



Ambleside Village Centre

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Streetscape Standards

MARCH 1, 2013

Ambleside Village Centre

MARCH 1, 2013

DISTRICT OF WEST VANCOUVER

West Vancouver Municipal Hall
750 - 17th Street, West Vancouver, BC V7V 3T3

In Association With:

PWL Partnership Landscape Architects - Landscape Architecture

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Streetscape Standards

westvancouver





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INTRODUCTION

PROJECT BACKGROUND

The Ambleside Village Centre Streetscape Standards project has been undertaken to provide a cohesive and unified framework for ongoing and long-term maintenance, renovation and development of the public realm within the Ambleside Village Centre Area.

The current streetscapes were designed and developed over 20 years ago. Over time, repair and renewal of the streets has been carried out in a piecemeal manner. A new standard will provide direction for future renovation and anticipated redevelopment in the area. The primary assumption of the project is that improving the quality of the public realm within the Village Centre will enhance liveability for residents and visitors, and assist local businesses to compete with other retail centres.

PROJECT HISTORY

The Ambleside Village Centre Strategy Project was initiated following the adoption of the OCP in 2004. The need for an Ambleside Streetscape Plan was a Strategic Initiative identified through the OCP and Zoning Bylaw amendment process in 2008.

Subsequently, the District hired PWL Partnership Landscape Architects to carry out the project commencing in 2011.

PUBLIC CONSULTATION

The project was introduced to the public through an open house in February 2012 prior to the development of initial design concepts. A second round of open houses was held in May 2012 to present conceptual design standards. The project was also presented to the Design Review Committee (DRC) at that time. In July 2012 the project was reviewed with executive members of the Ambleside Business Association (ABA). A second DRC review presentation was held in October 2012 to present the completed work. In late October 2012 the project was reviewed with members of the Advisory Committee on Disability Issues (ACDI).

Following a report to Council in November 2012, a final round of public consultation occurred. This included a public open house in early December 2012, and a meeting with the Ambleside Business Association in late January 2013.

PROJECT CONTEXT + EXISTING CONDITIONS

The project has included a review of background information related to the project and an assessment of the Village context. The project has also looked at the condition of the existing streetscapes including sidewalks, furnishings, trees, public artworks etc. A review of the existing street lighting was also added to the project.

PROJECT VISION + DESIGN PRINCIPLES

The design process commenced with the development of a Vision Statement for the Village Centre and the development of Design Principles, Opportunities and Constraints.

The Vision Statement anticipates the qualities and characteristics associated with Ambleside in future years with an emphasis on how the public realm would contribute to the character and appeal of the Village Centre.

Design Principles were developed to provide a guiding framework for the development and future implementation of the streetscape standards. More specific opportunities and constraints have been identified through the community process to help frame the parameters of the project.

STREETSCAPE DESIGN STANDARDS

The Streetscape Standards (see Section 2) are proposed as a series of design strategies that can be applied to streetscape development within the Village Centre over a period of time. The standards are described as primarily relating to the pedestrian public realm including sidewalks, boulevards, crosswalks, furnishings, street trees, street plantings, rain gardens, pedestrian lighting, signage and public art opportunities. The scope of the Streetscape Standards project was extended to look at opportunities involving development within the existing

streets, including corner bump outs, bus bump outs, street reconfiguration for Festival Streets and for Bellevue Avenue to accommodate bike paths.

A street-by-street summary of the proposed Design Strategies is provided to identify which strategies apply to which streets. Drawings included in the report illustrate the character of each of the proposed improvements and provide specific layout, materials, and product references.

SIDEWALK RENOVATION + REPLACEMENT

Initial work on the project identified that many sidewalks and boulevards were in poor condition and/or were inadequate in width in some locations. Furthermore, it was recognized that the replacement of sidewalks and boulevards would occur over a long period of time such that any new treatment would need to coexist with the existing condition for many years to come.

The existing red bricks, used primarily as boulevard treatments and curb edge bands, were identified as the most visually unique feature of the existing streetscape and yet the bricks were also perceived as problematic in terms of ongoing maintenance and slip resistance in sidewalk areas, especially when wet.

To address this scenario the proposed sidewalk standard aims to continue to use cast-in-place concrete as the main sidewalk surface and to re-use the existing red-bricks



Boundary of Ambleside Village Centre Streetscape Standards Project

as a narrower street edge band delineating the edge of the sidewalk. This strategy, which increases the width of the concrete portion of the sidewalk, removes the use of brick as a walking surface but retains the brick as a narrow decorative border, mixed with new basalt pavers, to provide some visual continuity and colour accent. Details are also provided for the use of basalt slabs, in random patterns, in conjunction with cast-in-place concrete for rear boulevards, where building set-backs occur through redevelopment.

A range of sidewalk details have been developed to suit each street and to suit complete replacement or renovation scenarios.

CORNER BUMP-OUTS

Analysis of the site and consultation with the public identified the inadequacy of space for pedestrian movement at street corners. In response to this, corner bump-outs are proposed at intersections along Marine Drive to enhance the pedestrian experience and mitigate the impact of cars on the streetscape. The bump-outs, which provide additional room for movement and waiting, reduce crosswalk lengths and provide additional space for street planting, seating, signage and art work. Corner bump-outs details can be implemented without loss of on-street parking.

BUS BUMP-OUTS

Prior to the commencement of this study the DWV had installed new bus shelters along Marine Drive and had begun to implement bus bump-outs at some bus stops. The Streetscape Standards supports this initiative and provides detailed designs for future bus bump-out areas. Bus bump-outs provide similar benefits to corner bump-outs with the added benefit of providing much needed additional space for bus shelters, loading and waiting areas for transit users.

STREETSCAPE ELEMENTS

The Standards provide illustrations and details of the palette of paving materials, furnishings, lighting, street trees and plantings proposed for use in the Standards.

Cast-in-place concrete is proposed as the main sidewalk surface. This is the most cost effective and practical solution and provides consistency with the current conditions. Red bricks and basalt pavers are proposed to form edge bands and paving panels where seating is provided. Larger basalt slabs are proposed in conjunction with concrete to define non-sidewalk areas such as rear boulevards and bus bump-outs. A custom designed crosswalk design is proposed utilizing a thermo-plastic



product that is applied on top of existing asphalt. Proprietary benches, bike racks and garbage/ recycling cans are proposed for use throughout the Village Centre.

A review of current street lighting was added to the scope of the project during the process of the design. New street lighting has been installed fairly recently along Marine Drive, Bellevue and Clyde Avenues. The Streetscape Standards include recommendations for additional street lights at intersections along Marine Drive and the north-south streets (except the Festival Streets). The new lights

will improve uniformity of treatment and improved light standards. In addition, new pedestrian scaled lights have been proposed along the two Festival Streets on 14th and 17th Streets. The lighting is intended to help distinguish the character of the festival streets, to improve lighting of the pedestrian realm and to strengthen the connection to the waterfront.

BELLEVUE AVENUE

The need to accommodate east-west bike movement through the Village Centre led to the development of preliminary recommendations for the reconfiguration of Bellevue Avenue to accommodate a separated bike facility. After consultation it was determined that further study would be required to investigate a range of possible design solutions.

TREE PLANTING

Most trees in the Village Centre date back to the planting in the early 1990 and vary in condition. Many of the trees are in poor health or have limited long-term potential. The Streetscape Standards makes recommendations for retention, removal and replacement of trees on a

street-by-street basis and provides general requirements for tree size and planting details. Alternate details are provided for tree planting utilizing structural growing medium or soil cells. Similarly, a range of plant species is proposed for streetscape plantings and rain gardens and typical planting details are provided.

PUBLIC ART

Opportunities for future permanent and temporary public art installations are proposed in the context of current installations and in relation to the proposed festival streets. Recommendations include opportunities for sidewalk motifs that would be inscribed within basalt paving slabs and for larger scaled stand-alone art pieces located in the Festival Streets.

FESTIVAL STREETS + BELLEVUE AVENUE

The Streetscape Standards also includes conceptual designs (see Section 3), as opposed to detailed design standards, for the two proposed festival streets on 14th and 17th Streets.

The Festival Streets are designed to provide much improved pedestrian focused streets that provide more space and a higher quality of finish suitable to accommodate a wide

range of uses such as seating areas, street vendors, performers, markets and festivals. For these events they would be temporarily closed from time to time. The concept designs anticipate complete reconfiguration of the streets between Marine and Bellevue, with a reduction in road width, and increased sidewalk and boulevard areas. The designs assume complete restoration of the streets including sidewalks, boulevards, curbs, road surfacing, tree planting, lighting, custom furnishings and artworks.



STREETSCAPE STANDARDS 2

STREETSCAPE STANDARDS

The following Vision Statement anticipates the future potential of the Ambleside Village Centre and suggests in particular, the role public realm improvements can play in achieving this vision. This anticipated future state cannot be achieved through public realm improvements alone, but they can play a critical role in signalling the District's commitment to set a new direction and to make real improvements in people's daily experience of the Village.

VISION STATEMENT

“Ambleside Village is known as a vibrant, high quality, seaside destination with a rich mixture of arts, cultural and retail amenities. Ambleside provides for all the daily needs of its residents and is a great destination to visit. It is known as one of the few places in the region where, in a short visit, one can enjoy a wide variety of small-scale local stores, cafes and restaurants as well as wonderful beaches, piers, parks and gardens. Businesses in Ambleside thrive and there is strong competition from landowners and retailers to own and operate here.

A visitor to Ambleside will be struck by the way the community celebrates its heritage and its strong connection to the local shoreline. Public art and other interpretive features are evident in the streetscapes as well as being an integral part of public and community buildings and local businesses.

Ambleside has distinctive high quality streetscapes that emphasise the rich cultural heritage of the community. It is known for its broad sidewalks, outdoor seating and lines of trees. It has a strong tradition of community festivals, markets, street vendors and local entertainers. “There’s always something happening at Ambleside.”

Ambleside’s streets are easily distinguished by their consistent sidewalk treatments, unique high quality street furnishings and street tree plantings. Generous sidewalks allow ample room for pedestrians to move alongside outdoor retail displays, café and restaurant seating with good separation from vehicles.

Pedestrians in Ambleside can move around easily and comfortably without encountering awkward or dangerous situations. The intersections have been designed to maximize pedestrian safety. They are shorter in length, paved in high quality materials and properly controlled through signals and signage.

Ambleside’s village character is emphasized by the extensive amount of streetscape planting that focuses on the use of drought tolerant and native plants and a variety of food plants within its streetscape. The natural history of the site, its streams and ecosystems are all recalled and celebrated in a variety of streetscape features.

North Shore recreational cyclists choose Ambleside as one of the best destinations to stop along their route, making purchases in local stores, cafes and restaurants. “



DESIGN PRINCIPLES

The development of the Streetscape Standards for Ambleside Village Centre has been guided by a clear set of Design Principles that have been established to help achieve the Vision Statement for the Village Centre. Design Principles will continue to provide a guiding framework as construction plans for the public realm improvements are developed and implemented over the years ahead.

DISTRICT IDENTITY

The Streetscape Standards will seek to reinforce the unique waterfront identity of the Village within well-defined boundaries. Streetscape designs for each street will be coordinated to create a unified character.

SUCCESSFUL BUSINESSES / MULTI-USE STREETS

Streetscapes will be developed to support successful businesses and allow for a variety of uses such as retail display, outdoor seating, street vendors, festivals, performances, etc.

PEDESTRIAN & TRANSIT FRIENDLY DESTINATION

The public realm design will give priority to the comfort, safety and accessibility of pedestrians, cyclists and transit users over the accommodation and convenience of private vehicles.

WATERFRONT CONNECTION

The public realm design will physically, visually and thematically reinforce the Village's relationship to the waterfront.

CIVIC CONNECTION

The development of 17th Street will reinforce the link between the Municipal Hall Complex and arts and cultural facilities along the waterfront.

CELEBRATION OF ARTS + CULTURE

The Standards will support the incorporation of public art and interpretive features that focus on celebrating Ambleside's cultural heritage.

SUSTAINABILITY

The design, implementation and maintenance of the public realm will be socially, economically and environmentally sustainable.

HIGH QUALITY / LONG LIFE

The Standards will promote design strategies and material choices that will result in easy-to-maintain, durable and high quality streetscapes.

FLEXIBLE IMPLEMENTATION

The Standards will allow for implementation through phased and incremental development.





OPPORTUNITIES + CHALLENGES

With input from the public, stakeholders and staff the following overall opportunities and challenges were identified for the project.

OVERALL OPPORTUNITIES

WATERFRONT ORIENTED VILLAGE

- Establish a coherent and authentic village character that promotes Ambleside Village Centre as a unique waterfront destination with local retailers and cultural attractions as a counterpoint to the ‘franchise’ shopping experience of Park Royal.
- Provide designated sites for existing cultural and community events, which take place in the area, in order to ensure that these on-going gatherings are well supported by infrastructure.
- Reinforce visual and physical connections to the waterfront. Widen north south sidewalks, especially south of Marine Drive and create places to rest and enjoy views.

COHESIVE STREETScape CHARACTER

- Develop a distinctive and unified language of streetscape elements that can be implemented incrementally to strengthen and renew the “village” character.
- Provide new, higher quality, street furniture such as benches, trash cans, bike racks etc.

- Provide a more consistent treatment of high quality sidewalk finishes.
- Update and improve the design of bus stops and shelters.

IMPROVED PEDESTRIAN PRIORITY

- Focus on safety and accessibility for pedestrians, transit users and cyclists with an emphasis on safety for vulnerable users. Adopt improved and consistently used accessibility standards.
- Where possible, create wider sidewalks for better circulation, retail displays, food and beverage seating, street planting etc.
- Where possible, expand sidewalks at street corners to provide more room for waiting and circulation and develop shorter, well-defined crosswalks to reinforce pedestrian priority and improve safety.
- Provide more bike racks and improve safety for cyclists.

FLEXIBLE MULTI-USE STREETS

- Explore potential for flexible plaza space on some streets for a variety of uses such as vendors, markets, festivals, performance etc.
- Emphasize lanes as high quality, safe, pedestrian routes with commercial / retail activity. Retain

this concept as a unique West Vancouver characteristic.

MAJOR DEVELOPMENT SITES

- Work with proponents of current comprehensive development sites to realize implementation of large sections of new streetscape design in the near future.

SUSTAINABLE STREETSAPES

- Where possible, improve and demonstrate environmental sustainability within the Village Centre, such as:
 - » Reduce rainwater run-off from streets and improve run off quality through the use of rain-gardens and infiltration galleries.
 - » Provide improved air quality, shade and habitat through improved tree canopy.
 - » Provide habitat and reduce maintenance through the use of native, drought tolerant tree and plant species within the streetscape.
 - » Where possible, re-use existing materials and source locally available new materials and products.
 - » Improve long-term health and performance of street trees through improved tree planting methods.

OVERALL CHALLENGES

- Increasing retail competition from Park Royal weakens economic viability.
- Aging streetscape infrastructure in need of renewal. Last comprehensive renewal in the late 1980's.
- Lack of streetscape standards has led to inconsistent approaches to repair and replacement resulting gradual erosion of distinct identity.
- No established source of funding for significant streetscape restoration.
- Streetscape renovation mostly reliant on private sector redevelopment.
- Large traffic volumes and parking needs dominate Marine Drive corridor and divide Village Centre.
- Narrow sidewalks in many locations reinforce vehicle priority. Limited room available for retail activity, pedestrian movement or refuge from traffic.
- Variable quality of existing street trees. Many small trees in poor condition except for Marine Drive. No consistent tree-planting theme.
- Limited number of streetscape amenities such as benches and bike racks.
- The south side of Clyde Avenue provides on-street loading and access to rear of Marine Drive businesses.
- Lanes need to accommodate truck access for servicing.



STREETSCAPE STANDARDS

THE INTENT OF THE STANDARDS

The Ambleside Streetscape Standards provide detailed designs that are to be applied to all future renovation, redevelopment and maintenance of the pedestrian realm within the Village Centre. The drawings contained in this report are intended to illustrate the character of each of the proposed design strategies and to provide specific layout, material and product references, and typical dimensioning. Each typical design detail explains the intent of the proposed design strategies and the locations in which each of the details is applicable. It is intended that the Standards be used by District staff, landowners and developers who are responsible for improvements within the road right of way.

The Streetscape Standards focus primarily on the pedestrian public realm, i.e. the streetscape design between the road curb and the property line, or to the building face where buildings are setback. To this end the Standards apply primarily to:

- Sidewalk and boulevard surface treatments
- Street furniture such as benches, chairs, bike racks etc.
- Street planting including trees, boulevard plantings and rain gardens
- Pedestrian focused lighting
- Directional and interpretive signage concepts
- Public art opportunities
- Lane treatments

The Standards have been extended to include curb realignment and limited detailing within the street area including:

- Curb realignment for corner bump-outs and bus bump-outs
- Curb realignment for the proposed Festival Streets
- Curb realignment on Bellevue to facilitate cycling
- Surface finishes for crosswalks
- Roadway finishes for Festival Streets

The Streetscape Standards are not intended to address roadway design or engineering issues such as:

- Road design and street geometrics
- Transportation planning
- Roadway drainage (other than rain gardens)
- Street lighting and signalling
- Regulatory signage and pavement markings
- Pavement construction
- Utilities design

HOW TO USE THE STANDARDS

The following table summarizes the range of design strategies proposed in the Streetscape Standards and identifies which strategies apply to which streets. Users of the standards should first consult the tables to identify the applicable strategies to each location of interest and then refer to the detailed standards developed for each strategy.

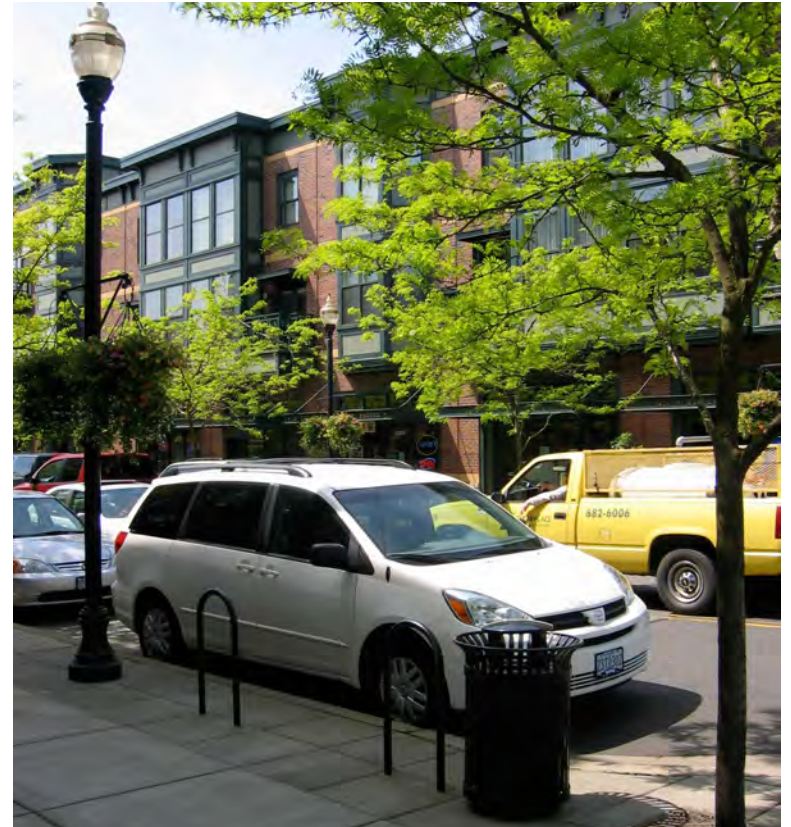


STREET BY STREET SUMMARY OF PROPOSED DESIGN STRATEGIES

PROPOSED DESIGN STRATEGIES	Page #	Marine Drive	Bellevue Avenue	Clyde Avenue	Lanes	13th St. South of Marine	13th St. North of Marine	14th St. South of Marine	14th St. North of Marine	15th St. South of Marine	15th St. North of Marine	
New Concrete Sidewalk	21-23			✓								
New Concrete Sidewalk w. Brick / Basalt Banding	21-23	✓	✓			✓	✓		✓	✓	✓	
Other Sidewalk Treatment	76-79							✓				
Corner Bump-Outs	24-27	✓	✓			✓	✓	✓	✓	✓	✓	where shown on plan
Bus Bump-Outs	28-29	✓										where shown on plan
Street Reconfiguration	66-79							✓				Festival Streets
Unit Paver Road Surface	67, 77		✓	✓	✓			✓				where shown on plan
Decorative Crosswalks	36	✓	✓			✓	✓	✓	✓	✓	✓	
New “Off the Shelf” Street Furniture	37-39	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
New Custom Design Furniture	74-75							✓				
New Domus Street Lighting	40-41	✓			✓	✓	✓		✓	✓	✓	
New Pedestrian Scale Lighting	42-43							✓				
Retain Trees / Infill Tree Planting	46-51	✓	✓	✓		✓	✓		✓	✓	✓	
Tree Removal / Tree Replacement	46-51							✓				
Public Art Sidewalk in Ground Artwork	60-61	✓	✓									between 14th and 17th
Public Art Commissioned Artwork	61-63							✓				
Basalt Street Name Medallions	60-61	✓										

STREET BY STREET SUMMARY OF PROPOSED DESIGN STRATEGIES

PROPOSED DESIGN STRATEGIES	Page #	16th South of Marine	16th North of Marine	17th South of Marine	17th North of Marine to Lane	17th North of Lane	18th South of Marine	18th North of Marine	19th South of Marine	19th North of Marine	
New Concrete Sidewalk	21-23					✓					
New Concrete Sidewalk w. Brick / Basalt Banding	21-23	✓	✓		✓		✓	✓	✓	✓	
Other Sidewalk Treatment	76-79			✓							
Corner Bump-Outs	24-27	✓	✓	✓	✓			✓	✓		where shown on plan
Bus Bump-Outs	28-29										where shown on plan
Street Reconfiguration	66-79			✓							Festival Streets
Unit Paver Road Surface	67, 77			✓							
Decorative Crosswalks	36	✓	✓	✓	✓		✓	✓	✓	✓	
New "Off the Shelf" Street Furniture	37-39	✓	✓	✓	✓	✓	✓	✓	✓	✓	
New Custom Design Furniture	74-75			✓							
New Domus Street Lighting	40-41	✓	✓				✓	✓	✓	✓	
New Pedestrian Scale Lighting	42-43			✓	✓	✓					
Retain Trees / Infill Tree Planting	46-51	✓	✓		✓	✓	✓	✓	✓	✓	
Tree Removal / Tree Replacement	46-51			✓							
Public Art In Ground Artwork	60-61										
Public Art Commissioned Artwork	61-63			✓		✓					
Basalt Street Name Medallions	60-61										



TYPICAL DESIGN STANDARDS

This section of the report provides typical Streetscape Standards that are to be applied to the various locations and conditions that occur within the Ambleside Village Centre. The drawings are intended to illustrate the character of each of the proposed design strategies and to provide specific layout, material and product references, and typical dimensioning. Each typical design detail explains the intent of the proposed design strategies and the locations in which each of the details is applicable.

INTENT

Sidewalks and boulevards are to be improved over time throughout the Village area either as a result of redevelopment of private parcels or through municipally initiated projects.

It is anticipated that sidewalks and boulevards will be renovated or replaced over a long period of time either as a result of redevelopment of private parcels or through municipally funded streetscape projects.

In this scenario, existing sidewalk and boulevard treatments will coexist with new treatments. Accordingly, the design standards propose new sidewalk designs and material finishes that are complementary to the existing conditions.

The existing red bricks are the most visually unique feature of the existing streetscape. While the bricks have been identified as problematic as a sidewalk surface and are limited in terms of ongoing supply, the streetscape standards envision re-using the bricks, in lesser quantities in conjunction with new basalt pavers and cast concrete. This strategy provides visual continuity between the existing and the new surfaces and allows the area of the brick surfacing to be reduced. Where feasible, the existing bricks are to be recycled and re-used.

The following key plan identifies the anticipated extent of renovated /replacement sidewalks and widened sidewalks.



Potential Sidewalk Improvements

- Renovated / Replacement Existing Sidewalks**
- Widened Sidewalk Replacement**
(Possible sidewalk widening due to road refiguration)
- Widened Sidewalk Replacement**
(Possible sidewalk widening due to road reconfiguration and / or building setbacks)

EXISTING SIDEWALK RENOVATION + REPLACEMENT

Where no road reconfiguration or building redevelopment is anticipated, sidewalks and boulevards could be renovated either through complete replacement or through renovation.

Complete replacement is the preferred strategy but where this is not possible, renovation of the boulevard zone achieves the two main objectives with the least disruption and cost, including:

- increasing the effective width of the concrete sidewalk
- partial removal of the red bricks which are perceived to be less accessible for more vulnerable users
- planting of new trees to infill gaps

In the renovation scenario, the existing streetscape would be modified as follows:

- existing concrete sidewalks would be restored by power washing
- the boulevard zone (red brick or other surfaces) would be removed and replaced with new cast in place concrete and a single row or double row of mixed red brick and grey basalt stones forming a curb edge band. Existing bricks may be recycled if feasible
- where necessary to infill gaps or replace weaker trees, new individual street trees would be installed during this renovation process

In the complete replacement scenario the existing streetscape would be modified as follows;

- the existing concrete sidewalk would be removed and replaced with new cast in place concrete
- the boulevard would be renovated as described above

The complete replacement scenario provides greater potential to improve the growing conditions for existing trees and to develop new larger tree pits for new tree planting. With the complete removal of sidewalks, the growing conditions of existing trees can be enhanced by installing soil cells or structural soil adjacent to existing tree pits. This would not be possible in the renovation scenario. For new tree planting, larger tree pits can be developed in conjunction with soil cells or structural soil.

In either scenario the improvements would result in a wider cast in place concrete sidewalk area and the area of red brick would be reduced to an accent band at the curb edge.

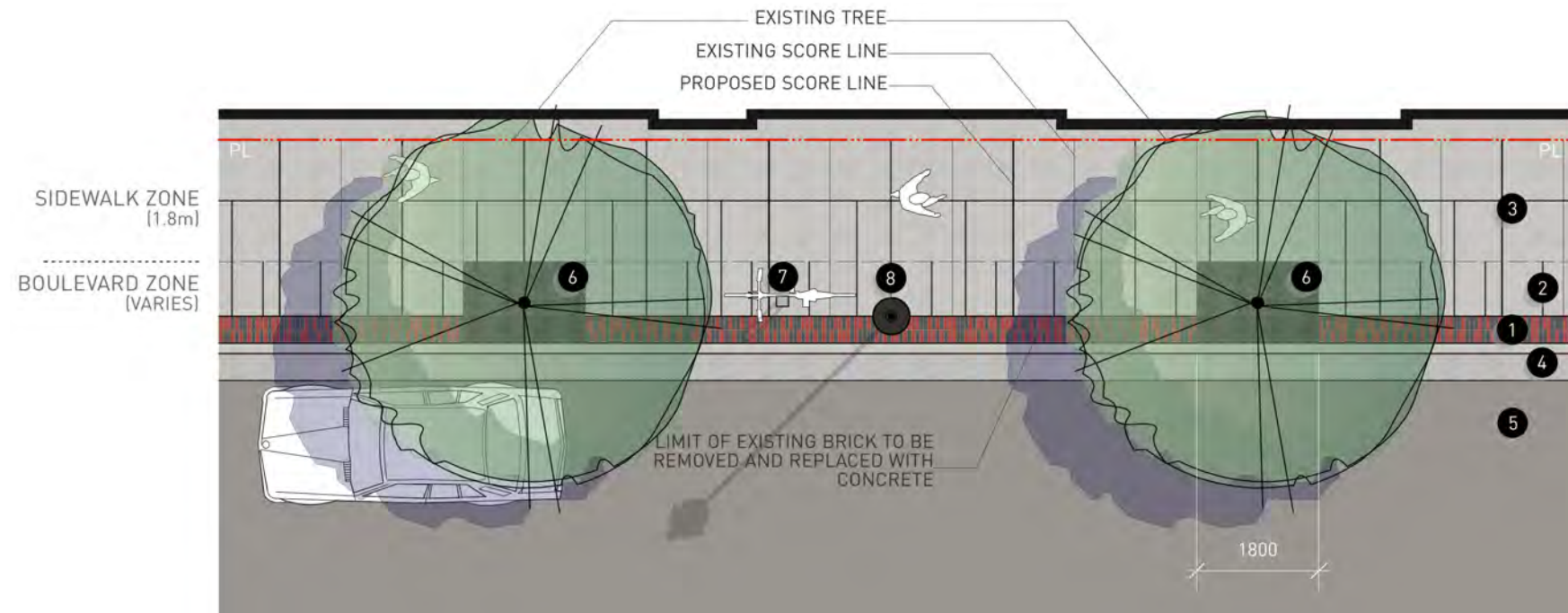
APPLICATION

Applicable to all sidewalk renovation or replacement where no road reconfiguration or development is anticipated, along Marine Drive, Bellevue Avenue and all north-south streets except 17th Street and 14th Street south of Marine Drive.

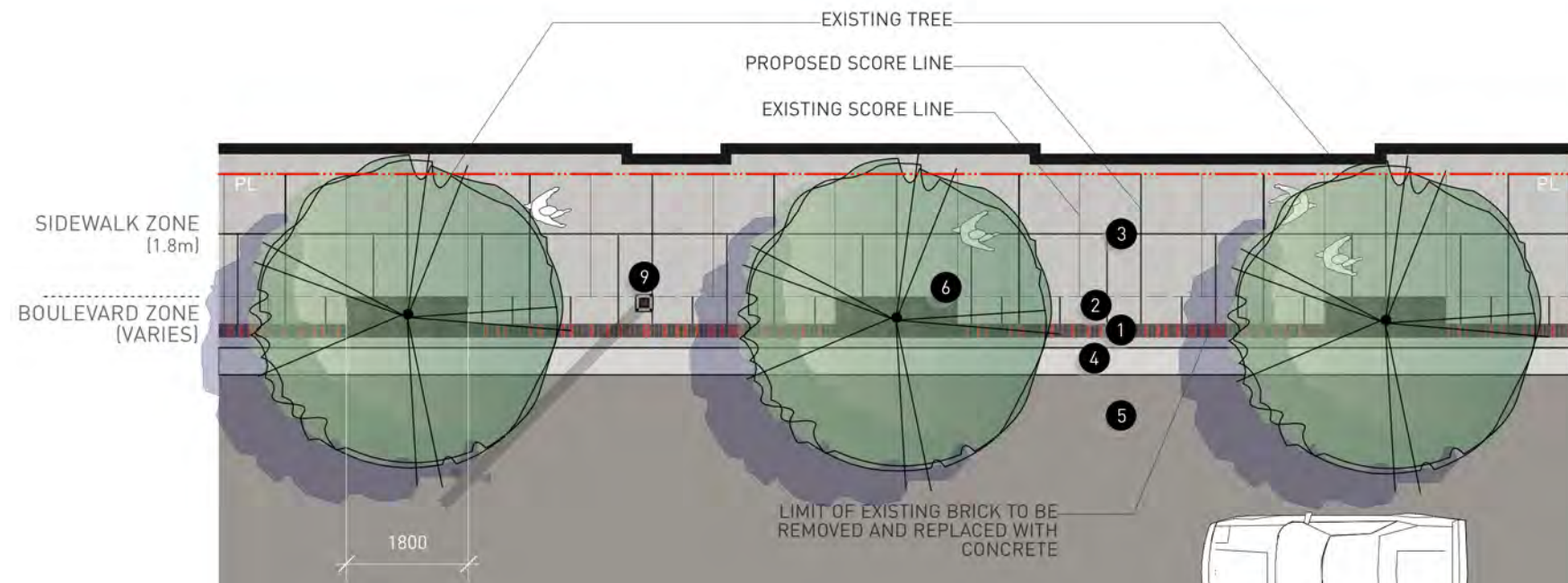
See Strategies Summary Table on pages 13 and 14, and Key Plan on page 17.

- 1 SIDEWALK EDGE BANDING
RECYCLED RED BRICKS AND GREY BASALT PAVERS
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 2 CONCRETE BOULEVARD
CAST IN PLACE SAND BLASTED FINISH CONCRETE
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 3 CONCRETE SIDEWALK
CAST IN PLACE SAND BLASTED FINISH CONCRETE
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 4 EXISTING CURB AND GUTTER
- 5 EXISTING ASPHALT PAVEMENT
- 6 TREE PIT
50mm THICK LAYER CLEAR CRUSHED AGGREGATE FINISH
REFER TO PAGE 53 FOR LAYOUT AND MATERIALS
- 7 PROPOSED BIKE RACK
REFER TO PAGE 38 FOR ADDITIONAL INFO
- 8 TYPICAL EXISTING STREET LIGHT
- 9 PROPOSED STREET LIGHT
REFER TO PAGE 43 FOR ADDITIONAL INFO

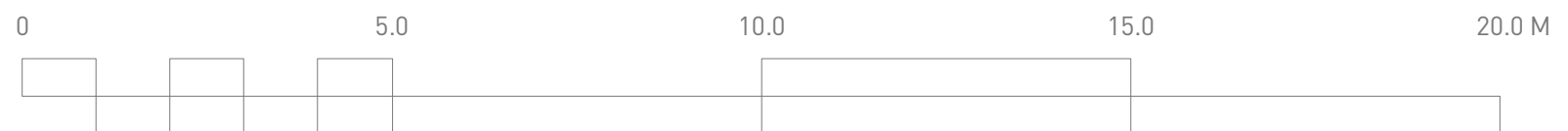
Note: Width of required tree pit is to be evaluated on site and may be wider than shown.



Plan: Typical Existing Sidewalk Renovation or Replacement: Marine Drive



Plan: Typical Existing Sidewalk Renovation or Replacement: North-South Streets





Typical View: Marine Drive Renovation or Replacement



Typical View: North-South Streets Renovation or Replacement

WIDENED SIDEWALK REPLACEMENT

INTENT

Where sidewalks are widened as a result of road reconfiguration or redevelopment of adjoining buildings, sidewalks would be renewed through complete removal and replacement. The new sidewalks configuration will:

- Increase the effective width of the concrete sidewalk
- Reduce the area of red bricks, which are perceived to be less accessible for more vulnerable users
- Provide a new edge band along the back of the curb
- Allow for the development of larger tree pits and rooting zone under adjoining paving
- Provide a new rear boulevard in the set-back zone that accommodates window shopping, food and beverage seating, signage, store displays etc.

In the complete replacement scenario the existing streetscape would be modified as follows;

- the existing concrete sidewalk would also be removed and replaced with new cast in place concrete
- the red brick boulevard zone would be removed and replaced with new cast in place concrete and a single row or double row of mixed red brick and grey basalt stones forming a curb edge band. Existing bricks may be recycled if feasible.
- new street trees would be installed where necessary to infill gaps or replace weaker trees.

- structural soil or soil cells would be installed under new paving around existing tree pits to improve growing conditions.
- a new rear boulevard comprising cast in place concrete and basalt slabs would be added.

This scenario provides greater potential to improve the growing conditions for existing trees and to develop new larger tree pits for new tree planting. With the complete removal of sidewalks, the growing conditions of existing tree can be enhanced by installing soil cells or structural soil adjacent to existing tree pits.

APPLICATION

Applicable to all sidewalk replacement where road reconfiguration and/or building development occurs and buildings are set back to provide a new rear boulevard. This standard applies to Marine Drive, Bellevue Avenue and all north south streets etc. 14th Street and 17 Street.

See Strategies Summary Table of page 13-14 and Key Plan on page 17.

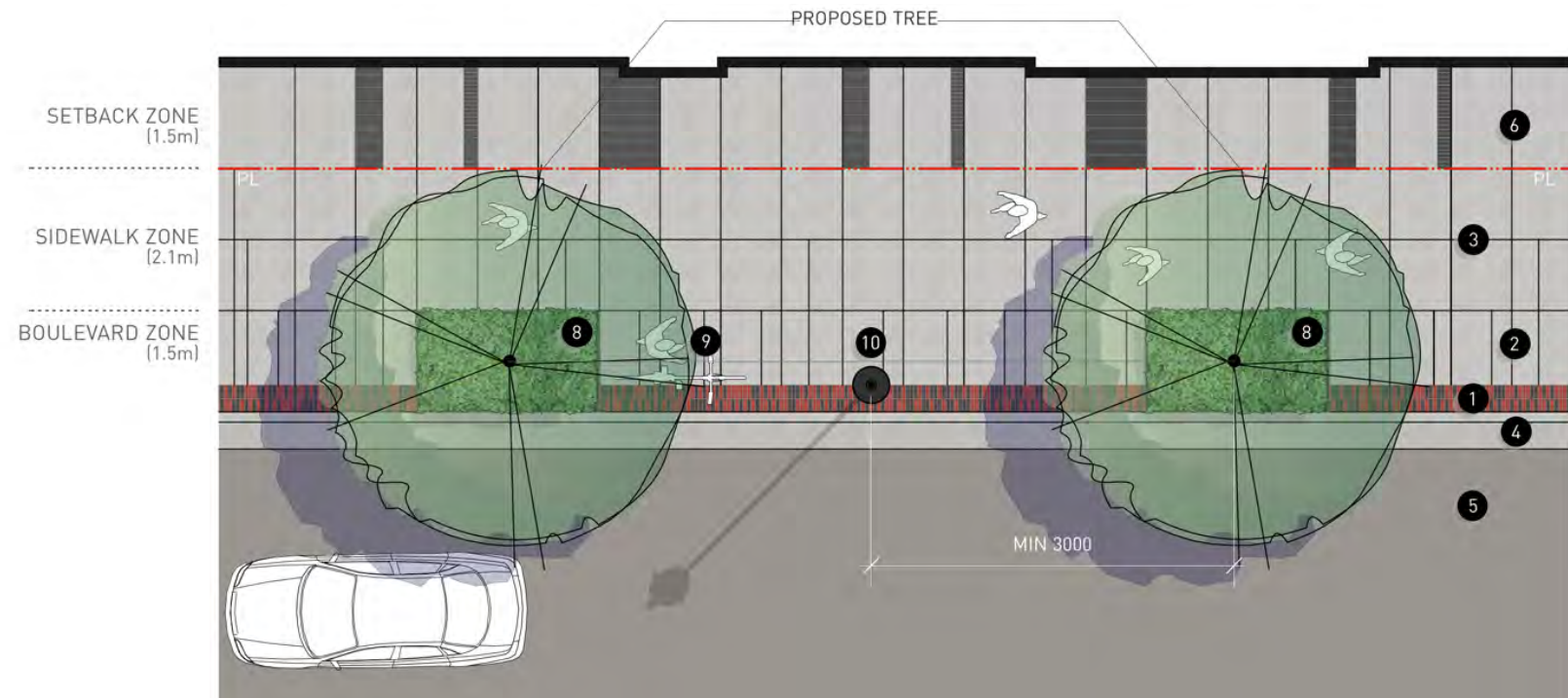
- 1 **SIDEWALK EDGE BANDING**
RECYCLED RED BRICKS AND GREY BASALT PAVERS
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 2 **CONCRETE BOULEVARD**
CAST IN PLACE SAND BLASTED FINISH CONCRETE
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 3 **CONCRETE SIDEWALK**
CAST IN PLACE SAND BLASTED FINISH CONCRETE
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 4 **EXISTING CURB AND GUTTER**
- 5 **EXISTING ASPHALT PAVEMENT**
- 6 **FRONT AND REAR BOULEVARD**
CAST IN PLACE CONCRETE WITH GREY BASALT SLABS
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 7 **TREE PIT**
50mm THICK LAYER CLEAR CRUSHED AGGREGATE FINISH
REFER TO PAGE 53 FOR LAYOUT AND MATERIALS
- 8 **PLANTER TREE PIT**
900mm GROWING MEDIUM
REFER TO PAGE 53 FOR LAYOUT AND MATERIALS
- 9 **PROPOSED BIKE RACK**
REFER TO PAGE 38 FOR ADDITIONAL INFO
- 10 **TYPICAL EXISTING STREET LIGHT**
- 11 **PROPOSED STREET LIGHT**
REFER TO PAGE 43 FOR ADDITIONAL INFO

Note: Exact dimensioning and treatment of new tree pits are dependent on site conditions.

Tree pits are to be planted adjoining sidewalks of 2 m width or more.

Tree pits are to be finished with gravel adjoining sidewalks of less than 2 m width.

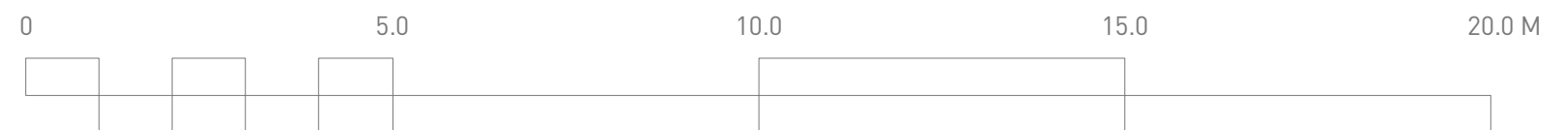
Existing tree grates are to be removed as tree pits surrounds are reconstructed.



Plan: Typical Widened Sidewalk Replacement: Marine Drive | Scale 1:100



Plan: Typical Widened Sidewalk Replacement: North-South Streets | Scale 1:100





Typical View: Marine Drive Widened Sidewalk Replacement



Typical View: North-South Street Widened Sidewalk Replacement

CORNER BUMP-OUTS

INTENT

Where traffic movement and the arrangement of adjoining parcels permit, new street corner bump-outs would be developed to provide a range of benefits aimed at improving the pedestrian environment, including:

- increased room for waiting and circulation
- improved sense of pedestrian safety
- reduced length of crosswalks
- improved connectivity across Marine Drive
- increased opportunity to add streetscape plantings, seating and other streetscape elements

The introduction of corner bump-outs is a cost effective way of providing significant benefits to the pedestrian realm without impacting on-street parking or necessitating renovation of the remainder of the street or intersection.

APPLICATION

New bump-outs are proposed at all street corners along Marine Drive and Bellevue Avenue except in the following situations:

- where a bump-out already exists
- where bus stops occur in which case a bus bump-out would apply

- where conflicts arise with the arrangement and configuration of the adjoining parcel, such as where existing driveways are in conflict
- where conflicts arise with the current road configuration, such as where right turn lanes are in conflict
- where it is deemed impractical due to vehicle turning requirements
- where other circumstances are deemed in conflict

See Plan on page 25 for proposed location.

BUS BUMP-OUTS

INTENT

There are currently 10 bus stops along Marine Drive within the Village Centre Area. Currently bus stops are located on the sidewalk with limited space for waiting and circulation. More recently, new bus shelters have been added at bus stops and competition for space has increased. In some cases navigation of the sidewalks by strollers, wheelchairs and walking devices is very challenging.

In addition to these conditions, Translink are promoting the introduction of bus bump-outs rather than more traditional bus lay-bys to improve priority for transit. With bus bump-outs, buses stop within the curbside travel lane and pull directly forward once loading has been completed. This avoids the need for buses to pull out into busy moving traffic and improves transit efficiency. The pros and cons of bus bump-outs from a traffic

management point of view are beyond the scope of this study.

Bus bump-outs are proposed to significantly increase the pedestrian realm at regular intervals along the street and provide room to accommodate:

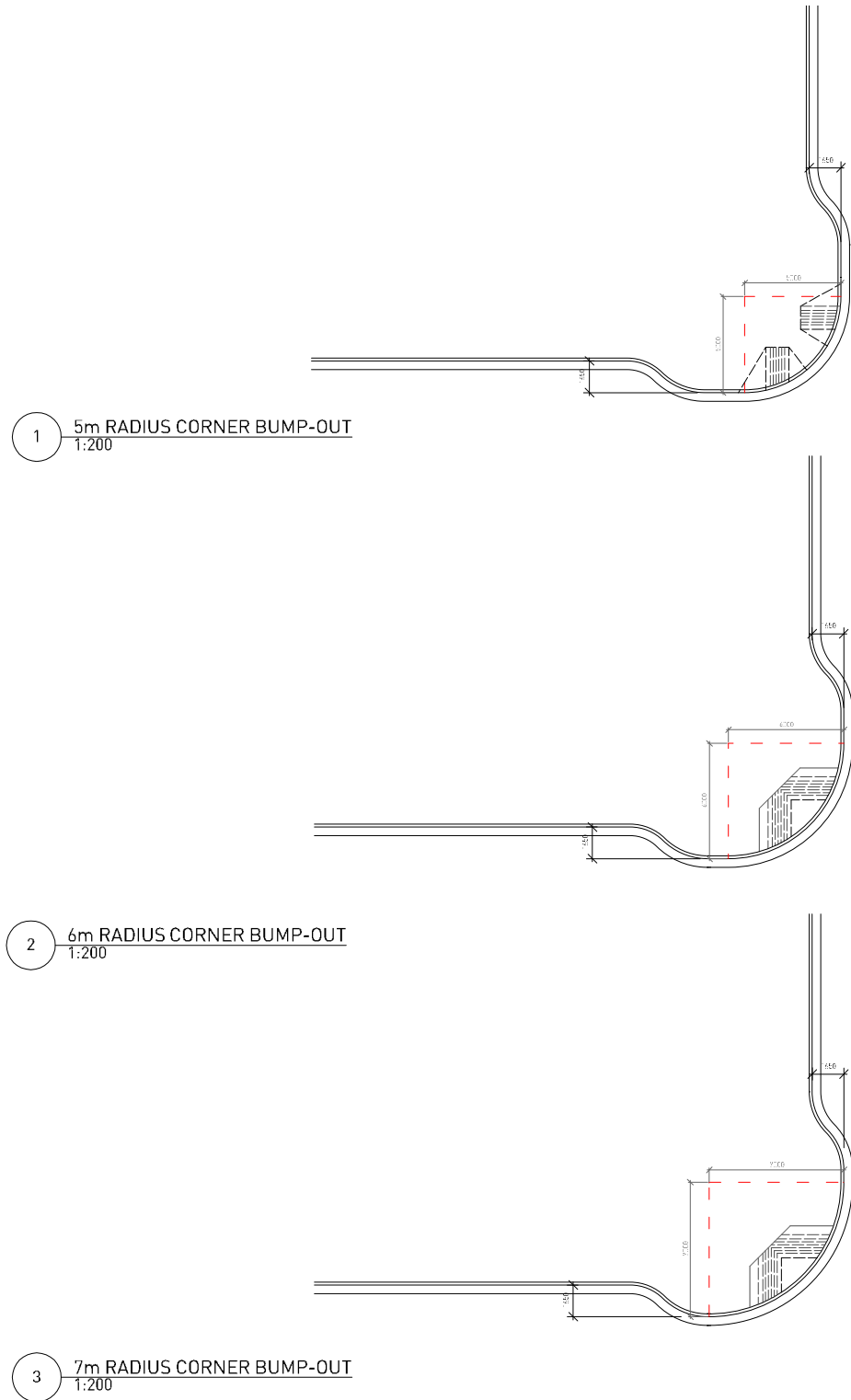
- waiting, loading and unloading for transit users,
- bus shelters,
- social seating areas,
- street furnishings such as garbage/recycling receptacles and signage
- street planting

In addition the added space reduces conflict with pedestrian circulation along the sidewalks and retail activity.

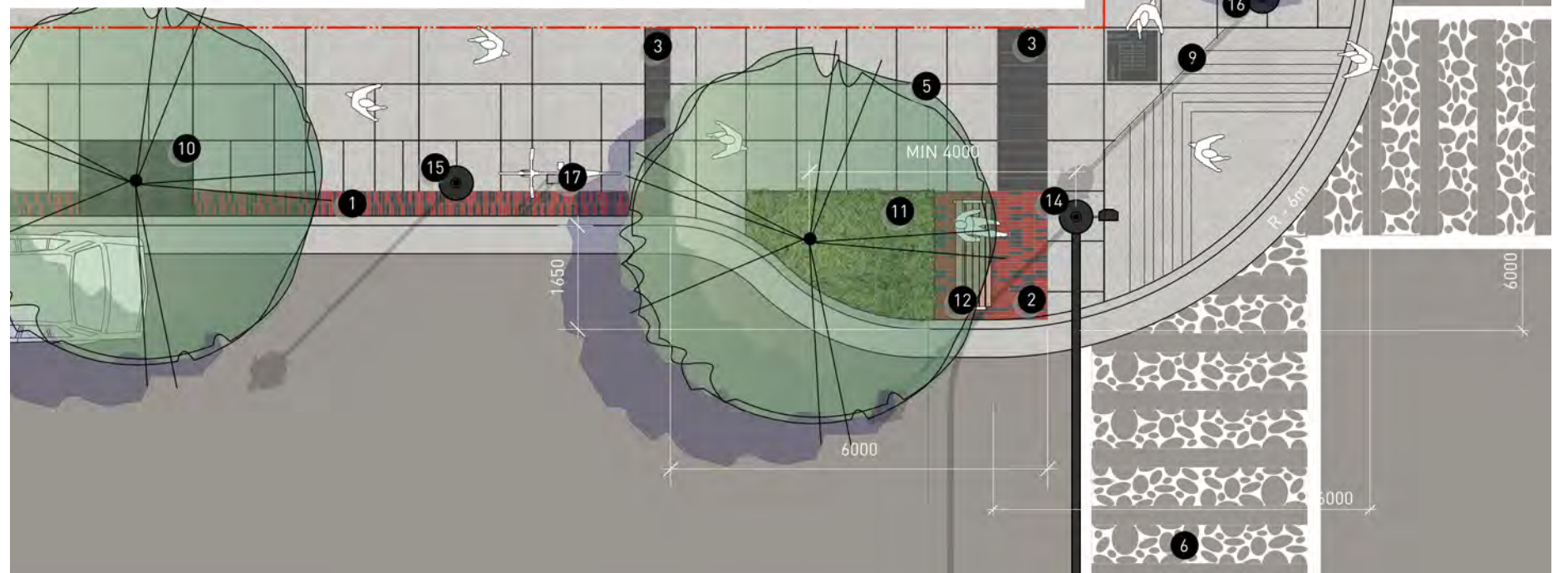
APPLICATION

For all bus stops along Marine Drive, except at 17th Street (west bound), where the bus stop is used as a transit waiting zone. See adjoining plan and Strategies Summary on pages 13 and 14.



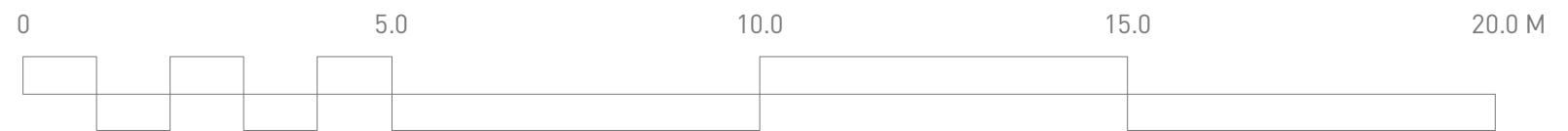


- 1 SIDEWALK EDGE BANDING
RECYCLED RED BRICKS AND GREY BASALT PAVERS
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 2 RED BRICK / BASALT MOSAIC
RECYCLED RED BRICKS AND GREY BASALT PAVERS
RANDOMLY MIXED
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 3 BASALT PAVING BAND
GREY BASALT SLABS
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 4 CONCRETE BOULEVARD
CAST IN PLACE SAND BLASTED FINISH CONCRETE
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 5 CONCRETE SIDEWALK
CAST IN PLACE SAND BLASTED FINISH CONCRETE
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 6 CUSTOM CROSSWALK PATTERN
THERMOPLASTIC CROSSWALK MARKING
REFER TO PAGE 36 FOR LAYOUT AND MATERIALS
- 7 EXISTING CURB AND GUTTER
- 8 EXISTING ASPHALT PAVEMENT
- 9 MEDALLION
GREY BASALT SLABS WITH SANDBLAST STREET NAME
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 10 TREE PIT
50mm THICK LAYER CLEAR CRUSHED AGGREGATE FINISH
REFER TO PAGE 53 FOR LAYOUT AND MATERIALS
- 11 PLANTER TREE PIT
900mm GROWING MEDIUM
REFER TO PAGE 53 FOR LAYOUT AND MATERIALS
- 12 PROPOSED BENCH
REFER TO PAGE 37-38 FOR ADDITIONAL INFO
- 13 PROPOSED CHAIR
REFER TO PAGE 37-38 FOR ADDITIONAL INFO
- 14 TYPICAL EXISTING SIGN POLE
- 15 TYPICAL EXISTING STREET LIGHT
- 16 PROPOSED STREET LIGHT
REFER TO PAGE 43 FOR ADDITIONAL INFO
- 17 PROPOSED BIKE RACK
REFER TO PAGE 38 FOR ADDITIONAL INFO



Plan: Typical Corner Bump-Out | Scale 1:100

*The curb radius for each corner would be determined by technical review of the geometry of each intersection. The anticipated range in curb radius is between 5-7 m

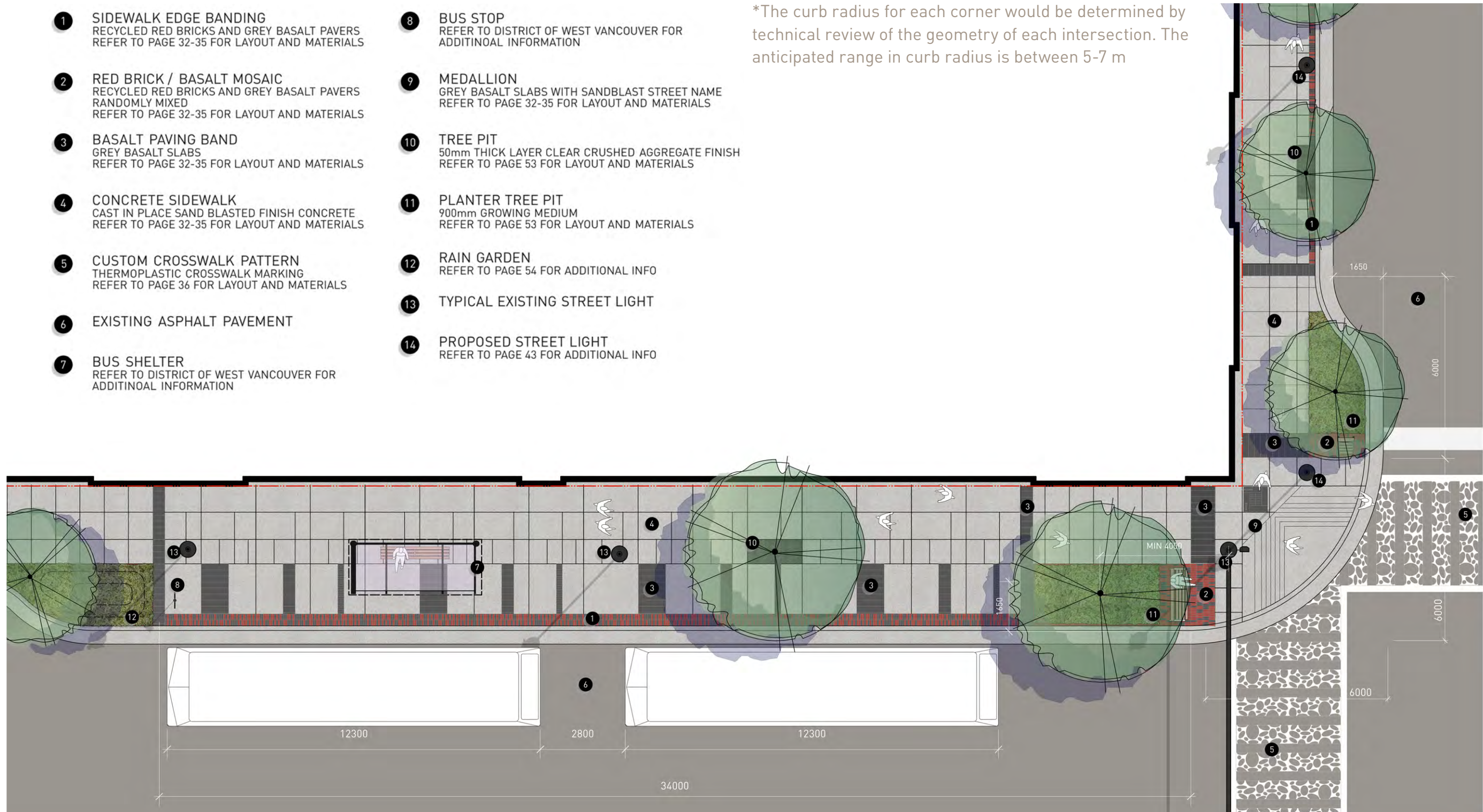




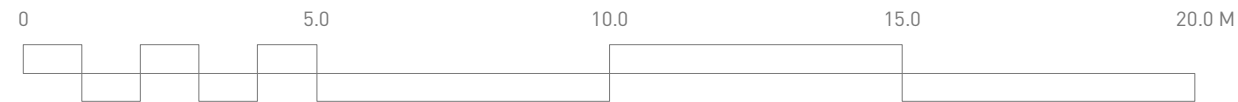
Typical View: Corner Bump-Out

- 1** SIDEWALK EDGE BANDING
RECYCLED RED BRICKS AND GREY BASALT PAVERS
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 2** RED BRICK / BASALT MOSAIC
RECYCLED RED BRICKS AND GREY BASALT PAVERS
RANDOMLY MIXED
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 3** BASALT PAVING BAND
GREY BASALT SLABS
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 4** CONCRETE SIDEWALK
CAST IN PLACE SAND BLASTED FINISH CONCRETE
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 5** CUSTOM CROSSWALK PATTERN
THERMOPLASTIC CROSSWALK MARKING
REFER TO PAGE 36 FOR LAYOUT AND MATERIALS
- 6** EXISTING ASPHALT PAVEMENT
- 7** BUS SHELTER
REFER TO DISTRICT OF WEST VANCOUVER FOR
ADDITIONAL INFORMATION
- 8** BUS STOP
REFER TO DISTRICT OF WEST VANCOUVER FOR
ADDITIONAL INFORMATION
- 9** MEDALLION
GREY BASALT SLABS WITH SANDBLAST STREET NAME
REFER TO PAGE 32-35 FOR LAYOUT AND MATERIALS
- 10** TREE PIT
50mm THICK LAYER CLEAR CRUSHED AGGREGATE FINISH
REFER TO PAGE 53 FOR LAYOUT AND MATERIALS
- 11** PLANTER TREE PIT
900mm GROWING MEDIUM
REFER TO PAGE 53 FOR LAYOUT AND MATERIALS
- 12** RAIN GARDEN
REFER TO PAGE 54 FOR ADDITIONAL INFO
- 13** TYPICAL EXISTING STREET LIGHT
- 14** PROPOSED STREET LIGHT
REFER TO PAGE 43 FOR ADDITIONAL INFO

*The curb radius for each corner would be determined by technical review of the geometry of each intersection. The anticipated range in curb radius is between 5-7 m



Typical Plan: Bus Bump-Out on Marine Drive | Scale 1:150





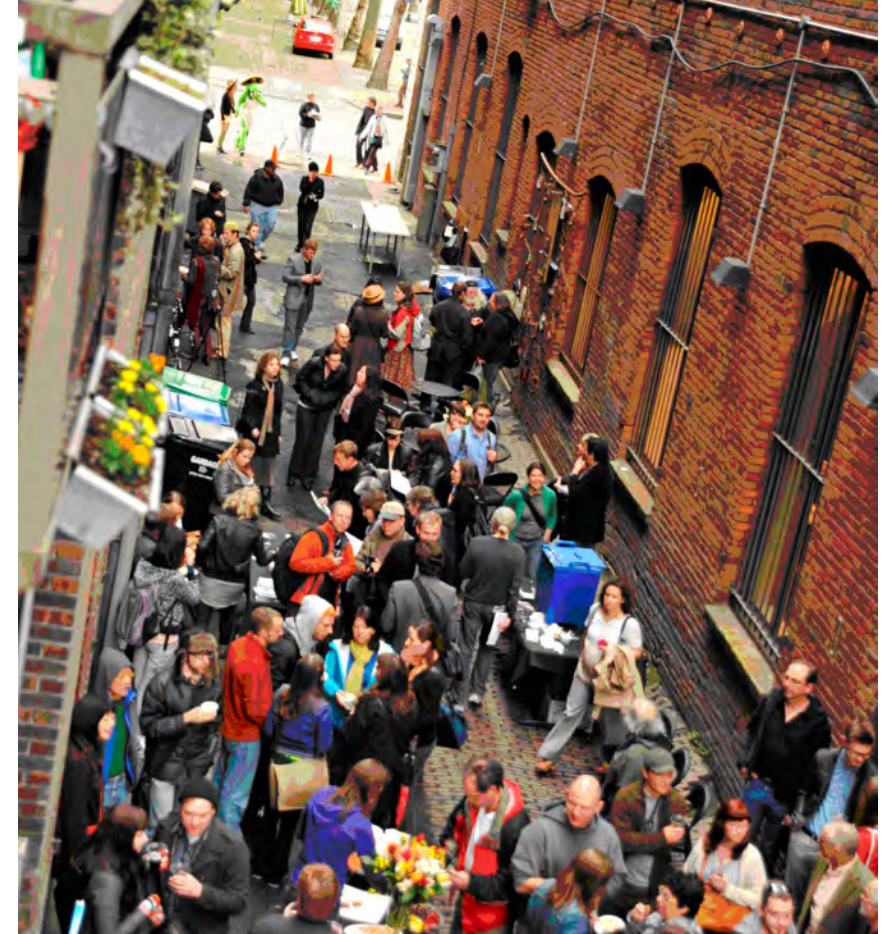
Typical View: Bus Bump-Out

CLYDE AVENUE + LANEWAYS

INTENT

Clyde Avenue and the network of existing paved lanes form an important secondary network of public spaces within the Village Centre. This network of “streets” has the potential to enliven and expand commercial opportunities in the Village Centre and to enhance the character and diversity of the public realm. As “streetscape” works or redevelopment is anticipated, the following guidelines should be accommodated:

- existing concrete unit paving surfaces should be retained / repaired to maintain a higher quality of public realm, encourage slower traffic speeds and reinforce a more pedestrian character.
- opportunities should be taken to improve street lighting through the addition of additional ‘Domus’ lights and / or other lighting located within private properties.
- street trees should be added to Clyde Avenue where opportunities exist. Street trees with high open canopies should be selected to provide more open views to storefronts and signage.
- commercial / retail uses fronting onto lanes should be encouraged.
- development proposals for properties adjoining lanes should be assessed in terms of their impact on the pedestrian experience. Impact from loading operations, parking areas, garbage facilities etc. should be ameliorated.





Map of Existing Lanes and Clyde Avenue

STREETSCAPE ELEMENTS

PAVING MATERIALS

- The streetscape standards propose a palette of paving materials including sand blasted cast-in-place concrete, recycled brick pavers, basalt slabs and pavers and concrete unit pavers. The following pages provide detail information concerning the typical layout and dimensioning of these materials within typical sidewalk conditions, the typical application of each paving material, and details of size, finish and installation.

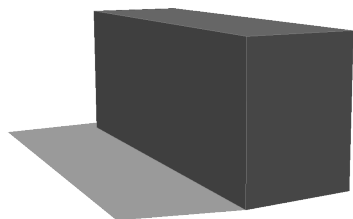
PAVING UNITS



AMBLESIDE RED BRICK

MATERIAL : RED BRICK PAVERS
 DIMENSIONS : 200mm x 60mm x 80mm
 INSTALLATION METHOD : MORTAR BEDDING AND JOINTING
 OVER CAST IN PLACE CONCRETE SLAB

(BRICK PAVERS COULD BE RECYCLED OR NEW
 SUBJECT TO COST AND AVAILABILITY)



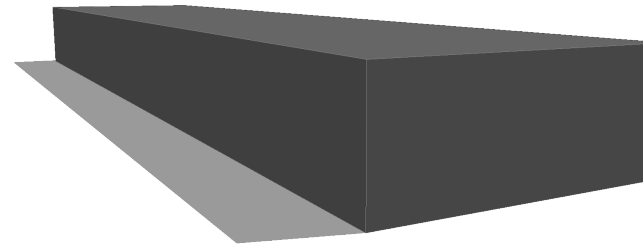
BASALT PAVER TYPE A

MATERIAL : GREY BASALT SLABS
 DIMENSIONS : 200mm x 60mm x 80mm
 INSTALLATION METHOD : MORTAR BEDDING AND JOINTING
 OVER CAST IN PLACE CONCRETE SLAB



BASALT PAVER TYPE B

MATERIAL : GREY BASALT SLABS
 DIMENSIONS : 400mm x 200mm x 80mm
 INSTALLATION METHOD : MORTAR BEDDING AND JOINTING
 OVER CAST IN PLACE CONCRETE SLAB



BASALT PAVER TYPE C

MATERIAL : GREY BASALT SLABS
 DIMENSIONS : 400mm x 900mm x 80mm
 INSTALLATION METHOD : MORTAR BEDDING AND JOINTING
 OVER CAST IN PLACE CONCRETE SLAB



CONCRETE

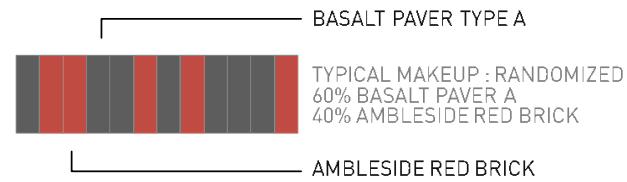
MATERIAL : CAST IN PLACE CONCRETE
 DIMENSIONS : 100mm THICK
 FINISH : SAND BLASTED WITH SAWCUT SCORE LINES
 REFER TO PAGE 58 FOR SAW CUT PATTERN

PAVING APPLICATIONS

SIDEWALK BANDING

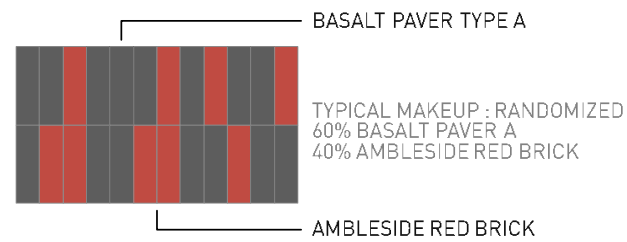
SIDEWALK EDGE BANDING TYPE A

TYPICAL ALONG : NORTH SOUTH STREETS
(13TH - 19TH)
PATTERN : SINGLE SOLDIER COURSE



SIDEWALK EDGE BANDING TYPE B

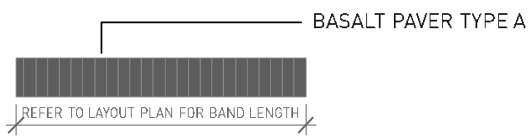
TYPICAL ALONG : MARINE DRIVE,
BELLEVUE AVE
PATTERN : DOUBLE SOLDIER COURSE



BASALT BANDING

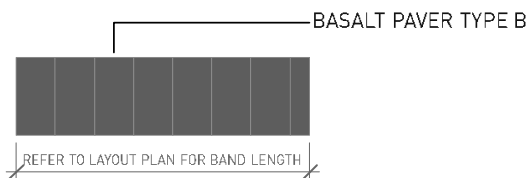
BASALT BANDING TYPE 1

PATTERN : SOLDIER COURSE



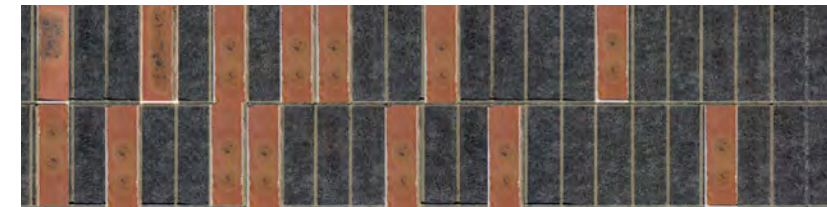
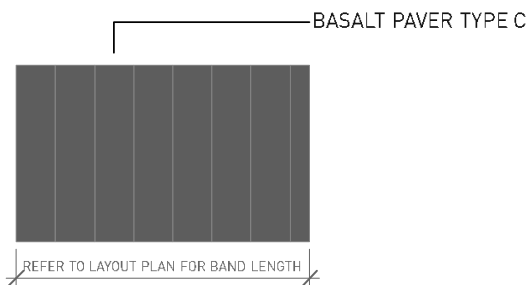
BASALT BANDING TYPE 2

PATTERN : SOLDIER COURSE



BASALT BANDING TYPE 3

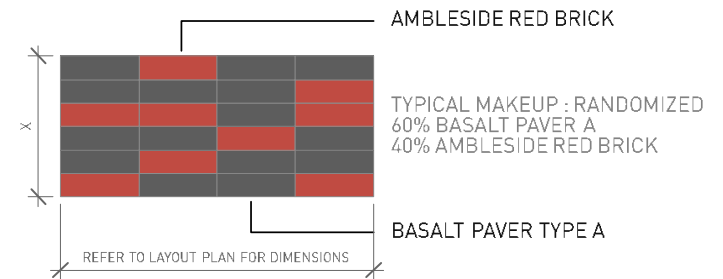
PATTERN : SOLDIER COURSE



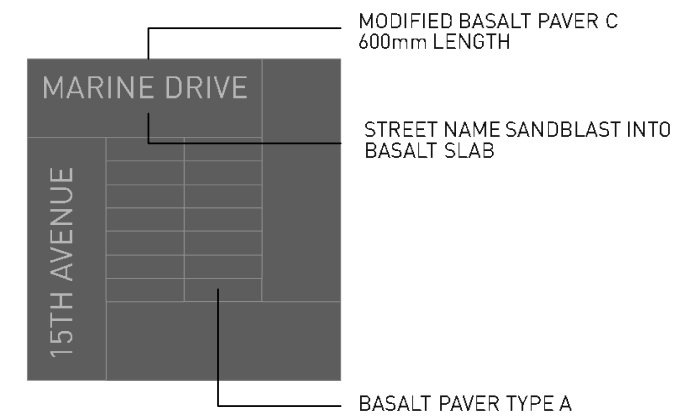
RED BRICK/BASALT MOSAIC (AT CORNERS)

BASALT BANDING TYPE 1

PATTERN : SOLDIER COURSE

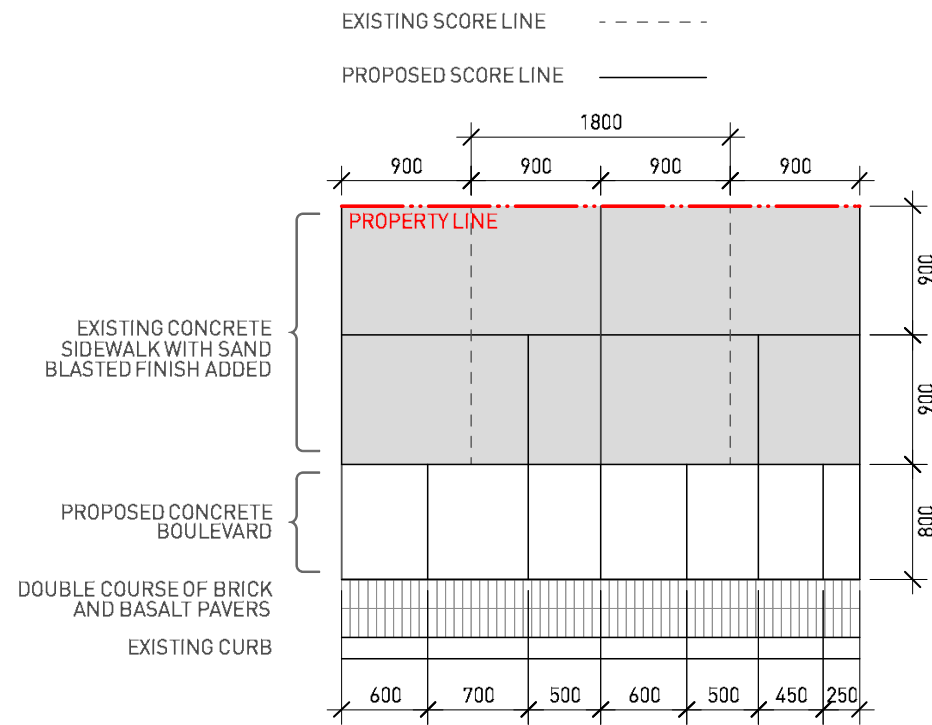


CORNER MEDALLION (STREET NAMES)

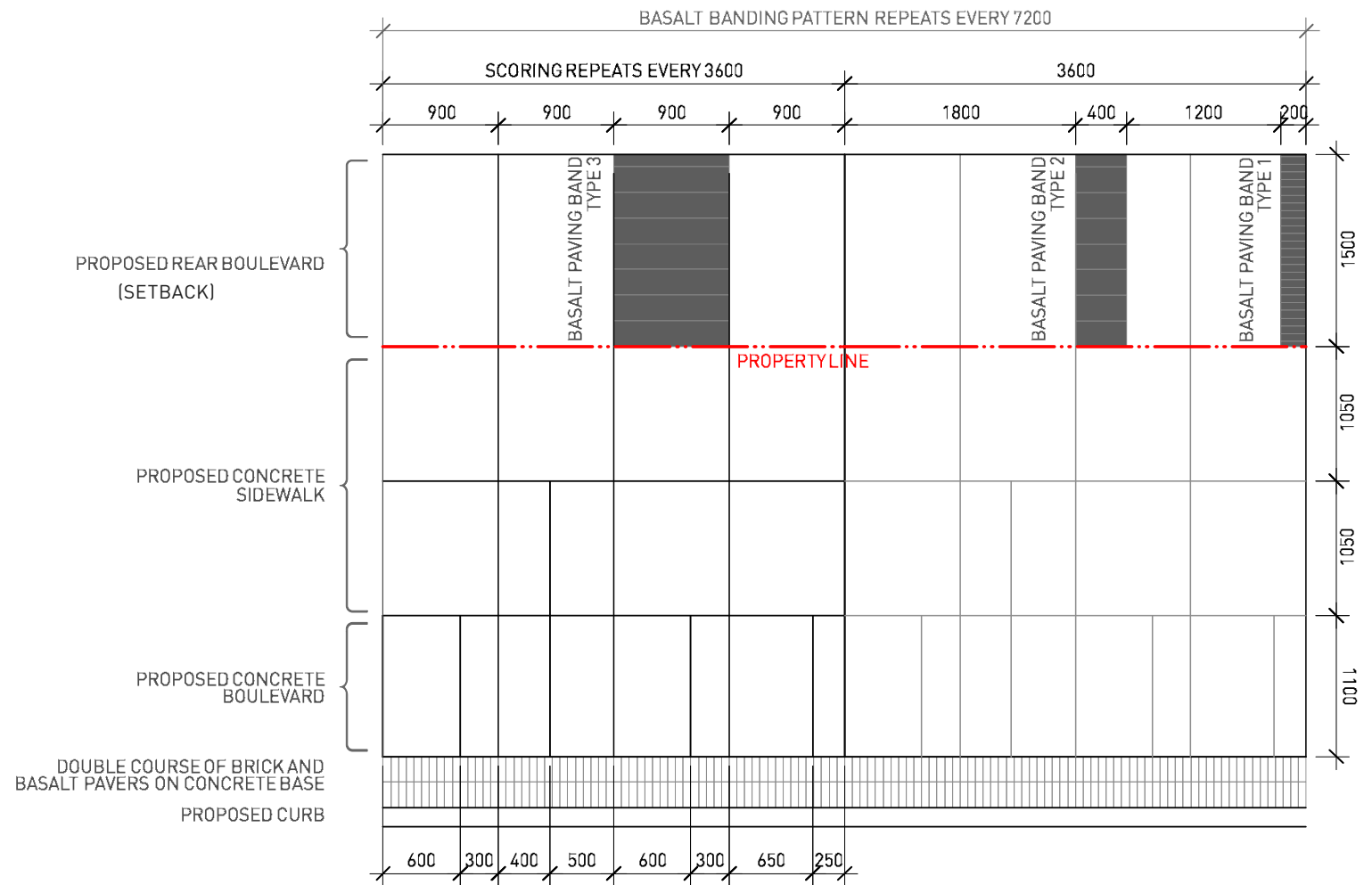


PAVING LAYOUT DETAILS - MARINE DRIVE AND BELLEVUE AVENUE

EXISTING SIDEWALK RENOVATION

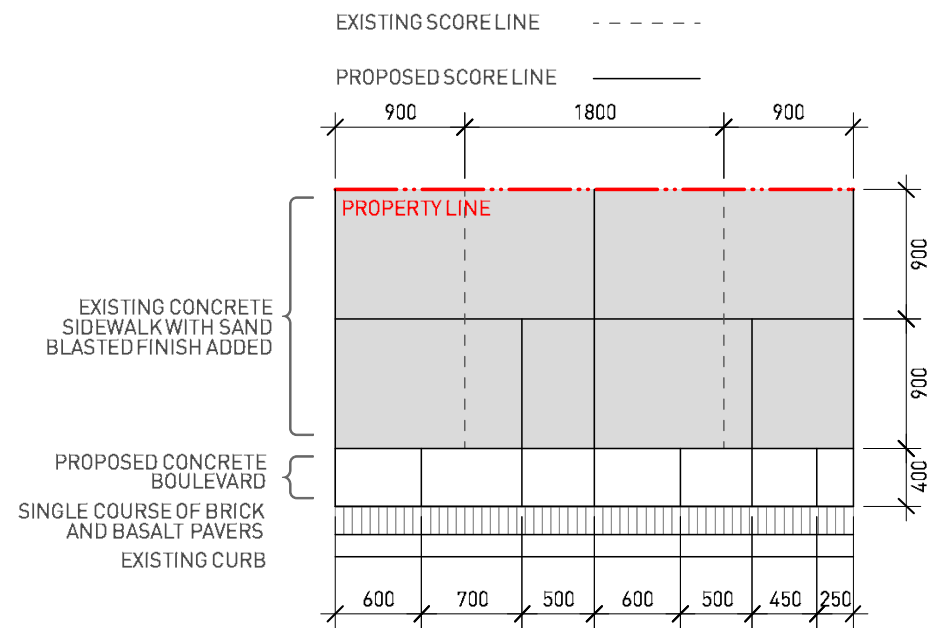


NEW SIDEWALK CONSTRUCTION

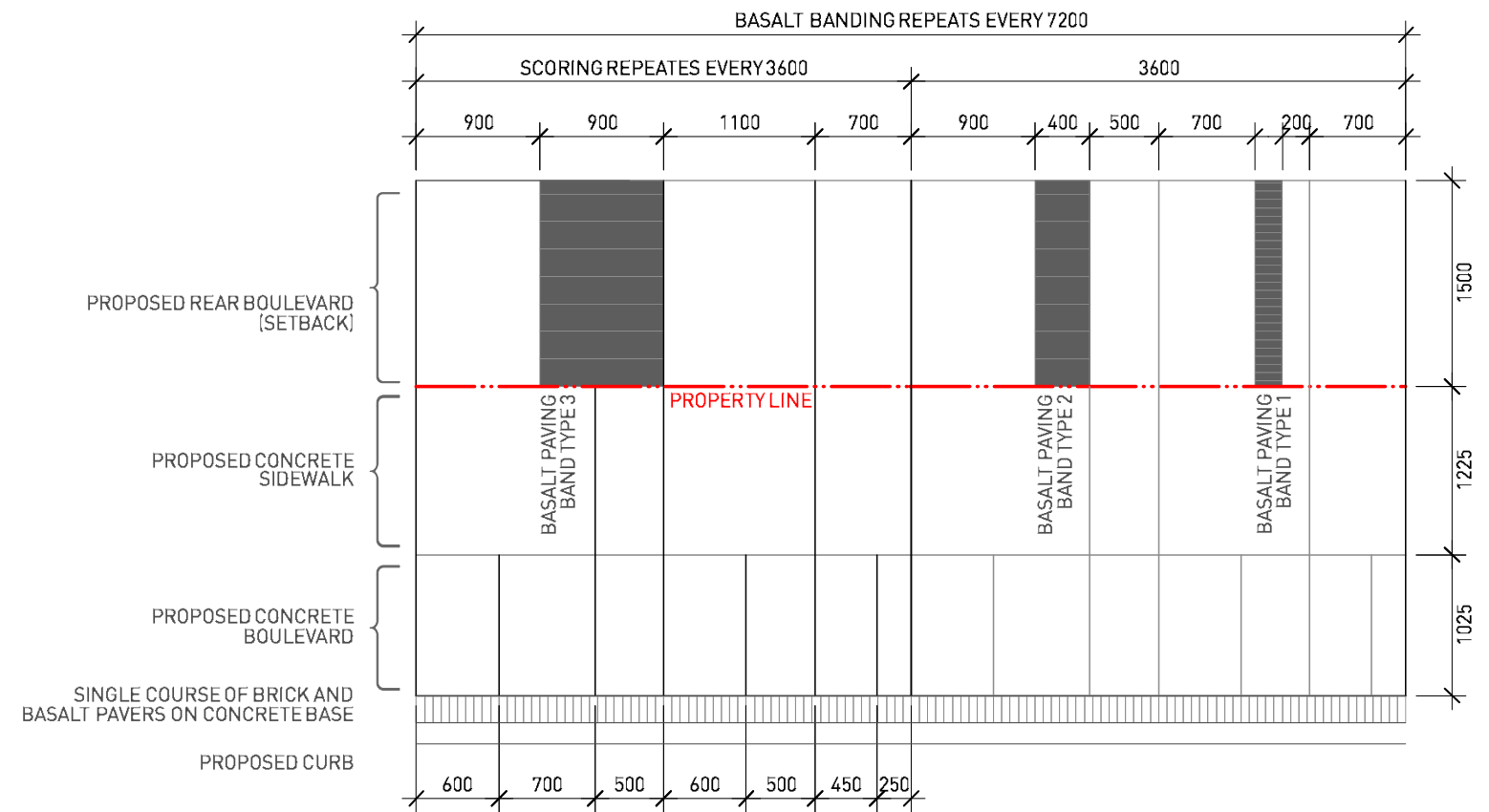


PAVING LAYOUT DETAILS - NORTH SOUTH STREETS SCORING AND LAYOUT

EXISTING SIDEWALK RENOVATION

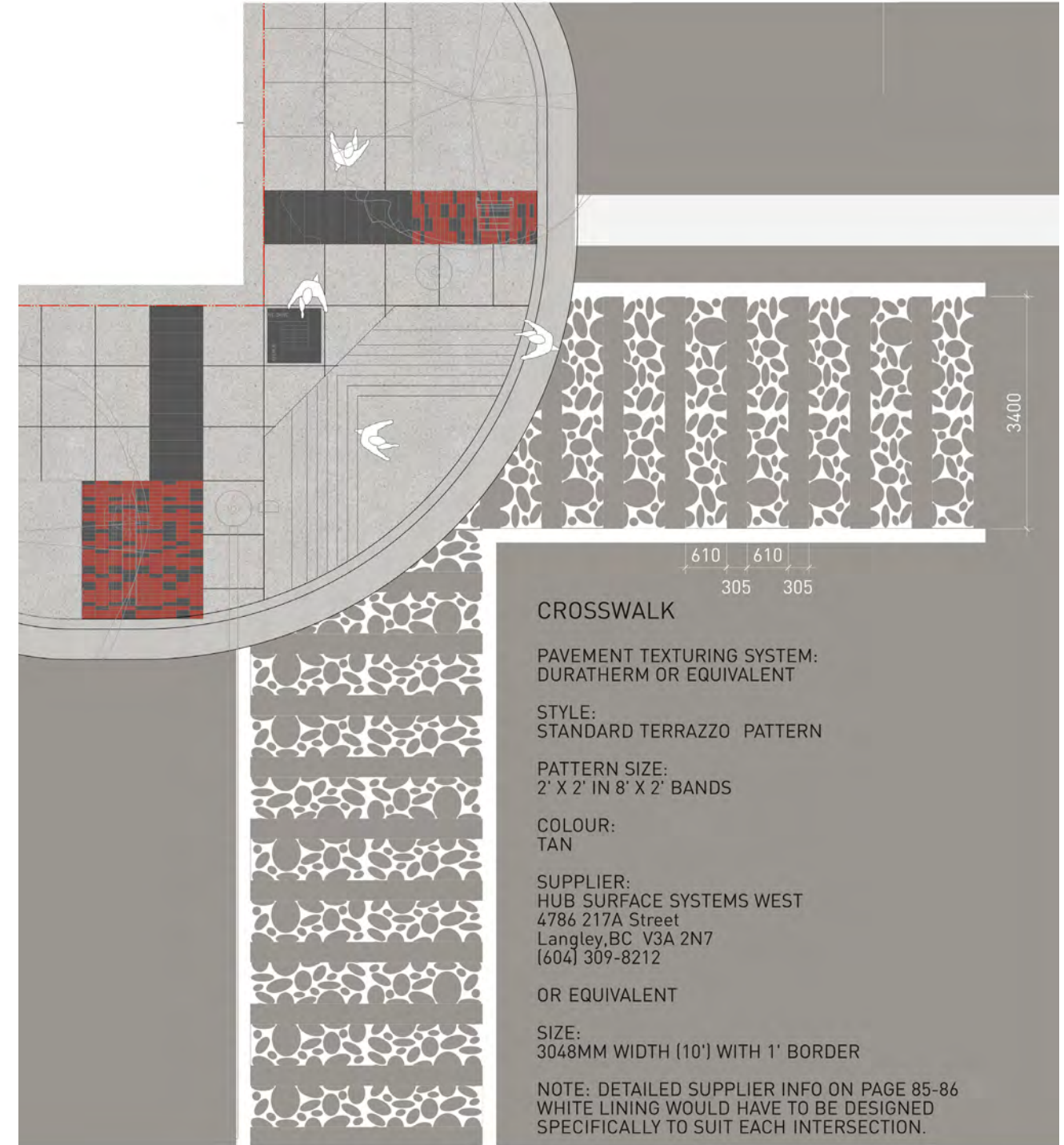


NEW SIDEWALK CONSTRUCTION



CROSSWALKS

- In order to emphasize pedestrian priority it is proposed to mark crosswalks with a custom designed patterning applied to the existing asphalt. The design of the crossing is derived from the shape of cobbles found on the nearby shoreline and is intended to provide a unique design feature within the Village Centre. The design proposed would need to be developed in consultation with a supplier to suit the manufacturing and application process.

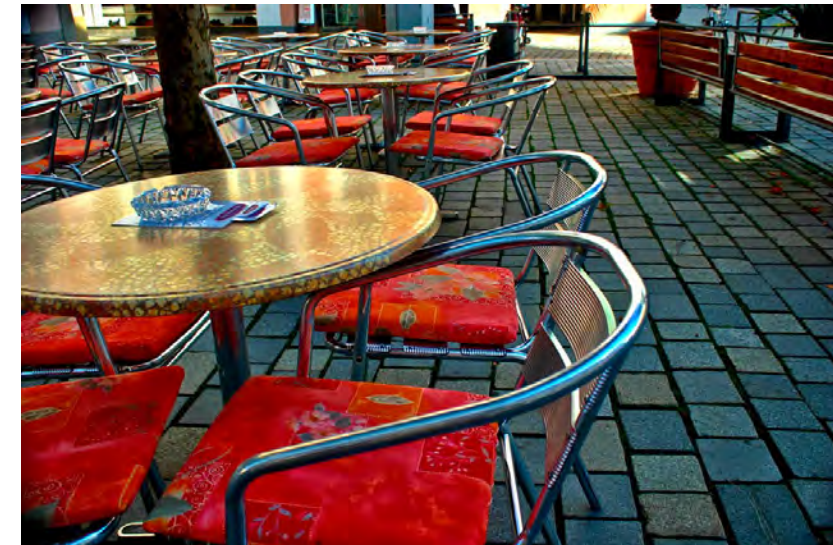


Crosswalk Details

STREET FURNISHINGS

INTENT

The Streetscape Standards propose a new suite of streetscape furnishings to replace the existing furnishings, which were mostly installed in the late 1980's. With the exceptions of a few newer furniture items in some locations, all existing benches, trash cans and bike racks would be replaced as streetscape renovations are completed. High quality durable furnishings are proposed to provide the best value over time and reduced maintenance. In addition to the proposed furnishings, it is proposed that newspaper-vending boxes be removed from the streetscape and local shopkeepers encouraged to dispense papers from stores. This approach would remove the clutter of newspaper vending boxes from the street and increase the number of visits to local stores. Existing bus shelters will also be relocated as required over a period of time as bus bump outs are developed.



BENCH + CHAIR

Seating is to be provided throughout the Village Centre by a combination of proprietary benches and chairs and custom designed seating elements within the Festival Streets on 14th Street and 17 Street. The custom designed furniture is outside of the scope of this study.

The proposed benches and chairs are products supplied by Landscape Forms. Both products utilize cast aluminum and Ipe hardwood providing a very high level of durability. These products have been designed to provide a simple, modern design language combined with the comfort of a traditional timber bench. Benches are proposed with backrests and armrests for comfort in most locations. Backed and backless benches are proposed within the festival streets where there is an opportunity to sit in either direction. Chairs provide the opportunity to locate seating where there is insufficient room for benches. Where possible benches and chairs would be arranged to encourage social interaction. All benches and chairs would be mechanically fastened to the concrete paving.

- Model: Neoliviano with back and armrests
- Mounting: embedded
- Size: 24" for chair and 69" for bench
- Manufacturer: Landscape Forms
- Detailed Cut Sheet Page 82-83

Note: Benches and chairs will be located to allow full access to on-street parking.

TRASH + RECYCLING

New multi-purpose trash receptacles are proposed throughout the Village Centre to accommodate trash collection while providing the potential for recycling of paper, drink cans and bottles. The circular drum form of the selected product is slatted to provide a visual connection to the timber benches and chairs. Trash can would be mechanically fastened to the concrete paving.

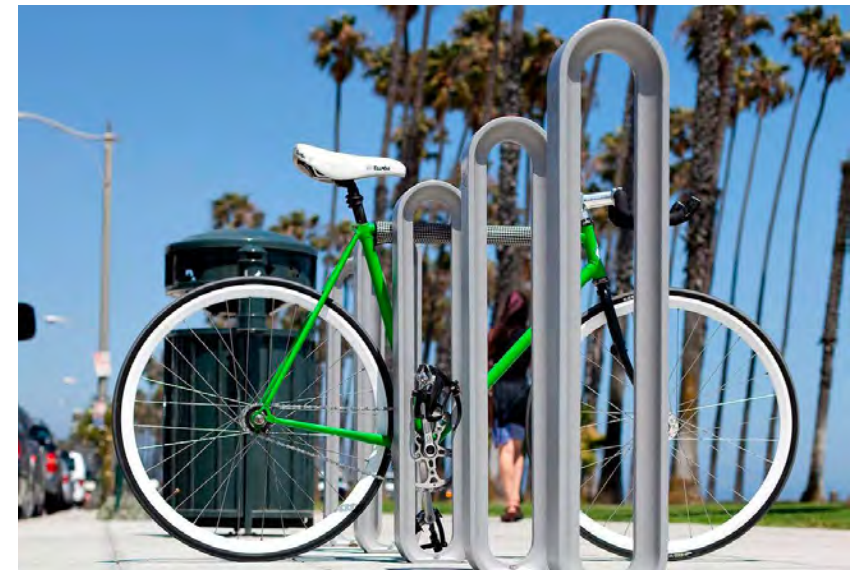
- Model: Dispatch SLDIS 136
- Mounting: surface mount without concrete base
- Size: 36 gallons
- Manufacturer: Forms and Surfaces
- Detailed Cut Sheet Page 90-91



BIKE RACKS

Bike racks are proposed throughout the Village Centre to encourage and accommodate cyclists. The proposed bike rack has been selected to provide a simple modern design element that takes up a minimal amount of space. A plain aluminum finish is proposed to match the proposed benches and chairs.

- Model: Olympia
- Mounting: surface mount
- Size: 178 mm
- Manufacturer: Forms and Surfaces
- Detailed Cut Sheet Page 84



Street Furniture Images

STREET LIGHTING

INTENT

While most of the streetlights in the Village Centre area were comprehensively upgraded in 2009, there are still inconsistencies in the lighting design especially at intersections along Marine Drive and on the north south streets. The Streetscape Standards recommend that further improvements be carried out to achieve the following goals:

- Provide consistency of street light fixtures
- Retain the most recently installed fixtures wherever possible
- Ensure light levels meet required standards for safety
- Aim to use most compatible energy efficient light sources
- Replace older HPS luminaires (yellow light) with newer Metal Halide lights (white light) to match lighting effect with majority of new lighting

The current status of the lighting system can be summarized as follows:

- Marine Drive sidewalks: Newer 15 ft. height pedestrian scaled Domus lights
- Marine Drive Intersections (13th and 19th only): Newer 20ft height Domus lights
- Marine Drive Intersections (14th to 18thth): Older style HPS “cobra-head” lights at signals
- Bellevue and Clyde Avenue sidewalks and intersections: Newer 15 ft. height pedestrian scaled Domus lights

- North South streets (13th to 19th): Minimal lighting north and south of Marine Drive. Individual 15’ height Domus lights are located at lane entrances on some blocks. Occasional older style pedestrian lights remain from previous periods

RECOMMENDATIONS

MARINE DRIVE:

- Replace older “cobra head” lights at intersections along Marine Drive with 20’ height Domus lights to achieve a consistent street lighting theme
- No change to lighting along sidewalks
- Carry out an examination of light levels at Marine Drive intersections and north-south streets.

BELLEVUE AND CLYDE AVENUE:

- No change to existing lighting

NORTH SOUTH STREETS (EXCL. FESTIVAL STREETS):

- Retain Domus lights at lane entrances
- Add additional 15’ high Domus Lights to improve light levels. Locate between every other tree. Spacing subject to more detailed study
- Remove any remaining older style lights

FESTIVAL STREETS 14TH AND 17TH STREETS:

- Add new pedestrian scaled Multi-Woody and coloured Lumendome Lighting System to reinforce connection to the waterfront and the Municipal Hall
- Remove any remaining older style lights or Domus lights



Lighting Strategy

Marine Drive, Bellevue & Clyde Avenue
Existing Domus Lighting System

North-South Streets
Add further 15' high Domus Lights to achieve improved light levels

Festival Streets
Proposed Pedestrian Scale Lighting MultiWoody and Lumendome Lighting System

Laneways
Retain existing Domus lights south of Marine Dr. Encourage Lighting Within Parcels Along Lane Edges.

Marine Drive Intersections
Proposed Domus Lighting (taller fixtures) to Match 13th and 19th Intersections

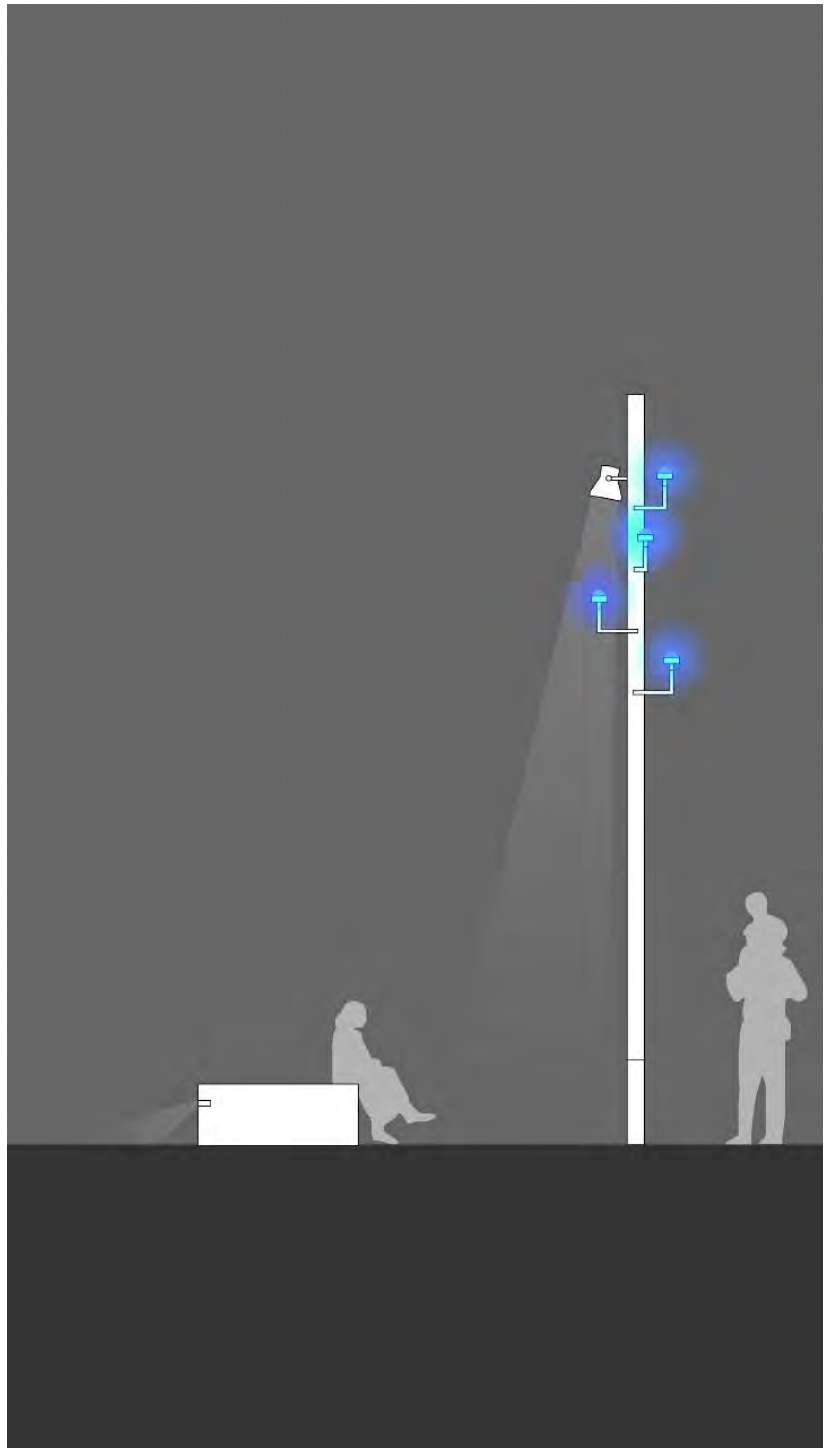
Potential extension of Festival Street
Lighting to Waterfront



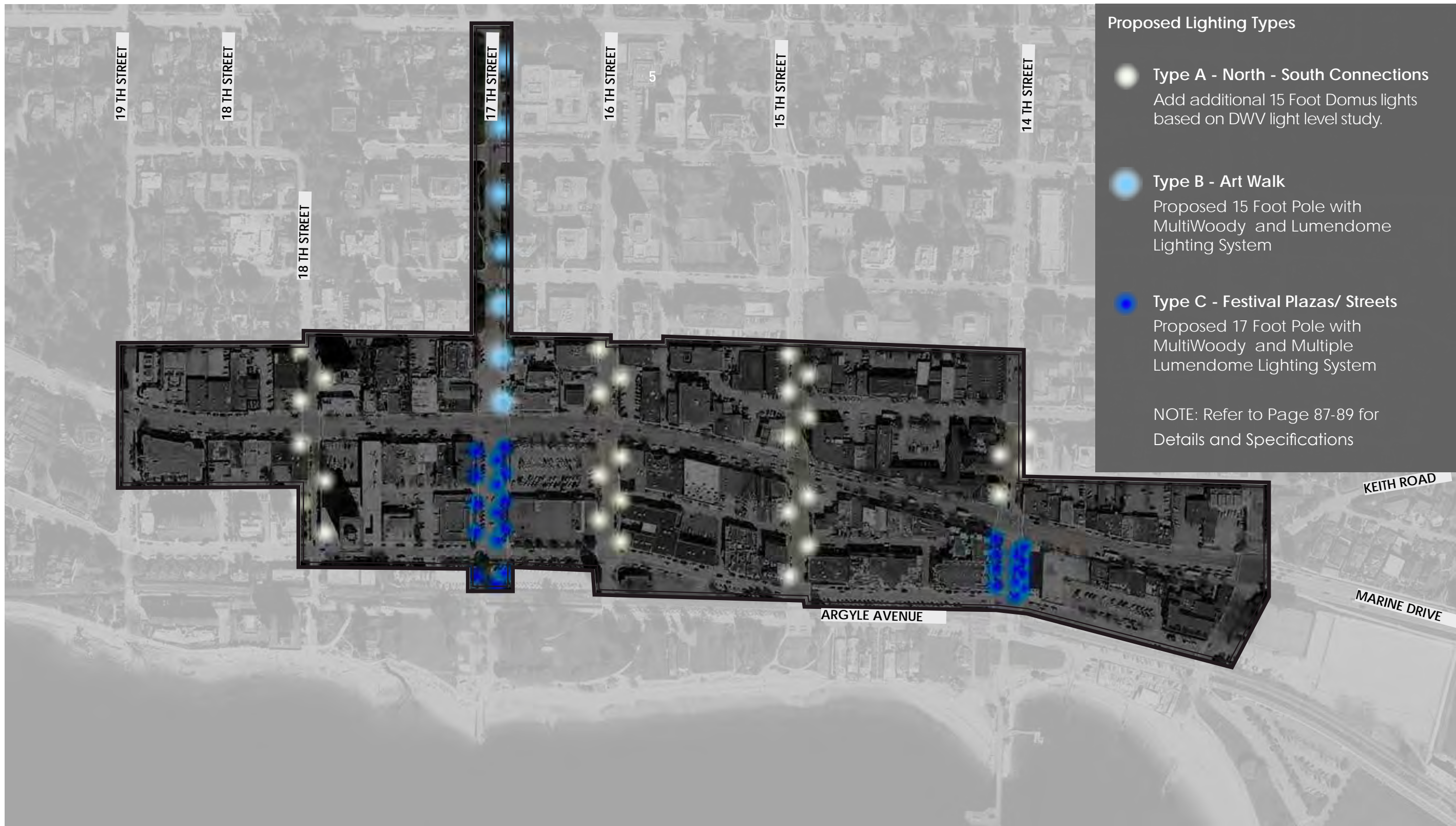
Pedestrian Light - Type A - 15'



Pedestrian Light - Type B - 15'



Pedestrian Light - Type C - 17'





Night View: 14th Street