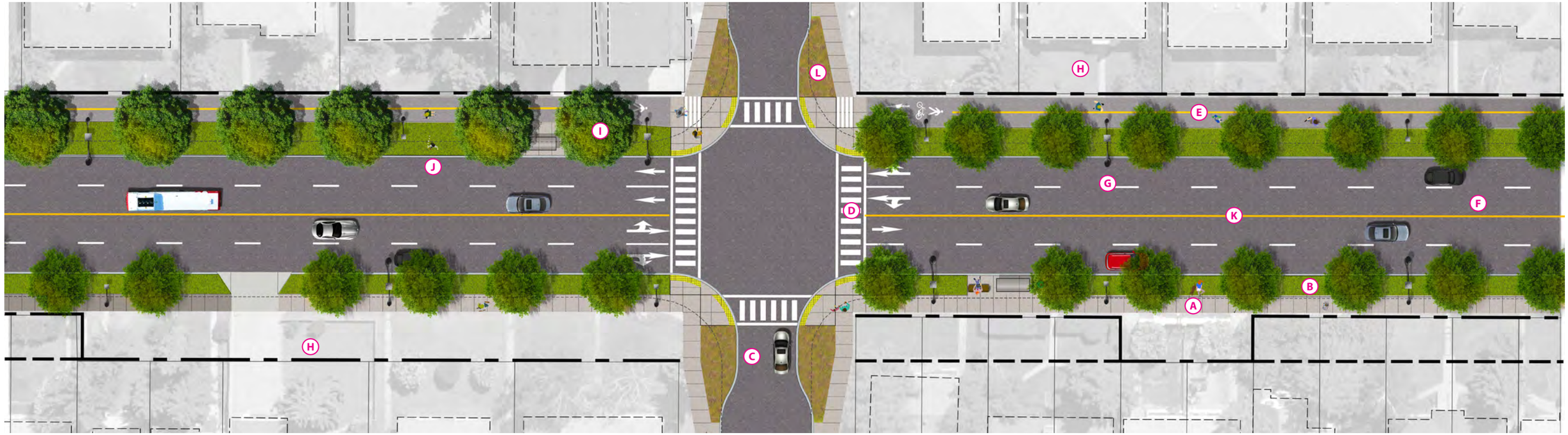
PRINCIPLE: SOCIAL & ECONOMIC

- (G) Upgrading streetlights to provide a consistent, aesthetic and comfortable environment during evening hours
- (H) Allowing for flexibility and evolution of the street with future redevelopment or residential infill development

PRINCIPLE: CHARACTER & IDENTITY

- (I) Preserving mature elm trees on the east side (supports healthy air, water absorption, bird habitat, comfortable walking environment and area property values)
- (J) Retaining some on-street parking in the outer lanes during off-peak hours to help reduce speed and provide additional separation between pedestrians and vehicle traffic
- (K) Retaining roadway capacity so the MAX Teal BRT service and traffic function are maintained, particularly by retaining all lanes open during peak traffic hours
- (L) Enhancing planting on side street bump outs to increase visual aesthetics

The typical plan of Zone 3 is illustrated in Map 3.6, the typical section of Zone 3 is illustrated in Figure 3.7 and the existing section of Zone 3 is illustrated in Figure 3.8.



MAP 3.6 - ZONE 3 TYPICAL

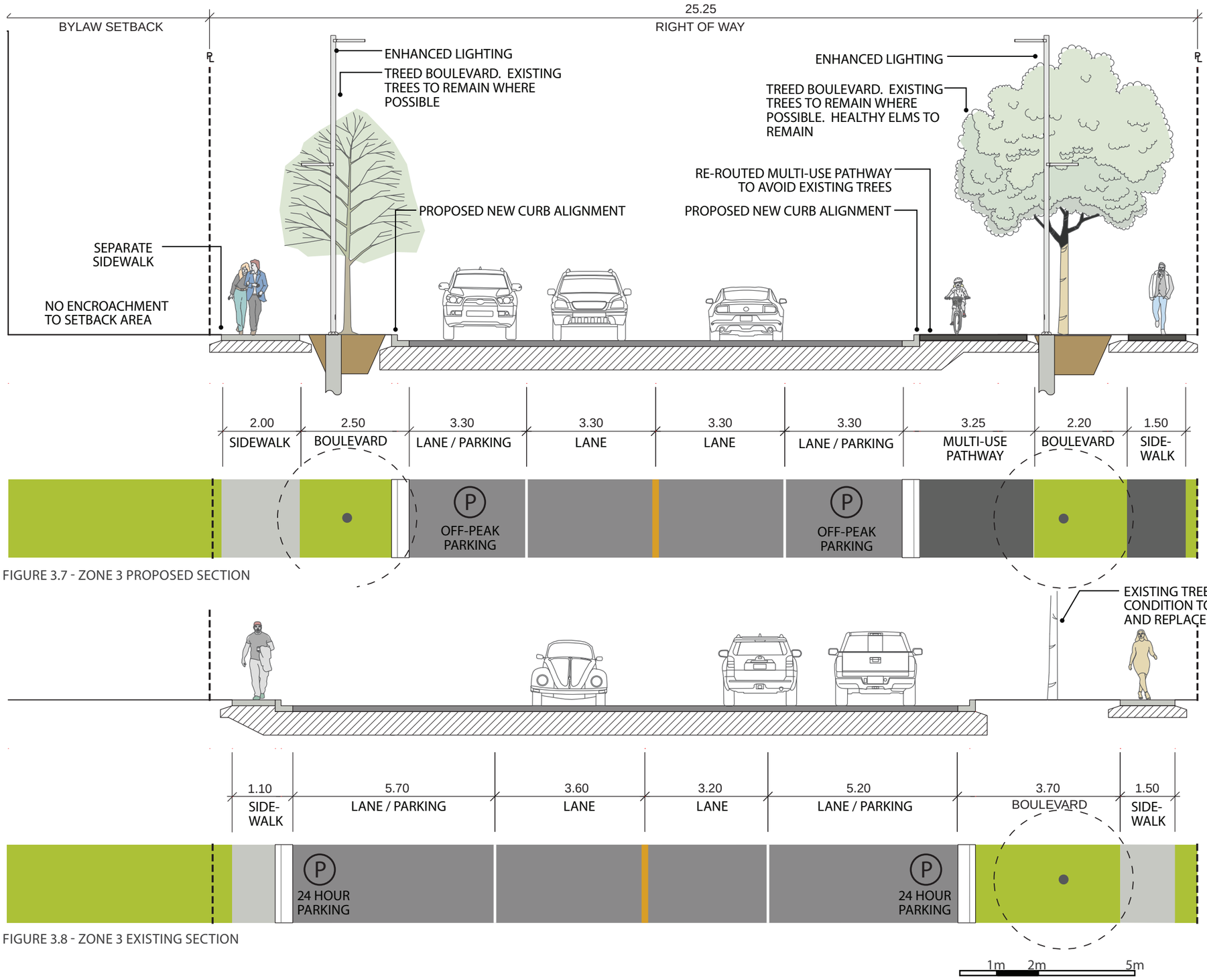


FIGURE 3.7 - ZONE 3 PROPOSED SECTION

FIGURE 3.8 - ZONE 3 EXISTING SECTION

* Dimensions to be finalized during detail design

Context Plan - Node 1

North

3.3 MASTER PLAN NODES

NODE 1 - BOW TRAIL SW

The Bow Trail intersection is the northern gateway to the 37 Street SW Main Street. The intersection is a highly constrained area, with limited public ROW, skewed geometry and poor pedestrian connections. A major challenge is the vehicular-oriented nature of Bow Trail, resulting in long crossing distances for pedestrians and cyclists across many traffic lanes. The crossing conditions were a key concern identified by public stakeholders during the engagement process in the Spring and Fall of 2018.

Improvements to the Bow Trail Gateway are primarily focused on 37 Street SW plus enhanced pedestrian and cycling conditions across Bow Trail, but larger design moves to address changes along Bow Trail itself are outside the scope of this plan. On 37 Street SW, removing one southbound lane of vehicle traffic at the intersection provides additional space to provide separation of sidewalks, a multi-use pathway, and landscape boulevards with street trees that will create a sense of gateway and arrival - strengthening the identity of the street.

The enhanced pedestrian and cyclist crossings on the east side of 37 Street SW require the use of a vacant lot owned by The City. The plan is reliant on the assumption that this lot can be converted to road ROW to accommodate the crossing. The resulting space also provides opportunity for gateway features including enhanced planting and public art.

Site analysis of this area indicated several constraints that influenced the streetscape plan shown. These included a need to:

- Interface with commercial parking lots on both sides of the street
- Retain existing back-of-sidewalk edge on both sides to avoid property impacts
- Address the uncomfortably narrow, monolithic sidewalk on the west side
- Work within significant private property constraints in all corners of the Bow Trail intersection, which also preclude any changes to Bow Trail itself in conjunction with the Main Street project
- Retain or consolidate existing driveways to minimize streetscape interruptions

Public realm streetscape improvements in this area include:

- (A) Providing safer off-street cycling space on a multi-use pathway on the east side
- (B) Enhancing marking and signage for all crosswalks to improve their visibility and accessibility
- (C) Providing separate crossing facilities for cyclists and pedestrians at the intersection to allow for safer crossing, and provide a transition between on-street cycling north of Bow Trail and the new multi-use pathway; this feature uses space in an empty residential lot owned by The City in the northeast corner of the intersection
- (D) Modifying the right-turn island at Bow Trail to:
  - provide additional space for pedestrian and cyclist crossing
  - improve sightlines and visibility for pedestrians and drivers
  - encourage slower vehicle traffic
  - provide a short bus-only lane on eastbound Bow Trail to improve transit operations
- (E) Providing wider separate sidewalks to create a more comfortable walking experience
- (F) Upgrading streetlights to provide a consistent, aesthetic and comfortable environment during evening hours, and to provide opportunity for pageantry to enhance the gateway and identity of the street
- (G) Retaining roadway capacity so traffic flow is not impeded, particularly during peak traffic hours
- (H) Encouraging slower and safer traffic speeds and safety for all through right-sizing vehicle lanes
- (I) Removing some existing driveways to minimize streetscape interruptions
- (J) Enhancing paving to delineate transition into the node area
- (K) Enhancing planting or public art opportunity to highlight 37 Street SW Gateway

An existing visualization of Node 1 is illustrated in Figure 3.9, a proposed visualization of Node 1 is illustrated in Figure 3.10, and a proposed site plan of Node 1 is illustrated on Map 3.7.

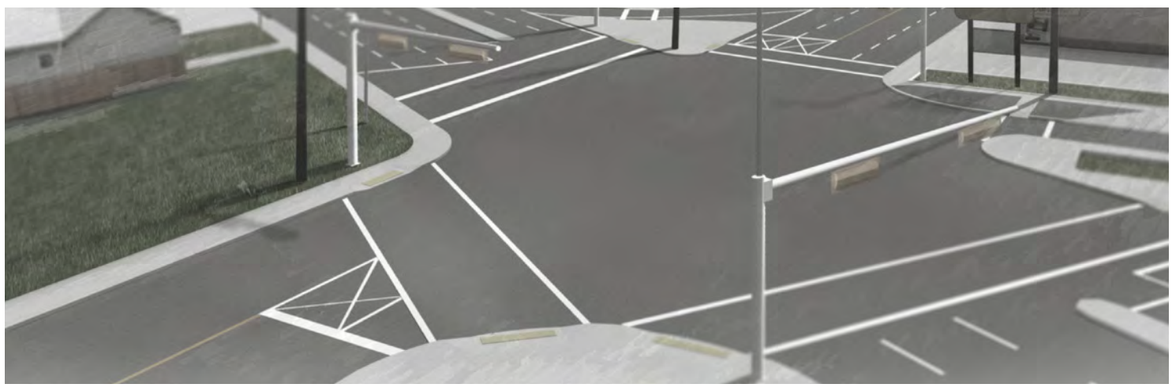
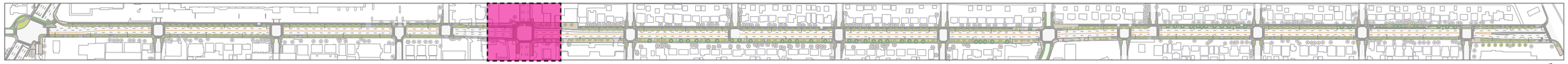


FIGURE 3.9 - NODE 1 EXISTING VISUALIZATION

FIGURE 3.10 - NODE 1 PROPOSED VISUALIZATION


LEGEND
New Trees
Existing Trees to Remain
Vehicular Lighting With Pedestrian Scale Luminaries
Pedestrian Scale Lighting
MAX Teal BRT Station
Bus Stop
Driveway Closure
Enhanced Paving
Asphalt Multi-use Pathway
Concrete Sidewalks
Bicycle Crossing
Pedestrian Crossing
Sod Boulevard
Enhanced Planting
Site Furnishings
Bow Trail
37 Street SW
A
B
C
D
E
F
G
H
I
J
1m 2.5m 5m 10m
North

MAP 3.7 - NODE 1



Context Plan - Node 2

North

NODE 2 - 17 AVENUE SW

The 17 Avenue SW node is an important intersection where two Main Streets meet. The intersection features commercial uses and will continue to grow as a vibrant, urban area with local shopping, dining and employment amenities. Future built form is informed by the Westbrook Village ARP, that allows for building heights of 26m to 32m, which is a higher concentration of built form compared with other locations along the 37 Street SW corridor. The intersection marks a transition between the commercial environment to the north and residential character to the south. Informed by community input provided in the Spring and Fall of 2018, improved walking and cycling amenities will connect the Main Streets with local business, retail experiences, and the nearby Westbrook LRT Station.

Property constraints are significant in the northwest and southeast corners of the intersection in particular. The plan relies upon the ability of The City to extend the public realm in the southeast corner into private property, up to the frontage of the adjoining commercial buildings. Without use of this space, the streetscape improvements could not be accommodated for a clear and smooth pathway.

Site analysis of this area indicated several constraints that influenced the streetscape plan.

These included a need to:

- Interface with existing commercial buildings, particularly in the southeast corner
- Reduce sidewalk and boulevard width in the northeast corner to avoid private property impacts (these can be further improved in future, if these sites redevelop over time)
- Retain existing turning lanes and intersection capacity on both 37 Street SW and 17 Avenue SW, recognizing that this is an important intersection in The City's overall transportation network

Options to improve priority for the MAX Teal BRT service may be available, though with some potential trade-off for general traffic flow. These priority measures should be reviewed further at the design stage.

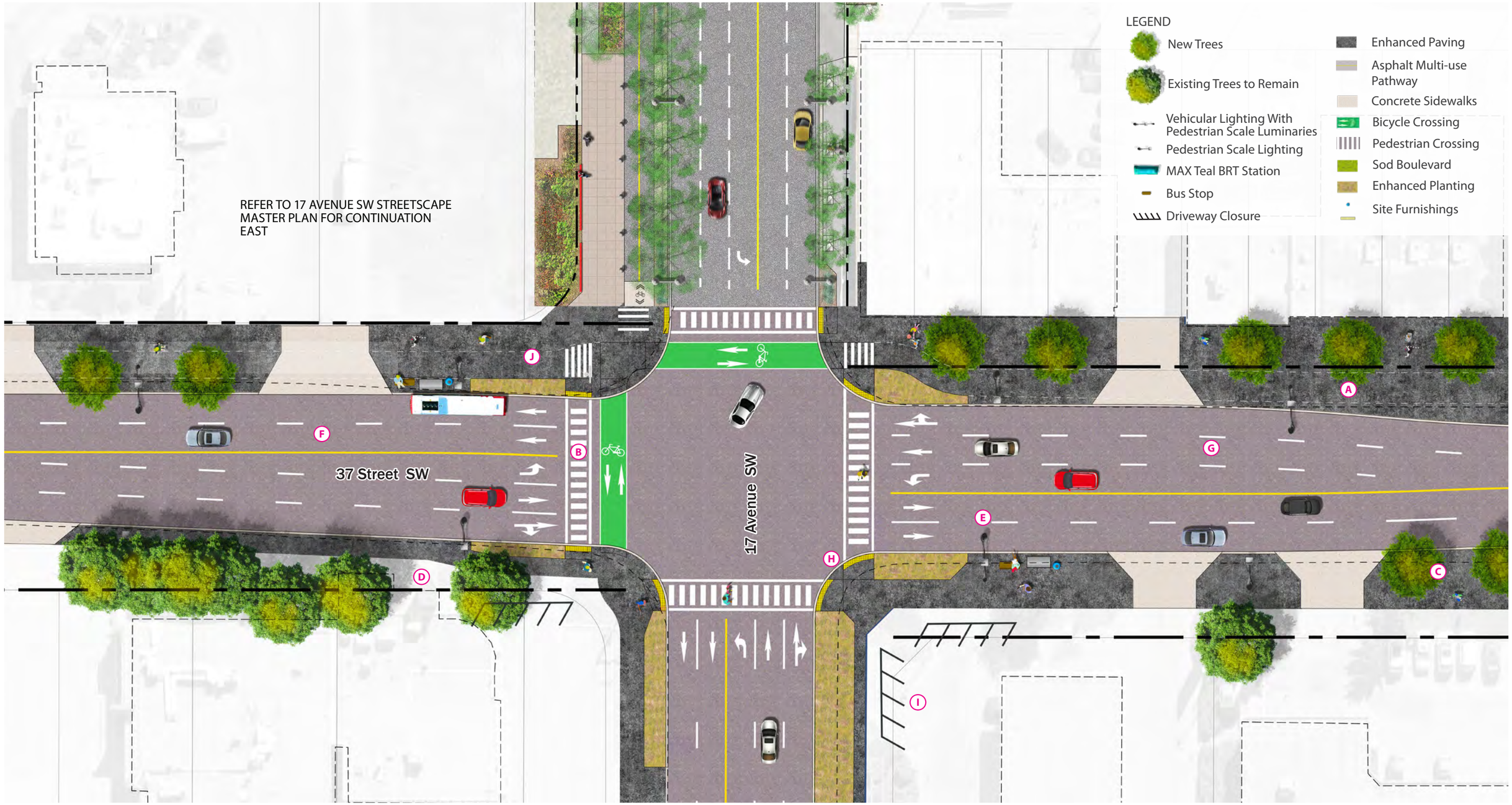
Public realm streetscape improvements in this area include:

- (A) Providing safer off-street cycling space on a multi-use pathway on the east side, including separation of cycling and pedestrian zones and crossings between 16 Avenue SW and 19 Avenue SW
- (B) Enhancing marking and signage for all crosswalks to improve their visibility and accessibility, including new Rectangular Rapid Flash Beacons (RRFB) at all unsignaled intersections
- (C) Adding wider urban or landscaped boulevards between sidewalks and vehicle lanes to:
  - » increase walking safety
  - » make waiting at transit stops more comfortable
  - » provide space for snow storage
  - » promote a healthy tree canopy by adding soil and supporting water filtration
- (D) Providing wider separate sidewalks to create a more comfortable walking experience
- (E) Upgrading streetlights to provide a consistent, aesthetic and comfortable environment during evening hours, and to provide opportunity for pageantry to enhance the gateway and identity of the street
- (F) Retaining roadway capacity so traffic flow is not impeded, particularly during peak traffic hours
- (G) Encouraging slower and safer traffic speeds and safety for all through right-sizing vehicle lanes
- (H) Refined geometry at intersections to provide more sidewalk space, and slow vehicles down at turns, thereby improving safety for those crossing the street
- (I) Removing some existing driveways to minimize streetscape interruptions
- (J) Enhancing paving to delineate transition into the node area
- (K) Enhancing planting in select areas

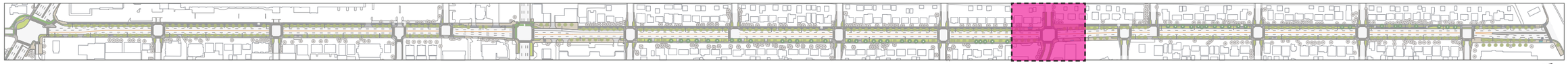
An existing visualization of Node 2 is illustrated in Figure 3.11, a proposed visualization of Node 2 is illustrated in Figure 3.12, and a proposed site plan of Node 2 is illustrated on Map 3.8.

FIGURE 3.11 - NODE 2 EXISTING VISUALIZATION

FIGURE 3.12 - NODE 2 PROPOSED VISUALIZATION


REFER TO 17 AVENUE SW STREETSCAPE MASTER PLAN FOR CONTINUATION EAST
37 Street SW
17 Avenue SW
A
B
C
D
E
F
G
H
I
J
LEGEND
New Trees
Existing Trees to Remain
Vehicular Lighting With Pedestrian Scale Luminaries
Pedestrian Scale Lighting
MAX Teal BRT Station
Bus Stop
Driveway Closure
Enhanced Paving
Asphalt Multi-use Pathway
Concrete Sidewalks
Bicycle Crossing
Pedestrian Crossing
Sod Boulevard
Enhanced Planting
Site Furnishings
1m 2.5m 5m 10m
North

MAP 3.8 - NODE 2



Context Plan - Node 3

North

NODE 3 - 26 AVENUE SW

The 26 Avenue SW intersection is a local focal point for commercial activity and is future transit-oriented node supported by land-use policy in the Killarney/Glengarry ARP and the new MAX Teal BRT Stations.

Informed by community input provided in the Spring and Fall of 2018, the streetscape here highlights its proximity to transit, cycling routes and area schools. By removing the existing left-turn lanes on 37 Street SW, wider boulevards and sidewalks can be provided along with urban elements to improve pedestrian circulation, safety and comfort.

The area around the northbound BRT Station will require special attention at the design stage to ensure the safety and comfort of all users including transit customers, pedestrians, and cyclists on the multi-use pathway. Lower speeds are essential for the safety of station users, and may warrant consideration of having cyclists dismount for this section of the pathway.

Site analysis of this area indicated several constraints that influenced the streetscape plan. These included a need to:

- » Retain existing back-of-sidewalk edge on both sides to avoid property impacts
- » Fit new streetscaping around the skewed geometry of the intersection
- » Integrate the recently-installed MAX Teal BRT Stations with the design

Public realm streetscape improvements in this area include:

- (A) Providing safer off-street cycling space on a multi-use pathway on the east side
- (B) Enhancing marking and signage for all crosswalks to improve their visibility and accessibility, including new Rectangular Rapid Flash Beacons (RRFB) at all unsignaled intersections
- (C) Adding wider urban or landscaped boulevards between sidewalks and vehicle lanes to:
  - » make walking more comfortable
  - » make waiting at transit stops more comfortable
  - » provide space for snow storage
  - » promote a healthy tree canopy by adding soil and supporting water filtration
- (D) Providing wider separate sidewalks to create a more comfortable walking experience
- (E) Providing a wider public realm around the MAX Teal BRT Stations to increase comfort for all users with consideration needed at the design stage for the intersection of cyclists and station users
- (F) Upgrading streetlights to provide a consistent, aesthetic and comfortable environment during evening hours, and to provide opportunity for pageantry to enhance the gateway and identity of the street
- (G) Removal of existing left-turn bays to give increased area to sidewalks and improve pedestrian access to MAX Teal BRT Stations; left turns would proceed from the shared centre lanes
- (H) Retaining sufficient roadway capacity so traffic flow is not impeded, even with removal of the left-turn lanes on 37 Street SW, with no on-street parking permitted in the vicinity of the intersection at any time of the day
- (I) Encouraging slower and safer traffic speeds and safety for all through right-sizing vehicle lanes
- (J) Allowing for easy integration of the public realm with redevelopment or expansion of commercial sites
- (K) Refined geometry at intersections to provide more sidewalk space, and slow vehicles down at turns, thereby improving safety for those crossing the street
- (L) Removing some existing driveways to minimize streetscape interruptions
- (M) Enhancing paving to delineate transition into the node area
- (N) Enhancing planting in select areas

An existing visualization of Node 3 is illustrated in Figure 3.13, a proposed visualization of Node 3 is illustrated in Figure 3.14, and a proposed site plan of Node 3 is illustrated on Map 3.9.

FIGURE 3.13 - NODE 3 EXISTING VISUALIZATION

FIGURE 3.14 - NODE 3 PROPOSED VISUALIZATION


LEGEND
New Trees
Existing Trees to Remain
Vehicular Lighting With Pedestrian Scale Luminaries
Pedestrian Scale Lighting
MAX Teal BRT Station
Bus Stop
Driveway Closure
Enhanced Paving
Asphalt Multi-use Pathway
Concrete Sidewalks
Bicycle Crossing
Pedestrian Crossing
Sod Boulevard
Enhanced Planting
Site Furnishings
37 Street SW
26 Avenue SW
A
B
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J
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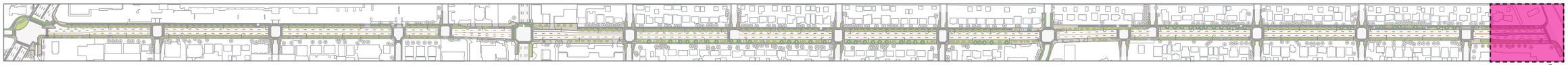
L
M
N
1m 2.5m 5m 10m
North

MAP 3.9 - NODE 3



Context Plan - Node 4

North

NODE 4 - RICHMOND ROAD SW

The Richmond Road intersection is the southern gateway to the 37 Street Main Street. The intersection is a highly constrained area, with limited public right-of-way, skewed geometry and poor pedestrian connections. Pedestrian activity is high around A.E. Cross School, local businesses and a new transit station on the MAX Teal BRT line.

Informed by community input provided in the Spring and Fall of 2018, wider boulevards and sidewalks can be incorporated with modest narrowing of the existing traffic lanes, to improve pedestrian circulation, safety and comfort for all users and particularly students.

Although the scope of the plan ends at Richmond Road, the plan assumes and allows for future continuation of streetscaping enhancements to the south. This might particularly include the continuation of the multi-use pathway south to provide enhanced connectivity to Mount Royal University and North Glenmore Park.

Site analysis of this area indicated several constraints that influenced the streetscape plan shown. These included a need to:

- » Retain existing back-of-sidewalk edge on both sides to avoid property impacts
- » Fit new streetscaping around the skewed geometry of the intersection
- » Integrate the recently-installed MAX Teal BRT Stations with the design
- » Integrate the design with the AE Cross School site

Public realm streetscape improvements in this area include:

- (A) Removing the median barrier and fence on 37 Street SW to improve sightlines and lessen the "industrial" feel of this block. The use of Public Art in the median could be an effective way to discourage jay-walking while enhancing the aesthetics of the Richmond Road gateway
- (B) Reducing the length of the median island on 37 Street SW to allow for a more open intersection at 33 Avenue SW, with distinct pedestrian crossing locations for A.E. Cross students and other users
- (C) Using high-quality materials in front of A.E. Cross School. Possible planting of an additional tree row on A.E. Cross property to enhance the gateway feel of the block
- (D) Providing safer off-street cycling space on a multi-use pathway on the east side
- (E) Providing a wide sidewalk space around the MAX Teal BRT Station to increase comfort for all users
- (F) Upgrading streetlights to provide a consistent, aesthetic and comfortable environment during evening hours, and to provide opportunity for pageantry to enhance the gateway and identity of the street
- (G) Providing wider separate sidewalks to create a more comfortable walking experience
- (H) Adding wider urban or landscaped boulevards between sidewalks and vehicle lanes to:
  - » make walking more comfortable
  - » make waiting at transit stops more comfortable
  - » provide space for snow storage
  - » promote a healthy tree canopy by adding soil and supporting water filtration
- (I) Enhancing marking and signage for all crosswalks to improve their visibility and accessibility, including Rectangular Rapid Flash Beacons (RRFB) at all unsignaled intersections
- (J) Retaining sufficient roadway capacity so traffic flow is not impeded; on-street parking would not be permitted at any time in the block approaching Richmond Road
- (K) Encouraging slower and safer traffic speeds and safety for all through right-sizing vehicle lanes.
- (L) Enhancing paving to delineate transition into the node area
- (M) Enhancing planting or public art opportunity to highlight 37 Street SW Gateway

An existing visualization of Node 4 is illustrated in Figure 3.15, a proposed visualization of Node 4 is illustrated in Figure 3.16, and a proposed site plan of Node 4 is illustrated on Map 3.10.

FIGURE 3.15 - NODE 4 EXISTING VISUALIZATION

FIGURE 3.16 - NODE 4 PROPOSED VISUALIZATION

MAP 3.10 - NODE 4

3.4 ULTIMATE CONDITION

The majority of 37 Street capiltalize By-law Setback that will allow for the expansion of public realm space as properties are redeveloped.

This expansion of the public realm will afford the opportunity to expand landscaping or programming space along 37 Street, as well as implement one-way bike lanes on each side of 37 Street. The following sections briefly highlight the future expansion opportunities in each zone.

Ultimate Section - Zone 1
West Side

- » Existing 2.0m sidewalk converted to 2.0m southbound bike lane
- » New 2.5m sidewalk constructed in setback area
- » New zone for enhanced landscaping or amenity space now available between sidewalk and bike lane

East Side

- » Existing multi-use pathway can be divided and resurfaced to provide a dedicated northbound bike lane adjacent to a sidewalk

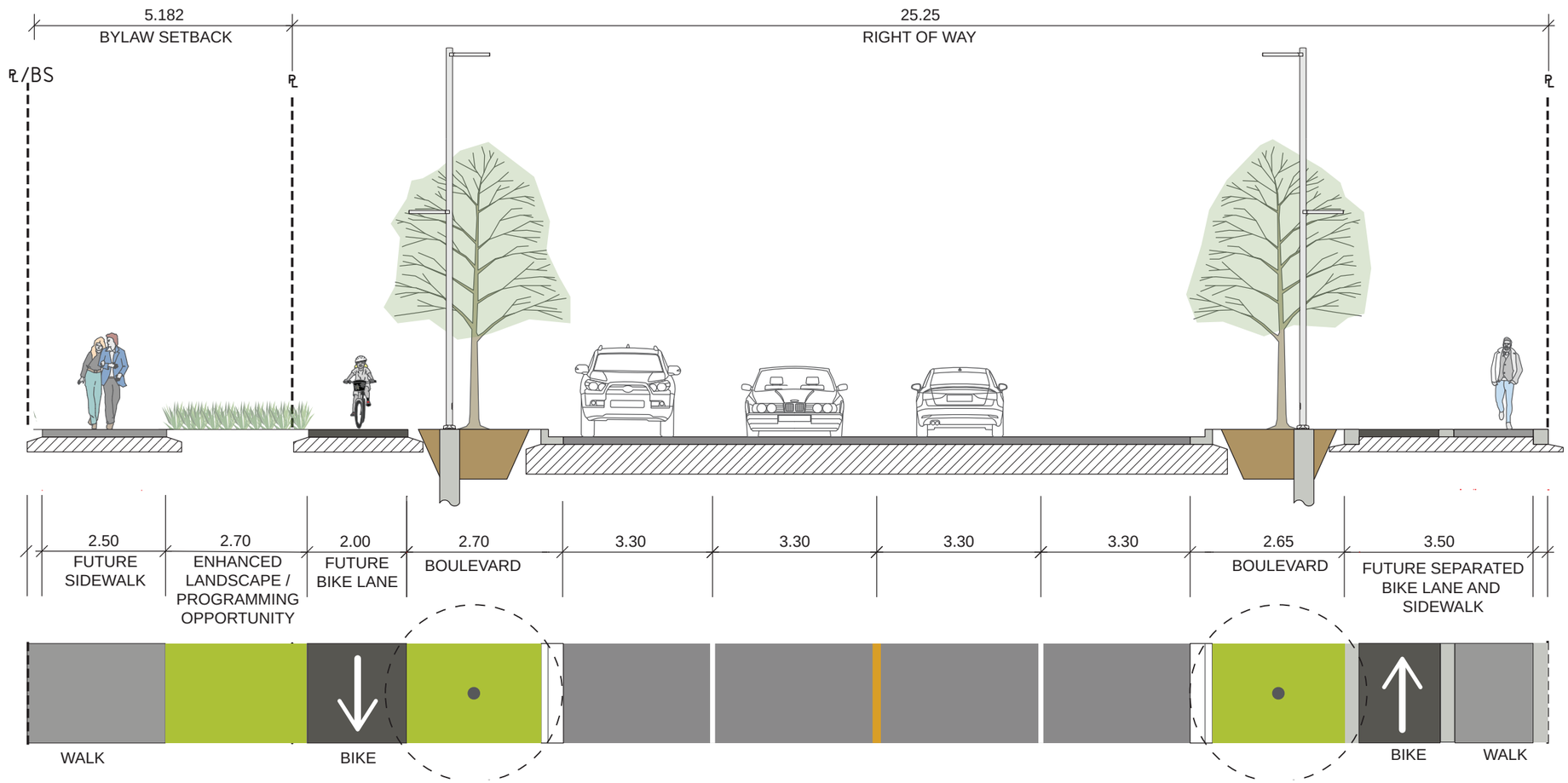


FIGURE 3.17 - ZONE 1 ULTIMATE SECTION

This zone already has full ROW width; however the interim streetscape plan can not fully utilize the space due to steep front-yard grades on the west side. If this grade interface is addressed and levelled off through redevelopment, then the corridor can be adapted to take full advantage of the available space.

Ultimate Section - Zone 2
West Side

- » Existing 2.0m sidewalk widened to the west for full 2.5m width
- » New 2.0m southbound bike lane constructed adjacent to 37 Street
- » New zone for enhanced landscaping or amenity space now available between sidewalk and property line

East Side

- » Exisitng multi-use pathway can be divided and resurfaced to provide a dedicated northbound bike lane adjacent to a sidewalk

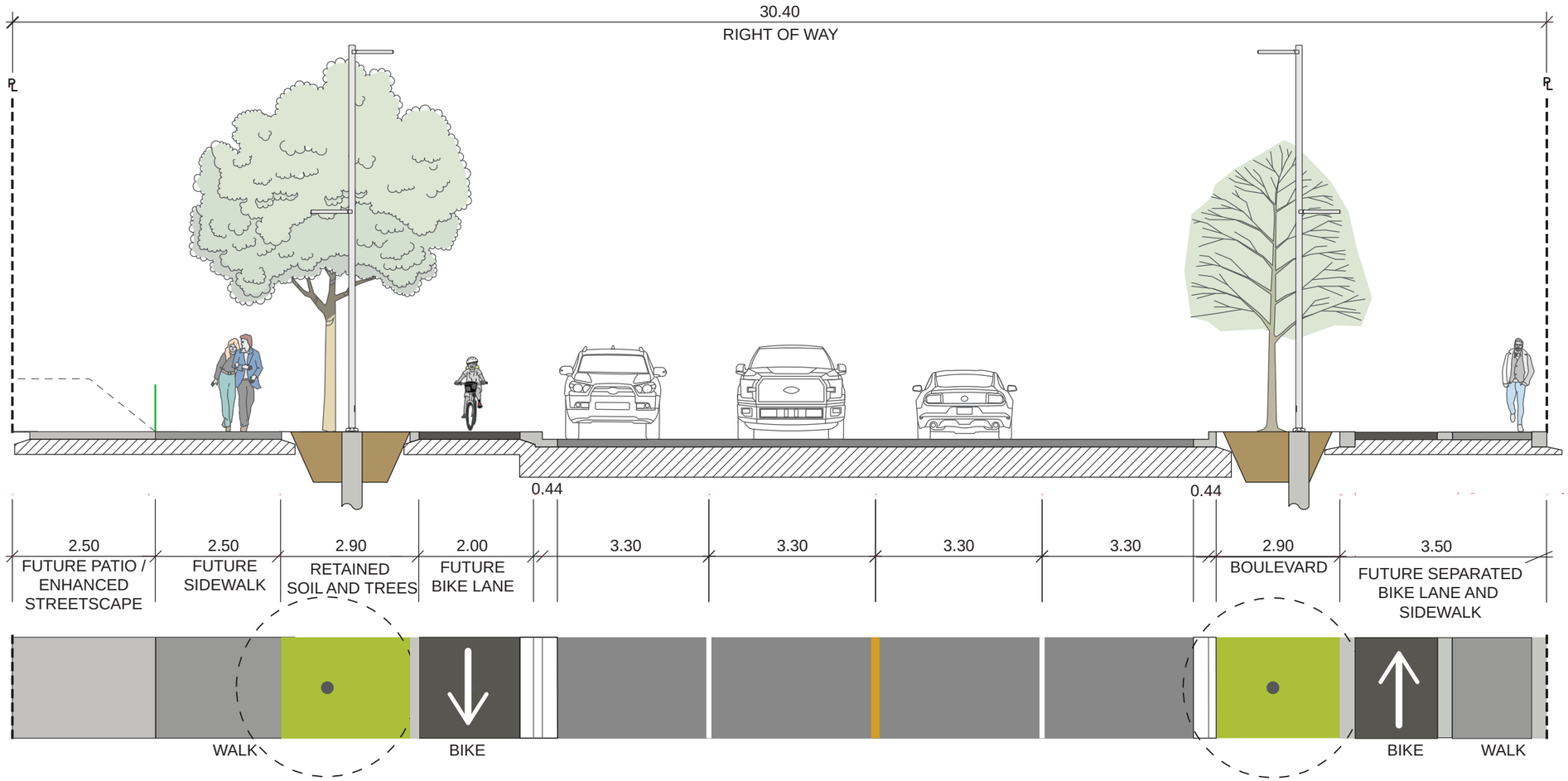


FIGURE 3.18 - ZONE 2 ULTIMATE SECTION

Ultimate Section - Zone 3
West Side

- » Existing 2.0m sidewalk converted to 2.0m southbound bike lane
- » New 2.5m sidewalk constructed in setback area
- » New zone for enhanced landscaping or amenity space now available between sidewalk and bike lane

East Side

- » New 2.0m northbound bike lane constructed adjacent to 37 Street SW

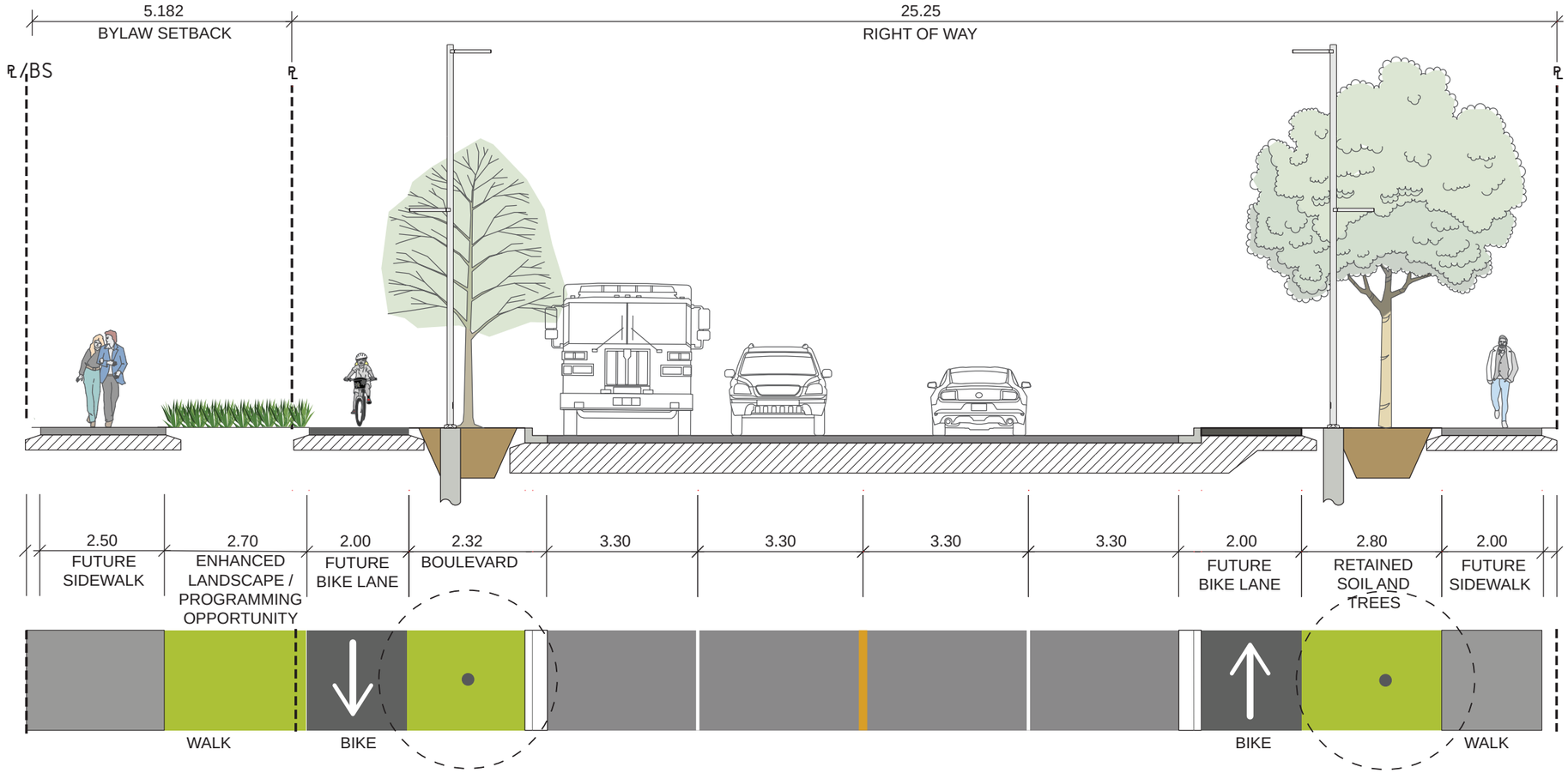


FIGURE 3.19 - ZONE 3 ULTIMATE SECTION

3.5 DESIGN TOOLKIT

The Design Toolkit aims to add further detail to the design concepts. It takes specific design features established in the node and zone analysis and concept plans and explores feature visualization to further determine how these specific elements will look within the constructed enhanced streetscape. The primary Design Toolkit features explored for the 37 Street SW Streetscape Master Plan include:

- Pedestrian and bicycle crossings
- Multi-use pathways
- Stormwater bio-retention cells
- Tree planting soil cells
- Public art
- Urban design elements (enhanced amenity opportunities, lighting opportunities, site furnishings and material palettes)

PEDESTRIAN CROSSWALKS

Enhanced pedestrian crosswalks with ladder-style markings are included for each leg of every intersection along 37 Street SW. Two exceptions are made to remove one crosswalk each across 37 Street SW at the T-intersections at 21 Avenue SW and 28 Avenue SW, due to the proximity of driveways.

Full traffic signals are used at Bow Trail, 13 Avenue SW, 17 Avenue SW, 26 Avenue SW and Richmond Road, along with controlled pedestrian crossings of 37 Street SW at those intersections. Overhead pedestrian signals are provided at 10 Avenue SW, 16 Avenue SW, 19 Avenue SW, and 33 Avenue SW and should be retained. A Rectangular Rapid Flash Beacon (RRFB) is provided at 23 Avenue SW and should also be retained. If funding allows, it is recommended that an RRFB be added at every other intersection along 37 Street SW, providing this enhanced visual crossing aid for pedestrians throughout the Main Street corridor.

Directional wheel chair ramps are proposed for all crossings. These ramps differ from standard City of Calgary crossings by providing a square and straight ramp in the direction of the crosswalk, without side flares. Ramps are also provided distinctly for each crosswalk, with two ramps in each corner of an intersection, rather than merging the ramps as one. This helps ensure true guidance in the direction of the crosswalk for visually impaired pedestrians and improves accessibility for all. A typical pedestrian crossing concept plan is illustrated on Figure 3.21 and a typical pedestrian crossing visualization is illustrated in Figure 3.23.

SEPARATED PEDESTRIAN AND BICYCLE CROSSINGS

The side-street crossings on the east side of 37 Street SW will also accommodate bicycle crossings for the multi-use pathway. Additional "elephants foot" markings should be considered for these crossings.

At the Bow Trail and 17 Avenue SW intersections, additional formal separation of the pedestrian and bicycle crossings is recommended. This provides for additional separation and safety of all users at these high-use locations, and at 17 Avenue SW in particular allows for dedicated bicycle routing at the intersection of two multi-use pathways in the northeast corner. A typical separate pedestrian and bicycle crossing concept plan is illustrated in Figure 3.22 and typical separate pedestrian and bicycle crossing visualization is illustrated on Figure 3.24.

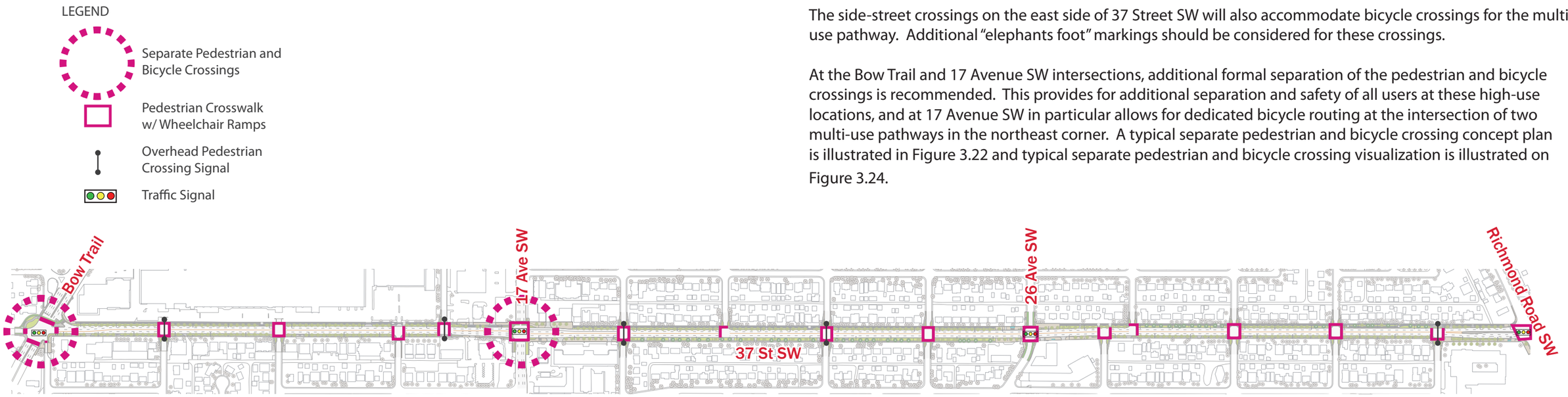


FIGURE 3.20 - PEDESTRIAN CROSSING KEY MAP

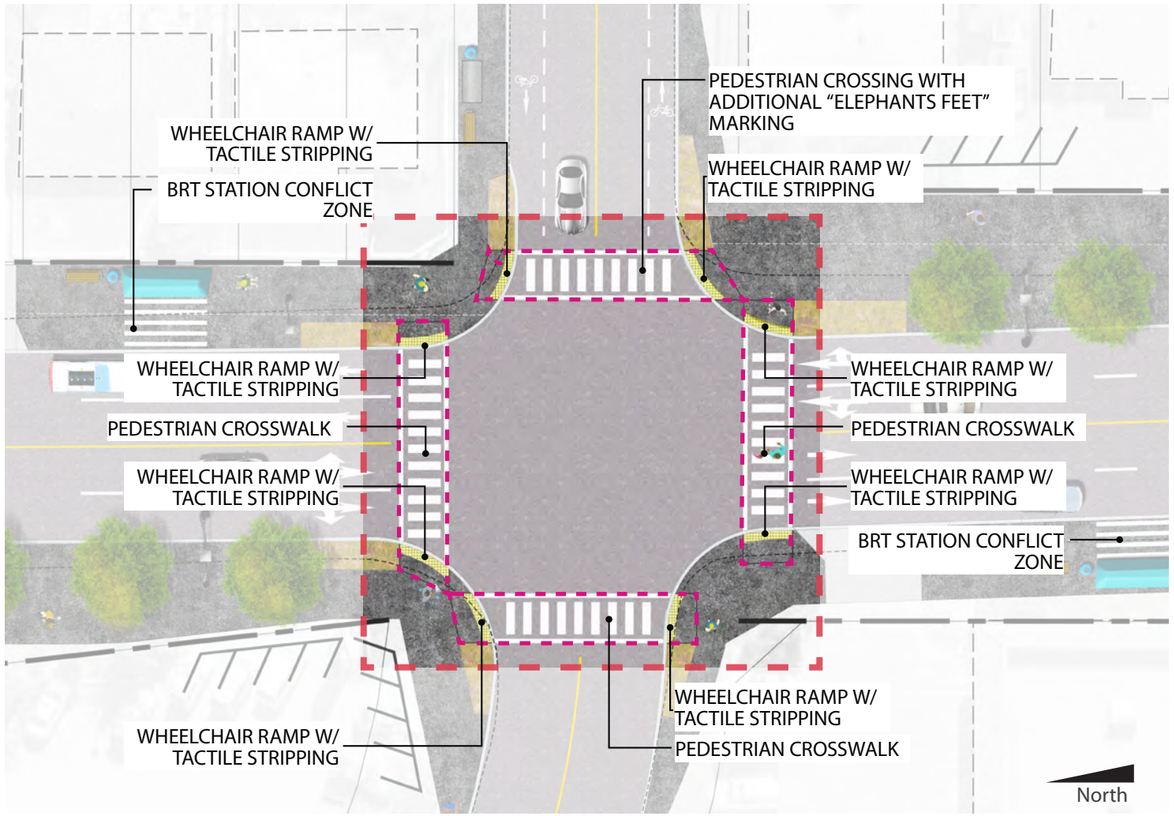


FIGURE 3.21 - PEDESTRIAN CROSSING CONCEPT PLAN

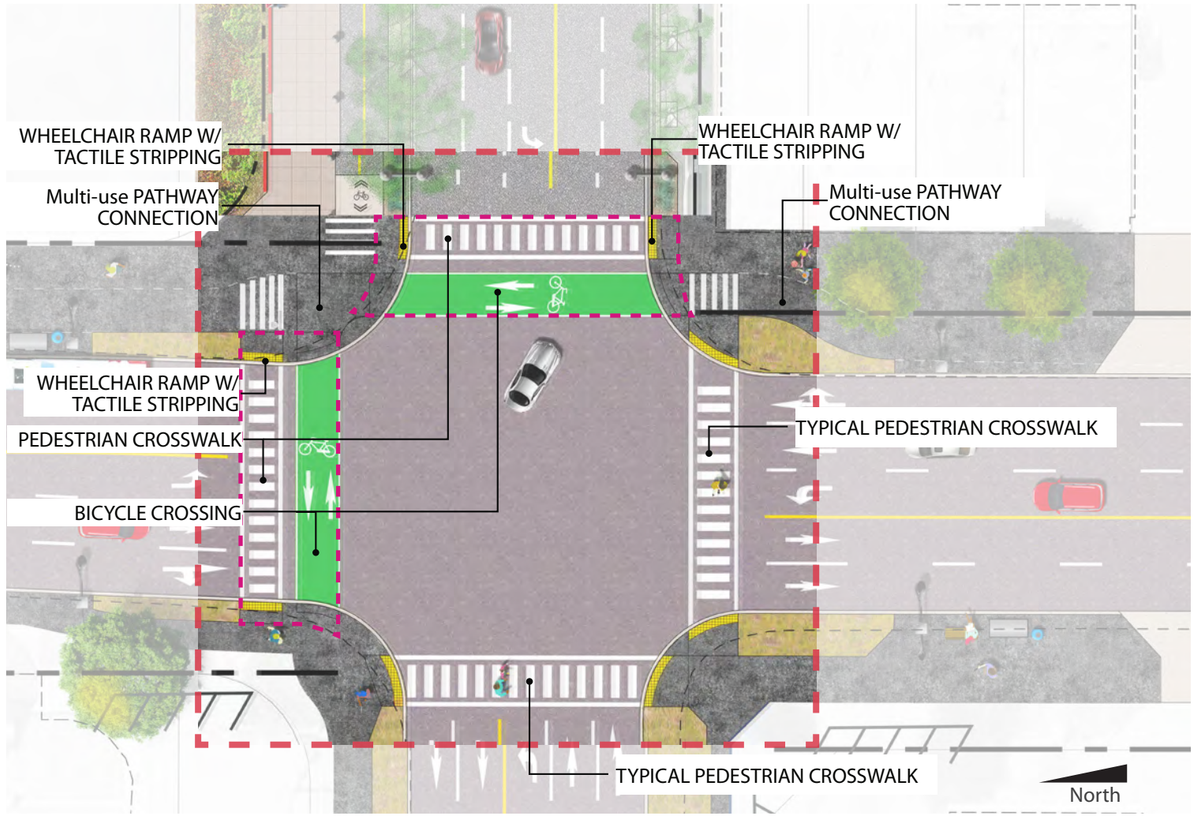


FIGURE 3.22 - SEPARATED PEDESTRIAN AND BICYCLE CROSSINGS CONCEPT PLAN

FIGURE 3.23 - TYPICAL PEDESTRIAN CROSSING VISUALIZATION

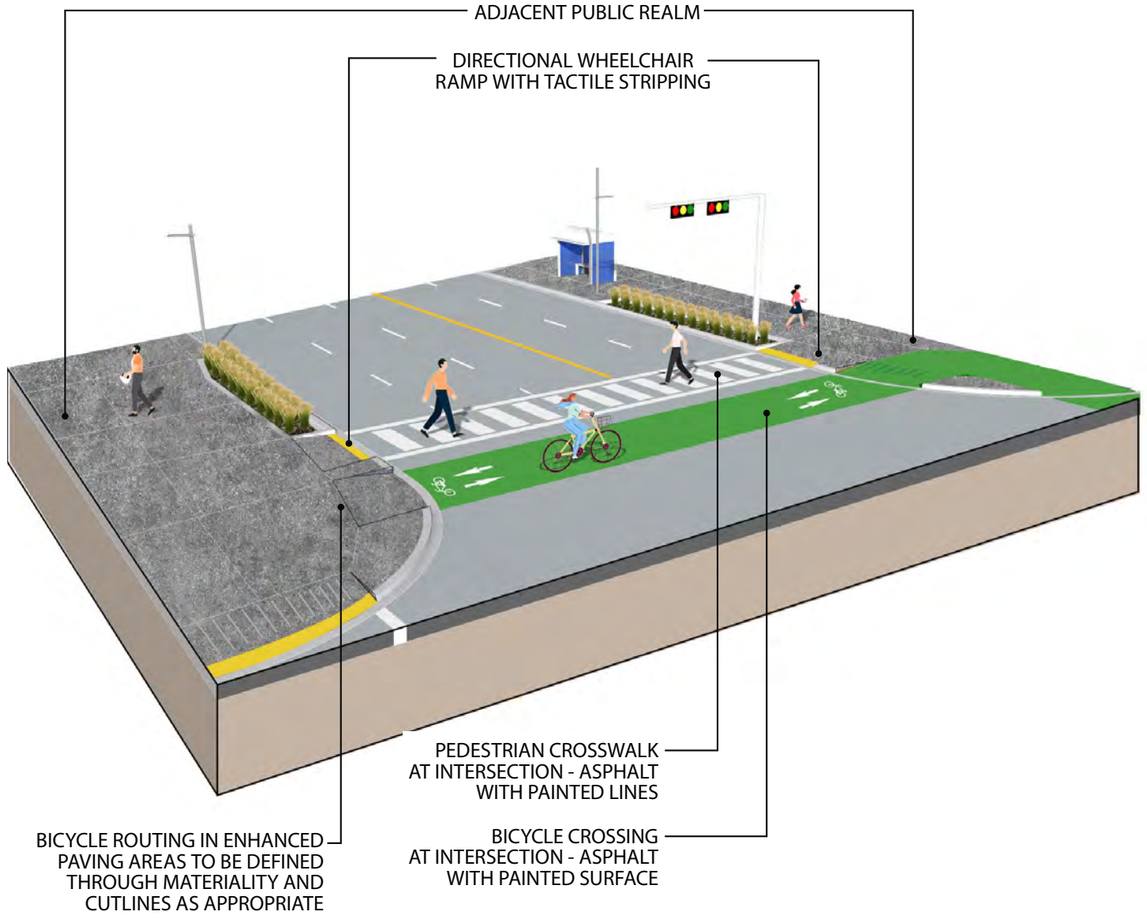


FIGURE 3.24 - TYPICAL SEPARATED BICYCLE AND PEDESTRIAN CROSSING VISUALIZATION

STORMWATER INFILTRATION AND BIO-RETENTION

Enhanced planting beds located at the corners of intersections and on bump outs create the potential to catch, store and release excess stormwater in rain events. This practice will produce more natural water flow into planting beds and create less maintenance as a result. The bio-retention network is a part of a broader stormwater strategy to be later developed within the planning process. A concept stormwater infiltration section is illustrated in Figure 3.25 and a concept stormwater infiltration visualization is illustrated in Figure 3.26.

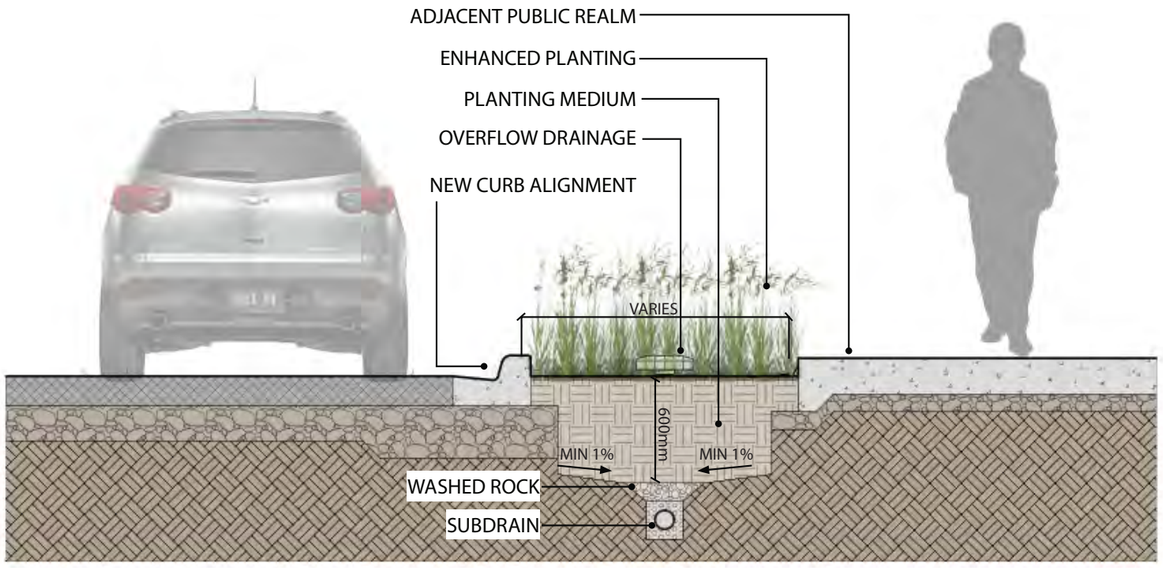


FIGURE 3.25 - STORMWATER INFILTRATION TO BIO CELLS

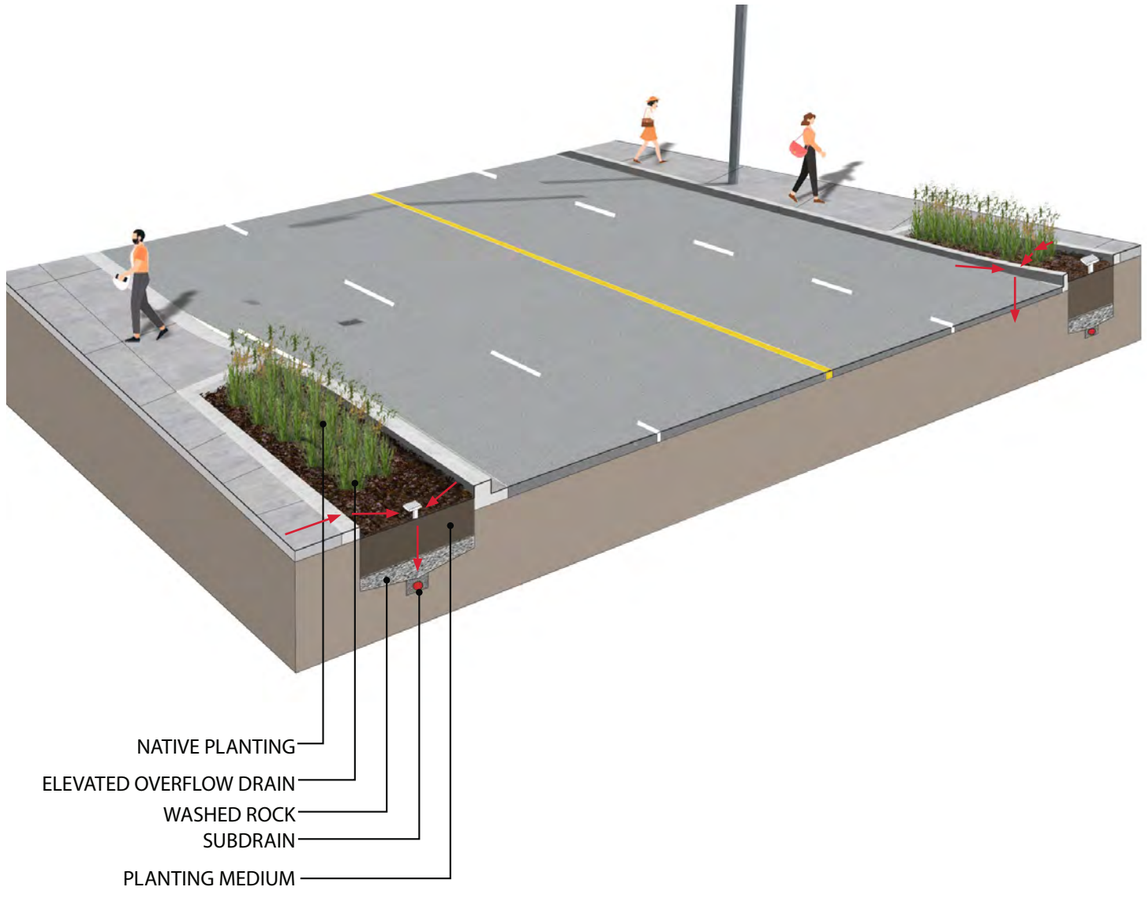


FIGURE 3.26 - BIO-RETENTION VISUALIZATION

LEGEND

Potential locations for Bio-Retention

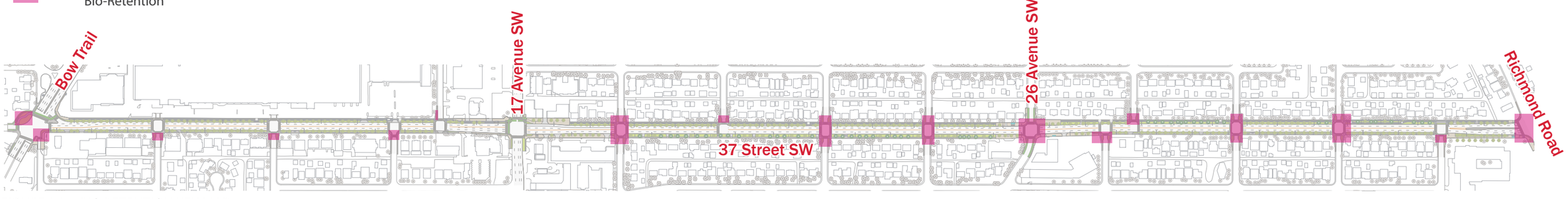


FIGURE 3.27- BIO RETENTION KEY MAP

TREE PLANTING SOIL CELLS

With the addition of enhanced paving at the primary commercial nodes, trees along the extended boulevard are located within the paved areas. The use of tree planting soil cells allows for trees planted within urban treatments to thrive by giving them access to a high volume of healthy, non-compacted soil. The cell systems also provide the capability to store up to 20% of their volume in water for up to 24 hours, which can be tied into the bio-retention system for further stormwater runoff control during rain events. This also limits maintenance and watering of vegetation on site. A tree planting soil cell concept section is illustrated in Figure 3.28 and a tree planting soil cell concept plan is illustrated in Figure 3.29.

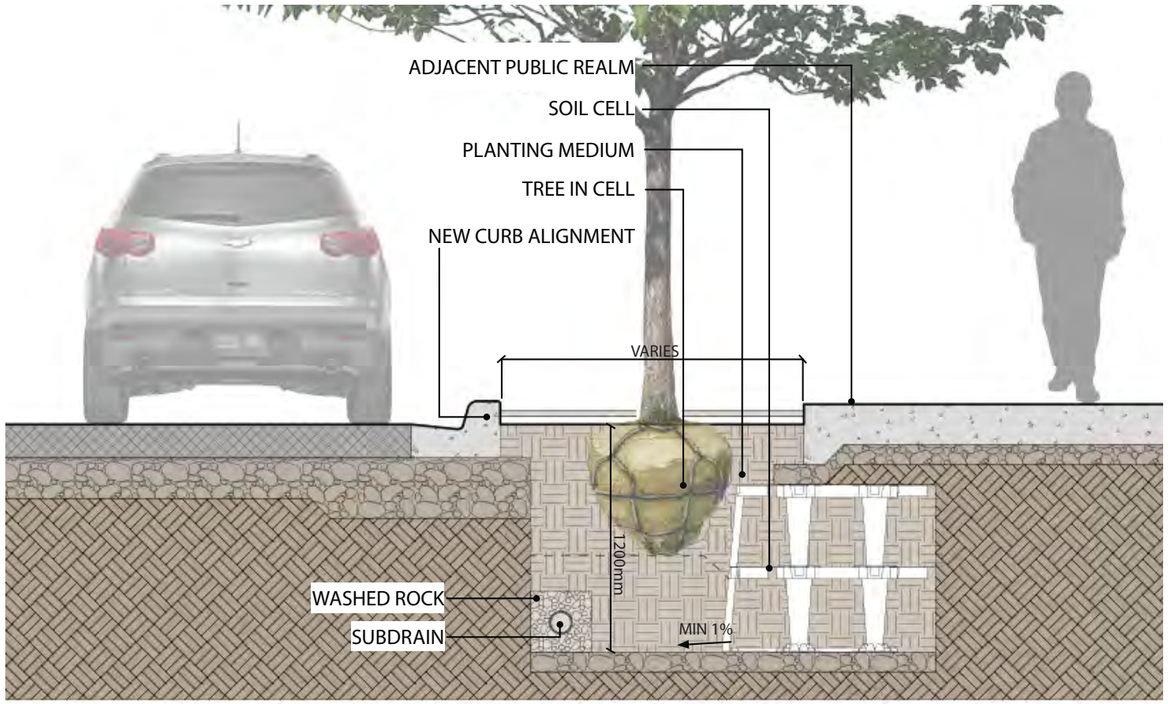


FIGURE 3.28 - TREE PLANTING SOIL CELLS CONCEPT SECTION

FIGURE 3.29 - TREE PLANTING SOIL CELLS CONCEPT PLAN

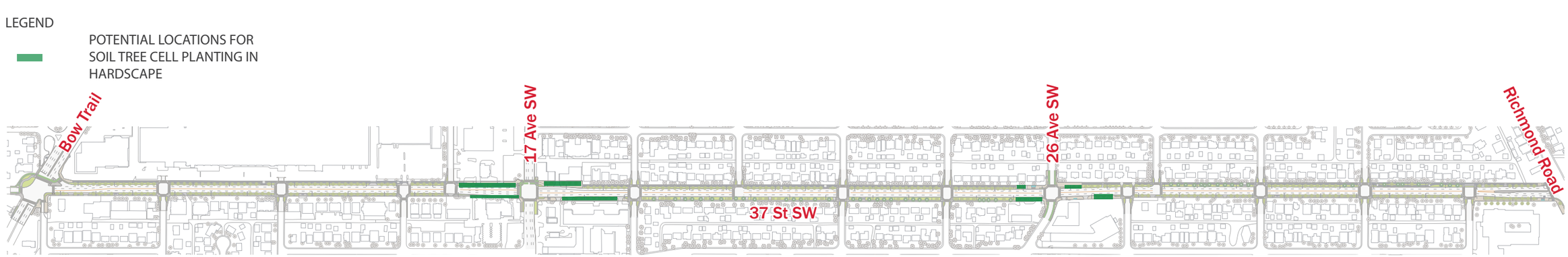


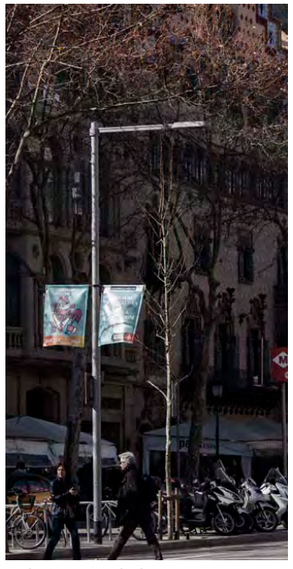
FIGURE 3.30 - TREE PLANTING SOIL CELLS KEY MAP

LIGHTING

With the addition of the multi-use pathway, widened sidewalks, and enhanced public realm along the 37 Street SW corridor, the need for enhanced lighting is amplified to satisfy the functional needs of vehicular, cycle and pedestrian safety while using the streetscape. The following are selected example fixtures that satisfy these needs and build upon the design aesthetic of the streetscape.

At the time of this Master Plan, The City of Calgary is confirming a palette of potential lighting fixtures for all Main Streets projects. The 37 Street SW Main Street will make use of an elegant, modern style from the available palette.

Concept light standards scale and lumen analysis is illustrated on Figure 3.31



Pole top single luminaire

Pole top dual luminaire

Pole top luminaire with two scales of lighting

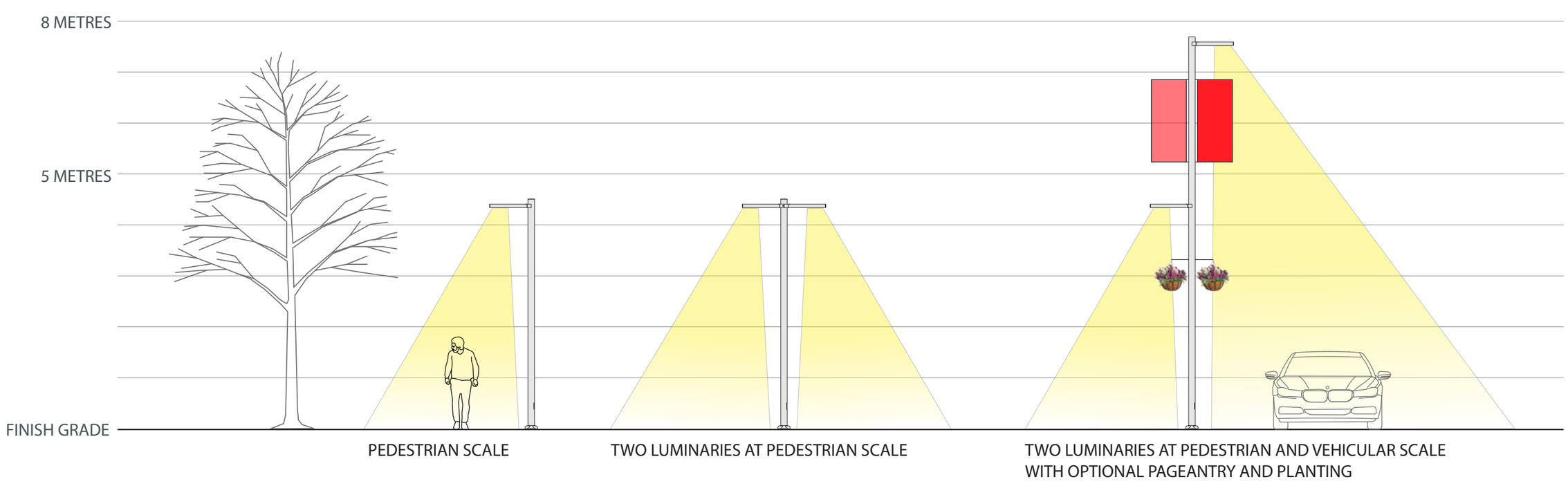


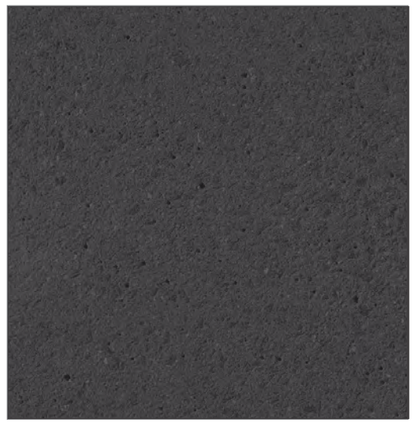
FIGURE 3.31 - LIGHT STANDARDS SCALE AND LUMEN ANALYSIS

MATERIALS PALETTE

A simple yet purposeful material palette was selected to strategically identify public space and modal corridors based on a combination of City standards and design intent. The following treatments are represented on surface conditions and on site furnishings.

CONCRETE / SIDEWALK

ASPHALT



ENHANCED PAVING

STEEL

WOOD

SUGGESTED PLANTING

Building upon the existing palette of vegetation on site and the desire to retain healthy trees where possible, the following species have been selected for street tree planting and boulevard planting.

Ulmus americana spp.
AMERICAN ELM

INSTALLATION SIZE: 70-100 Cal.
MATURE SIZE: 15m height, 6m spread

Quercus macrocarpa
BUR OAK

INSTALLATION SIZE: 30-50 CAL.
MATURE SIZE: 14m height, 7m spread

Fraxinus pennsylvanica spp.
GREEN ASH

INSTALLATION SIZE: 70-100 Cal.
MATURE SIZE: 9m height, 4m spread

Populus tremuloides
TREMBLING ASPEN

INSTALLATION SIZE: 50-70 Cal.
MATURE SIZE: 10m height, 5m spread

Native Grasses
GRASS

INSTALLATION SIZE: #1 Container
MATURE SIZE: 1m height, .5m spread

Fescue Sod
SOD

INSTALLATION SIZE: Sod
MATURE SIZE: Sod

SITE FURNISHINGS

Benches, bike racks, and waste bins for 37 Street SW will be selected with an elegant modern feel they are recommended to reflect a future optimism about an up and coming area.

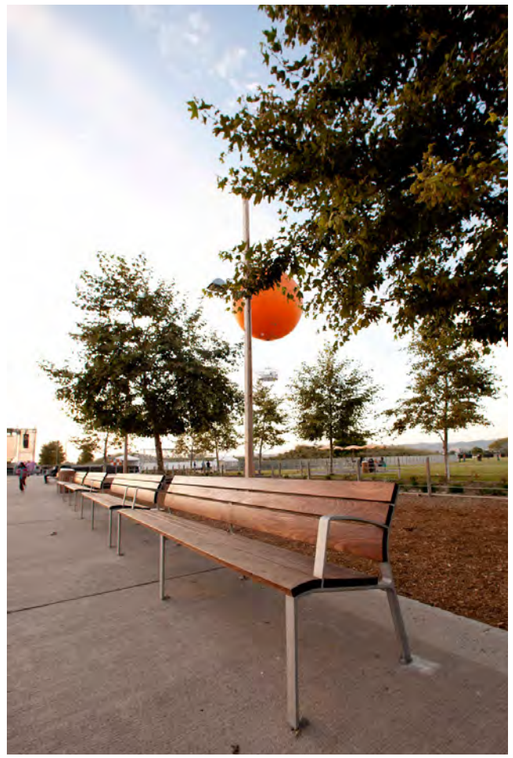
Options for benches that allow for easy maintenance and replacement of wood slats over time should be considered

Bike racks should be chosen that allow a bike tire and frame to be locked simultaneously using a U-lock; a variety of design options are available on the market.

Waste bins present the greatest opportunity to create a unique place-making opportunity by changing paint colours or materials. Options for bins that allow for the sorting of refuse should be explored such as the custom design for the on-street recycling pilot program undertaken jointly by the City of Vancouver and Recycle BC in partnership with Emily Carr University of Art + Design. Bins use familiar colours and iconographics to help guide users. A bin liner with street-side access is easily accessible by maintenance personnel.

The images shown are used to suggest a style, but are not intended to be indicative of particular products.

Elegant modern bench

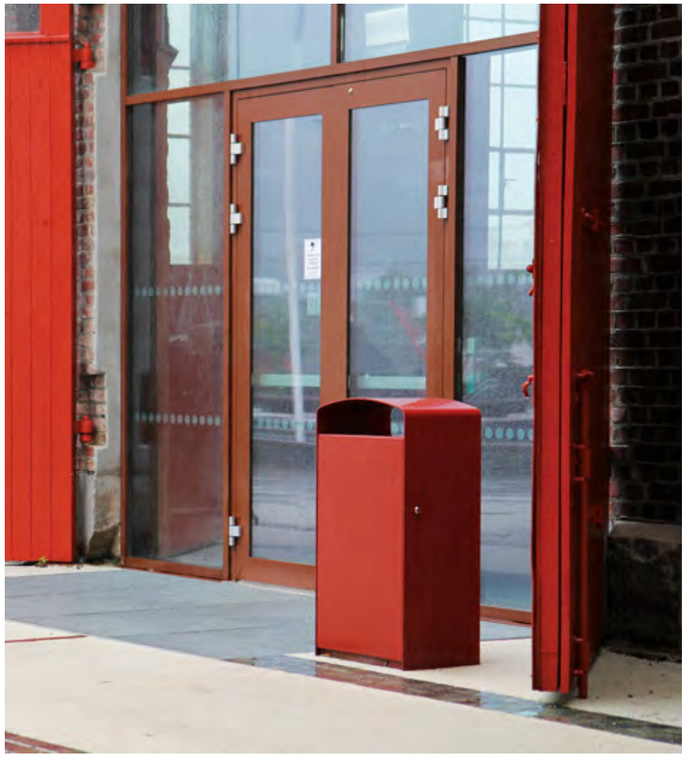


Simple stainless steel

Modern dynamic design

Circular bike rack with colour

BIKE RACKS



Simple design using City of Calgary red

Artistic design using colour

Artistic design using laser cut text

Design with wood paneling

Designs from City of Vancouver / Recycle BC on-street recycling pilot program

WASTE BINS

PUBLIC ART OPPORTUNITIES

The City's Public Art Master Plan highlights five distinct goals for public art:

- » To build a sense of community through art
- » To increase Calgarians' participation in art
- » To provide greater opportunities for artists
- » To build a collection for citizens and visitors alike
- » To embrace collaboration between all who commission art for the public realm

Opportunities for public art along 37 Street SW exist in two distinct locations: at the northeast corner of the Bow Trail intersection, and along the median at the Richmond Road intersection. As the two gateways to the site, these locations not only serve a purpose in establishing a sense of place but they also hold a significance to user safety and the functional need of the public art.

Bow Trail Intersection:
The Bow Trail intersection will make use of a vacant city lot in the northeast corner to provide an enhanced pedestrian and bicycle crossing of Bow Trail. This creates a pocket of planted area on the northeast corner adjacent to the new multi-use pathway connection and sidewalk connection. This site can be utilized for public art and coordinated into signage and wayfinding on site.

Richmond Road Intersection:
With the shortening of the centre median adjacent to A.E. Cross School at the Richmond Road intersection, there is a need to replace the existing jersey barrier and fence combination currently situated on top of the median. A barrier is still valuable to discourage jay-walking. A designed median structure will bring character to the gateway node and serve purposefully as a necessary barrier on the median.

Node 1 potential public art locations are illustrated in Figure 3.32 and Node 4 potential public art locations are illustrated in Figure 3.33.

Node 1: Potential Public Art Example

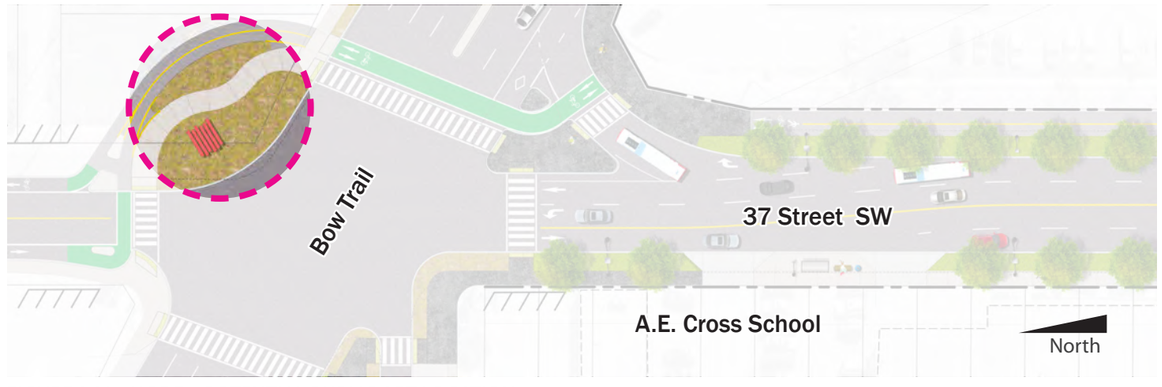


FIGURE 3.32 - NODE 1 POTENTIAL PUBLIC ART LOCATION

Node 4: Potential Public Art Example

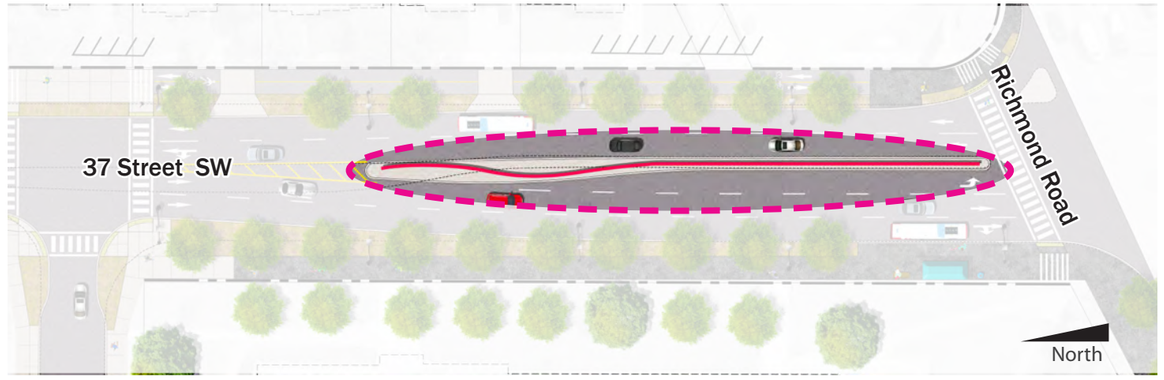


FIGURE 3.33 - NODE 4 POTENTIAL PUBLIC ART LOCATION