



Development Permit Panel

Council Chambers, City Hall
6911 No. 3 Road

Wednesday, July 13, 2016
3:30 p.m.

Minutes

Motion to adopt the minutes of the Development Permit Panel meeting held on June 29, 2016.



1. **Development Permit 11-566011**
(REDMS No. 4880630 v. 10)

APPLICANT: Ecowaste Industries Ltd.

PROPERTY LOCATION: 15111 Williams Road and Richmond Key 1095

Director's Recommendations

That a Development Permit be issued which would:

1. *Permit the construction of a 65.22 ha (161.14 acres) Industrial Logistics Park at 15111 Williams Road and Richmond Key 1095 on a site zoned "Industrial (I)" that is adjacent to the Agricultural Land Reserve and several Environmental Sensitive Areas, and*
2. *Vary the provisions of Richmond Zoning Bylaw 8500 to:*
 - (a) *Increase the maximum building height from 12.0 m to 13.0 m and that the building height is to be measured from the finished foundation slab and further to apply the Geological Survey of Canada (GSC) datum shown on the phase block plan attached as "Schedule B" as the maximum elevation limits for the tallest point on each building, and*

ITEM

- (b) *Reduce the minimum number of parking spaces required to 0.56 spaces per 100 m² of gross leasable floor area for those portions of the building used for freight forwarding services or warehouse storage services.*



2. **Development Permit 16-727168**

(REDMS No. 5007440 v. 2)

APPLICANT: Pritam Samra

PROPERTY LOCATION: 7311 No. 5 Road

Director's Recommendations

That a Development Permit be issued which would permit the construction of a single-family dwelling with a detached garage on a site with an Environmentally Sensitive Area designation at 7311 No. 5 Road, on a site zoned Agriculture (AG1).



3. **New Business**

4. **Date of Next Meeting: July 27, 2016**

5. **Adjournment**



**Development Permit Panel
Wednesday, June 29, 2016**

Time: 3:30 p.m.
Place: Council Chambers
Richmond City Hall
Present: Joe Erceg, Chair
John Irving, Director, Engineering
Victor Wei, Director, Transportation

The meeting was called to order at 3:30 p.m.

Minutes

It was moved and seconded

That the minutes of the meeting of the Development Permit Panel held on June 15, 2016, be adopted.

CARRIED

1. Development Permit 15-703204
(File Ref. No.: DP 15-703204) (REDMS No. 5020234)

APPLICANT: Matthew Cheng Architect Inc.

PROPERTY LOCATION: 7751 Heather Street

INTENT OF PERMIT:

1. Permit the construction of five (5) townhouses at 7751 Heather Street on a site zoned "High Density Townhouses (RTH2)"; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to:
 - (a) Allow one (1) of the required resident vehicle parking spaces to be a small parking space.

Development Permit Panel

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Applicant's Comments

Matthew Cheng, Matthew Cheng Architect Inc., provided background information on the proposed development and highlighted the following:

- the proposed 5-unit townhouse development is located on a residual site;
- the architectural form and character of the proposed development complement the surrounding townhouse developments;
- the proposed single vehicle access point to the site is from Turnill Street;
- the applicant is providing a cash-in-lieu contribution for Affordable Housing in keeping with the rezoning requirements;
- eight resident bicycle parking spaces and a bicycle rack for two visitor bicycles are proposed;
- outdoor amenity space is proposed to be located in the north portion of the site;
- a convertible unit and aging-in-place features for townhouse units are provided; and
- the townhouse units are designed to achieve an EnerGuide 82 rating.

Denitsa Dimitrova, PMG Landscape Architects, briefed the Panel on the main landscaping features of the proposed development and noted the following:

- each townhouse unit is provided with a private yard, small patio and shade tree;
- the streetscape is enhanced by a low transparent aluminum fence;
- a six-foot wood fence along the south and west property lines provides privacy to neighbours;
- each townhouse unit is separated by a fence;
- the outdoor amenity space includes a small play area for younger children, a bicycle rack, a bench and mailbox kiosk; and
- permeable paving is introduced at the driveway entrance adjacent to the outdoor amenity space and at the visitor surface parking stall.

Panel Discussion

In response to a query from the Panel, Mr. Cheng confirmed that the proposed small parking space in the garage of the southwest unit, which is subject to a variance request, is larger than a small car parking space, but approximately a foot short of the required length of a standard indoor parking space.

In response to a query from the Panel, Ms. Dimitrova stated that (i) the proposed outdoor amenity space is separated from the concrete sidewalk on the north by a 42-inch tall transparent fence and planting strip and (ii) the applicant will consider the suggestion to introduce permeable pavers adjacent to the visitor parking space to provide an end treatment to the internal drive aisle.

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Staff Comments

Wayne Craig, Director, Development, advised that (i) there will be off-site frontage improvements associated with the proposed development through City Work Order, and (ii) two existing boulevard trees will be relocated within the boulevard.

In response to queries from the Panel, Mr. Craig confirmed that (i) the density of the proposed development is consistent with the Zoning Bylaw and (ii) the applicant is providing a cash-in-lieu contribution to the City's Affordable Housing Reserve Fund.

Correspondence

Anonymous Residents, 28-7733 Heather St. (Schedule 1)

Mr. Craig stated that the unnamed occupants of the subject residential unit expressed concern regarding the rezoning of the subject site due to insufficiency of parking in the area.

In response to a query from the Panel, Mr. Craig confirmed that the proposed development complies with the Zoning Bylaw's parking requirement, except for the requested variance to the size of one required resident vehicle parking space.

Gallery Comments

None.

Panel Decision

It was moved and seconded

That a Development Permit be issued which would:

1. *Permit the construction of five (5) townhouses at 7751 Heather Street on a site zoned "High Density Townhouses (RTH2)"; and*
2. *Vary the provisions of Richmond Zoning Bylaw 8500 to:*
 - (a) *Allow one (1) of the required resident vehicle parking spaces to be a small parking space.*

CARRIED

2. Development Permit 15-716268

(File Ref. No.: 15-716268)(REDMS No. 5036252 v. 3)

APPLICANT: Oris Developments (Hamilton) Corp.

PROPERTY LOCATION: 23241, 23281 and part of 23301 Gilley Road, and part of 23060 and 23000 Westminster Highway

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INTENT OF PERMIT:

1. Permit the construction of a 69-unit mixed use building on 23241, 23281 and part of 23301 Gilley Road, and part of 23060 and 23000 Westminster Highway on a site zoned "Residential/Limited Commercial (ZMU29) – Neighbourhood Village Centre (Hamilton)"; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to relax the requirement for one (1) on-site, medium size loading space.

Applicant's Comments

Dana Westermarck, Oris Consulting Ltd., provided background information on Oris' Parcels 2 and 3 project, noting that (i) three affordable housing units will be provided in lieu of the affordable housing cash contributions for both Parcels 2 and 3, (ii) a geo-exchange system will be introduced for heating, cooling and recirculation of waste energy in the two buildings in Parcels 2 and 3, (iii) the shared partially below-grade parkade for Parcels 2 and 3 will be accessed from the north side of Parcel 3 off the future New Road, (iv) the interim New Road will extend eastward and ultimately connect to Smith Crescent, and (v) Gilley Road will be raised by up to 8 feet.

Keith Hemphill, Rositch Hemphill Architects, with the aid of a visual presentation (attached to and forming part of these Minutes as Schedule 2), provided an overview of Parcels 2 and 3 and highlighted the following:

- raising the habitable space for the proposed development to a new floodplain level resulted in interim and future conditions and challenges in the project;
- proposed parkades for Parcels 2 and 3 are partially below-grade and will be connected;
- the loading space and fire access are temporarily located on Gilley Road but the loading space will be relocated as part of future developments;
- Gilley Road will be reconstructed to create a High Street with retail spaces facing the road;
- high quality materials will be used for the two buildings in Parcels 2 and 3 which are differentiated through the use of different colours and types of building materials;
- a 2.5-meter grade change at the corner of Gilley Road and Westminster Highway has been addressed through appropriate architectural and landscaping treatments;
- the entrance to the shared underground parkade, vehicle drop-off and pick-up area for residents and loading are proposed to be provided on the north elevation of Parcel 3 which is facing the future New Road; and
- the proposed north-south greenway at the eastern side of the subject site provides a significant pedestrian link within the project.

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Doug Shearer, Hapa Collaborative, noted the main landscaping features for Parcels 2 and 3 and stated the following:

- the landscape design rationale for Parcels 2 and 3 is to revitalize the Hamilton Area and create a vibrant and accessible landscape;
- the two buildings in Parcels 2 and 3 enclose a landscaped central courtyard with shared uses for both parcels and specific uses for each parcel;
- the publicly accessible north-south greenway and the semi-private east-west pathway between the two parcels enhance pedestrian connectivity within the project;
- the proposed landscaping defines the public, semi-private and private spaces in the project;
- Parcels 2 and 3 provide opportunities for residents to gather, play and socialize;
- wide and heavily landscaped terraces provide a buffer to Westminster Highway and an attractive transition to the adjacent streetscape;
- proposed landscaping for Gilley Road High Street includes feature paving and planting of new street trees;
- the High Street Plaza at the southwest corner of Parcel 2 is a place where people could gather and socialize and connects Gilley Road to the north-south greenway;
- a variety of conditions along Westminster Highway provide diversity on the west elevation of the project;
- a secure walkway on the west side of the building in Parcel 3 is provided as an amenity for residents; and
- amenities in the south courtyard for Parcel 3 include, among others, community garden plots, garden shed, seating benches, a gazebo, and a separate private area dedicated for memory ward residents.

Panel Discussion

In response to a query from the Panel, Mr. Hemphill advised that a transparent partition will separate commercial parking from residential parking in the underground parkade.

In response to a query from the Panel, Mr. Westermarck stated that in order to focus the residents' attention to the various program elements in the internal courtyard, a soft building backdrop would be appropriate, thus the red vertical columns found in other elevations need not be integrated in the building façade facing the courtyard.

In response to a query from the Panel, Mr. Westermarck confirmed that a person in wheelchair coming from Westminster Highway can access the internal courtyard through the residential component in Parcel 2 and the accessible building entry in Parcel 3.

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In response to a query from the Panel, Mr. Hemphill and Mr. Westermarck noted that (i) the underground parkade, being a non-habitable space, has a lower floodplain level and (ii) the proposed design of the parkade will minimize damage to the parkade structure in the event of flooding.

In response to a query from the Panel, Mr. Westermarck advised that (i) a future increase in the elevation of Westminster Highway will benefit the project as it will reduce the grade change between the podium level and the sidewalk, and (ii) a five-foot increase in the elevation of Westminster Highway will not adversely impact the parkade wall structure.

In response to a query from the Panel, Mr. Hemphill commented that the shadow analysis reveal that the proposed location of the community garden plots will receive adequate sun exposure.

Staff Comments

Mr. Craig noted that (i) Parcel 2 provides 41 Basic Universal Housing units, and (ii) the three variances requested for Parcel 3 are related to the proposed increase in the permitted height and projection of an architectural feature to add visual interest to the building and reduction of the south interior side yard setback for a garden shed located in close proximity to the shared property line between the two projects.

Panel Discussion

The Chair commended the applicant for the hard work done on the project and for successfully addressing the challenging condition at Westminster Highway.

Correspondence

None.

Gallery Comments

None.

Panel Decision

It was moved and seconded

That a Development Permit be issued which would:

- 1. Permit the construction of a 69-unit mixed use building on 23241, 23281 and part of 23301 Gilley Road, and part of 23060 and 23000 Westminster Highway on a site zoned "Residential/Limited Commercial (ZMU29) – Neighbourhood Village Centre (Hamilton)"; and*
- 2. Vary the provisions of Richmond Zoning Bylaw 8500 to relax the requirement for one (1) on-site, medium size loading space.*

CARRIED

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3. Development Permit 15-716274

(File Ref. No.: DV 15-716274)(REDMS No. 5024605 v. 2)

APPLICANT: Oris Developments (Hamilton) Corp.

PROPERTY LOCATION: Parts of 23241 and 23281 Gilley Road, and part of 23060, 23066, 23080, and part of 23100 Westminster Highway

INTENT OF PERMIT:

1. Permit the construction of a 130-unit seniors housing building on parts of 23241 and 23281 Gilley Road, and part of 23060, 23066, 23080, and part of 23100 Westminster Highway on a site zoned "Low Rise Apartment (ZLR27) – Neighbourhood Village Centre (Hamilton)"; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to:
 - (a) Increase the maximum permitted height from 17.0 m (55.77 ft.) to 17.6 m (57.77 ft.) for an architectural feature on the north elevation of the building;
 - (b) Increase the maximum permitted projection into the north setback from 0.60 m (2.0 ft.) to 1.07 m (3.5 ft.) for an architectural feature on the north elevation of the building; and
 - (c) Reduce the south interior side yard setback for a garden shed from 3.0 m (9.8 ft.) to 0.30 m (1.0 ft.).

Applicant's Comments

(See Applicant's Comments in Item 2 - Development Permit 15-716268 on pages 4-5 of these Minutes)

Panel Discussion

(See Panel Discussion in Item 2 on pages 5 and 6 of these Minutes)

Staff Comments

(See Staff Comments in Item 2 on page 6 of these Minutes)

Correspondence

None.

Gallery Comments

None.

Development Permit Panel
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Panel Decision

It was moved and seconded

That a Development Permit be issued which would:

1. *Permit the construction of a 130-unit seniors housing building on parts of 23241 and 23281 Gilley Road, and part of 23060, 23066, 23080, and part of 23100 Westminster Highway on a site zoned "Low Rise Apartment (ZLR27) – Neighbourhood Village Centre (Hamilton)"; and*
2. *Vary the provisions of Richmond Zoning Bylaw 8500 to:*
 - (a) *Increase the maximum permitted height from 17.0 m (55.77 ft.) to 17.6 m (57.77 ft.) for an architectural feature on the north elevation of the building;*
 - (b) *Increase the maximum permitted projection into the north setback from 0.60 m (2.0 ft.) to 1.07 m (3.5 ft.) for an architectural feature on the north elevation of the building; and*
 - (c) *Reduce the south interior side yard setback for a garden shed from 3.0 m (9.8 ft.) to 0.30 m (1.0 ft.).*

CARRIED

4. **Date of Next Meeting: July 13, 2016**

5. **Adjournment**

It was moved and seconded

That the meeting be adjourned at 4:34 p.m.

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Development Permit Panel of the Council of the City of Richmond held on Wednesday, June 29, 2016.

Joe Erceg
Chair

Rustico Agawin
Auxiliary Committee Clerk

Schedule 1 to the Minutes of the
Development Permit Panel
meeting held on Wednesday,
June 29, 2016.

To Development Permit Panel	
Date:	<u>June 29, 2016</u>
Item #	<u>1</u>
Re:	<u>DP 15 - 703204</u>

To: City clerk's office.

On the subject of:

7751 Heather Street

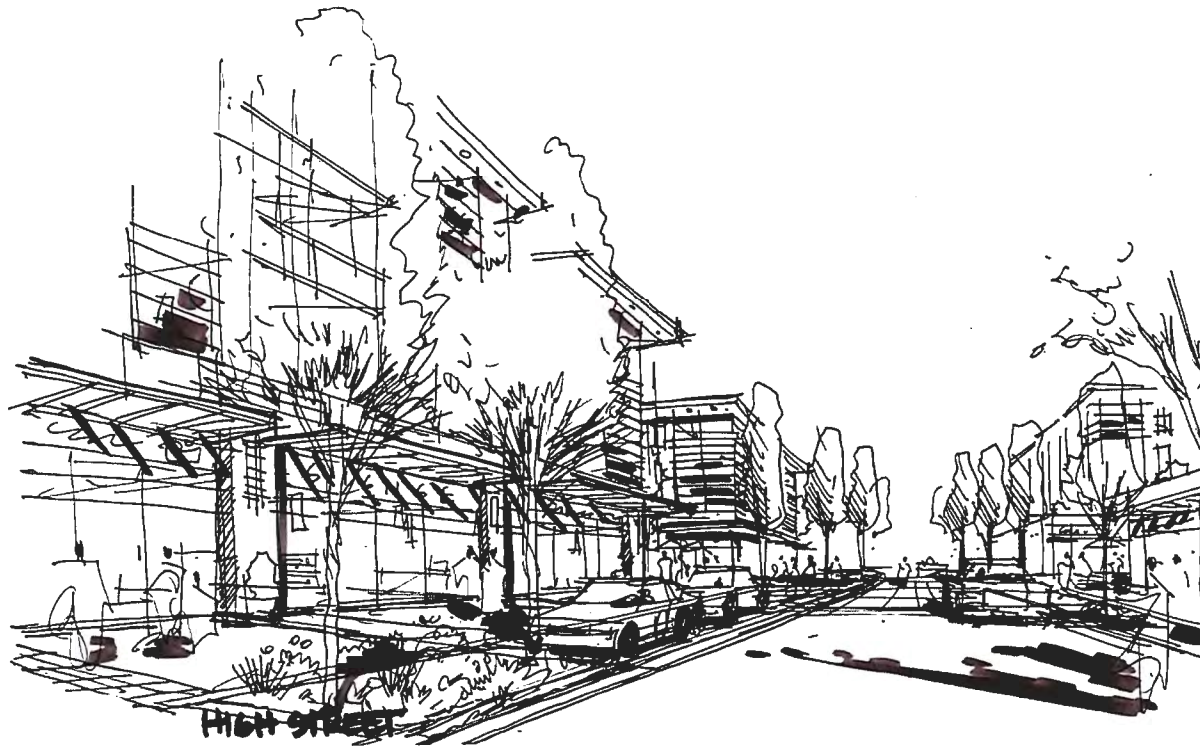
(5) Townhouse development permit panel meeting.

As the owners of unit #28 7733 Heather Street,
we disagree on the subject of rezoning of 5
townhouses in area 7751 due to insufficient parking
near our residence and over development of
townhomes in the area.

Sincerely,

The residents of 28 - 7733 Heather Street.





HAMILTON

Parcels 2 & 3

LANDS

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Dr_Panel_Presentation_for_Oris_Parcels 2 & 3

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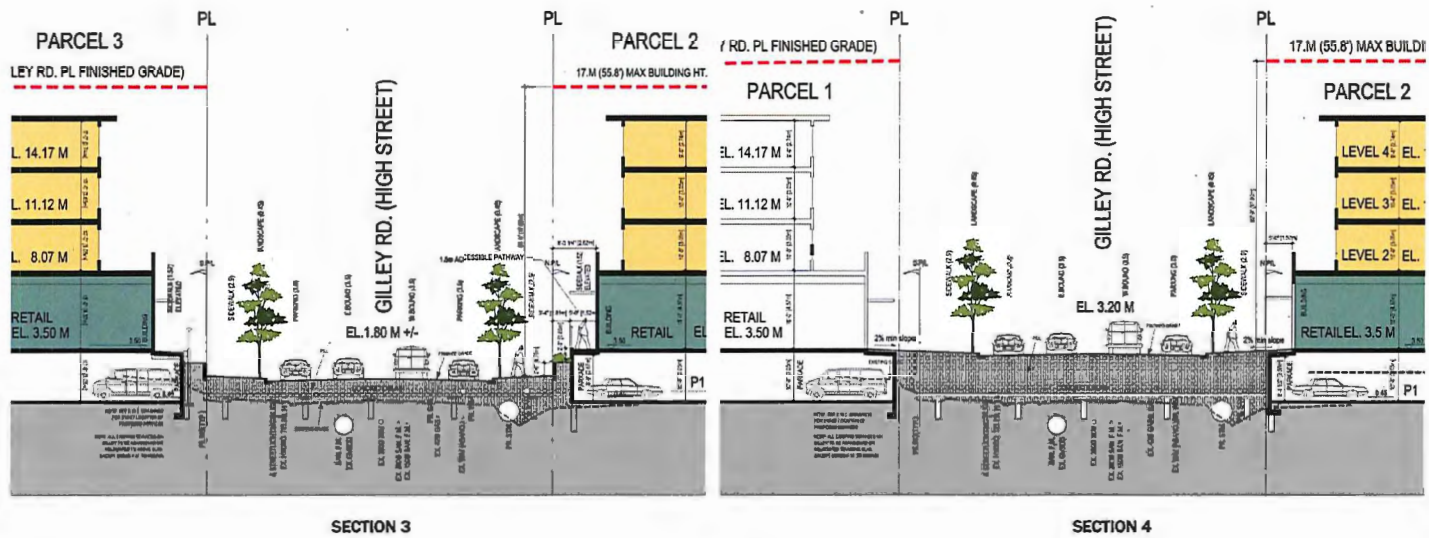
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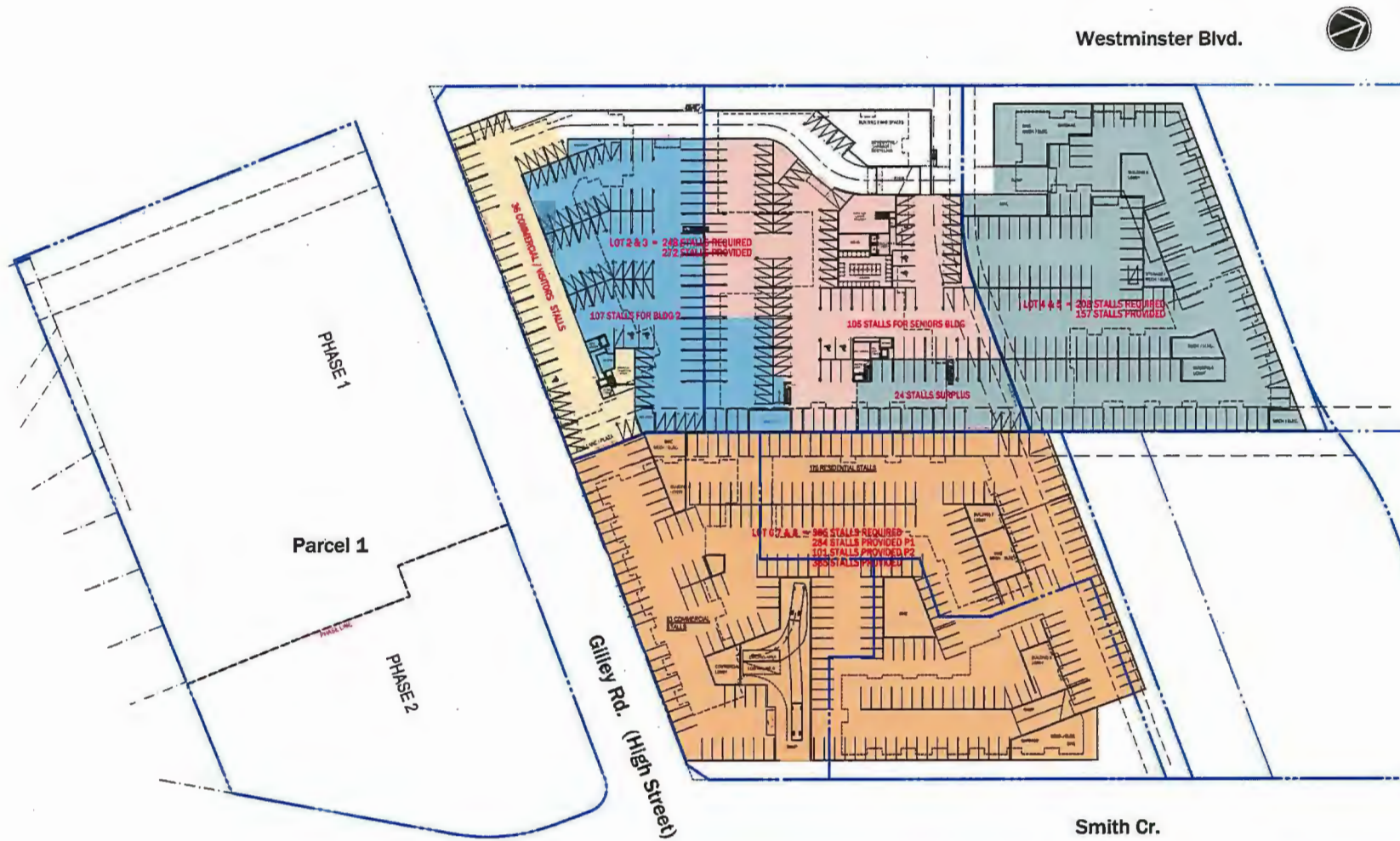
HAMILTON LANDS_Panel_Presentation_for_Oris_Parcels

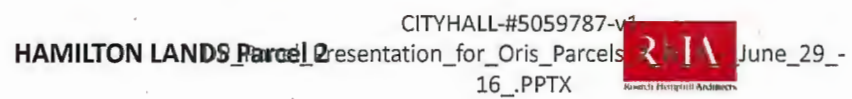
Research Highlight Archive

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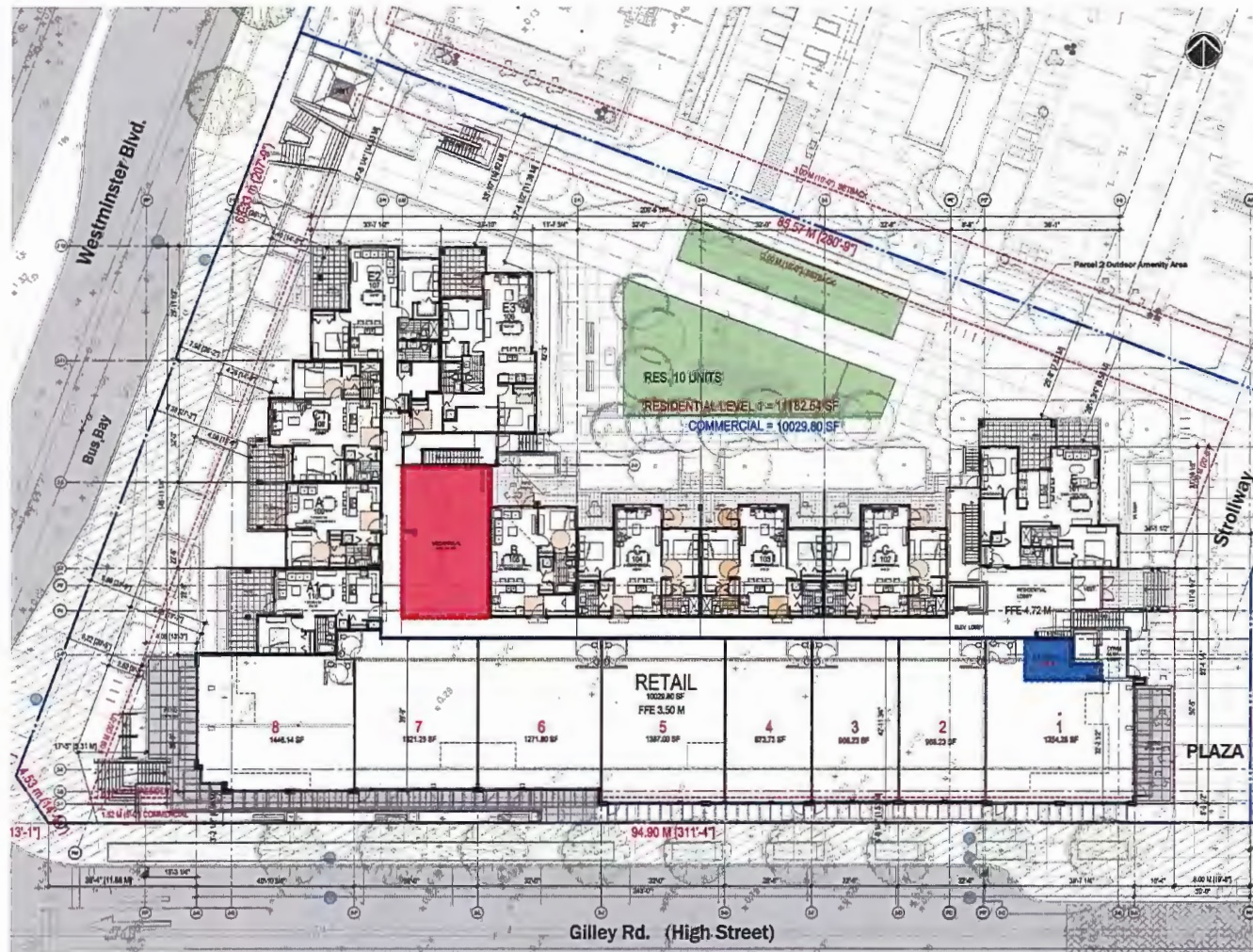


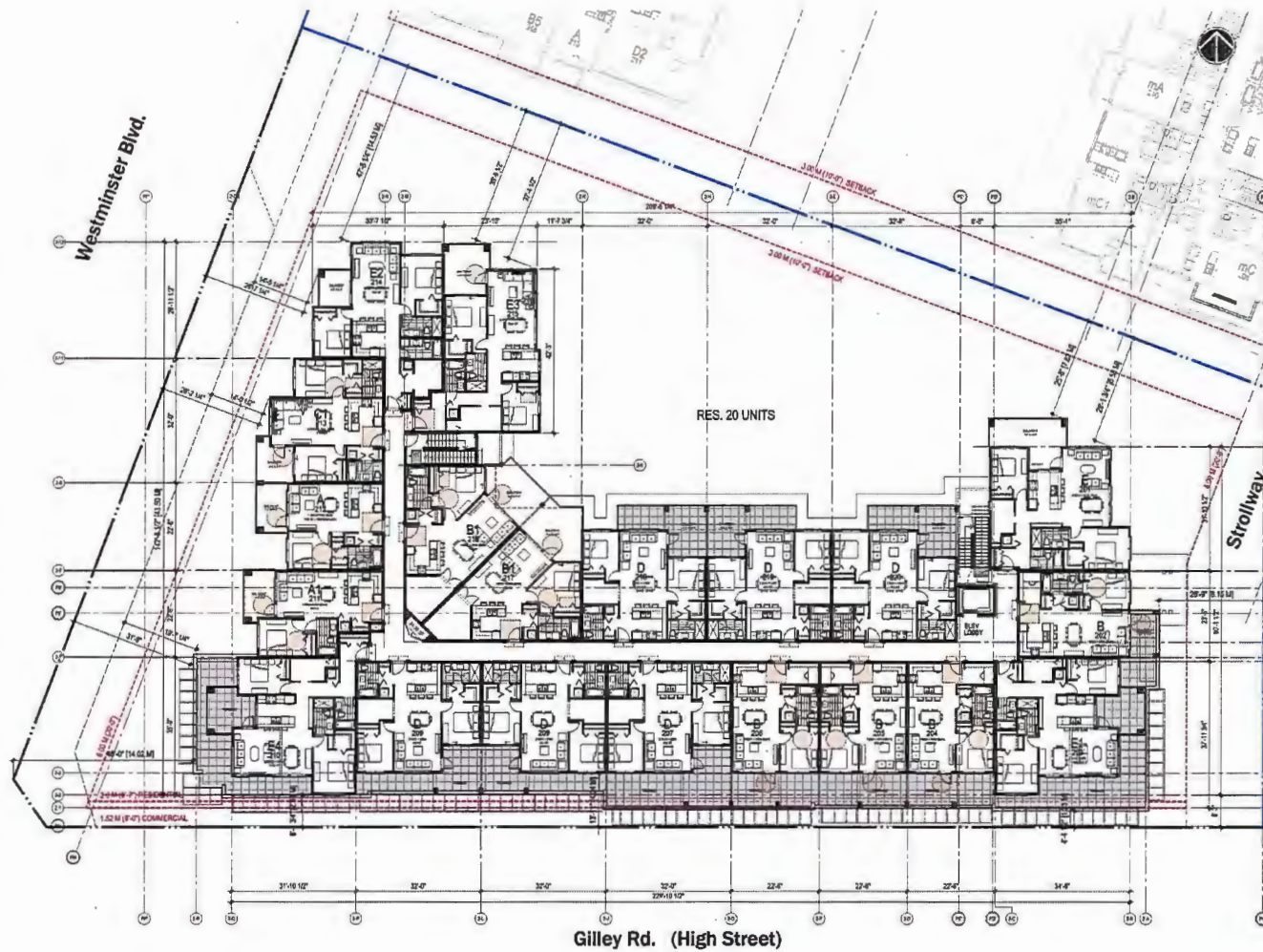




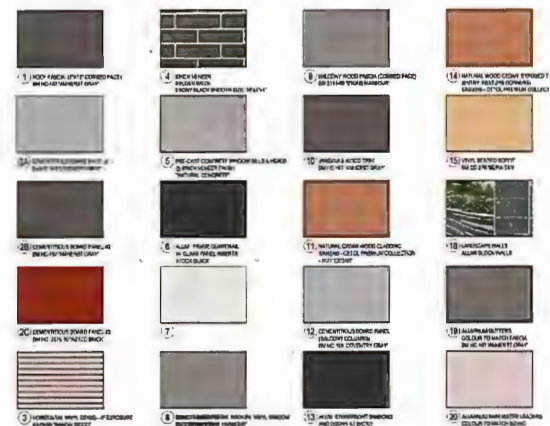


ORIS





FINISH SCHEDULE		
MATERIALS		COLOR
1. ROOF FINISH (GUTTER/FLASHING)	1.1.1.1.1.1	BRICK RED (BRICK)
2. EXTERIOR WALL FINISH (FACED)	2.1.1.1.1.1	BRICK RED (BRICK)
3. EXTERIOR WALL FINISH (BACK)	3.1.1.1.1.1	BRICK RED (BRICK)
4. EXTERIOR WALL FINISH (CORNER)	4.1.1.1.1.1	BRICK RED (BRICK)
5. EXTERIOR WALL FINISH (CORNER)	5.1.1.1.1.1	BRICK RED (BRICK)
6. EXTERIOR WALL FINISH (CORNER)	6.1.1.1.1.1	BRICK RED (BRICK)
7. EXTERIOR WALL FINISH (CORNER)	7.1.1.1.1.1	BRICK RED (BRICK)
8. EXTERIOR WALL FINISH (CORNER)	8.1.1.1.1.1	BRICK RED (BRICK)
9. EXTERIOR WALL FINISH (CORNER)	9.1.1.1.1.1	BRICK RED (BRICK)
10. EXTERIOR WALL FINISH (CORNER)	10.1.1.1.1.1	BRICK RED (BRICK)
11. EXTERIOR WALL FINISH (CORNER)	11.1.1.1.1.1	BRICK RED (BRICK)
12. EXTERIOR WALL FINISH (CORNER)	12.1.1.1.1.1	BRICK RED (BRICK)
13. EXTERIOR WALL FINISH (CORNER)	13.1.1.1.1.1	BRICK RED (BRICK)
14. EXTERIOR WALL FINISH (CORNER)	14.1.1.1.1.1	BRICK RED (BRICK)
15. EXTERIOR WALL FINISH (CORNER)	15.1.1.1.1.1	BRICK RED (BRICK)
16. EXTERIOR WALL FINISH (CORNER)	16.1.1.1.1.1	BRICK RED (BRICK)
17. EXTERIOR WALL FINISH (CORNER)	17.1.1.1.1.1	BRICK RED (BRICK)
18. EXTERIOR WALL FINISH (CORNER)	18.1.1.1.1.1	BRICK RED (BRICK)
19. EXTERIOR WALL FINISH (CORNER)	19.1.1.1.1.1	BRICK RED (BRICK)
20. EXTERIOR WALL FINISH (CORNER)	20.1.1.1.1.1	BRICK RED (BRICK)
21. EXTERIOR WALL FINISH (CORNER)	21.1.1.1.1.1	BRICK RED (BRICK)
22. EXTERIOR WALL FINISH (CORNER)	22.1.1.1.1.1	BRICK RED (BRICK)
23. EXTERIOR WALL FINISH (CORNER)	23.1.1.1.1.1	BRICK RED (BRICK)
24. EXTERIOR WALL FINISH (CORNER)	24.1.1.1.1.1	BRICK RED (BRICK)
25. EXTERIOR WALL FINISH (CORNER)	25.1.1.1.1.1	BRICK RED (BRICK)



CITYHALL-#5059787-v1
HAMILTON LANDS Parcel 2 Presentation_for_Oris Parcels June 29 -
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HAMILTON LANDS Parcel 2 Presentation_for_Oris_Parcels June 29_-
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The site plan illustrates the proposed development for Parcel 3 and Parcel 2. Parcel 3, the primary subject of the application, is a large rectangular lot with a yellow highlight. It contains a building footprint with a central courtyard and an outdoor amenity area. The plan is bounded by New Road to the north, Stroll Way to the east, and Westminster Blvd. to the west. Detailed dimensions for all boundaries and internal building components are provided in both metric and imperial units.

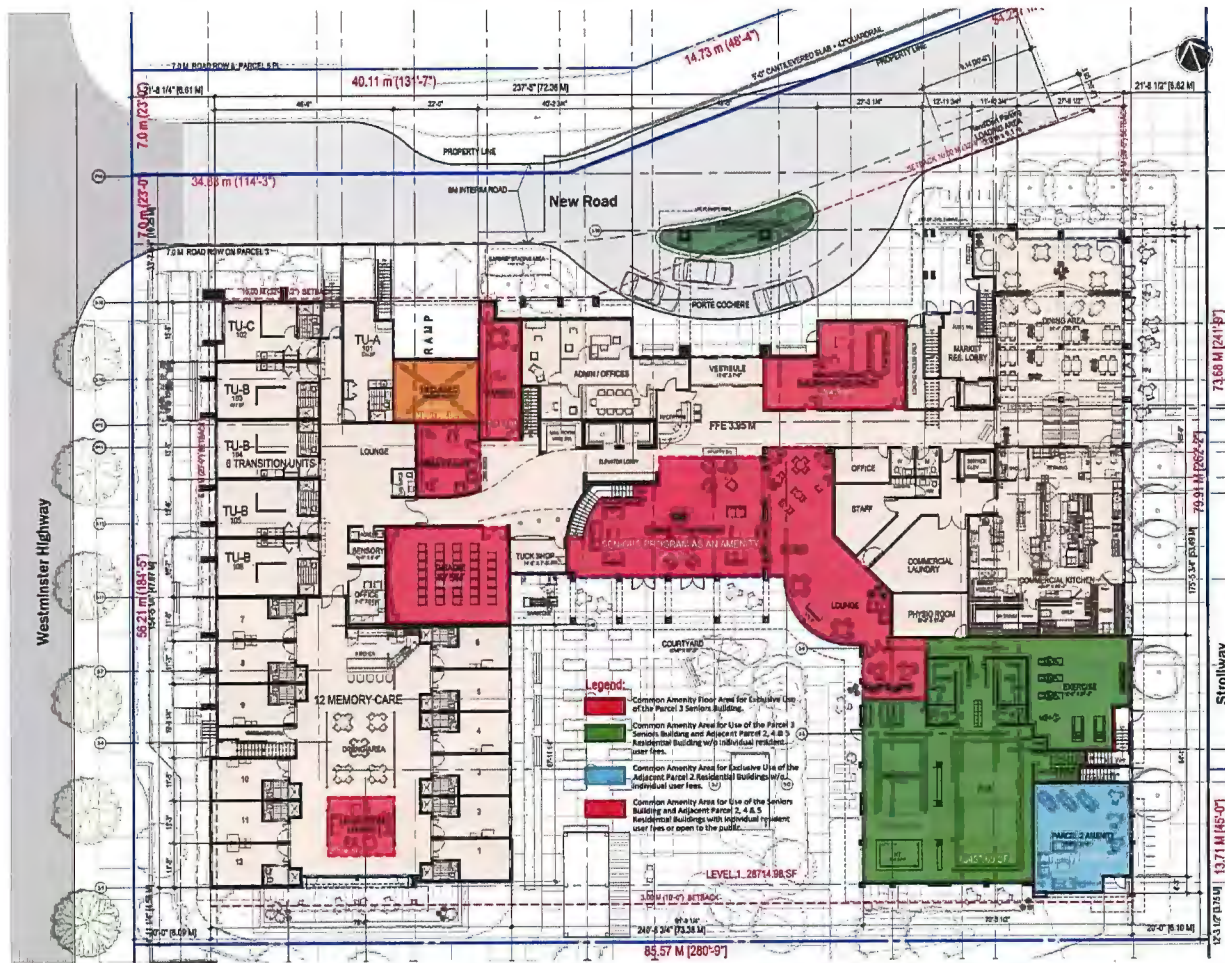
Feature / Boundary	Dimensions (M / Feet)
North Boundary (New Road)	40.11 M (131'-7")
East Boundary (Stroll Way)	6.00 M (19'-4 1/4")
West Boundary (Westminster Blvd.)	6.10 M (20'-0")
Parcel 3 Building Footprint (Main)	27.95 M (91'-3 1/2")
Parcel 3 Building Footprint (Side)	4.58 M (15'-0 1/2")
Parcel 3 Building Footprint (Front)	5.17 M (16'-11 3/4")
Parcel 3 Building Footprint (Back)	3.05 M (10'-0")
Parcel 3 Building Footprint (Depth)	28.32 M (93'-2 1/2")
Parcel 3 Building Footprint (Width)	85.57 M (280'-7")
Parcel 3 Outdoor Amenity Area	12.31 M (40'-5")
Parcel 2 Building Footprint	9.45 M (30'-7")
Parcel 2 Building Footprint (Depth)	18.14 M (59'-6")

RIA
Molecular Biology Analysis



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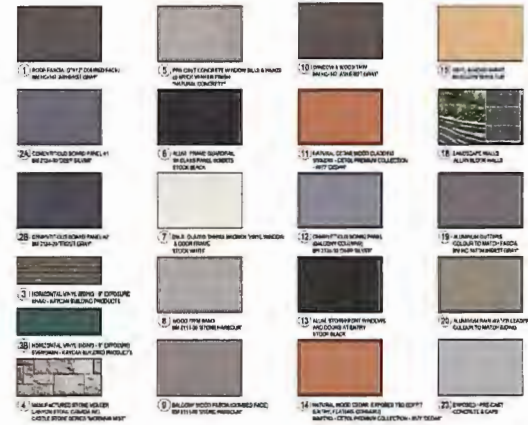








FINISH SCHEDULE			
MATERIALS		COLOR	
1. TYPICAL STONE CONCRETE	FINISH	BRICK-RED SANDSTONE GRAY	
2. CONCRETE/STONE PANELS	2A	FINISH	BRICK-RED SANDSTONE GRAY
3. CONCRETE/STONE PANELS	2B	FINISH	BRICK-RED SANDSTONE GRAY
4. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
5. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
6. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
7. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
8. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
9. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
10. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
11. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
12. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
13. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
14. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
15. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
16. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
17. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
18. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
19. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
20. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
21. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
22. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
23. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
24. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
25. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	
26. HORIZONTAL WOOD SLATS - TYPICAL	FINISH	PAINT - NATURAL WOOD FINISH	







View at Westminster Hwy & New Road (Mid-Aerial View)



View at Westminster Hwy & New Road



CITYHALL #5059787-v1-
 HAMILTON LANDS Parcels 2 & 3
 Application for Oris Parcels 2 & 3
 16_PPTX



HAPA

ORIS

Landscape Rationale

Area Revitalization

As part of the revitalization of the Hamilton Lands the mixed use development on Parcel 2 and neighbouring Parcel 3 seniors' housing facility provide improvements to pedestrian connections, high quality streetscapes and enhancements to the open space network. A hierarchy of open spaces has been introduced for both parcels that provides a rich environment of private and public landscape types. For Parcel 2 the following landscape types are proposed: boulevards, street trees and adjacent soft landscape on Westminster Highway; Gilley as a high street with ample pedestrian realm; soft landscape and connections to ground floor commercial spaces; a pocket plaza at the south end of the north-south stroll way; and a green space with a play area connecting to the east-west walkway between Parcel 2 and 3.

Pedestrian Connectivity

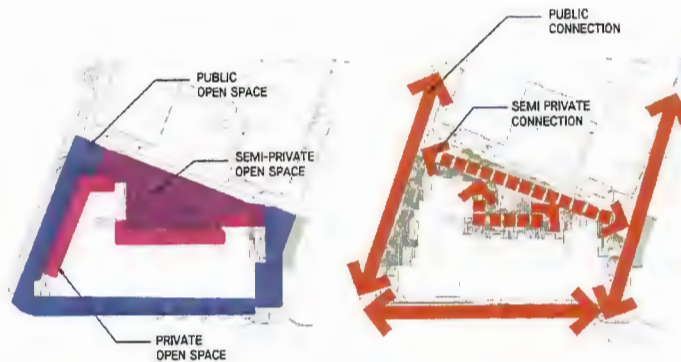
The north-south strollway on the east side of the site will improve pedestrian connectivity within the greater development as it is built out. The east-west pathway between the two parcels provides further connectivity for those living in the Parcel 2 & 3 buildings.

Defining the Edge between Public and Private

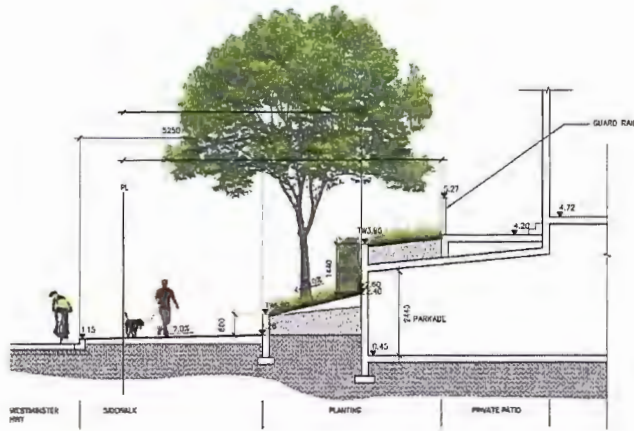
Layers of groundcovers, perennials, grasses, shrubs and evergreen climbing plants softly screen walls and fences that define the edges between public space and private patios on Westminster Highway. Gates located at the east and west access points delineate the transition from public space to the semi-private common outdoor amenity area. Landscape plantings further buffer residential patios facing on to the outdoor amenity area with gates marking the transition from semi-private to private patio space.

Programming, Amenities and Opportunities for Play

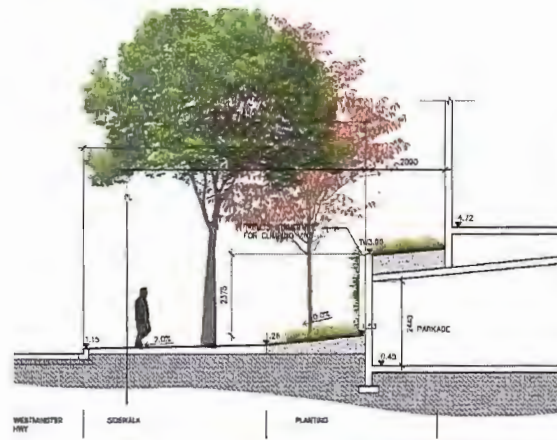
A cluster of Raywood Ash trees on grassed borms form an "outdoor room" in the common amenity area adjacent to the east-west walkway bordering the neighbouring parcel. The outdoor room features a barbecue, gathering area and a children's play area, which provide opportunities for socialization and play. Public art is proposed at key locations on Parcel 2. Bike parking has also been accommodated for residents, visitors, and commercial users.



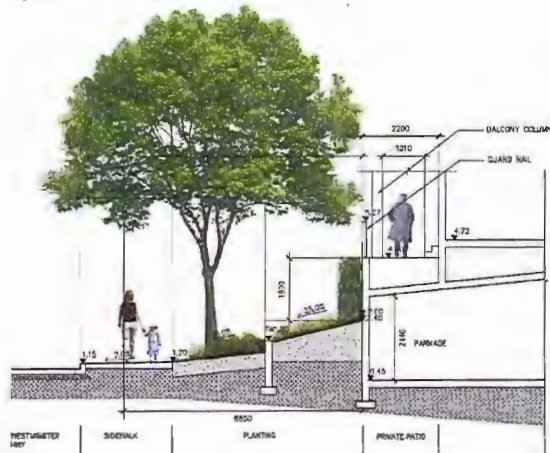




1 Residential Frontage at Westminster Highway Condition 1
11.5 1:50



2 Residential Frontage at Westminster Highway Condition 2
11.5 1:50



3 Residential Frontage at Westminster Highway Condition 3
11.5 1:50



4 Residential Frontage at Westminster Highway Condition 4
11.5 1:50

Landscape Rationale

Area Revitalization

As part of the revitalization of the Hamilton Lands the development of the seniors' housing facility on Parcel 3 and neighbouring Parcel 2 mixed use development provide improvements to pedestrian connections, high quality streetscapes and enhancements to the open space network. A hierarchy of open spaces has been introduced for both parcels that provides a rich environment of private and public landscape types. For Parcel 3 the following landscape types are proposed: boulevards, street trees and adjacent soft landscape on Westminster Highway; a south facing, well programmed secure courtyard space; and secure perimeter walking route.

Pedestrian Connectivity

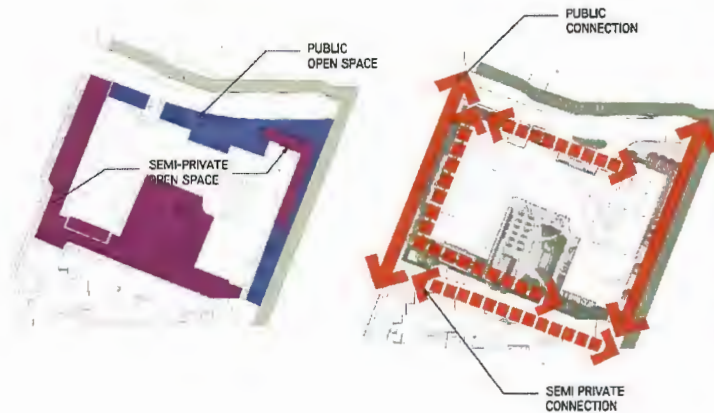
The north-south strollway on the east side of the site will improve pedestrian connectivity within the greater development as it is built out. The east-west pathway between the two parcels provides further connectivity for those living in the Parcel 2 & 3 buildings. A secure walkway on the west side of the building provides amenity for residents.

Defining the Edge between Public and Private

Layered plantings screen walls and fences that define the edges between public space and private space on Westminster Highway. Gates located at the north, east, west and south access points delineate the shift from public space to the internal courtyard. To the south planted boms and fencing mark the transition between the Parcel 3 courtyard and walkway to the adjacent parcel. The internal courtyard and west strollway are secure, as is the memory garden, which is separate from all the other spaces.

Programming and Opportunities for Recreation

The well programmed secured courtyard space provides recreation, socialization and activity space for Parcel 3 residents. Urban agriculture planters and a potting shed provide residents with the facilities for gardening activities for Parcel 3 residents. The shuffle board and gazebo provide opportunities for recreation and socialization within the courtyard. The landscaped walking route extends from the courtyard and following the south and west perimeter of the building providing residents with access to recreation.



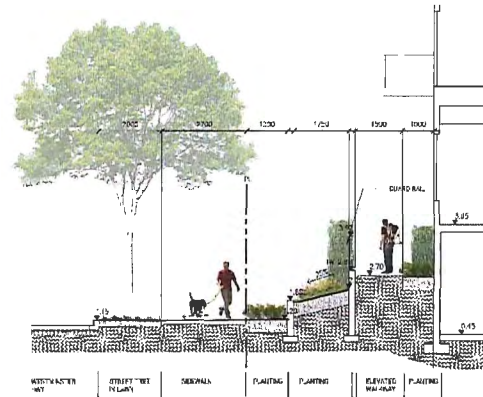


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 HAMILTON LANDS Parcel 3 Presentation_for_Oris_Parcels
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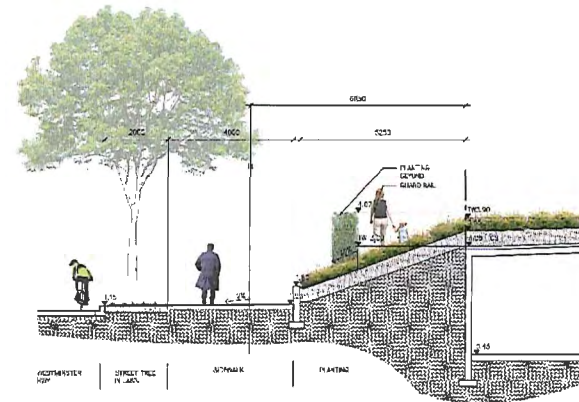


HAPA

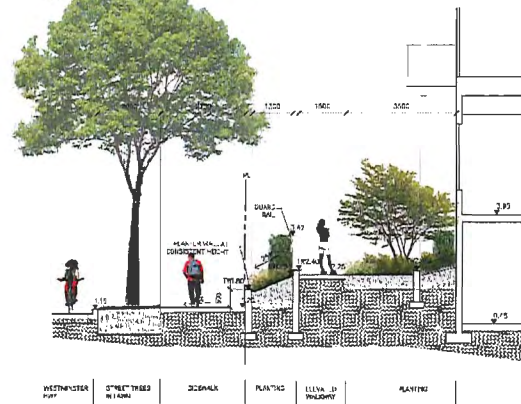




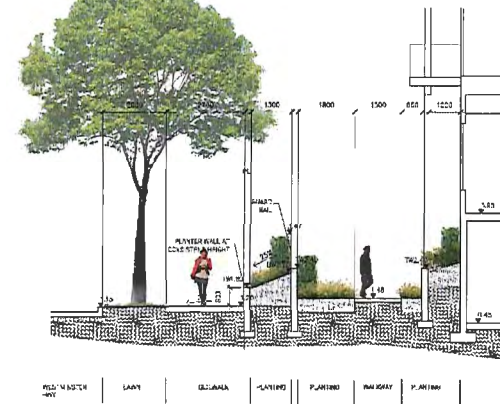
1 Seniors' Housing Frontage at Westminster Highway
1/10 1:50



2 Planting at Stairs Between Parcel 2 & 3 at Westminster Highway
1/10 1:50



3 Seniors' Housing Frontage at Westminster Highway - South
1/10 1:50

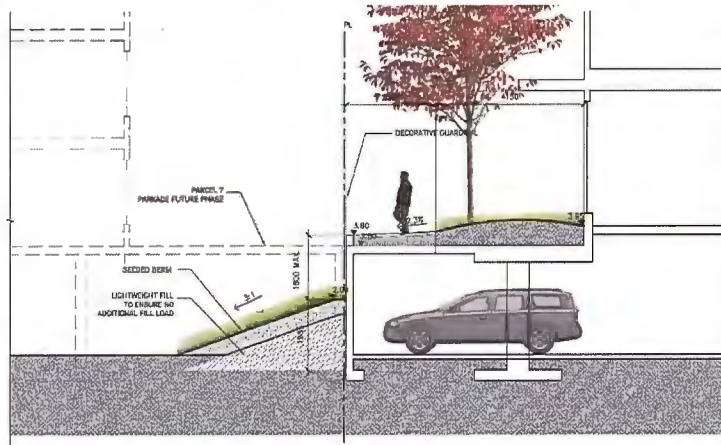


4 Seniors' Housing Frontage at Westminster Highway - North
1/10 1:50



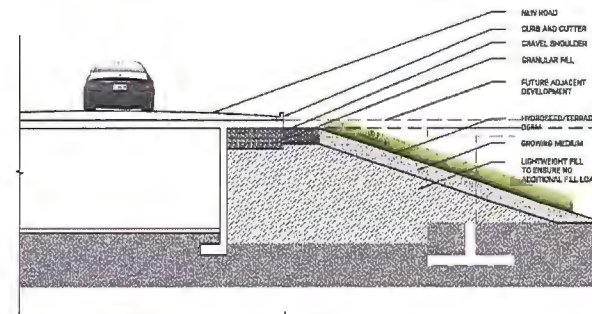
Parcel 2 Private Patio Planting Walkway Planting Children's Play Area Walkway Planting Parcel 3 Courtyard

1 Parcel 2 & 3 Courtyard Looking West
1:50



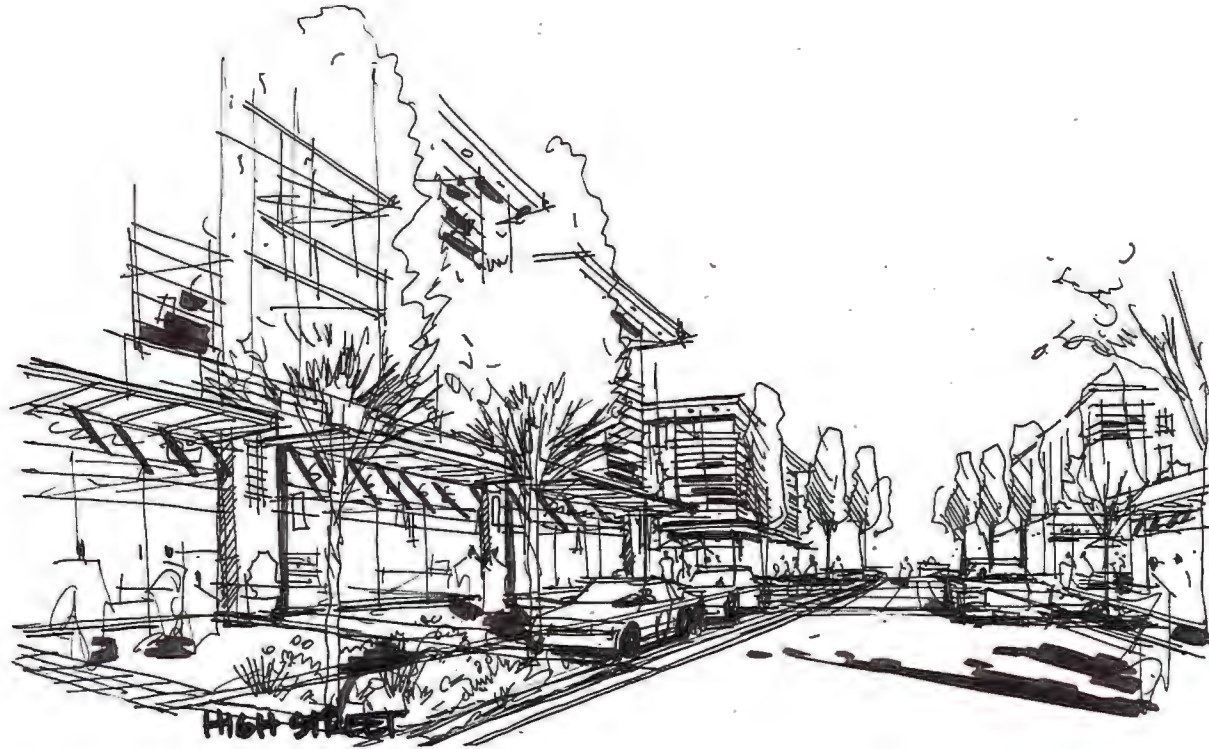
Parcel 7 Future Development Interim Walkway Planting Parcel 3 Building

2 Parcel 3 Interim Walkway at Future Development
1:50



New Road at Parcel 3 Parcel 3 Future Development

3 Parcel 3 Interim Walkway at Future Development
1:50



HAMILTON

THANK YOU

LANDS

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City of Richmond

Report to Development Permit Panel

To: Development Permit Panel

Date: June 23, 2016

From: Wayne Craig
Director of Development

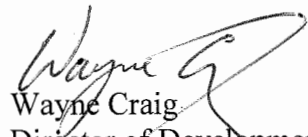
File: DP 11-566011

Re: Application by Ecowaste Industries Ltd. for a Development Permit at
15111 Williams Road and Richmond Key 1095

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of a 65.22 ha (161.14 acres) Industrial Logistics Park at 15111 Williams Road and Richmond Key 1095 on a site zoned "Industrial (I)" that is adjacent to the Agricultural Land Reserve and several Environmental Sensitive Areas, and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to:
 - a) Increase the maximum building height from 12.0 m to 13.0 m and that the building height is to be measured from the finished foundation slab and further to apply the Geological Survey of Canada (GSC) datum shown on the phase block plan attached as "Schedule B" as the maximum elevation limits for the tallest point on each building, and
 - b) Reduce the minimum number of parking spaces required to 0.56 spaces per 100 m² of gross leasable floor area for those portions of the building used for freight forwarding services or warehouse storage services.


Wayne Craig
Director of Development

DCB:blg

Staff Report

Origin

Ecowaste Industries Ltd. has applied to the City of Richmond for permission to develop a 65.22 ha (161.14 acres) industrial site at 15111 Williams Road and Richmond Key 1095. The subject properties are adjacent to the Agricultural Land Reserve (ALR), several Environmental Sensitive Areas (ESA) and Riparian Management Areas (RMA).

The portion of the site south of Francis Road (15111 Williams Road) is currently used primarily for sorting and processing construction waste while the portion north of Francis Road (Richmond Key 1095) contains an active construction debris landfill authorized by the Province and operated by the applicant.

The site is currently zoned "Industrial (I)" and a rezoning will not be required for the proposed industrial logistics park. The Development Permit is required because of the adjacency to the ALR and the proposed impacts to the designated ESA and RMA areas, and does not address form and character of the buildings.

The applicant is seeking variances to reduce the parking ratio specific to freight forwarding services or warehouse storage services and to increase the maximum building height as measured from the foundation slab. Both variances are discussed in more detail later in this report.

Development Information

The subject site is located south of Blundell Road and west of the No. 7 Road canal and consists of two (2) separate parcels; one (1) unaddressed no-access lot to the north of Francis Road of approximately 53.35 ha (131.8 acres - Richmond Key 1095) and one (1) to the south of Francis Road with full road access of approximately 11.87 ha (29.3 acres) addressed as 15111 Williams Road. The larger site is currently used as a Ministry of Environment approved construction debris landfill, but is reaching full capacity. Ecowaste Industries is proposing to close the landfill operation in phases as each cell within the landfill reaches its capacity and develop each closed landfill phase sequentially for light uses.

Once the landfill has been closed and capped, it is anticipated that the highest finished grade on the portion of the site north of Francis Road will be approximately 19 m GSC, while the highest finished grade on the parcel south of Francis Road will be approximately 6.7 m GSC.

Ecowaste's proposal is to develop the site in five (5) phases over a period of up to 20 years; beginning with the north part of the site and working south. A conceptual plan, prepared by Ecowaste, indicates potential development of up to 13 large distribution buildings ranging in size from approximately 6,782 m² (73,000 ft²) to 46,452 m² (500,000 ft²), although the number, size and building configuration may vary depending on their client's requirements. Ecowaste's intent is to "build to suit" for their prospective tenants. Upon completion, a total of approximately 265,145 m² (2,854,000 ft²) of light industrial floor space is anticipated to be developed.

Extensive off-site upgrades and installations will be required to support the proposed development, including the construction of a new two-lane bridge over the No. 7 Road Canal providing access to the development, extension and construction of roadways along fronting portions of Blundell Road, Francis Road and Savage Road, new water and sanitary services to the property, and a new storm system discharging directly to the main arm of the Fraser River. The final routing of the storm discharge line will be determined through the Servicing Agreement review process which is identified under the Development Permit considerations (Attachment 2).

Roads through the site (shown on the concept plans as “Road A” and “Road B”) will be privately owned (Statutory Rights-of-Way to allow public right-of-passage) and maintained by the owner. Because of the time span involved and the nature of the development, the servicing issues and associated agreements will be addressed through several separate Servicing Agreements as outlined later in this report and in the Development Permit considerations.

Subsequent sections of this report provide more information on the development proposal and how it addresses the specific conditions of the site. For a comparison of the proposed development data with the relevant bylaw requirements, please refer to attached Development Application Data Sheet provided in Attachment 1.

Background

Development surrounding the subject site is as follows:

- To the north: A 54 ha (132.5 acre) Agriculture (AG1) zoned parcel owned by Ecowaste Industries and operated as a landfill site under the authority of the Ministry of Environment.
 - To the east: No. 7 Road Canal and Port Metro Vancouver’s Port terminal and associated industrial lands. These properties are zoned “Industrial (I)”.
 - To the south: A Canadian National Railway right-of-way and a 30.35 ha (75 acre) lot owned by Port Metro Vancouver (PMV) are located immediately south of the development site. The PMV site is currently vacant, but is expected to be used for port related industrial uses. The western most portion of PMV’s site is being considered for the proposed Vancouver Airport Fuel Facilities Corp. (VAFFC) jet fuel storage tank facility. The PMV site is zoned “Industrial (I)”.
- On the south side of Williams Road, is a 3.8 ha (9.5 acre) “Industrial (I)” zoned parcel owned by the VAFFC. The VAFFC is proposing to use this property for its YVR marine terminal facility for receiving jet fuel.
- To the west: Across the Savage Road road allowance, five (5) large lots all within the Agricultural Land Reserve. Zoning on four (4) of the properties is Agricultural (AG1); while zoning on the fifth lot is Golf Course (GC). The golf course is known as “Country Meadows”. Only one (1) of these lots is currently being farmed.

Environmental Management Act (EMA) Restriction

As the development site includes an active landfill, Ecowaste has been working with the Province to fulfill the requirements for an "administrative guidance" release which would allow the City's to issue the necessary permits and approvals for this project to proceed. The Development Permit considerations include the requirement for receipt of authorization by the Ministry of Environment prior to the Permit's approval.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan (OCP) and is generally in compliance with the "Industrial (I)" zoning except for the zoning variances noted below.

Zoning Compliance/Variations (staff comments in **bold**)

The applicant requests to:

- 1) Vary the provisions of Richmond Zoning Bylaw 8500 to:
 - a) Increase the maximum height for buildings from 12.0 m to 13.0 m and that the building height is to be measured from the finished foundation slab of each building, and further to apply the Geological Survey of Canada (GSC) datum shown on the phase block plan attached as "Schedule B" as the maximum elevation limits for the tallest point on each building.

(The height variance has been requested by Ecowaste, as the demand within the logistics industry, and industry in general, is for internal building clearances of 11 m (36 ft.) to support their operations. Ecowaste has advised that achieving these internal clearances is critical for this development to attract the AAA tenants they are targeting. These internal clearances will translate into external building heights of approximately 13 m (43 ft.) as measured from the building's finished slabs as opposed to the approach specified in the Zoning Bylaw of measuring the vertical distance between finished site grade and the highest point of the building.

As the elevations of the corners of the lot, which are typically used to calculate the average ground elevation, are well below the proposed final finished height of the site, the standard approach for calculating building height in this site would mean that the proposed buildings would not achieve even the existing bylaw permitted height of 12 m. On this basis the alternative approach is warranted.

This variance also places an absolute maximum to the heights of the proposed buildings since the building height is to be measure from the building slab rather than the average ground surface which will change as the land fill is raised. Any requests for additional height above the proposed height cap will require a separate variance application.

As discussed above, application of the average grade calculation is problematic in this situation and the adjacent public roads are well below the anticipated future final site grade. Based on the submitted cross sections, the two (2) private internal roads ("Road A" and "Road B") will be brought up to approximately the same elevation of the final finished grade of the site. From this perspective, a publically accessible roadway will be provided at a comparable elevation for most of the proposed building's sites.

On the basis of this information staff recommend support for the height variance and the height measurement approach for this development to allow it to respond to the needs of industry.)

- b) Reduce the minimum number of parking spaces required to 0.56 spaces per 100 m² of gross leasable floor area for those portions of the building used for freight forwarding services or warehouse storage services.

(The applicant has retained a traffic consultant to undertake a parking study which included a survey of ten (10) comparable industrial sites in the area, and research best practices for similar situations and other municipalities. The proposed reduced rates are reflective of the typical parking demand observed by the traffic consultant in the area, as well as reflective of a lower parking required by other municipalities. The proposed parking rate for the specified freight forwarding services and warehouse storage services is support by staff accordingly. Other uses will be required to meet the City's standard general industrial parking rates as outlined in the Zoning Bylaw.)

Analysis

City Objectives

Staff worked with Ecowaste and their consultants through several iterations of the redevelopment plan as it evolved. Key objectives identified and addressed in the Ecowaste submission are as follows:

- Address the agricultural lands/industrial interface requirements.
- Identify and address RMA and ESA impacts and compensation requirements.
- Minimize new storm discharges to the No. 7 Road Canal.
- Address the Green Roof Bylaw requirements while incorporating the storm discharge restrictions.
- Ensure appropriate utility service levels to the development while minimizing City liability of infrastructure over the landfill.
- Ensure provision of adequate vehicle access for this development and future transportation needs.
- Minimize new traffic to the Steveston Highway and Highway 99 Interchange.

The responses to these objectives are more fully detailed in the following discussions.

Project Timing

The proposed development of the site is anticipated to occur in sequential phases over a number of years, dependent upon how quickly areas of the landfill operation reach capacity, the market's demand for light industrial buildings and the approach to servicing the site. A series of legal agreements have been identified in the Development Permit Considerations to ensure that subsequent Servicing Agreements, environmental compensation measures and overall site landscaping requirements are developed as specific areas are developed.

ALR Buffer Requirements

The development site is bounded by the Agricultural Land Reserve (ALR) on both its northern side and its western side. The ALR boundary runs adjacent to the development along the length of Blundell Road and Savage Road. Under Section 14.0 "Development Permit Guidelines" of the Official Community Plan (OCP) sites abutting the edge of the Agricultural Land Reserve are required to provide landscape buffers intended to minimize the impacts of new development on agricultural land. These buffers aim to achieve public safety and minimize agricultural-urban land use conflicts and complaints.

Because of the site configuration, there are three (3) different landscaping buffer treatments proposed to respond to the ALR Buffer requirements. The locations and cross sections for these areas are shown on Plans 4a and 4b with each described in more detail in the following text.

Blundell Road

Along Blundell Road, the buffer will be located on the south side of the road on Ecowaste property. The buffer will be approximately 8 m wide; starting from the edge of the parking area and continuing northward down the slope toward Blundell Road. The vegetation plantings within this buffer will consist of appropriate low level ground covers, followed by a solid vegetated hedge/screen and equally spaced trees (a mix of deciduous and coniferous varieties). The shrubs and trees will be spaced to minimize light overspill from vehicles and trucks using the site.

Savage Road (north of Francis Road)

This area will have a gradual slope rising up 13 m over the adjacent service road. An 8 m wide strip will be enhanced to act as the ALR buffer consistent with the Blundell Road buffer and will contain a row of trees and vehicle light screening shrubs at the top of the bank. The balance of the slope will be grassed.

Savage Road (south of Francis Road)

The ALR buffer south of Francis Road will be divided into two halves; a 3 m wide strip in the City right-of-way along the western side of the proposed newly constructed Savage Road and a 3-4 m wide strip on Ecowaste's property at the top of the slope that will provide vehicle light screening. The portion of the buffer on City lands will be maintained by the City after the initial maintenance period has completed.

The buffer on the east side of Savage Road (on the development site) will consist of a double row of shrubs/groundcovers (trespass inhibiting), a single row of solid planted screen (hedge or other) and a single row of trees (a mix of deciduous and coniferous).

The buffer on the west side of Savage Road (on the City's right-of-way) will consist of a 6 ft. high (approximately) fence and a solid planting screen/hedge between fence and edge of the road's curb.

Agricultural Advisory Commission (AAC) Review

Representative detail sections of the proposed planting strips, plant species listings, cross sections and overall selection counts are provided in the plan submission. The proposed ALR buffer configurations were reviewed by the Agricultural Advisory Commission (AAC) initially on September 2011 and again, with a revised plan, on June 21, 2012. The ALR buffer was supported by the AAC at their June 21, 2012 meeting.

As none of these ALR buffers can be planted until the landfill has been raised as each of the landfill cells reaches capacity and is capped off and prepared for industrial redevelopment. The Development Permit considerations include requirements for the registration of legal agreements to provide ALR landscape buffer plans, cost estimates current to the date of submission and landscape securities prior to the Building/Foundation Permits being issued in either phase block A, B, C or E (as per (Schedule B)). The submitted plans are required to be consistent with the ALR buffer plans submitted under this Development Permit and must be to the satisfaction of the Director of Development.

Habitat Impacts

As the site has been used as an active landfill there is very limited ESA vegetation on site. The applicant's consultant, Keystone Environmental, has conducted site investigations and analysis of the site and has found that approximately 6,742 m² (72,570 ft²) identified in the OCP as ESA do not carry sufficient features to warrant that designation. The majority of these areas are stands of invasive shrubs either on Ecowaste's property or within the Savage Road right-of-way.

An ESA response strategy is required because the Biologist's site investigations have identified impacts to approximately 4,383 m² (47,178 ft²) of valued habitat features including 1,440 m² (15,500 ft²) of aquatic habitat and 2,943 m² (31,678 ft²) of terrestrial habitat. The impacts will occur in three (3) areas:

- No. 7 Road Canal due to the installation of the proposed bridge.
- Savage Road, south of Francis Road due to the future construction of Savage Road.
- At Williams Road, by the Fraser River, to accommodate the storm water discharge outfall.

Each of these impacts and the proposed compensation responses are outlined in the following sections.

Riparian Management Area (No. 7 Road Impacts and Compensation)

Vehicle access to the redeveloped site is proposed to be achieved via a new bridge over the No. 7 Road Canal and construction of paved roadway from the Canal to just westward of the proposed "Road B". Construction of the new bridge will result in unavoidable impacts within the No. 7 Road Canal RMA requiring compensation for the loss of approximately 1,373 m² (14,774 ft²) of terrestrial vegetation.

The proposal will provide compensation in the form of invasive species removal and enhancement planting of 3,731 m² (40,161 ft²) on Ecowaste's property adjacent to the No. 7 Road Canal. A representative cross section of the proposed enhancement plan and the overall numbers and types of shrubs proposed for this area is provided in Plan 6. All vegetation species installed for the RMA compensation will be native species.

To secure the RMA planting requirements, the Development Permit Considerations include requirements for submission of a registerable survey plan(s), detailed landscaping plans prepared by a Qualified Landscape and or Environmental Professional reflective of the planting scheme provided as part of this Development Permit and to the satisfaction of the Director of Development, plus appropriate securities prior to issuing the Development Permit. Monitoring and annual reporting of the RMA landscape installation is required for a minimum of five years. The landscaping plans submitted under this application provides a detail for a representative segment of the area to be planted/enhanced plus an overall number of trees, shrubs and ground cover vegetation needed to plant the enhancement area.

The RMA impacts along the No. 7 Road Canal will occur in the first phase of the redevelopment since access to the site from Blundell Road is one of the Development Permit considerations.

Riparian Management Area and Environmentally Sensitive Area (Savage Road South)

Keystone Environmental's assessment indicates that habitat compensation will be required for a total of 2,963 m² (31,895 ft²) of impacts. Of this total, 1,393 m² (14,995 ft²) are impacts to aquatic habitat and 1,570 m² (16,900 ft²) are impacts to terrestrial habitat associated with preloading and construction of the road.

The habitat impacts along Savage Road are not anticipated to occur until preloading for Savage Road is required during the last phase of the development. The Development Permit considerations include a "no build" covenant registered on Title over 15111 Williams Road to ensure that the compensation wetland costs are reassessed at that time and securities submitted covering the cost of construction. Inspections will be carried out by staff upon completion of the installation to ensure that the wetland meets the intent of replacement and enhancement outlined in the Development Permit.

No compensation measures are proposed along the Savage Road corridor south of Francis Road. Compensation for the habitat impacts in this location is proposed to be provided as part of a constructed upland wetland that will be on Ecowaste property (15111 Williams Road) – refer to the Habitat Balance Sheet Summary for more details on the proposed wetland.

Environmentally Sensitive Area (Storm Water Discharge to Fraser River)

With the installation of the proposed storm water direct discharge pipe approximately 47.5 m² (511 ft²) of brackish aquatic impacts will occur with the outfall installation. These impacts are not anticipated to occur until the Storm Water Discharge Servicing Agreement has been agreed to. Compensation habitat is secured through the same "no build" covenant registered on Title over 15111 Williams Road as noted above for Savage Road South.

Compensation for the habitat impacts in this location is proposed to be provided as part of a constructed upland wetland that will be on Ecowaste property (15111 Williams Road). The foreshore aquatic impacts may be subject to approval and additional compensation measures by the Province. This will be determined through the Servicing Agreement for the proposed storm water pipe construction.

Wetland Habitat Compensation

Ecowaste has proposed to construct a wetland habitat in the northeast corner of their property south of Francis Road (15111 Williams Road) to offset ESA and RMA impacts primarily from the Savage Road and Fraser River foreshore area. Ecowaste's plan sets aside an area of approximately 10,000 m² which will be excavated down to the water table to create a ponding area with aquatic plants and ringed by a variety of native riparian vegetation species. Within this area, they propose to provide approximately 1,588 m² of aquatic habitat and 3,230 m² of terrestrial/riparian habitat.

Keystone's wetland feasibility study (Keystone Environmental report dated May 3, 2016) recommends that the water levels be monitored for at least a year prior to construction to ensure the design depth is sufficient to establish a sustainable wetland habitat. The Development Permit considerations include a requirement for submission of a contract with a qualified environmental professional to undertake the monitoring as per the Wetland Feasibility Study.

The wetland habitat compensation will not be created until the last phase of the development project. As this may be a number of years away, the Development Permit considerations include requirements for submission of an updated landscaping design, cost estimate and securities. The requirements are linked to the "no build" covenant over 15111 Williams Road. A vegetation conceptual cross section of the wetland and an overall total number of trees and shrubs proposed for the wetland is provided on Plan 5.

Habitat Balance Sheet Summary

Ecowaste's Development Permit submission includes a detailed habitat balance sheet that indicates where and what type of habitat impacts are expected to occur as a result of the development proposal and correspondingly where and how much habitat compensation is proposed to offset the impacts.

The tables below provide a simplified summary of the habitat impacts and proposed habitat compensation. The overall impacts total approximately 4,383 m² (47,178 ft²). The overall compensation totals 8,651 m² (93,118.6 ft²). The data suggests an overall net benefit of nearly 2 for 1. The tables also indicate that 'like for like' habitat will be created (i.e. both aquatic and terrestrial habitat types are addressed).

Habitat Impact Summary

Location	Aquatic Impacts (m²)	Terrestrial Impacts (m²)
No. 7 Road Canal (Bridge)	-	1,373 m ²
Savage Road & Vicinity	1,393 m ²	1,570 m ²
Fraser River Storm Outfall	47.5 m ²	-
Total Impacts	1,440 m²	2,943 m²

Combined Impact: 4,383 m²

Proposed Habitat Compensation Summary

Location	Aquatic Compensation (m²)	Terrestrial Compensation (m²)
Constructed Wetland	1,588 m ²	3,230 m ²
Williams Road Culvert	32 m ²	70 m ²
No. 7 Road Canal	-	3,731 m ²
Total Compensation	1,620 m²	7,031 m²

Combined Compensation: 8651 m²

Aquatic Balance: Gain - Loss = 1620-1440 = 180 m² gain

Terrestrial Balance: Gain - Loss = 7031-2943=4089 m² gain

Net Habitat Balance: Gain/Loss = 8651/4383 = 1.97 gain to 1 loss

Green Roof Bylaw Response

Two (2) key objectives of the Green Roof Bylaw (Bylaw No. 8385) are: 'runoff control & storm water management' and 'landscaping enhancement'. The solution proposed by Ecowaste in consultation with the Engineering Department is that storm water would be collected on-site and directed through a privately-owned pipe that discharges directly to the main arm of the Fraser River, sufficient to address the 20% reduction in storm water discharge required under the Green Roof Bylaw. Construction of the pipe will occur through a separate Servicing Agreement. The Development Permit considerations include conditions for entering into the Servicing Agreement for this work prior to issuance of the development's second Building Permit.

To address the landscape provisions of the Green Roof Bylaw, Ecowaste has prepared a landscape strategy and a "landscaping master plan" which should result in an approximate five (5) times the amount of landscaping for the entire site as compared to the Zoning Bylaw standards according to the Landscape Strategy submitted by Sharp & Diamond Landscape Architecture (submission dated November 10, 2015). The landscaping master plan provides cross sections, detailed representative planting segments and overall vegetation counts for each phase of the development. These documents will be used to guide the individual landscaping submissions for each of the future building lots.

The Development Permit Considerations include requirements for the submission of detailed planting plans and landscape securities with each Building/Foundation Permit application to the satisfaction of the Director of Development, consistent with the landscaping master plan

submitted as part of this Development Permit. Once an acceptable plan has been approved, the owners will be required to register an agreement on Title, ensuring that the landscaping will be maintained in perpetuity or until the site is redeveloped. These requirements are secured through "no build" legal agreements registered on the Titles of both parcels.

Site Servicing Overview

Ecowaste has worked with City staff to develop a servicing strategy including the following:

- A new two-lane bridge on Blundell Road, with an off-road multi-use pathway, is proposed to be built over the No. 7 Road canal and act as the main access to the site. This bridge and construction of the road surface, curbing, boulevard lighting and off-road pathway features over a portion of Blundell Road will be undertaken in the first phase of the development (as per "Schedule B").
- A restricted temporary discharge of surface storm run-off will be allowed to the No. 7 Road canal from the first phase of the development until a new storm discharge system has been installed leading from the site southward toward Williams Road, through the dike and then to a direct discharge station at the Fraser River as outlined in the Development Permit Considerations
- Water and sanitary utility services will be provided up to the property boundaries. Internal distribution and maintenance within the site will be the responsibility of the property owners. In part, this approach is intended to limit the City's exposure to liability of utility lines over the landfill. The Development Permit considerations include requirements for entering into a License Agreement for construction of the sanitary forcemain across Francis Road prior to the development's first Building Permit issuance on 15111 Williams Road (i.e. the parcel south of Francis Road).
- Road improvements to Blundell Road, Francis Road and Savage Road will be undertaken by the developer under one or more Servicing Agreements. The finished works will include lighting, curbs and gutters, sidewalks and/or off-road multi-use pathways and treed boulevards. Francis and Savage Roads are to be designed and constructed to their ultimate standards, while Blundell Road will be designed and constructed to an interim standard. Blundell Road improvements will occur in the first phase of the development, while Francis Road and Savage Road improvements will occur in the final phase of the development and will be secured through "no build" covenants over the last phase of lands to be developed. These legal agreements will be secured through the Servicing Agreement.
- All roads and sidewalks/pathways on Ecowaste's site will be privately-owned and maintained. This approach is similar to that proposed for the utility services and is again intended to limit the City's exposure to liability of roadways over the landfill. Agreements for public right of access on the main internal roads and sidewalks/pathways will be registered on Title as outlined in the Development Permit considerations as a condition of the Development Permit issuance. Refinements to these agreements may occur through the subsequent Servicing Agreements required at Building Permit stage.

The on-site roads and sidewalks/pathways will be constructed in association with phase blocks A through D (as per "Schedule B") of the development.

Transportation

The Development Permit considerations include the City's requirements for all the road dedications, road cross sections for both public and private roads with public right-of-passage and vehicle parking and loading. The considerations also include requirements for a special crosswalk on Blundell Road at "Road A" and for the acquisition and dedication of a 2000 m² section of Savage Road which is currently under private ownership by Sanstor Farms Ltd. and is within the Agricultural Land Reserve (ALR). Ecowaste will need to undertake a separate application to the Agricultural Land Commission for subdivision (including necessary road dedication) of the 2000 m² section of Savage Road as a requirement of phase block E (as per "Schedule B") Servicing Agreement. This Agricultural Land Commission (ALC) application will need to be considered by Richmond City Council prior to the ALC.

Should Ecowaste be unsuccessful in acquiring the road or obtaining the necessary subdivision approvals the panhandle lands south of Francis Road (Block E) may need to be revisited through either a General Compliance application or a new Development Permit.

The development plans incorporate a cul-de-sac on the future Savage Road construction south of Francis Road. The intent is to restrict new vehicle activity from the development site and development sites east of the No. 7 Road Canal from accessing Steveston Highway and the Highway 99 interchange via Williams Road until such time the necessary road infrastructure is in place. At this time, the objective of these traffic measures is to not increase the traffic generated at the Steveston Highway/Highway 99 Interchange until additional planning and transportation infrastructure upgrades occur along the Highway 99 corridor (including applicable highway interchanges). The Development Permit considerations include a legal agreement restricting vehicles associated with the development to access via Blundell Road. The considerations also require the owners to notify prospective tenants of the restricted access conditions.

Until the development of roads occurs along Savage and Francis Road, secondary access (for emergency vehicles) needs to be provided for the northern lot once buildings are constructed to account for an alternative access route in the event of a blockage on Blundell Road. The proponent has indicated that a network of existing internal service roads currently provides access throughout the development site, including a means to access the entire development site from Williams Road. These roads are currently utilized by Ecowaste vehicles and large trucks for maintenance and monitoring of the former landfill site and access to the active landfill operation on the north side of Blundell Road. The proponent has indicated that these internal service roads will remain (for private maintenance use only – no public access) throughout the build-out of the development and can be utilized to provide for secondary emergency vehicle and fire access. The Development Permit Considerations includes a requirement for registration of a legal agreement providing emergency services access across both properties.

Additional Considerations

The Development Permit considerations include a requirement for the submission of a geotechnical report to be submitted at the Building Permit review stage to ensure that buildings can be safely constructed overtop of the land fill.

Public Art

Pursuant to the City's Public Art Policy (No. 8703) Public Art contributions will be secured with each new Building Permit application through a "no build" Public Art covenant over both parcels. The Public Art covenant is included in the Development Permit considerations. The rate of contribution will be determined as of the date of Building Permit application.

Operating Budget Impacts (OBI)

As a result of the proposed development, the City will take ownership of developer contributed assets such as a bridge, roadworks, waterworks, storm sewers, sanitary sewers, street lights, street trees and traffic signals on Blundell Road and Savage Road. The anticipated operating budget impact for the ongoing maintenance of these assets \$105,000.00. This will be considered as part of the 2018 Operating budget.

Conclusions

Ecowaste has worked closely with staff to refine the site's overall design and develop acceptable servicing strategies for the two (2) parcels. The Development Permit considerations provide sufficient safeguards to ensure that subsequent Servicing Agreements, land dedications, landscaping requirements and ESA /RMA environmental impacts will be appropriately addressed over the development's extended time span. The proposed variances outlined in the Development Permit application have been reviewed and are supported by staff from a technical standpoint in terms of contributing to the creation of a modern logistics hub and the development's unique placement atop a former landfill site. Staff are recommending support for the variances and the redevelopment proposal outlined in this report and the submitted plans.



David Brownlee
Planner 2
(604-276-4200)

DCB:blg

Attachments:

- 1 Development Permit Considerations
- 2 Development Application Data Sheet



City of Richmond

Development Permit Considerations
Development Applications Department
6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 15111 Williams Road and Richmond Key 1095

File No.: DP 11-566011

Prior to approval of the Development Permit, the developer is required to complete the following:

1. Ministry of Environment (MOE) Certificate of Compliance or alternative approval to proceed granted from MOE regarding potential site contamination issues. This approval is required prior to Development Permit Issuance.
2. Flood: Registration of a flood plain covenant on Title identifying a minimum habitable elevation of 3.0 m GSC.
3. Servicing Agreement No Building 15111 Williams Road: Registration of a legal agreement on Title for 15111 Williams Road requiring that, no Building Permit for 15111 Williams Road will be issued until a Servicing Agreement has been entered into for the related servicing works for Francis Road, Savage Road, Williams Road and provision of services to the site, to the satisfaction of the Director of Engineering.
4. Public Art & Landscape Plans: Registration of a legal agreement on Title for 15111 Williams Road and Richmond Key 1095 that with every new Building Permit (excluding tenant interior improvements) a permit will not be issued until the following items have been addressed:
 - 4.1 A voluntary cash contribution shall be made to Richmond's Public Art Reserve fund prior to the issuance of the Building Permit. The contribution is to be based on the approved floor area at each building permit application, the building type and the Public Art Contribution rate at the time of Building Permit application submission.
 - 4.2 Submission of a detailed landscape plan and installation cost estimate (including materials and labour plus contingency) prepared by a BCSLA and appropriate security to the satisfaction of the Director of Development. The submitted landscape plan is to be generally in accordance with the master site landscape plan submitted under DP 11-566011.

The legal agreement is to include clauses ensuring that the enhanced landscaping is maintained in accordance with generally accepted landscaping maintenance practices and the recommendations of the landscape architect in perpetuity or until approved redevelopment. If not already completed for the phase block (see "Schedule B" of DP 11-566011) where the new Building Permit site is located, the landscape plan and security is to include the Agricultural Land Reserve landscape buffer components for that phase block. The detailed agricultural landscaping plan(s) are to be prepared by a Qualified Landscape Professional and acceptable to the Director of Development; showing the type, size and number of trees, shrubs, ground covers and growing medium that will form the ALR landscape buffer.

5. Private Roads: Registration of a Statutory Right of Way inclusive of appropriate survey plan(s) prepared by a BCLS and acceptable to the Director of Engineering and Director of Transportation showing the alignment and extent of internal private roadways and pedestrian/bike pathways (i.e., along "Road A", "Road B" and Blundell Road) on Title providing public right-of-passage (owner to maintain). The dimensions and alignment of the right-of-ways are to be based on the requirements identified under the Engineering Servicing Requirements and the Transportation Requirements sections below. If required, and at the discretion of the Director of Engineering and Director of Transportation, these legal agreements may need to be discharged and replaced or modified as the precise alignment and dimensions of the right-of-ways are refined through subsequent Servicing Agreements associated with each future Building Permit. Except as specified by the Engineering Servicing Requirements and the Transportation Requirements sections liability, construction and maintenance for works within the right-of-ways are the responsibility of the Owner.
6. Vehicle Access Restriction: Registration of a legal agreement on Title of 15111 Williams Road and Richmond Key 1095 the sole vehicle access to/from the both properties will be via Blundell Road unless otherwise

authorized by the Director of Transportation; that is, no vehicular access would be provided to/from the south via Williams Road unless authorized. Exceptions to the access restriction will be made for City utility service vehicles, emergency vehicles, transit vehicles, bicycles and pedestrians. Additionally, the access restrictions will not apply to vehicles engaged in the ongoing landfill and closure operations.

7. Letter of Commitment: Submission of a letter of commitment by Ecowaste to ensure that all future tenants in the development are aware that, unless authorized by the Director of Transportation, access to the proposed development site is to be solely via Blundell Road and not to Williams Road via Savage Road. Exceptions to the access restriction will be made for City utility service vehicles, emergency vehicles, transit vehicles, bicycles and pedestrians.
8. ALR Buffers: Registration of a legal agreement on Title of 15111 Williams Road and Richmond Key 1095 for agricultural landscaping buffers to secure:
 - 8.1 A survey plan prepared by a BCLS showing the dimensions and locations of the Agricultural Land Reserve (ALR) landscaped buffer required along Blundell Road and Savage Road.
 - 8.2 Outlining conditions ensuring that no structures or debris will be placed within the ALR buffer area and that the Agricultural Land Reserve (ALR) landscaped buffer is maintained at the sole cost of the developer/property owner and will not be abandoned or removed. The legal agreement would also indicate that the property is located adjacent to active agricultural operations and that the ALR landscape buffer is to help mitigate against potential agricultural impacts including noise, dust and odour. The agreement is to include clauses giving the City the right to enter the ALR buffer areas to repair and maintain the landscaping, at the sole cost of the developer/property owner, should the owners fail to do so.
9. RMA: Registration of a legal agreement on Title of Richmond Key 1095 for Riparian Management Area (RMA) compensation (No. 7 Road Canal impacts) to secure the following:
 - 9.1 Survey plan(s) prepared by a BCLS showing the dimension and location of the RMA compensation landscaping areas along the No. 7 Road Canal.
 - 9.2 Submission of detailed landscaping plans prepared by a Qualified Landscape and or Environmental Professional with appropriate security (including materials and labour costs plus contingency) to the satisfaction of the Director of Development. The plans shall include the type, size and number of trees, shrubs, ground covers and growing medium that will form the compensation landscaping.;
 - 9.3 RMA Security: Submission of landscaping security to the satisfaction of the Director of Development for the Riparian Management Area (RMA) compensation (No. 7 Road Canal impacts) based on the RMA planting plan submitted under DP 11-566011. The security is to be based on an installation cost estimate prepared by a BCSLA inclusive of materials and labour costs plus a 10% contingency. The cost estimate shall include cost breakdowns for the type, size and number of trees, shrubs, ground covers and growing medium that will form the compensation landscaping.
 - 9.4 Conditions ensuring that no structures or debris will be placed within the compensation area and that, once installed, the compensation landscaping is maintained and will not be abandoned or removed. Conditions are to include submission of monitoring reports by a Qualified Environmental Professional (QEP) for a minimum of five years from the date of the initial satisfactory landscape inspection by the City. The agreement is to include clauses giving the City the rights to enter the RMA compensation areas to repair and maintain the landscaping should the owners fail to do so.
 - 9.5 Submission of a Contract entered into between the applicant and a Qualified Environmental Professional (QEP) for supervision of any on-site works conducted within or adjacent to the environmental compensation areas. The Contract should include the scope of work to be undertaken, including: the proposed number of site monitoring inspections, and a provision for the QEP to submit a post-construction assessment report to the City for review.
10. ESA No Build 15111 Williams Road: Registration of a "No Build" legal agreement on Title of 15111 Williams Road for Environmentally Sensitive Area (ESA) and Riparian Management Area (RMA)

compensation measures (Savage Road impacts). A Building Permit will not be issued until the following conditions have been addressed to the satisfaction of the Director of Development:

- 10.1 Submission of detailed landscaping plans and detailed installation cost estimate prepared by a Qualified Landscape and or Environmental Professional for the ESA/RMA compensation area to the satisfaction of the Director of Development and generally corresponding to the compensation requirements outlined in the Habitat Balance sheet submitted under DP 11-566011. The plans shall include the type, size and number of trees, shrubs, aquatic vegetation, ground covers and growing medium that will form the compensation landscaping.
- 10.2 Submission of a landscaping security based on the updated ESA/RMA compensation landscaping plan and cost estimates current to the date of submission. Cost estimates are to include materials, labour and monitoring costs plus a 10% contingency.
- 10.3 Survey plan prepared by a BCLS showing the configuration and dimensions of the ESA/RMA compensation area as submitted under DP 11-566011;
- 10.4 Registration on Title of a legal agreement for the conservation and ongoing maintenance of the ESA/RMA compensation area to the satisfaction of the Director of Development. The agreement shall include the accepted detailed landscaping plan including the type, size and number of trees, shrubs, ground covers and growing medium that will form the compensation landscaping. The agreement is to ensure that no structures or debris will be placed within the compensation area and that, once installed and approved by the City, the compensation landscaping is maintained and will not be abandoned or removed. The agreement is also to include submission of monitoring reports by a Qualified Environmental Professional (QEP) for a minimum of five years from the date of the initial satisfactory landscape inspection by the City. The agreement is to include clauses giving the City the rights to enter the Environmental Compensation areas to repair and maintain the landscaping should the owners fail to do so.
- 10.5 Submission of a Contract entered into between the applicant and a Qualified Environmental Professional (QEP) for supervision of any on-site works conducted within or adjacent to the environmental compensation areas and to oversee the construction of the compensation wetlands at 15111 Williams Road. The Contract should include the scope of work to be undertaken, including: the proposed number of site monitoring inspections, and a provision for the QEP to submit a post-construction assessment report to the City for review.
11. Water Table Monitoring: Submission of a contract, to the satisfaction of the Director of Engineering, for a qualified Environmental Professional to undertake the water table monitoring for the proposed wetland compensation as outlined in the Wetland Feasibility Study and Conceptual Design report by Keystone Environmental dated May 3, 2016.
12. Emergency Access: Registration of a legal agreement on Title of 15111 Williams Road and Richmond Key 1095 providing emergency services to access across both properties.

Prior to Building Permit Issuance, the developer must complete the following requirements:

- 1 Enter into the legal agreements and Servicing Agreements* as outlined in the Engineering Servicing Requirements and the Transportation Requirements sections below.
- 2 Submission of geotechnical report(s) prepared by a professional engineer or geoscientist and experienced in geotechnical engineering verifying that the land may be used safely for the use intended.
- 3 Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
- 4 Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

- 5 Installation of appropriate tree protection fencing around all trees to be retained as part of the development prior to any construction activities, including building demolition, occurring on-site.

Engineering Servicing Requirements

Scope: ECOWASTE INDUSTRIES LTD. has applied to the City of Richmond for permission to develop a 169-acre Industrial Logistics Park at 15111 Williams Road and No Access Parcel 1095. A Development Permit is required as the proposed road and bridge infrastructure is adjacent to an Environmentally Sensitive Area, a Riparian Management Area and the Agricultural Land Reserve (ALR).

Ecowaste Industries Ltd. has presented a servicing strategy for the Richmond Industrial Centre Development's proposed bridge, road, stormwater, water and sanitary servicing, dated December, 2015. Generally, the document provides a servicing strategy that can be used as a basis for creating Servicing Agreement drawings. Key issues and other requirements that must be addressed through servicing agreements* are outlined below. Minor issues and currently unknown issues must also be resolved through the servicing agreements.

Since the servicing document was submitted its content has been reviewed on an on-going basis. As such, some of the issues listed here-in may already have been resolved.

Servicing Agreements and Other Agreements

- The Developer is required to:
 1. Prior to the development's first Building Permit issuance for the site, enter into a Servicing Agreement to complete the interim works on Blundell Road. Drawings for the development's entire off-site works (including Savage Road, Francis Road and all private works within statutory right-of-ways for public passage) should be presented for City approval and clearly demarked to show all construction phasing.
 2. Prior to the development's second Building Permit issuance, enter into agreements for the development's proposed stormwater pipe to cross Francis Road, Dyke Road, Lot K and, if necessary, Williams Road and to define property owner management obligations for private infrastructure and drainage discharge between two (2) separate land parcels. Parcel to parcel agreements must be registered at LTO prior to infrastructure construction.
 3. Prior to the development's first Building Permit issuance on land located south of the Francis Road dedication (i.e. 15111 Williams Road), enter into agreements for the development's proposed sanitary forcemain to cross the City's Francis Road dedication and to define property owner management obligations for private infrastructure and sewage discharge between two (2) separate land parcels. Parcel to parcel agreements must be registered at LTO prior to infrastructure construction.
 4. Prior to the development's first Building Permit issuance on land located south of the Francis Road dedication (i.e. 15111 Williams Road), enter into a Servicing Agreement to complete the ultimate works on Francis Road and Savage Road. The City reserves the right to request amendments to these drawings should the form of development vary from that proposed in the Development Permit application, should the City's engineering standards change prior to the Servicing Agreement being signed or if, based on the aforementioned Servicing Agreements construction, there are technical reasons to require such change.
 5. Enter into, depending on the applicant's preference, one or more servicing agreements to complete the Francis Road and Savage Road pre-load works. The timing to enter these agreements may vary depending on the developments construction schedule requirements.
 6. Coordinate pre-load works along Savage Road with pipeline works proposed by the Vancouver Airport Fuel Facilities Corporation to ensure that neither parties work precludes construction of the other and to ensure that ground is adequately pre-loaded prior to the road's ultimate construction.
 7. On all Servicing Agreement (SA) drawings clearly show where land owner maintenance responsibilities end and City maintenance responsibilities begin. As a general rule, the City will not own and maintain infrastructure outside of the existing road dedications.

Water Works

- The Developer is required to:
 8. Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm the development has adequate fire flow for on-site fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage and Building designs.
 9. Design private watermains within "Road A" and "Road B" to meet all applicable standards (Plumbing Code, City Engineering Specs and others as required). Pipe inspections to be made by the City's plumbing inspectors (add notes to drawings).

Storm Sewer Works

- The Developer is required to:
 10. Limit the permanent drainage catchment into the No. 7 Road drainage canal to that of Blundell Road and the north entrances of "Road A" and "Road B".
 11. Limit the temporary drainage catchment into the No. 7 Road drainage canal to that of the development's first building and its adjacent parking lots.
 12. Construct, prior to the construction of subsequent buildings, a permanent drainage system discharging directly into the Fraser River.
 13. In the event that the permanent drainage pipe construction is delayed due to the on-going discussions with Port Metro Vancouver, an on-site stormwater storage system will be considered. An on-site storage system would need to attenuate storm flows so that the maximum peak flow from the first building's drainage catchment is not exceeded.
 14. Locate the development's drainage system on private property (no pipe is permitted to run in a north-south direction within Savage Road) apart from where it crosses Francis Road, Dyke Road, Lot K or other City controlled land.
 15. Assess the storm outfall's potential to erode/impact the Fraser River bank/foreshore present designs to prevent any identified impacts.
 16. Provide road drainage along Savage Road and Francis Road, no private tie-in permitted.
 17. Remove the storm overflow to Francis Road.

Sanitary Sewer Works:

- The Developer is required to:
 18. No additional items identified at this time.

Frontage Improvements and General Items:

- The Developer is required to:
 19. Own and maintain all sidewalks, bike paths, curbs, gutters, asphalt, streetlights, utilities and other similar infrastructure located above areas of land that are known or suspected to be used for landfill operation. This includes infrastructure located within the Ecowaste property fronting Blundell Road, with the exception of a small strip of asphalt (approx. 300 mm wide) between the concrete gutter and the property line, for which a Statutory Right-of-Way (SRW) agreement will be required.
 20. Prior to the construction of any building south of Francis Road, purchase and dedicate approximately 2,000 m² of land to complete the 20 m wide Savage Road dedication (immediately north of Williams Road), including obtaining all necessary approvals from the City and Agricultural Land Commission.
 21. Revise the Savage Road design to minimize the use of retaining walls on City dedication.
 22. Provide a signed and sealed geotechnical letter reviewing the revised retaining wall and embankment designs.
 23. Select plants for any steep sections of land within road dedication to have minimum maintenance requirements.
 24. Provide a detailed ultimate bridge layout (4 lanes, but not a full design) within the Servicing Agreement drawings to ensure that the ultimate road and bridge layout is conceptually acceptable. This should include any utilities that may be located beneath it.

25. Register all SRWs (including discharge and replacement or modification SRWs) prior to Servicing Agreement drawing approval.
26. Design the gravel section of Blundell Road to avoid erosion by storm events.
27. Add safety barriers along Savage Road wherever a safety issues requires them.
28. Install pre-duct for future hydro, telephone and cable utilities along all road frontages.
29. Locate all above ground utility cabinets and kiosks required to service the proposed development within the development site (see list below for examples). Please coordinate with the respective private utility companies and the project's lighting and traffic signal consultants to confirm the right-of-way requirements and the locations for the above ground structures. If a private utility company does not require an above ground structure, that company shall confirm this via a letter to be submitted to the City. The following are examples of SRWs that shall be shown in the functional plan and registered prior to Servicing Agreement design approval:
 - BC Hydro Vista - Confirm SRW dimensions with BC Hydro.
 - BC Hydro PMT – Approximately 4 m wide x 5 m (deep) – Confirm SRW dimensions with BC Hydro.
 - BC Hydro LPT – Approximately 3.5 m wide x 3.5 m (deep) – Confirm SRW dimensions with BC Hydro.
 - Street light kiosk – Approximately 2 m wide x 1.5 m (deep)
 - Traffic signal controller cabinet – Approximately 3.2 m wide x 1.8 m (deep)
 - Traffic signal UPS cabinet – Approximately 1.8 m wide x 2.2 m (deep)
 - Shaw cable kiosk – Approximately 1 m wide x 1 m (deep) – show possible location in functional plan. Confirm SRW dimensions with Shaw.
 - Telus FDH cabinet - Approximately 1.1 m wide x 1 m (deep) – show possible location in functional plan. Confirm SRW dimensions with Telus.
30. Provide other frontage improvements as per Transportation's requirements. Improvements shall be built to the ultimate condition wherever possible.
31. Provide, prior to first Servicing Agreement design submission, a geotechnical assessment of preload and soil preparation impacts on the existing utilities fronting or within the development site, proposed utility installations, and provide mitigation recommendations. The mitigation recommendations shall be incorporated into the first Servicing Agreement design submission or if necessary prior to pre-load.
32. Enter into additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering, including but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.

Transportation Requirements

1. Land dedication and PROP SROW:

Applicant responsible for dedicating land and providing the necessary Public Right-of-Passage Statutory Right-of-Way (PROP SROW) to accommodate the road/frontage works as noted below in item 2 along each of the development frontages. In general, the following list summarizes the total widths required to accommodate the road cross-sections; however, the exact width of the dedication and PROP SROW is subject to the review and approval of the detailed Servicing Agreement (SA) design of which would be based on the area necessary to accommodate the ultimate standards for both roads and intersections.

Dedications

- a. Savage Road: 20.0 m (as dedication)
- b. Francis Road: 20.0 m (as dedication)

PROP SROW*

- c. Blundell Road: 24.4 m (composed of a 1.10m wide strip of land along the south side as PROP SROW*, and the existing road right-of-way as dedication ranging between 19.12 m and 20.98 m in width, plus the northern edge where a strip of PROP SROW* ranging between 2.32 m and 4.18 m to be provided for the off-road pathway, proposed concrete curb and gutter and a strip of asphalt. The total dedication and PROP SROW* should be no less than 24.4 m).
- d. "Road B" (private road): 20.0 m (as PROP SROW*)
- e. "Road A" (private road): 20.0 m (as PROP SROW*)
- f. Minimum 4 m x 4 m corner cuts (as PROP SROW*) on the corners of intersections where two (2) roads intersect. The corner cut should be measured from the new property lines and/or new PROP SROW's*.

*All PROP SROW's are to be maintained by the owner.

2. Road Cross-Sections:

Applicant responsible for the design and construction of the frontage works as noted in the Servicing Strategy dated December, 2015, submitted by the applicant. The document provides a servicing strategy that can be used as the basis to define the scope of the road and/or frontage improvements on a conceptual basis. The exact scope and extent of the road improvements would be reviewed and refined as part of the detailed Servicing Agreement process which will aim to achieve the following general cross-sections:

- a. Blundell Road Bridge over No. 7 Road right-of-way be constructed as part of the development (from north to south):
 - 0.3 m wide for handrail
 - 3.2 m wide paved shared pedestrian/cyclist path
 - 0.39 m wide concrete barriers with railing
 - 8.3 m wide asphalt pavement for vehicular traffic
 - 1.045 m wide street lighting & concrete median barriers

The interim bridge should be designed to allow for the future widening to the south to accommodate the following ultimate cross-section that would be in addition to the interim cross-section noted above (from north to south):

- 0.445 m wide for street lighting/median barriers
 - 8.3 m wide asphalt pavement for vehicular traffic
 - 0.39 m wide concrete barriers with railing
 - 1.7 m wide concrete sidewalk path
 - 0.3 m wide for handrail
- b. Blundell Road (from the proposed Blundell Road bridge to just west of "Road B") to be constructed as part of the development (from north to south):
 - 2.5 m wide paved shared pedestrian/cyclist path
 - 0.15 m wide curb/gutter
 - 8.3 m wide asphalt pavement for vehicular traffic (11.3 m at intersections with the additional width for left-turn bays)
 - 0.15 m wide curb/gutter
 - street lighting placed at 1.7 m south of the curb/gutter
 - 1.5 m wide sidewalk along the south side at the ultimate location, between "Road B" and "Road A".

Note that the ultimate cross-section for Blundell Road would consist of the above, and a “mirror image” of the above cross-section on the south side with the exception that the 2.5 m wide pathway that would be replaced with a 1.5 m wide concrete sidewalk.

- c. Savage Road, from Williams Road to Francis Road to be constructed as part of the development (from east to west):
 - 1.0 m wide transition/tie-in
 - 4.0 m wide shared pedestrian/cycling path
 - 1.5 m wide treed boulevard & street lighting
 - 0.15 m wide curb/gutter
 - 10.0 m wide asphalt for vehicular travel
 - 0.15 m wide curb/gutter
 - remaining width for buffer
- d. Francis Road, from Savage Road to “Road B” to be constructed as part of the development (from south to north):
 - 0.85 m wide transition/tie-in
 - 2.5 m wide paved pedestrian/cycling path
 - 1.5 m wide treed boulevard & street lighting
 - 0.15 m wide curb/gutter
 - 10.0 m wide asphalt for vehicular travel
 - 0.15 m wide curb/gutter
 - 1.5 m wide treed boulevard & street lighting
 - 2.5 m wide paved pedestrian/cycling path
 - 0.85 m wide transition/tie-in
- e. “Road B” (private road), from Francis Road to Blundell Road to be constructed as part of the development (from east to west):
 - 0.85 m wide transition/tie-in
 - 2.5 m wide paved pedestrian/cycling path
 - 1.5 m wide treed boulevard & street lighting
 - 0.15 m wide curb/gutter
 - 10.0 m wide asphalt for vehicular travel
 - 0.15 m wide curb/gutter
 - 1.5 m wide treed boulevard & street lighting
 - 2.5 m wide paved pedestrian/cycling path
 - 0.85 m wide transition/tie-in
- f. “Road A” (private road), from “Road B” to Blundell Road to be constructed as part of the development (from east to west):
 - 0.85 m wide transition/tie-in
 - 2.5 m wide paved pedestrian/cycling path
 - 1.5 m wide treed boulevard & street lighting
 - 0.15 m wide curb/gutter
 - 10.0 m wide asphalt for vehicular travel
 - 0.15 m wide curb/gutter
 - 1.5 m wide treed boulevard & street lighting
 - 2.5 m wide paved pedestrian/cycling path
 - 0.85 m wide transition/tie-in

3. Special Crosswalk:

Applicant to design and construct a special crosswalk (with flashing beacons, and downward lighting) on Blundell Road at "Road A" (west leg).

4. Vehicle Parking & Loading and Bicycle Parking:

Vehicle parking and loading and bicycle parking to be provided as per requirements noted in Zoning Bylaw Section 7.0 with the exception for the following variance if approved by Council:

Reduce the minimum number of parking spaces required to 0.56 spaces per 100 m² of gross leasable floor area for those portions of the building used for freight forwarding services or warehouse storage services.

Note:

- * This requires a separate application.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner, but also as covenants pursuant to Section 219 of the Land Title Act.
All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.
The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development.
- Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- Applicants for all City Permits are required to comply at all times with the conditions of the Provincial *Wildlife Act* and Federal *Migratory Birds Convention Act*, which contains prohibitions on the removal or disturbance of both birds and their nests. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.

Signed

Date



Development Application Data Sheet

Development Applications Department

DP 11-566011

Attachment 2

Address: 15111 Williams Road and Richmond Key 1095

Applicant: Ecowaste Industries Ltd. Owner: same

Planning Area(s): Fraser Lands

	Existing		Proposed
Site Area:	65.22 ha (161.14 acres)		Same (possible minor road dedications via Servicing Agreement.)
Land Uses:	Industrial – active landfill north of Francis Road and sorting and processing construction waste south of Francis Road		Industrial – closed landfill with light industrial logistics park
OCP Designation:	Industrial		Same
Zoning:	Industrial (I)		Same
	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	1.0 FAR	1.0 FAR max	none permitted
Lot Coverage:	Max. 60%	60%	None
Setback – Frontage to Public Roads	Min. 3.0 m	13 m or more	None
Setback – Exterior Side Yard to Public Roads	Min. 0.0 m	3 m	None
Setback – Frontage to Internal Private Roads	N/A	3 m or more	None
Setback – Exterior Side Yard Internal Private Roads	N/A	3 m or more	None
Height (m):	Max. 12 m	13 m as measured from slab finished floor	Variance
Lot Size:	Richmond Key 1095): 53.35 ha (131.8 acres - 15111 Williams Road: 11.87 ha (29.3 acres)	Same (possible minor road dedications via Servicing Agreement.)	None
Off-street Parking Spaces – Regular/Commercial:	TBD at BP stage	TBD at BP stage 0.56 spaces per 100 m ² for freight forwarding services or warehouse storage services	Variance for freight forwarding services or warehouse storage services
Off-street Parking Spaces – Accessible:	TBD at BP stage	TBD at BP stage	None
Bicycle Parking Spaces: Class 1 and Class 2	TBD at BP stage	TBD at BP stage	None



City of Richmond

Development Permit

No. DP 11-566011

To the Holder: ECOWASTE INDUSTRIES LTD.
Property Address: 15111 WILLIAMS ROAD AND RICHMOND KEY 1095
Address: C/O MR. ANGUS BEATTIE
5TH FLOOR, 595 BURNARD STREET
VANCOUVER, BC

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500" is hereby varied to:
 - a) Increase the maximum building height from 12.0 m to 13.0 m and that the building height is to be measured from the finished foundation slab and further to apply the Geological Survey of Canada (GSC) datum shown on the phase block plan attached as "Schedule B" as the maximum elevation limits for the tallest point on each building, and;
 - b) Reduce the minimum number of parking spaces required to 0.56 spaces per 100 m² of gross leasable floor area for those portions of the building used for freight forwarding services or warehouse storage services.
4. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #17 attached hereto.
5. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
6. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

Development Permit

No. DP 11-566011

To the Holder: ECOWASTE INDUSTRIES LTD.

Property Address: 15111 WILLIAMS ROAD AND RICHMOND KEY 1095

Address: C/O MR. ANGUS BEATTIE
5TH FLOOR, 595 BURRARD STREET
VANCOUVER, BC

7. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO.
DAY OF , .

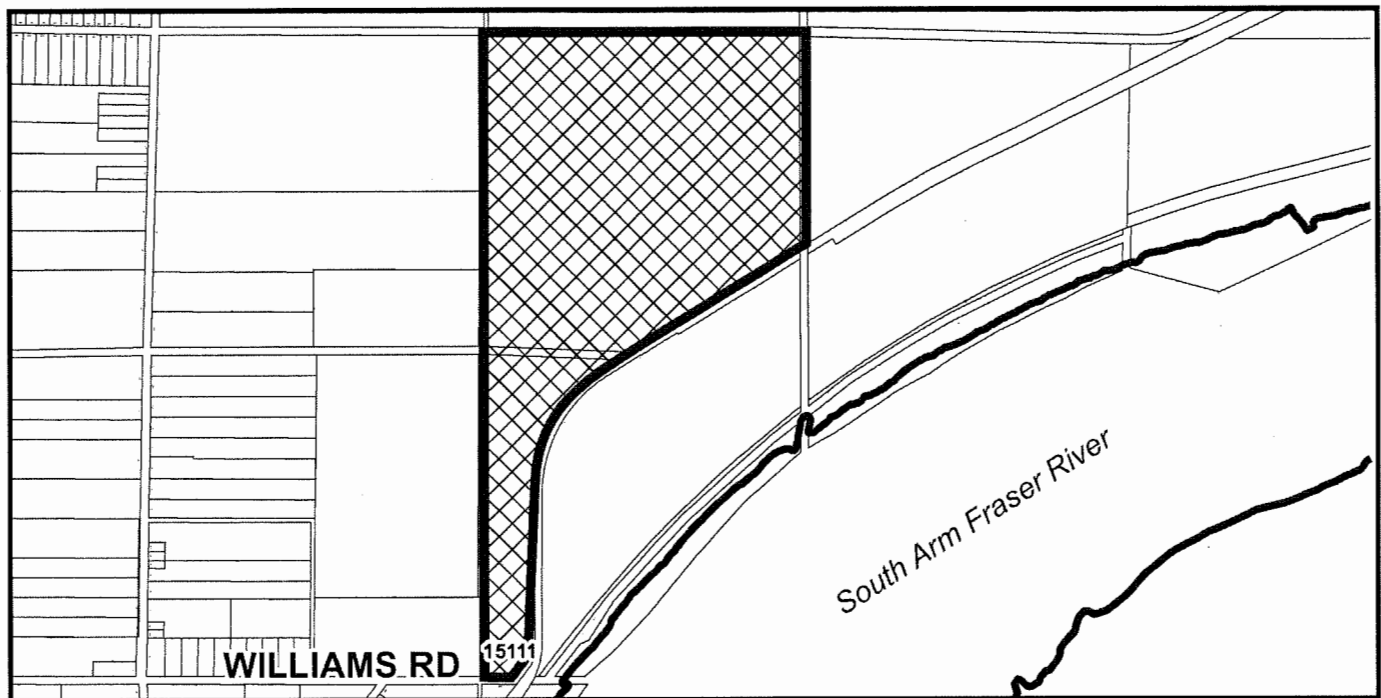
ISSUED BY THE COUNCIL THE

DELIVERED THIS DAY OF , .

MAYOR



City of Richmond

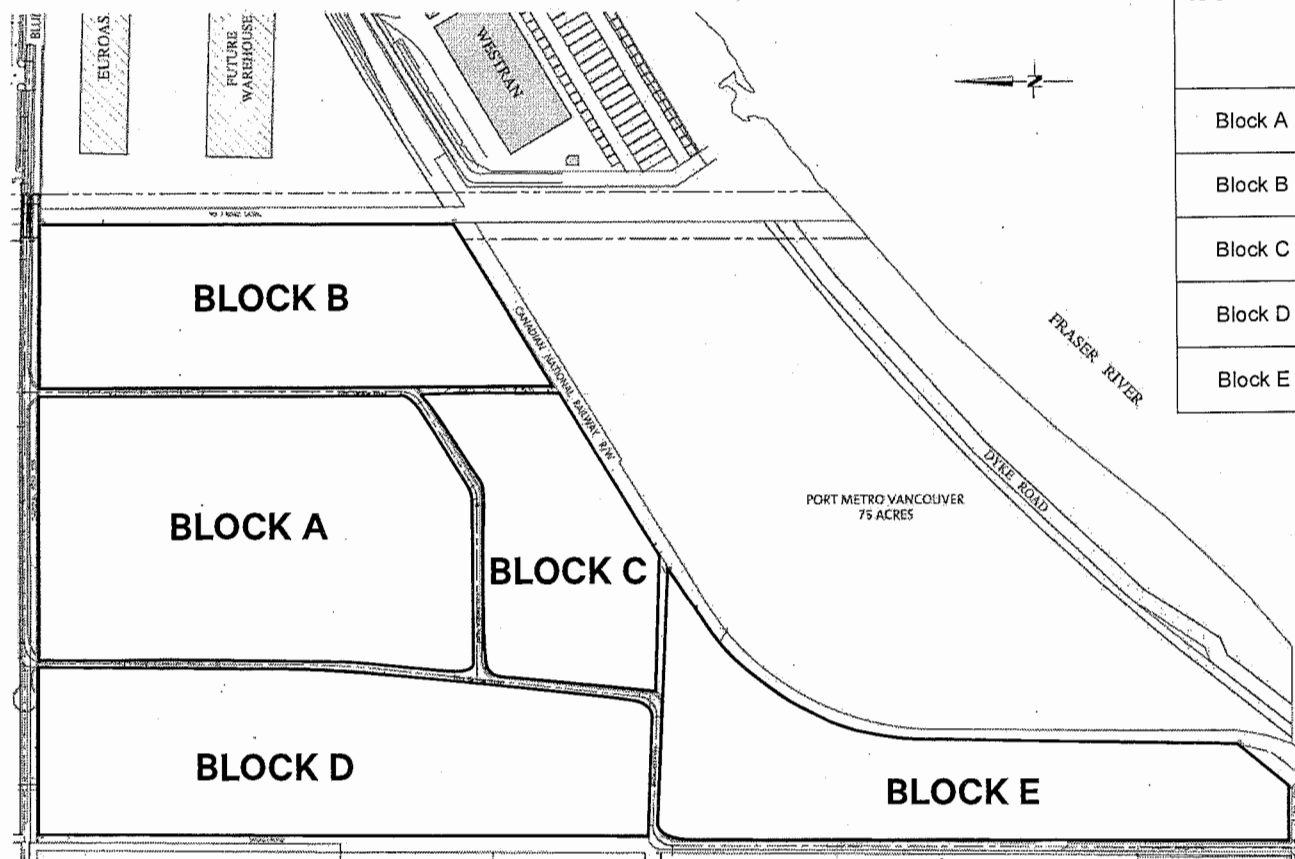


DP 11-566011
SCHEDULE "A"

Original Date: 06/20/16

Revision Date:

Note: Dimensions are in METRES



Location	Approximate Finished Grade	Maximum Building Height
Block A	19 m GSC	The lesser of 13 m above slab or 32 m GSC
Block B	18.2 m GSC	The lesser of 13 m above slab or 31.2 m GSC
Block C	18.2 m GSC	The lesser of 13 m above slab or 31.2 m GSC
Block D	18.2 m GSC	The lesser of 13 m above slab or 31.2 m GSC
Block E	6.7 m GSC	The lesser of 13 m above slab or 19.7 m GSC

BUILDING HEIGHT VARIANCE

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



Richmond
Industrial
Centre

SCHEDULE B

Richmond Industrial Centre Development

JUL 13 2016

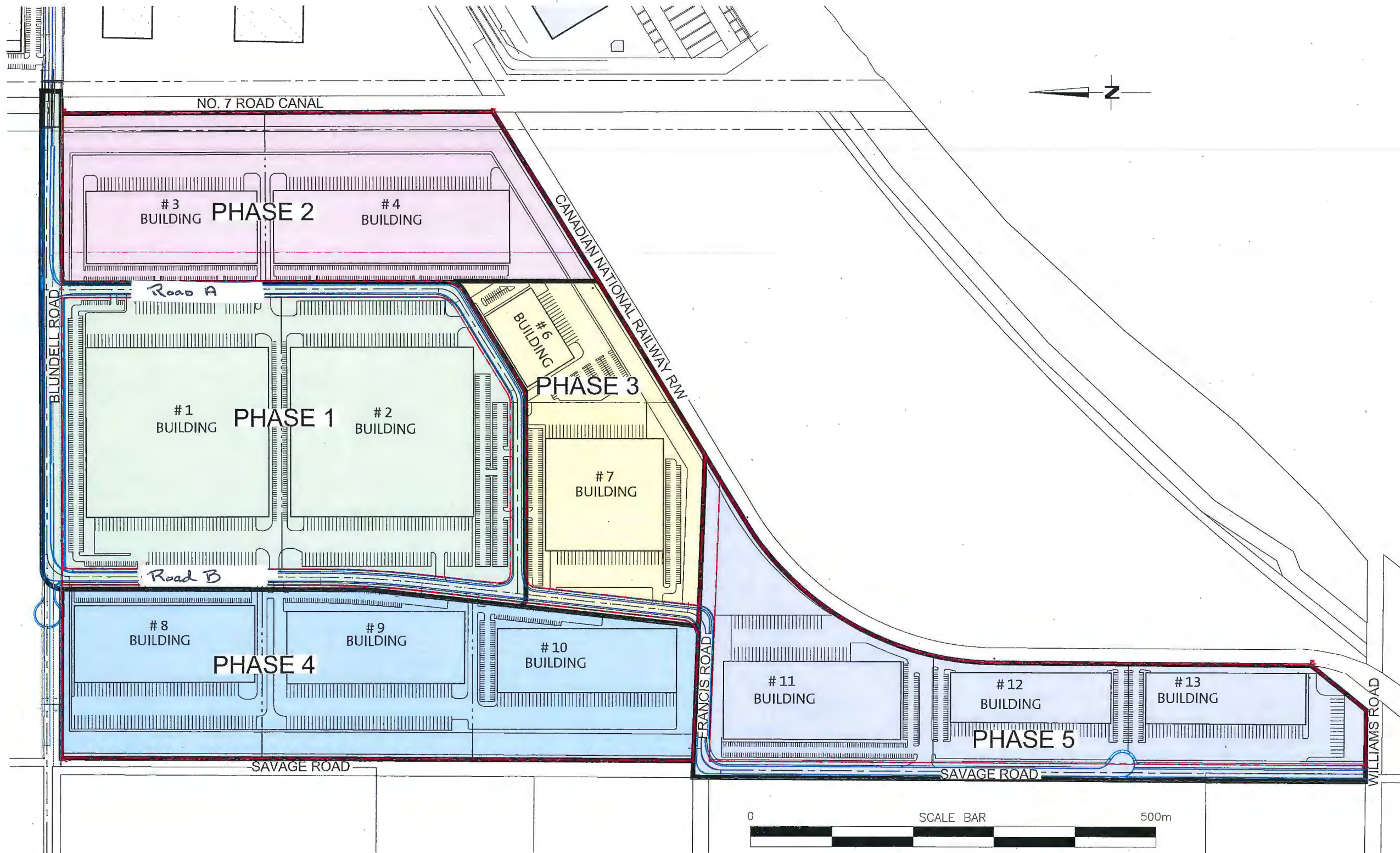
RICHMOND INDUSTRIAL CENTRE DEVELOPMENT

FILE NO. DP 11-566011

DP 11-566011



Richmond
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JUL 13 2016

Plan #1

DEVELOPMENT PHASING PLAN

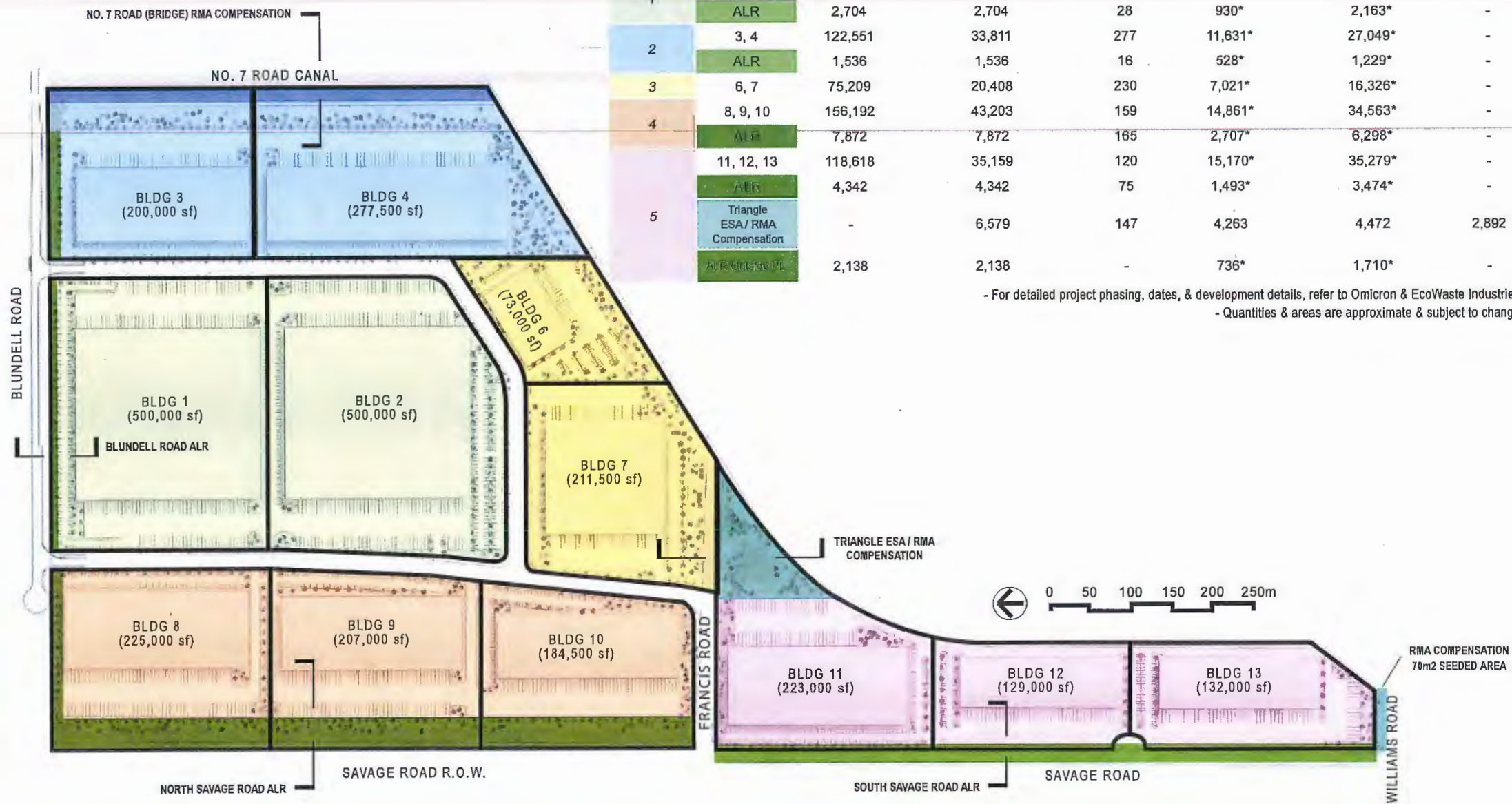
RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



Richmond
Industrial
Centre

DP 11-566011

Planting Strategy Plan



JUL 13 2016

Plan #2

LANDSCAPE PLAN AND PLANTING OVERVIEW

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



NP 11-566011

Proposed Plant Lists - Site & ALR Buffer

REPRESENTATIVE TREE LIST

No.	BOTANICAL NAME	COMMON NAME	SIZES & NOTES
1	AMELANCHIER ALNIFOLIA	SERVICEBERRY	MIXED 7, 10 POTS
2	BETULA NIGRA	RIVER BIRCH	MIXED 7, 10 POTS
3	CRATAEGUS SPP.	HAWTHORN	MIXED 7, 10 POTS
4	MALUS FUSCA	PACIFIC CRAB APPLE	MIXED 7, 10 POTS
5	PICEA SPP	SPRUCE	MIX 1.2 - 2.5M HT
6	PINUS CONTORTA	SHORE PINE	MIX 1.2 - 2.5M HT
7	PRUNUS EMARGINATA	BITTER CHERRY	MIXED 7, 10 POTS
8	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	MIX 1.2 - 2.5M HT
9	ROBINIA PSEUDOACACIA	BLACK LOCUST	MIX 1.2 - 2.5M HT
10	QUERCUS PALUSTRIS	PIN OAK	MIX 1.2 - 2.5M HT

REPRESENTATIVE SHRUBS, GRASSES & SEED LIST

No.	BOTANICAL NAME	COMMON NAME	SIZES & NOTES
1	ARCTOSTAPHYLOS UVA-URSI	KINNIKINNICK	4" POTS
2	CAREX SPP	SEDGE, VARIOUS	1 POTS
3	FESTUCA SPP	BLUE FESCUE	1 POTS
4	POTENTILLA FRUTICOSA	SHRUBBY CINQUEFOIL	5 POTS
5	PHYSOCARPUS OPULIFOLIUS	NINEBARK	5 POTS
6	RIBES SANGUINEUM	FLOWERING CURRANT	5 POTS
7	ROSA NUTKANA	NOOTKA ROSE	5 POTS
8	RUBUS PARVIFLORUS	SALMONBERRY	5 POTS
9	SALIX HOOKERIANA	HOOKE'S WILLOW	5 POTS
10	SPIREA DOUGLASSII	HARDHACK	5 POTS
11	SYMPHORICARPOS ALBUS	SNOWBERRY	5 POTS
12	NATIVE GRASS AND WILDFLOWER SEED	COASTAL REVEGETATION MIX, SUPPLEMENTED WITH CAMASSIA & ERYTHRONIUM	

Proposed Plant Lists - ESA/RMA Comp.

REPRESENTATIVE TREE LIST

No.	BOTANICAL NAME	COMMON NAME	SIZES & NOTES
1	*RED ALDER	ALNUS RUBRA	MIX 1.2 - 2.5M HT
2	*BLACK COTTONWOOD	POPULUS BALSAMIFERA OR P. TRICHOCARPA	MIX 1.2 - 2.5M HT
3	BITTER CHERRY	PRUNUS EMARGINATA	MIX 1.2 - 2.5M HT
4	*PACIFIC WILLOW	SALIX LUCIDA SSP. LASIANDRA	5 POTS
5	*SITKA SPRUCE	PICEA SITCHENSIS	MIX 1.2 - 2.5M HT
6	WESTERN RED CEDAR	THUJA PLICATA	MIX 1.2 - 2.5M HT

REPRESENTATIVE SHRUBS & WETLAND PLANTS

No.	BOTANICAL NAME	COMMON NAME	SIZES & NOTES
1	SASKATOON	AMELANCHIER ALNIFOLIA	5 POTS
2	*RED-OSIER DOGWOOD	CORNUS SERICEA OR C. STOLONIFERA	5 POTS
3	PACIFIC NINEBARK	PHYSOCARPUS CAPITATUS	5 POTS
4	*SNOWBERRY	SYMPHORICARPOS ALBUS	5 POTS
5	*THIMBLEBERRY	RUBUS PARVIFLORUS	5 POTS
6	*SALMONBERRY	RUBUS SPECTABILIS	5 POTS
7	HOOKE'S WILLOW	SALIX HOOKERIANA	5 POTS
8	*RED ELDERBERRY	SAMBUCUS RACEMOSA VAR. ARBORESCENS	5 POTS
9	CATTAIL	TYPHA LATIFOLIA	1 POTS
10	SLOUGH SEDGE	CAREX LYNGBYEI	1 POTS
11	*BEAKED SEDGE	CAREX ROSTRATA	1 POTS
12	COMMON RUSH	JUNCUS EFFUSUS	1 POTS
13	HARDSTEM BULRUSH	SCIRPUS LACUSTRIS	1 POTS

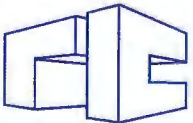
Note: 50% of plants selected should be from those identified with an (*) as per the City of Richmond's Criteria for the Protection of Environmentally Sensitive Areas.

JUL 13 2016

Plan #3

GENERAL SITE PLANTING LIST

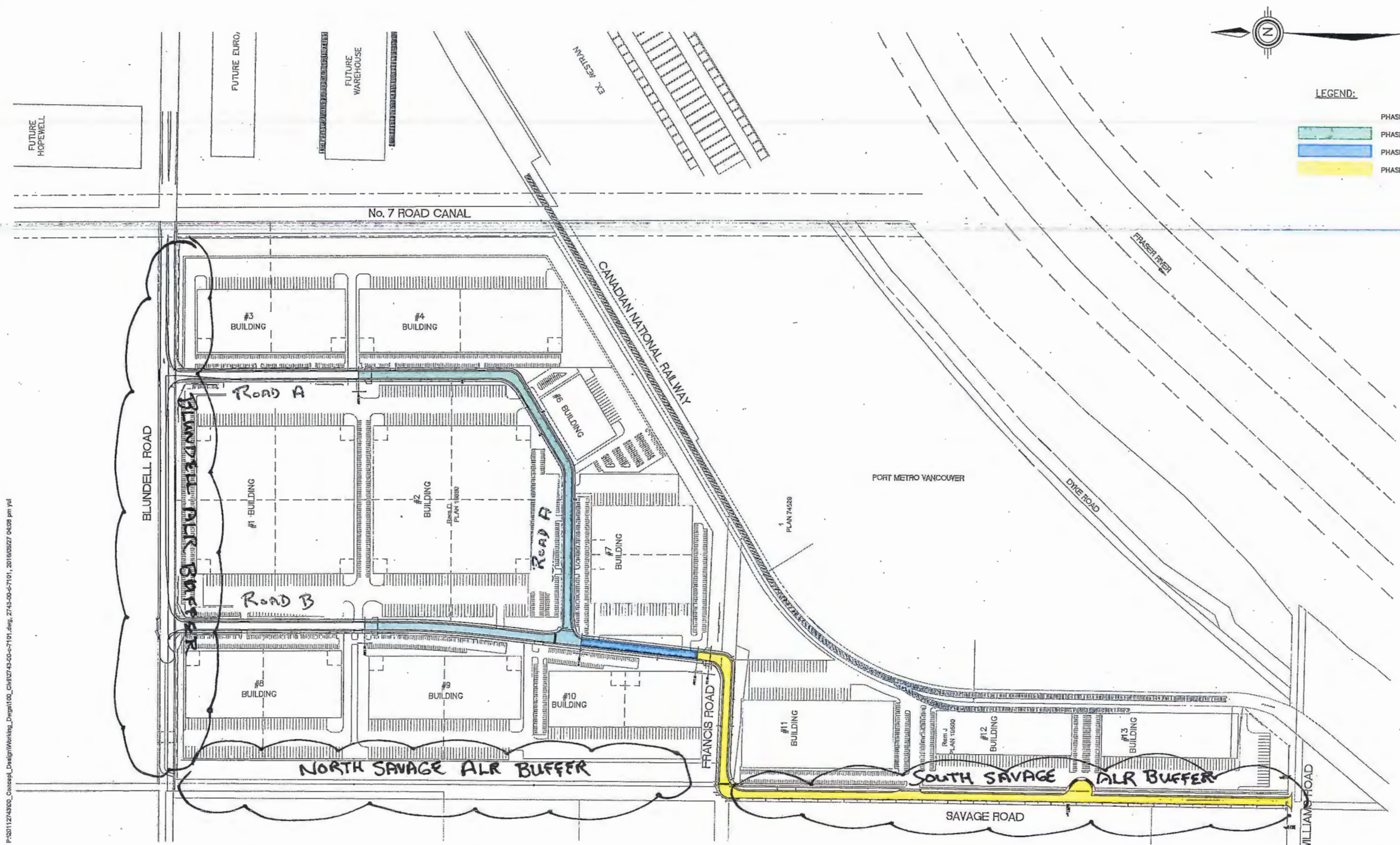
RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



Richmond
Industrial
Centre

DP 11-566011

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ALR BUFFER LOCATIONS

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011

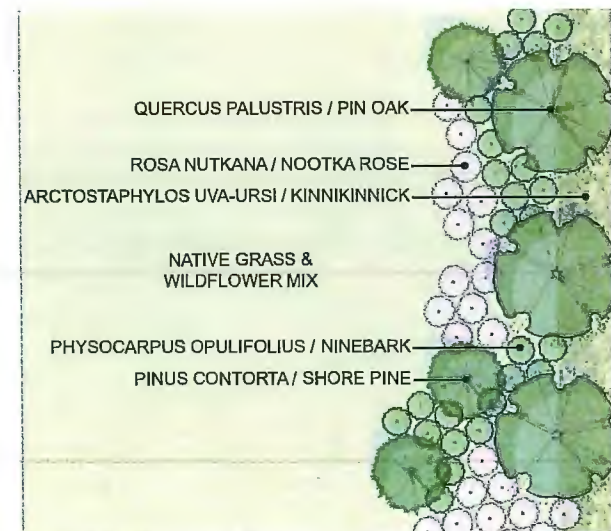


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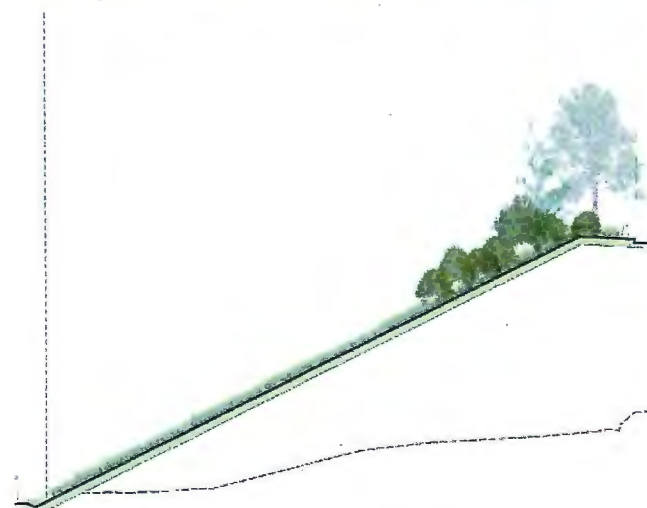
DP 11-566011

JUL 13 2016

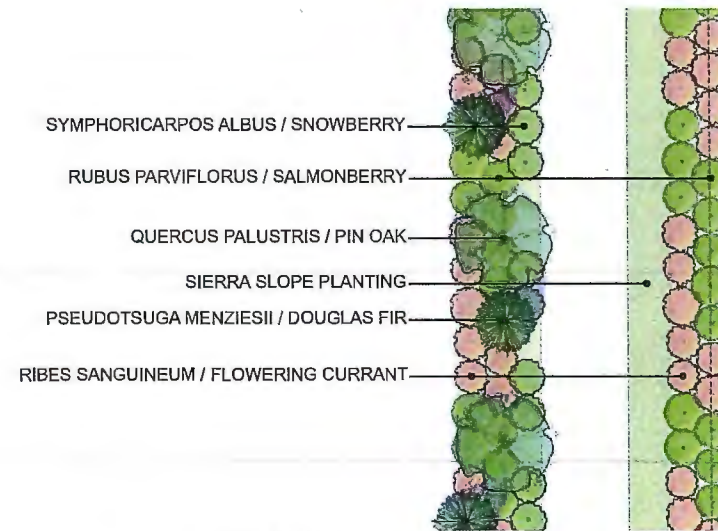
Plan #14a



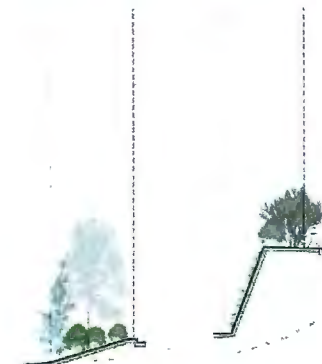
NORTH SAVAGE RD - PARTIAL ALR PLAN



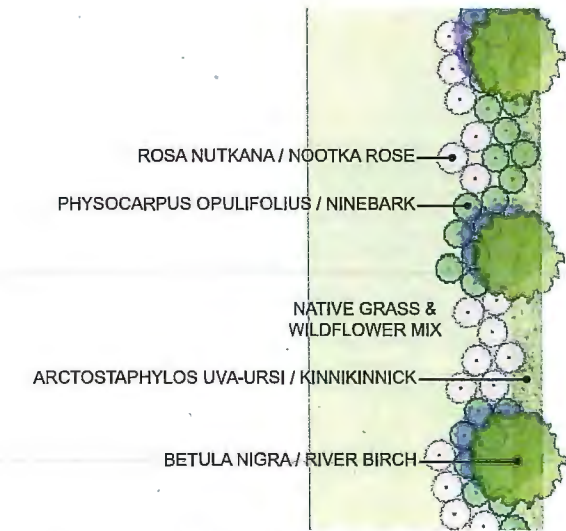
NORTH SAVAGE RD - PARTIAL ALR SECTION



SOUTH SAVAGE RD - PARTIAL ALR PLANS



SOUTH SAVAGE RD - PARTIAL ALR SECTIONS



BLUNDELL RD - PARTIAL ALR PLAN



BLUNDELL RD - PARTIAL ALR SECTION

DESIGN INTENT:

THE LANDSCAPE TOPOGRAPHIES OF THE PROPOSED LANDFILL ELEVATIONS ALONG THE ALR CORRIDORS, ACT AS A PHYSICAL & VISUAL BUFFER. IN ADDITION, SCREENING SHRUBS & TREES WILL ALLEVIATE LIGHT SPILL OVER FROM ADJACENT PARKING LOTS. THE PROPOSED PLANT PALETTE IS INSPIRED BY THE SCALE, TEXTURES & HABITAT OF THE REGIONAL LANDSCAPES. THE PLANTING IS INTENDED TO BE SIMPLE & A REPRESENTATION OF THE RURAL GRASSLAND COMMUNITIES & FRASER RIVER ESTUARY, WITH CLUSTERED GROUPINGS OF TREED THICKETS REPRESENTATIVE OF THE AGRICULTURAL HEDGEROWS. RATHER THAN DESIGN A HIGHLY MANICURED, ORNAMENTAL LANDSCAPE THAT REQUIRES IRRIGATION, FERTILIZERS & BURDENS RESOURCES, THE DEVELOPMENT PROPOSES A STRATEGY OF PREDOMINANTLY NATIVE PLANT COMMUNITIES TO MIMIC THE CHARACTER & HABITAT OF THE TRADITIONAL SITE ECOLOGY. THIS DENSITY HAS BEEN CHOSEN TO ALIGN WITH INTENSIVE LANDSCAPE STRATEGIES & OVERALL CHARACTER OF THE DEVELOPMENT & SCREEN BUILDINGS WHERE APPROPRIATE. TREE SPECIES ADD TO THE OVERALL BIODIVERSITY OF THE INDUSTRIAL PARK & WHERE APPLICABLE, ASSIST IN MITIGATING THE HEAT ISLAND EFFECT.

NOTE:

THE ABOVE PLANS ILLUSTRATES PARTIAL AREAS ALONG DESIGNATED, ALR CORRIDORS. FULL PLANT LISTS & QUANTITIES TO BE FURTHER DEVELOPED DURING DETAILED DESIGN.

ALR BUFFER SECTION, PLAN & PLANTING LIST

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT

FILE NO. DP 11-566011



Richmond
Industrial
Centre

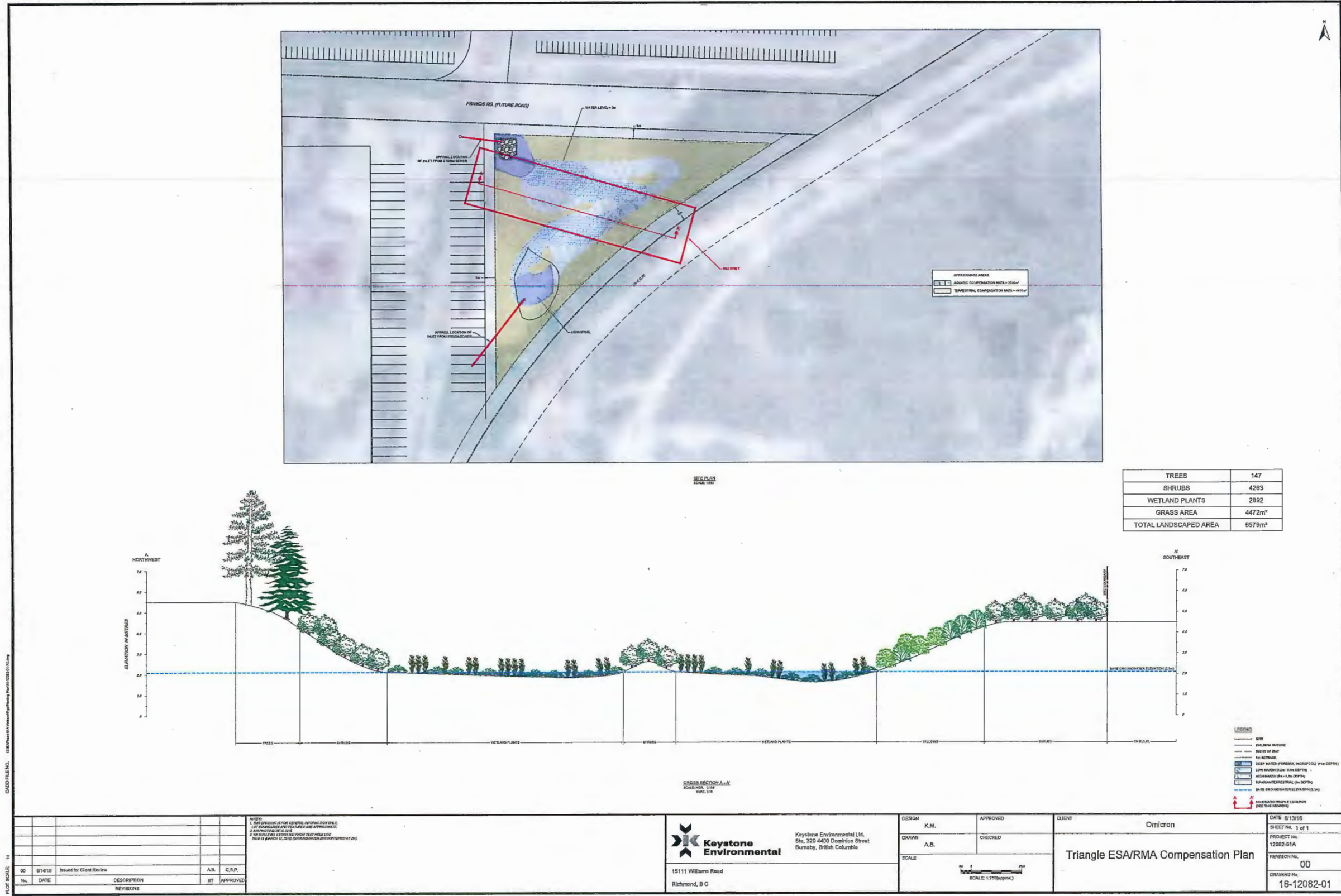
DP 11-566011

JUL 13 2016

Plan #4b

JUL 13 2016

Plan #5



TRIANGLE ESA / RMA COMPENSATION SECTION, PLAN & PLANTING LIST

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



NP 11-566011



NOTE:
PLANT SPACING AND COUNT TO BE DETERMINED
FOLLOWING INVASIVE REMOVAL



**Richmond
Industrial
Centre**

DP 11-566011

JUL 13 2016

2/3/75

Richmond Industrial Centre Habitat Balance Sheet and Proposed Compensation

Site / Photo Number	Habitat Type	Lot 1101 (Ecowaste Property)	Lot 1123 (Neighbouring Property)	Road ROWs	Total	Compensation Ratio (Impact to Replacement)	Required Compensation Area	Compensated Like Habitat for Like Habitat	Compensated in Same Ecological Unit	
Impacted ESA / RMA Requiring Compensation (m ²)										
1	ESA	Freshwater Aquatic	-	480	Savage Rd: 1,600	2,080	2:1	1,040	Yes	No [†]
		Riparian Terrestrial	-	2,164	Savage Rd: 205	2,369	2:1	1,185	Yes	No [†]
2a	RMA	Freshwater Aquatic	-	-	Savage / Francis Rd: 105	147	2:1	74	Yes	No [†]
3a					Williams Rd: 42					
2b		Riparian Terrestrial	-	-	Savage / Francis Rd: 101	142	2:1	71	Yes	No [†]
3b					Williams Rd: 41					
4	ESA	Storm Water Outfall - Brackish Aquatic	-	-	Williams Rd: 75	75	2:1	38	No*	No [†]
5	RMA	No.7 Canal Bridge - Riparian Terrestrial	-	-	Blundell Rd: 732	732	1:1.5	1,098	Yes	Yes
Non-Impacted Areas to be Removed from ESA (m ²)										
6	ESA	Riparian Terrestrial	6,688	54	Savage / Francis Rd: 5,566	12,308	-	-	-	-
Required Compensation Sub-Total								3,506	-	-
+ Additional 25% for Net Benefit / Local Values								4,383	-	-
Total Required Aquatic Compensation								1,440	-	-
Total Required Terrestrial Compensation								2,943	-	-

Proposed Habitat Compensation (m ²)							
Site / Photo Number	Location	Compensation Habitat Type	Impacted Habitat Type / Location	Compensation Area	Total Compensation Area	Compensated Like Habitat for Like Habitat	Compensated in Same Ecological Unit
7	Ecowaste "Triangle Lot" Constructed Wetland	Freshwater Aquatic	ESA Lot 1123 and Road ROWs	1,040	1,588	Yes	No [†]
			RMA Road ROWs	74		Yes	No [†]
			ESA Storm Water Outfall	38		No*	No [†]
			ESA Additional Net Benefit	436		-	-
		Riparian Terrestrial	ESA Lot 1123 and Road ROWs	1,185	3,230	Yes	No [†]
			RMA Road ROWs	71		Yes	No [†]
			ESA Additional Net Benefit	1,974		-	-
8	Williams Road Entrance Culvert Removal & Watercourse Restoration	Freshwater Aquatic	RMA Additional Net Benefit	32	32	-	-
		Riparian Terrestrial	RMA Additional Net Benefit	70	70	-	-
9	No. 7 Road Canal Riparian Restoration	Riparian Terrestrial	RMA No. 7 Road Canal ROWs	1,098	3,731	Yes	Yes
			RMA Additional Net Benefit	2,633		-	-
Total Proposed Aquatic Compensation					1,620	-	-
Total Proposed Terrestrial Compensation					7,031	-	-
Aquatic Net Benefit (1,620 – 1,440)					180	-	-
Terrestrial Net Benefit (7,031 – 2,943)					4,088	-	-

* Brackish intertidal aquatic impacts from the storm water outfall will be compensated as part of the upland constructed wetland (unlike habitat), based on the limited area of impacts and limited value an isolated brackish compensation area would provide.

† Compensation habitat will not be located in the same contiguous ecological unit based on the inability to establish compensation areas on the Ecowaste property that maintain direct connectivity to impacted areas beyond the property boundaries. Providing compensation habitat in a concentrated area at >25% of the replacement ration is considered to represent a no net loss of habitat.

JUL 13 2016

Plan #7

HABITAT BALANCE SHEET

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



Richmond
Industrial
Centre

DP 11-566011

Ecowaste Landscape Data

ITEM	DESCRIPTION	% OF SITE	TOTAL AREA (m ²)
Total Site	Current as per site plan 2015 (site plan development ongoing)	100 %	652,106 m ²
Building Footprint	Includes Total Footprints of Buildings 1 through 13 (site plan development ongoing)	36 %	265,787 m ²
ESA / RMA	No. 7 Road canal habitat compensation area for proposed bridge per Keystone letter dated July 28, 2011.	1.1 %	7,031 m ²
ALR	Agricultural Land Reserve Buffers along Blundell, and North and South Savage Rd, as approved in 2014	2.0 %	18,592 m ²
Richmond Zoning	Based on COR Development Permit Guidelines, 3.0m setback	2.3 %	14,998 m ²
Additional Landscape	Additional site landscape beyond all regulatory requirements	19 %	123,900 m ²
Total Landscape	Total landscape area (not including building footprints, parking, loading, and roadways)	24 %	156,505 m ²

Secondary Objective: Minimum Double the Amount of Required Landscaping Required in the Zoning Bylaw

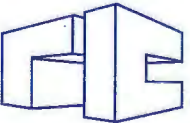
ITEM	METHOD	TARGET	PURSUED
1. Rooftop Parking	A) Parking on the roof and equivalent area of intensive landscaping at grade	50 Points	Not Pursued
2. Enhanced landscaping by anyone or combination of a) to e) methods	A) Area is used for local food production, outdoor amenity space, and/or an environmentally sensitive area	50 Points	30 Points
	B) Vertical landscaping on at least 50% of the length of walls visible from any highway, public trail, or natural watercourse	30 Points	20 Points
	C) Tree canopy in the staff and visitor parking area to provide 50% canopy cover in 10 years		
	D) Other methods		
	E) Intensive landscape including native species in the rainwater and detention system, bioswale, or other methods for runoff control	15 Points	15 Points
		Req'd Points = 30	65 Points

JUL 13 2016

Plan #8

GREEN ROOF BYLAW VARIANCE OVERVIEW

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011

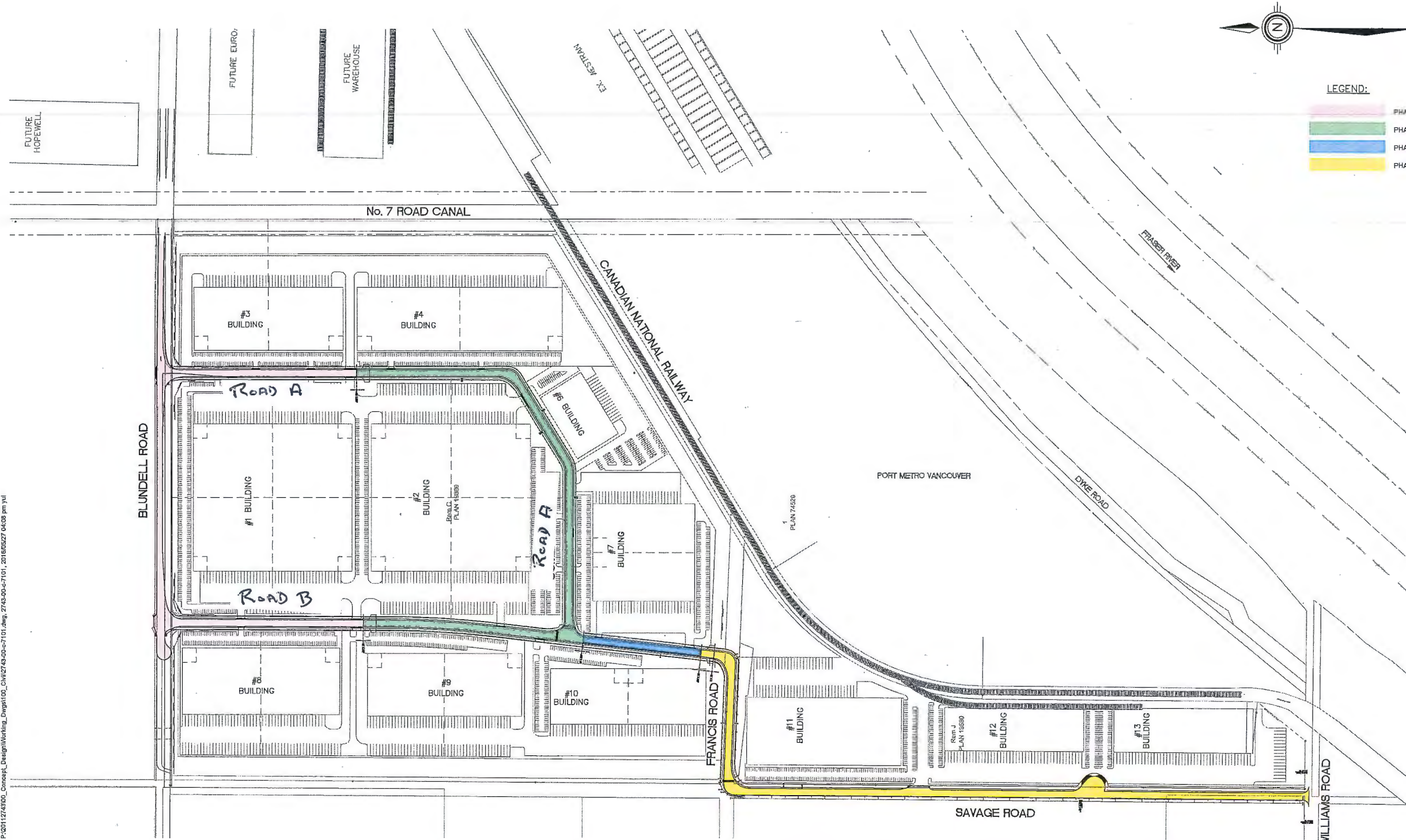


Richmond
Industrial
Centre

DP 11-566011



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ROAD PHASING PLAN

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



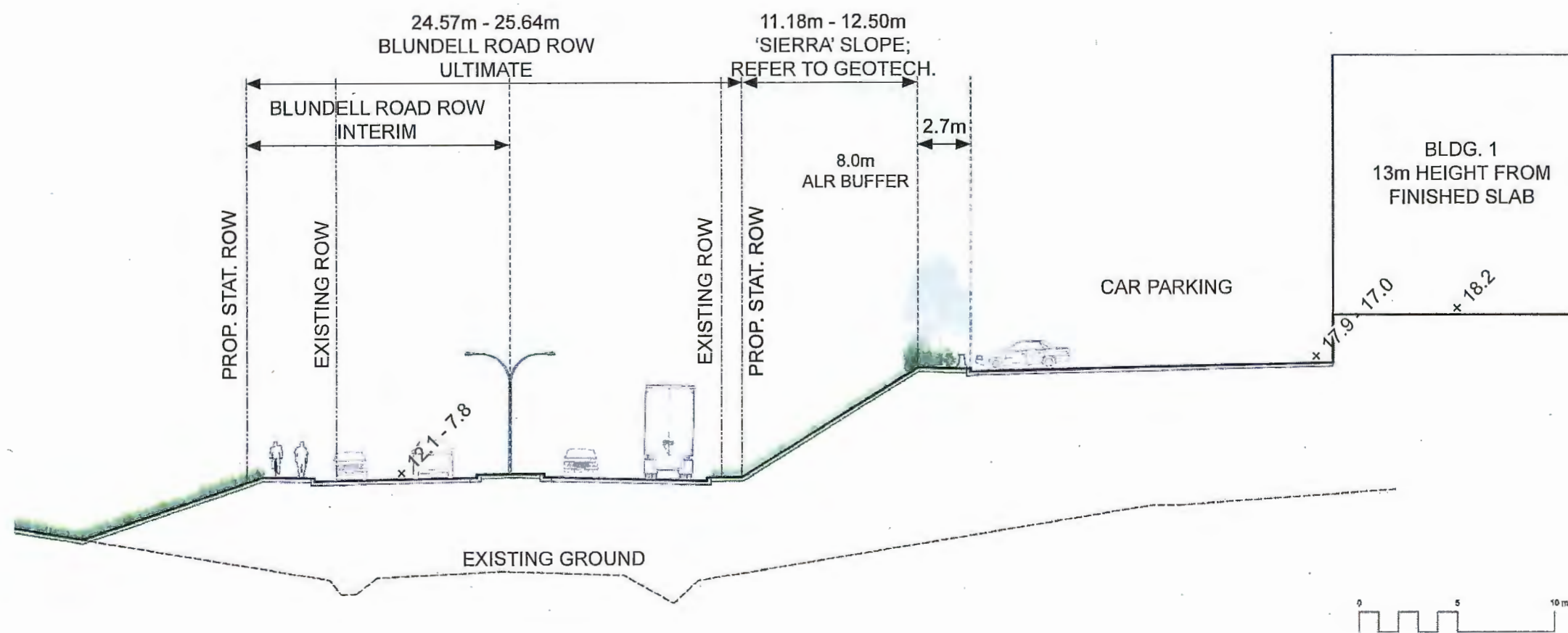
Richmond
Industrial
Centre

DP 11-566011

JUL 13 2016

Plan #9





BLUNDELL ROAD ROW

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011

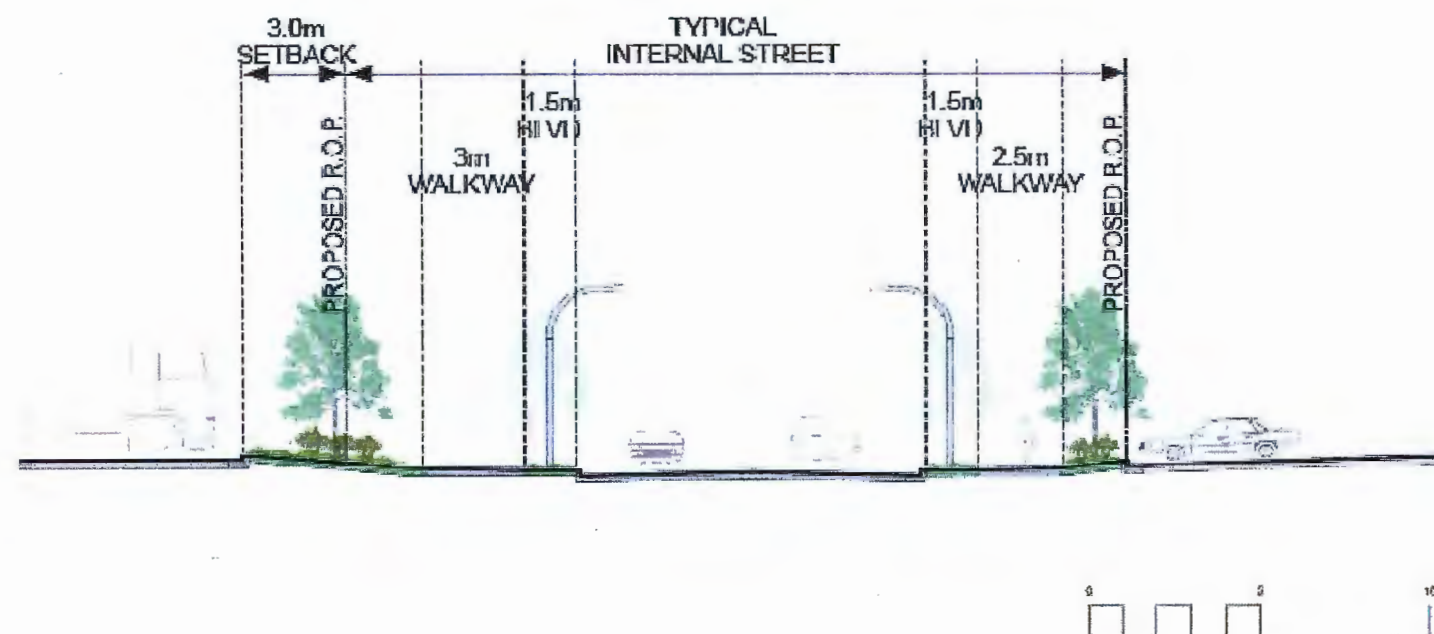


Richmond
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DP 11-566011

JUL 13 2016

Plan #11



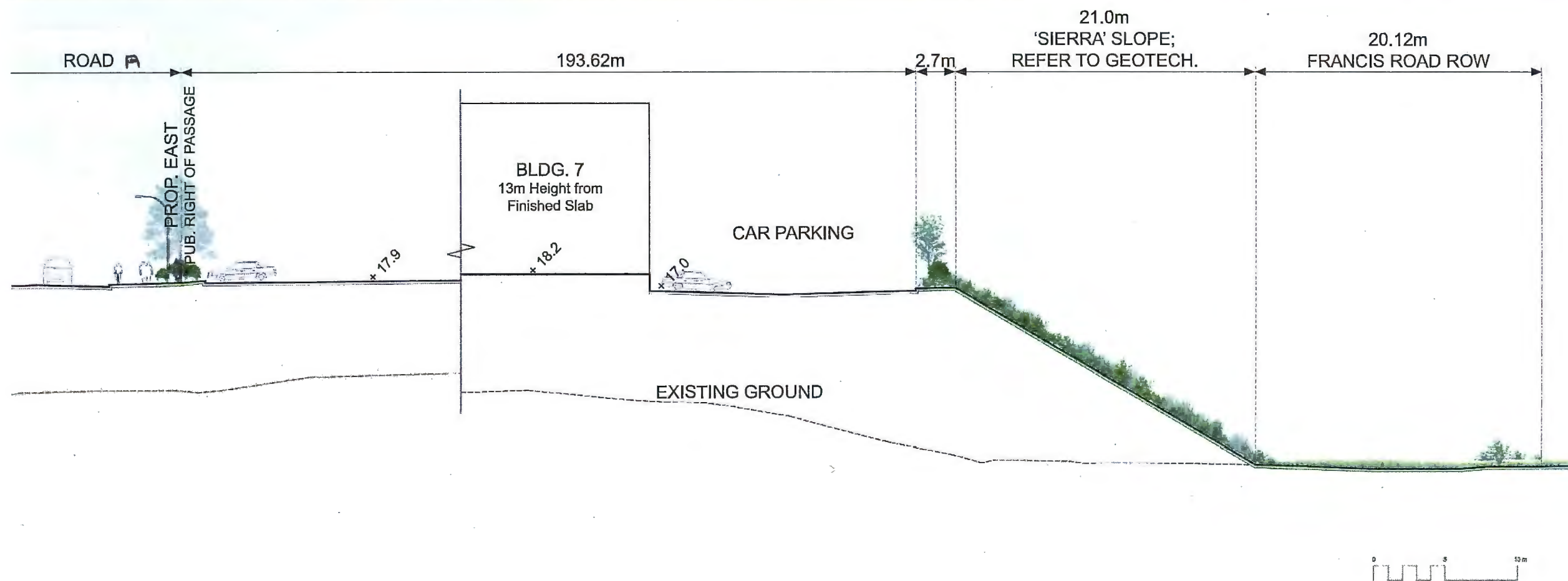
TYPICAL INTERNAL ROADWAYS

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



Richmond
Industrial
Centre

DP 11-566011



JUL 13 2016

Plan #12

FRANCIS ROAD ROW

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011

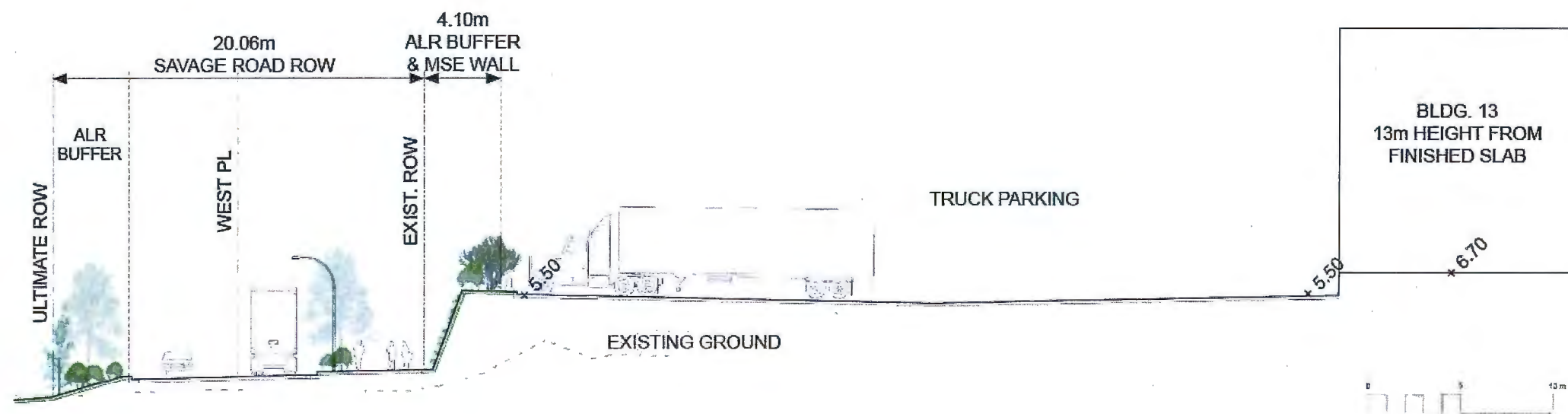


Richmond
Industrial
Centre

DP 11-566011

JUL 13 2016

Plan #13



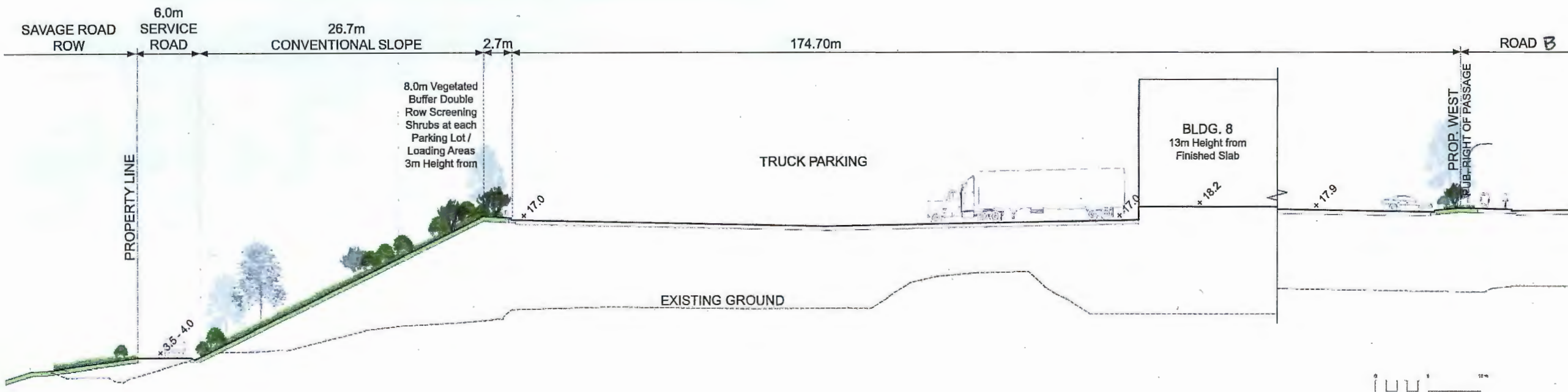
SAVAGE ROAD ROW (SOUTH OF FRANCIS)

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



Richmond
Industrial
Centre

DP 11-566011



SAVAGE ROAD ROW (NORTH OF FRANCIS)

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011

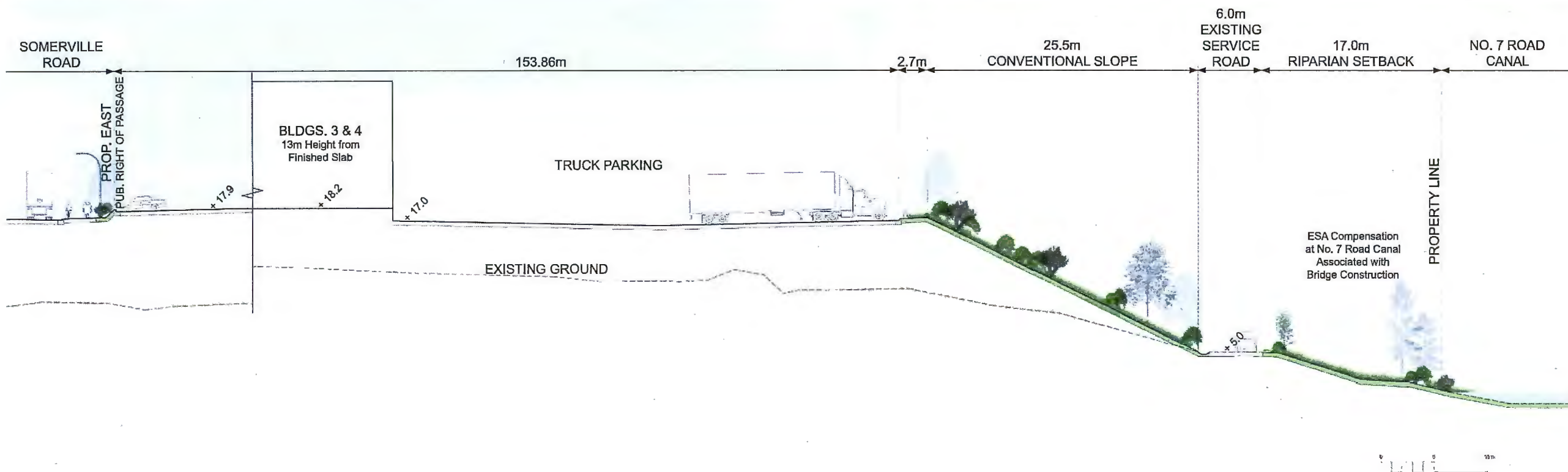


Richmond
Industrial
Centre

DP 11-566011

JUL 13 2016

Plan #14



JUL 13 2016

Plan #15

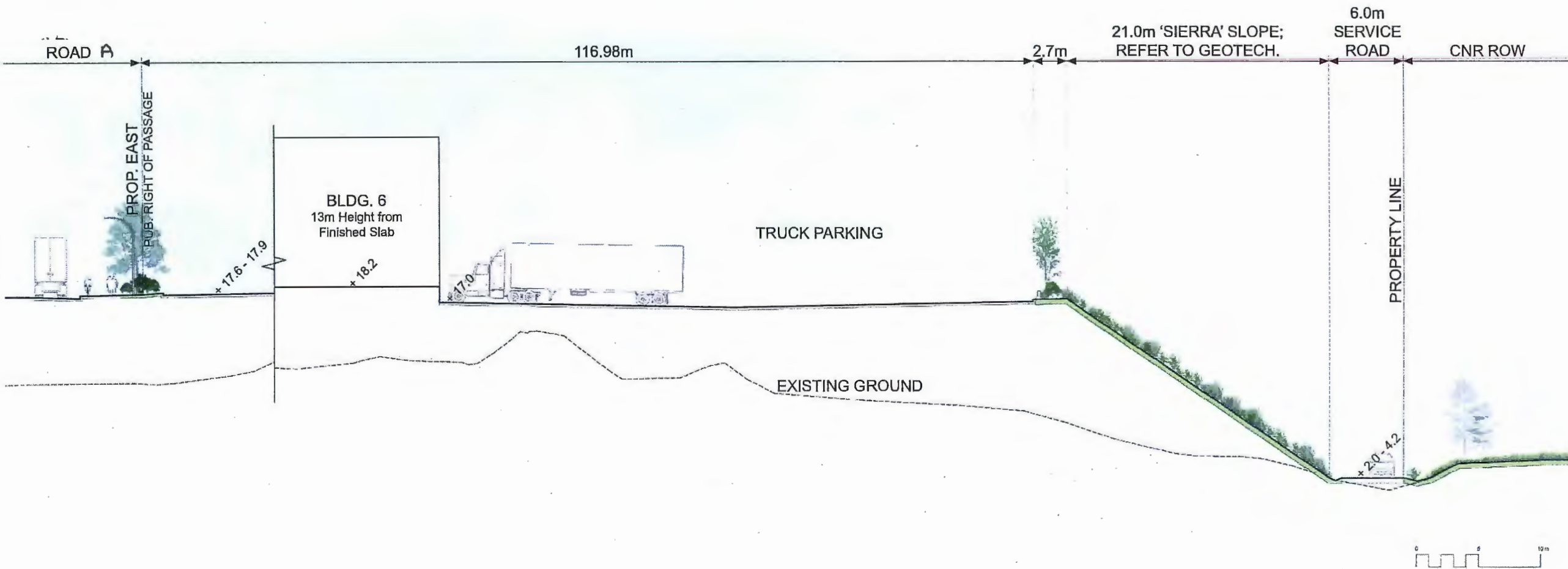
NO. 7 ROAD CANAL ESA / RMA COMPENSATION AREA

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



Richmond
Industrial
Centre

DP 11-566011



CNR ROW

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



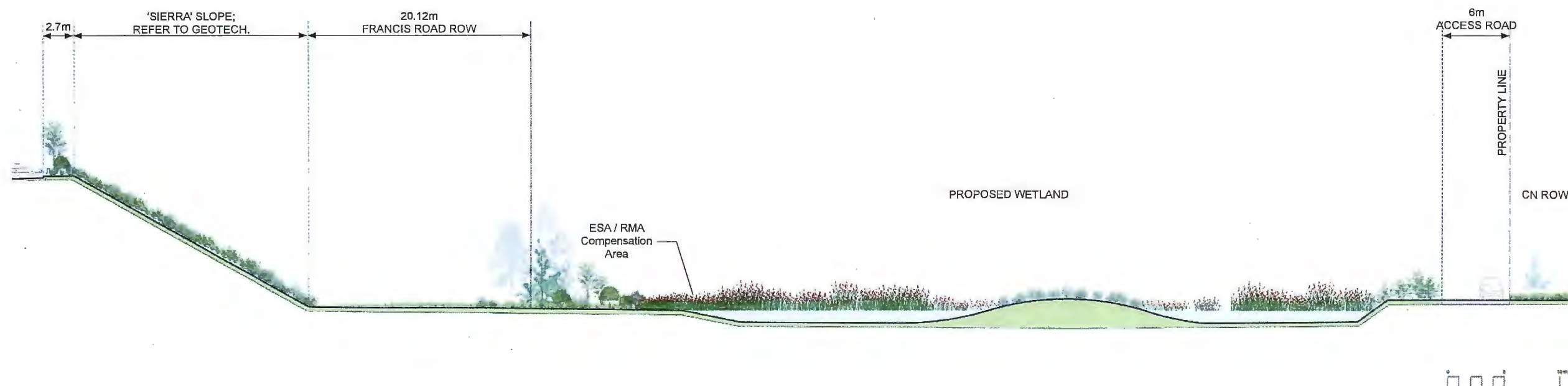
Richmond
Industrial
Centre

DP 11-566011

JUL 13 2016

Plan #16

Plan #17 JUL 13 2016



ONSITE COMPENSATION AREA

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



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DP 11-566011

REFERENCE DOCUMENTS

JUL 13 2016

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT

FILE NO. DP 11-566011



Richmond
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DP 11-566011



JUL 13 2016

Reference

AERIAL VIEW OF DEVELOPMENT LOCATION

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



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Industrial
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NP 11-566011



JUL 13 2016

Reference

DEVELOPMENT OVERVIEW

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



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Centre

DP 11-566011



BUILDING ELEVATION — CONCEPTUAL

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011

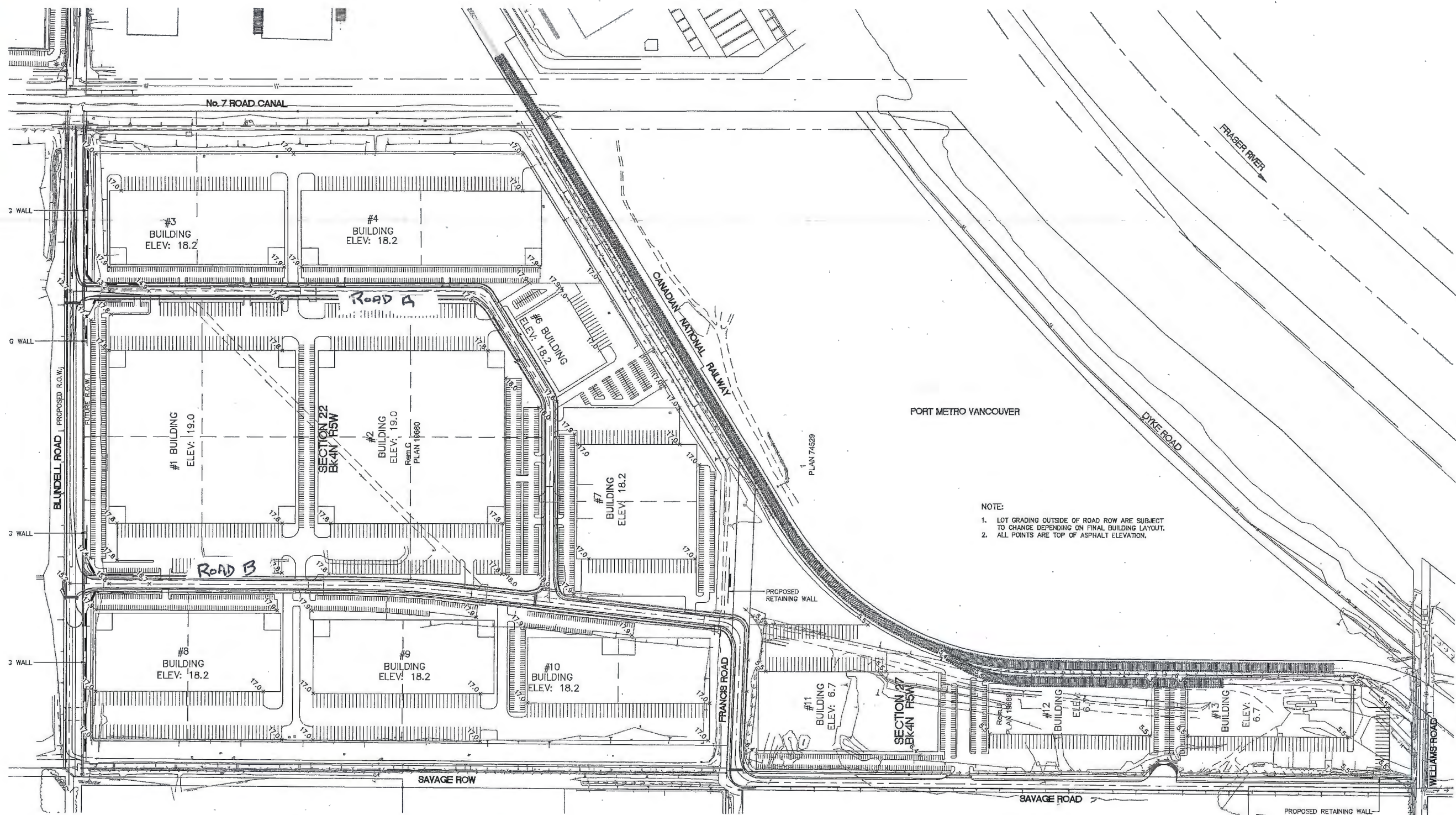


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Reference



LEGAL SITE PLAN — CONCEPTUAL

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



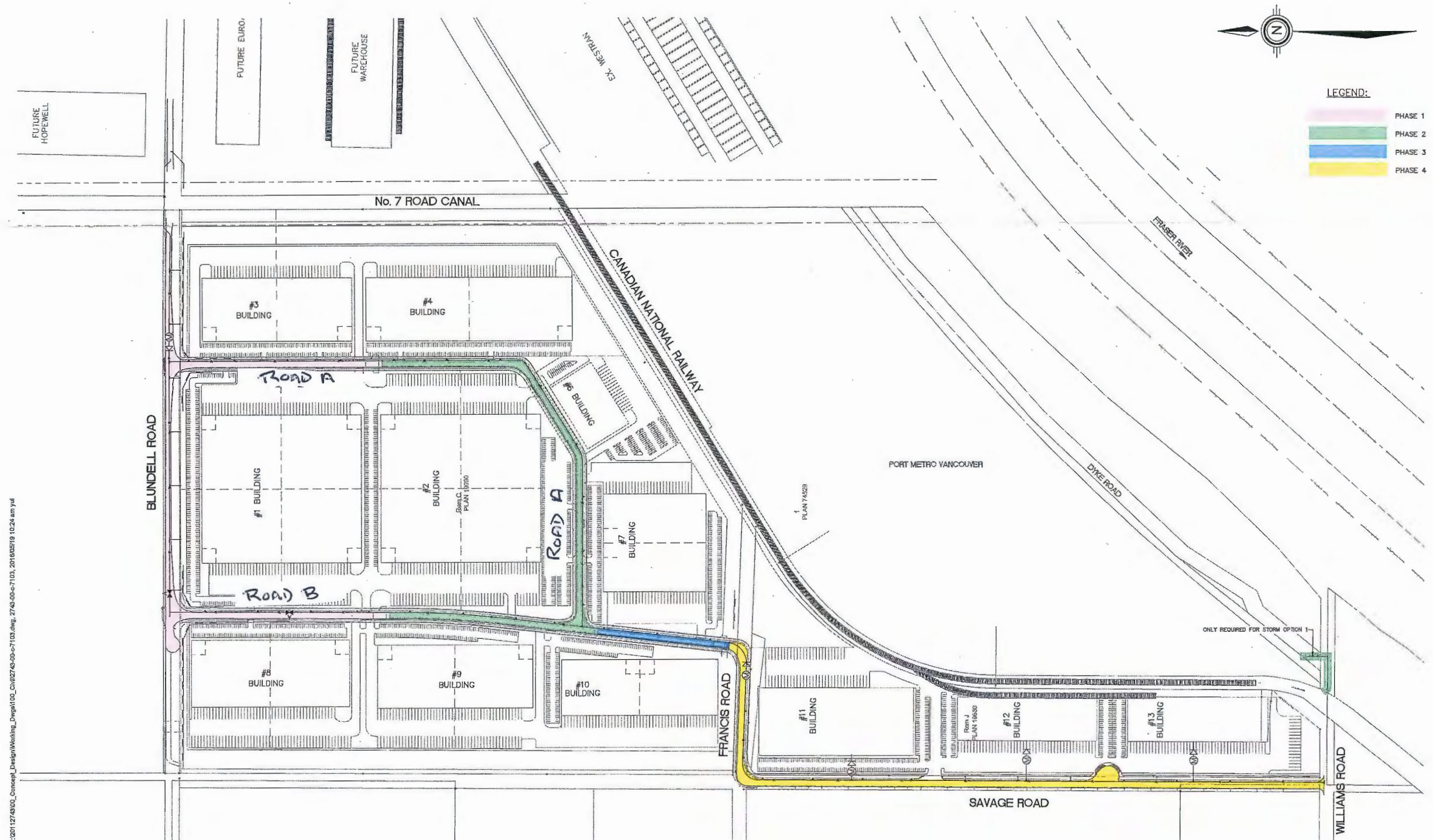
Richmond
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Centre

DP 11-566011

JUL 13 2016

Reference

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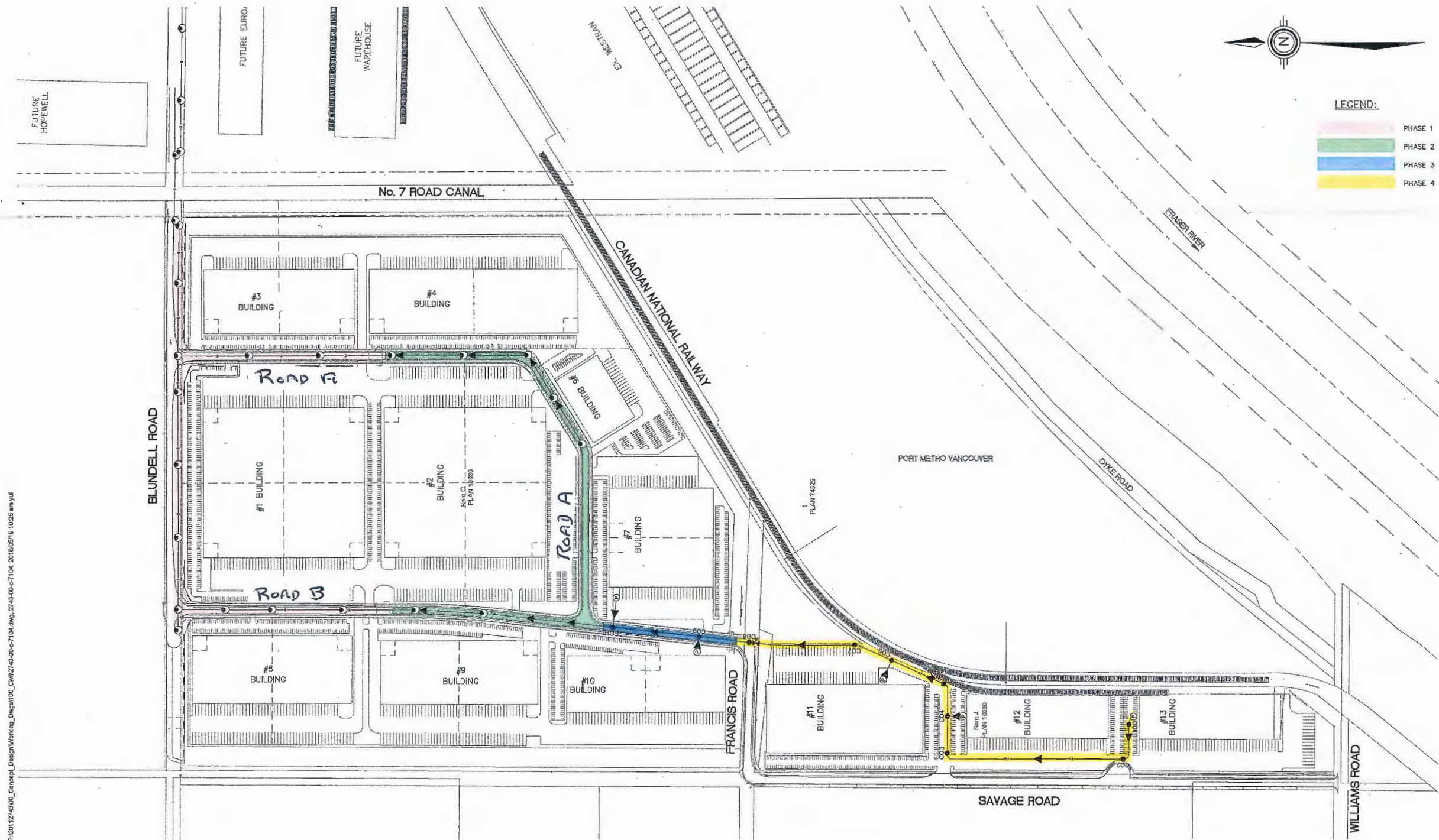
DOMESTIC WATER SERVICING PLAN

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



DP 11-566011

Reference
JUL 13 2016



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SANITARY SERVICING PLAN

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT
FILE NO. DP 11-566011



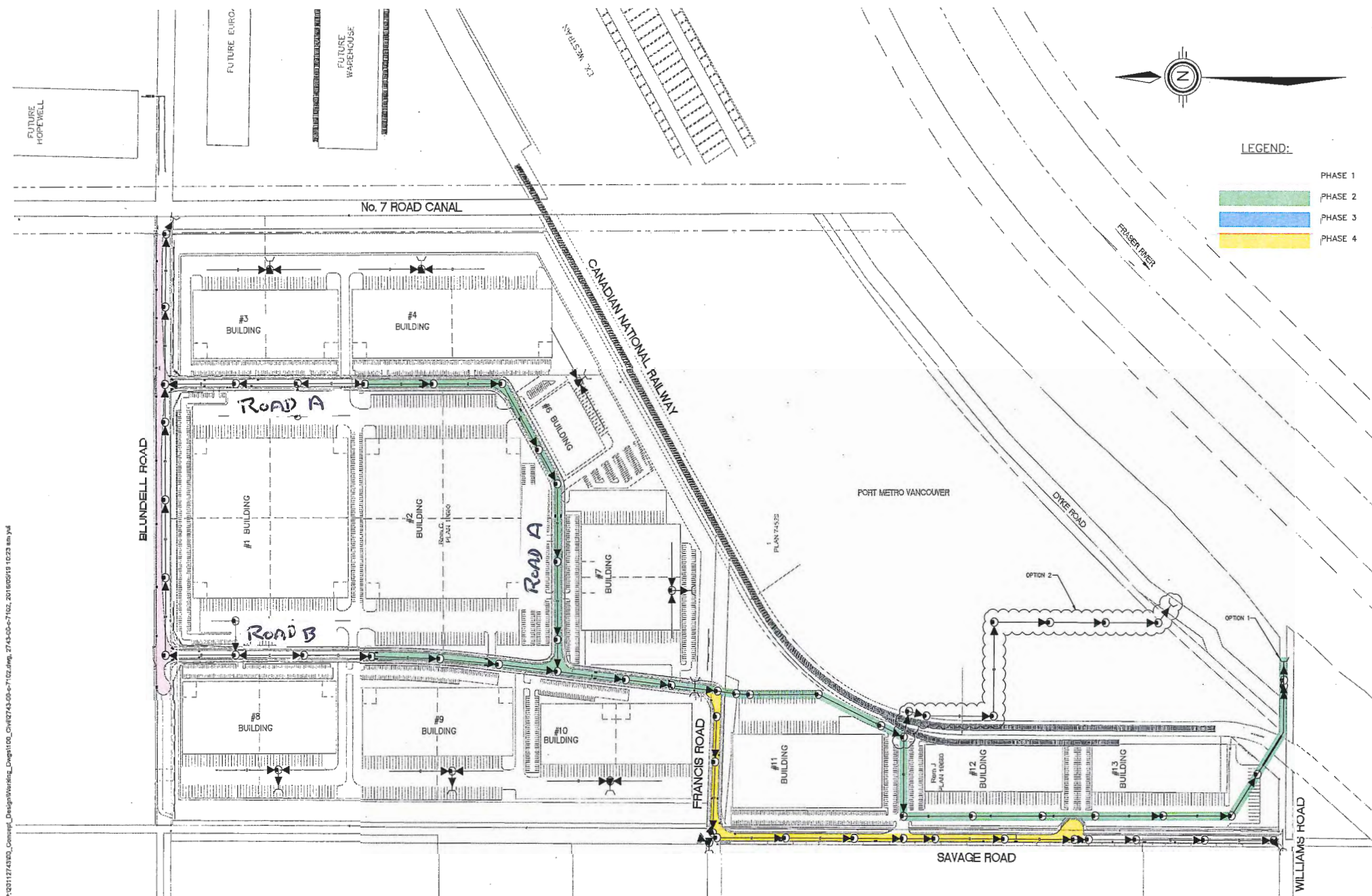
Richmond
Industrial
Centre

DP 11-566011

JUL 13 2016

Reference

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Option 2 is currently being explored as a joint storm / outfall. Once discussions between Port Metro Vancouver, Ecowaste and the City of Richmond have concluded, a decision will be made whether to proceed with Option 1 or 2.

STORM WATER SERVICING PLAN

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT

FILE NO. DP 11-566011

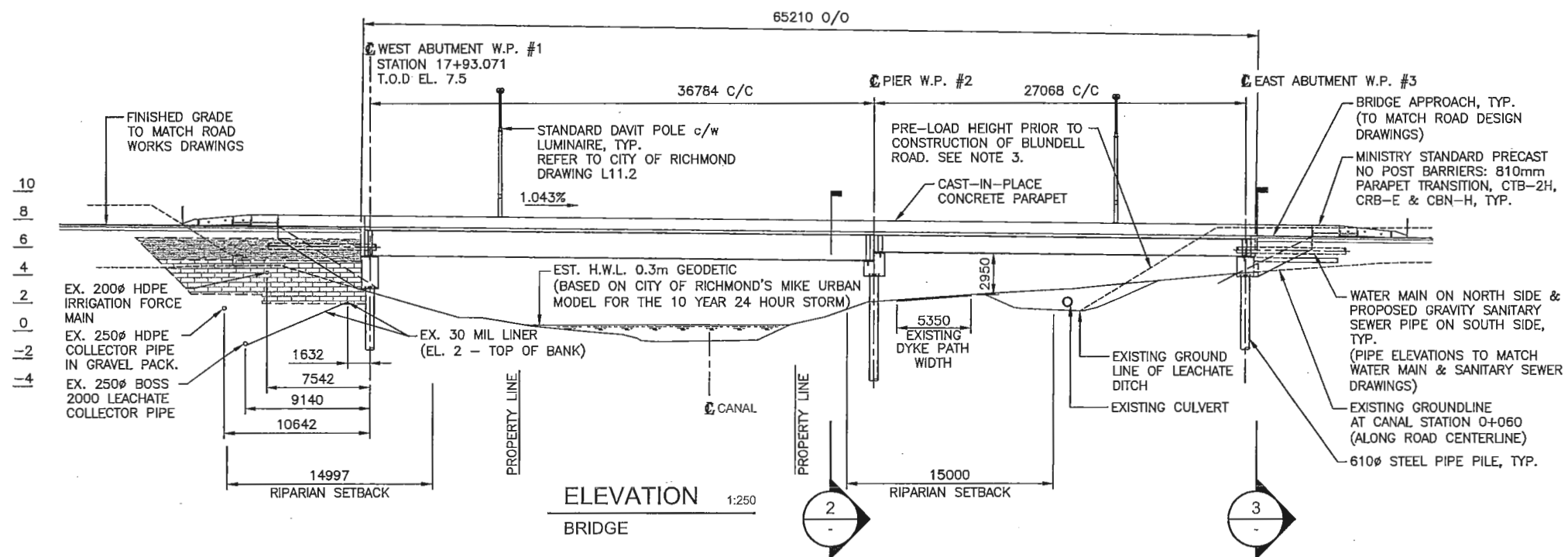
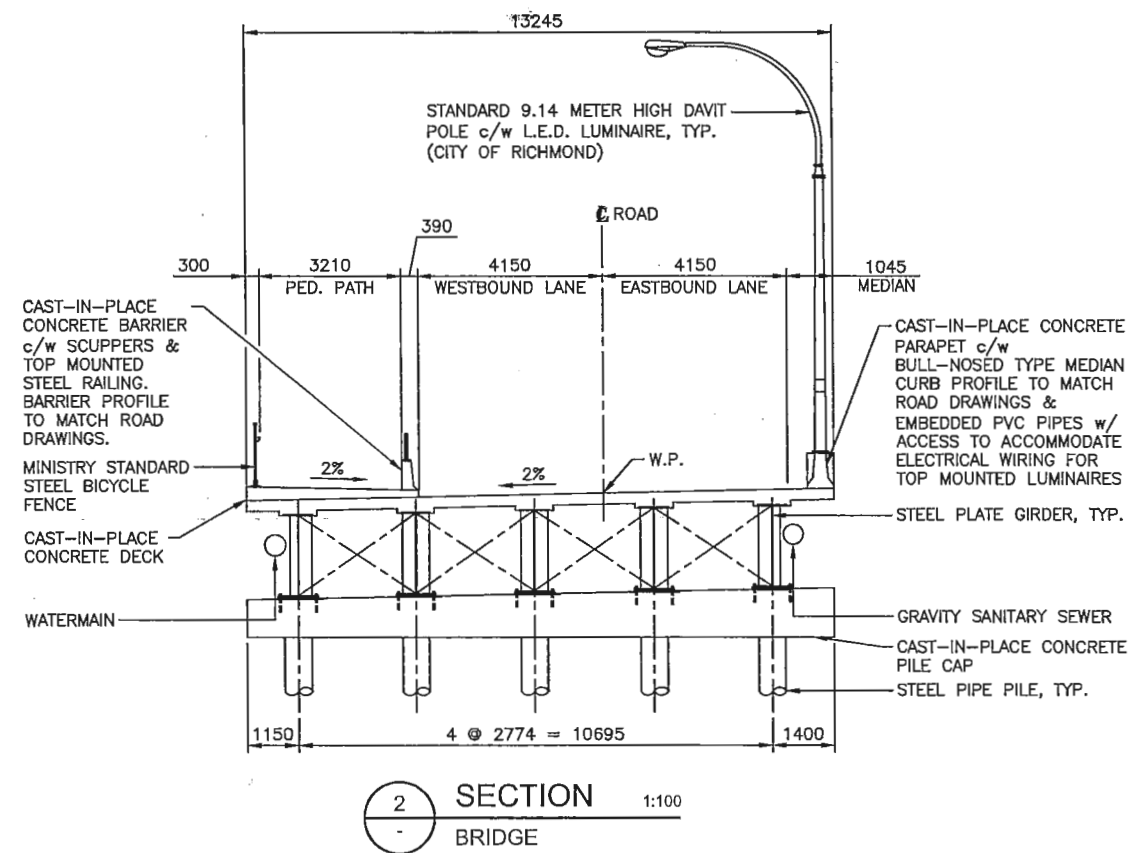
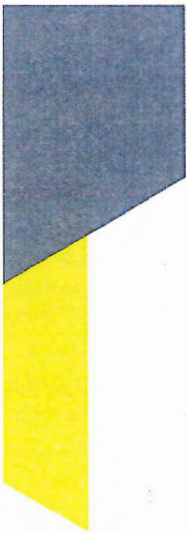


Richmond
Industrial
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DP 11-566011

JUL 13 2016

Reference



BLUNDELL BRIDGE OVER NO 7 ROAD CANAL ELEVATION AND SECTION

RICHMOND INDUSTRIAL CENTRE DEVELOPMENT

FILE NO. DP 11-566011



Richmond
Industrial
Centre

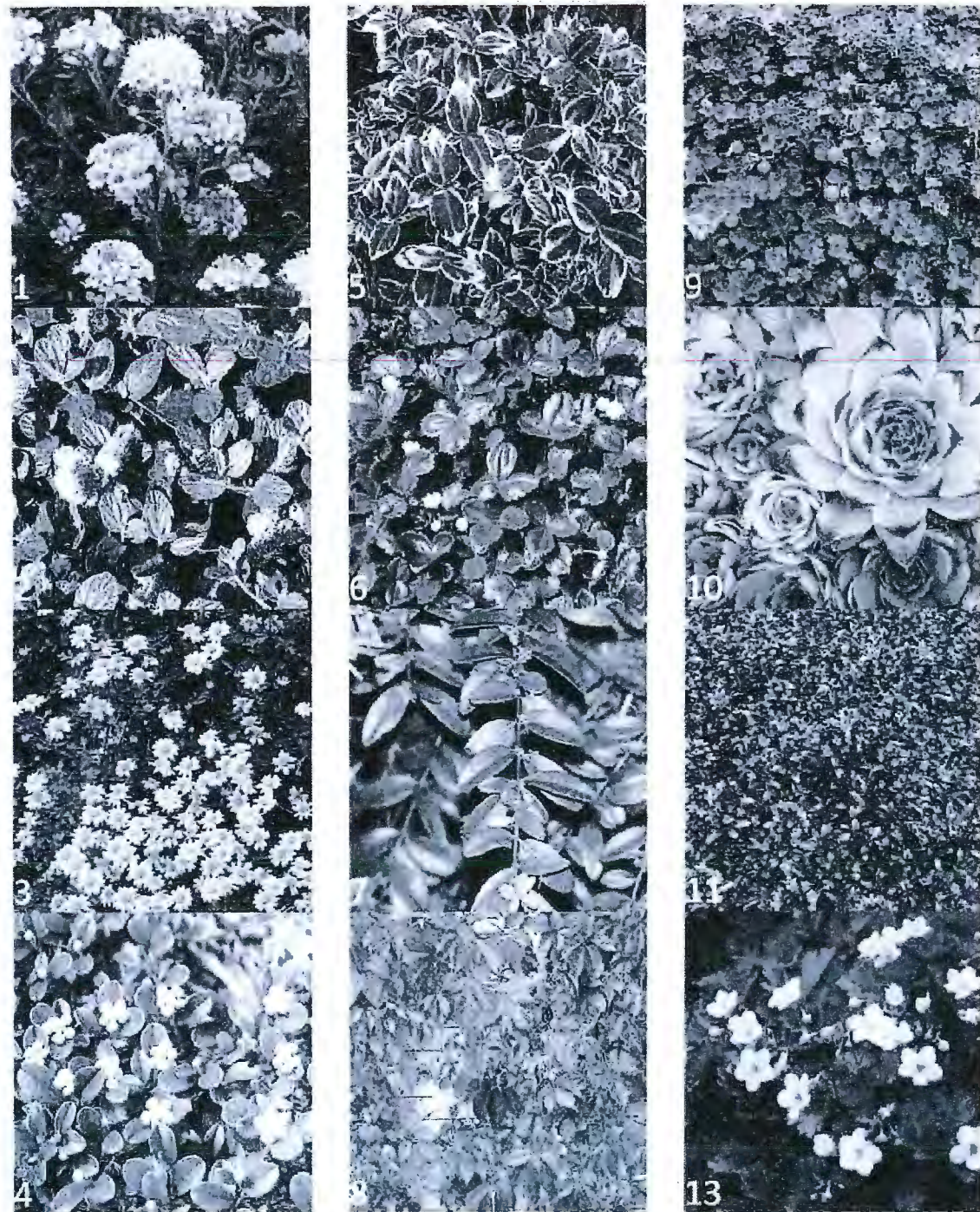
DP 11-566011

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Reference

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SHARP & DIAMOND
LANDSCAPE ARCHITECTURE

DRAFT

PLANT LIST - SIERRA SLOPE WALL SUNNY CONDITIONS

SHADY ORIENTATION PLANTS

ID	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
1	5%	Alyssium wulfenianum	Alpine Alyssum	4" pot	15" o.c
2	10%	Ceanothus griseus horizontalis	Creeping California Lilac	4" pot	15" o.c
3	5%	Chamaemelum Nobile	Creeping Chamomile	4" pot	15" o.c
4	10%	Cotoneaster dammeri	Little-Leaf Cotoneaster	4" pot	15" o.c
5	5%	Euonymus fortunei 'Emerald Gaiety'	Emerald Gaiety Euonymous	4" pot	15" o.c
6	15%	Fragaria chiloensis	Beach Strawberry	4" pot	15" o.c
7	5%	Pachistima myrsinites	Mountain Boxwood	4" pot	15" o.c
8	Base	Parthenocissus quinquefolia	Virginia Creeper	#1 pot	24" o.c
9	15%	Rubus calycinoides 'Emerald Carpet'	Creeping Raspberry	4" pot	15" o.c
10	10%	Sempervivum tectorum	Hens and Chicks	4" pot	15" o.c
11	10%	Thymus praecox 'Coccineus'	Creeping Thyme	4" pot	18" o.c
12	5%	Thymus pseudolanuginosus	Wooly Thyme	4" pot	15" o.c
13	5%	Waldsteinia ternata	Waldesteinia	4" pot	15" o.c

NOTES:

- 1 - PLANTS SHOWN ARE A SUGGESTION, AND SHOULD BE TAILORED TO THE SPECIFIC SITE DESIGNS AND CONDITIONS.
- 2 - A MINIMUM OF 8 DIFFERENT PLANT TYPES ARE RECOMMENDED FOR DIVERSITY OF PLANTING ON VEGETATED WALLS.
- 3 - ALL PLANT MATERIALS, SOILS, AND INSTALLATION TO MEET OR EXCEED THE BC LANDSCAPE STANDARD, LATEST EDITION.
- 4 - FINAL PLANT NUMBERS TO BE DETERMINED BASED ON THE AREA OF WALL FACE, DETERMINED BY SITE SPECIFIC DESIGNS.
- 5 - DO NOT USE PLANTS CONSIDERED INVASIVE FOR THE PROJECT LOCATION. ALTERNATE PLANT SPECIES SHOULD BE DETERMINED BY A QUALIFIED PROFESSIONAL.



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Tensar International Corporation
2500 Northwind Pkwy, Suite 500
Alpharetta, Georgia 30009
(770) 344-2154



Unearthing better results

Nilex Civil Environmental Group
6610 8th Street
Edmonton, AB T6P 0G5
(780) 463-9595

Issue/Revisions

NO.	DESCRIPTION	DATE

Project Number

Project

SIERRA 3H:8V SLOPE
GENERIC DESIGN

Sheet Title

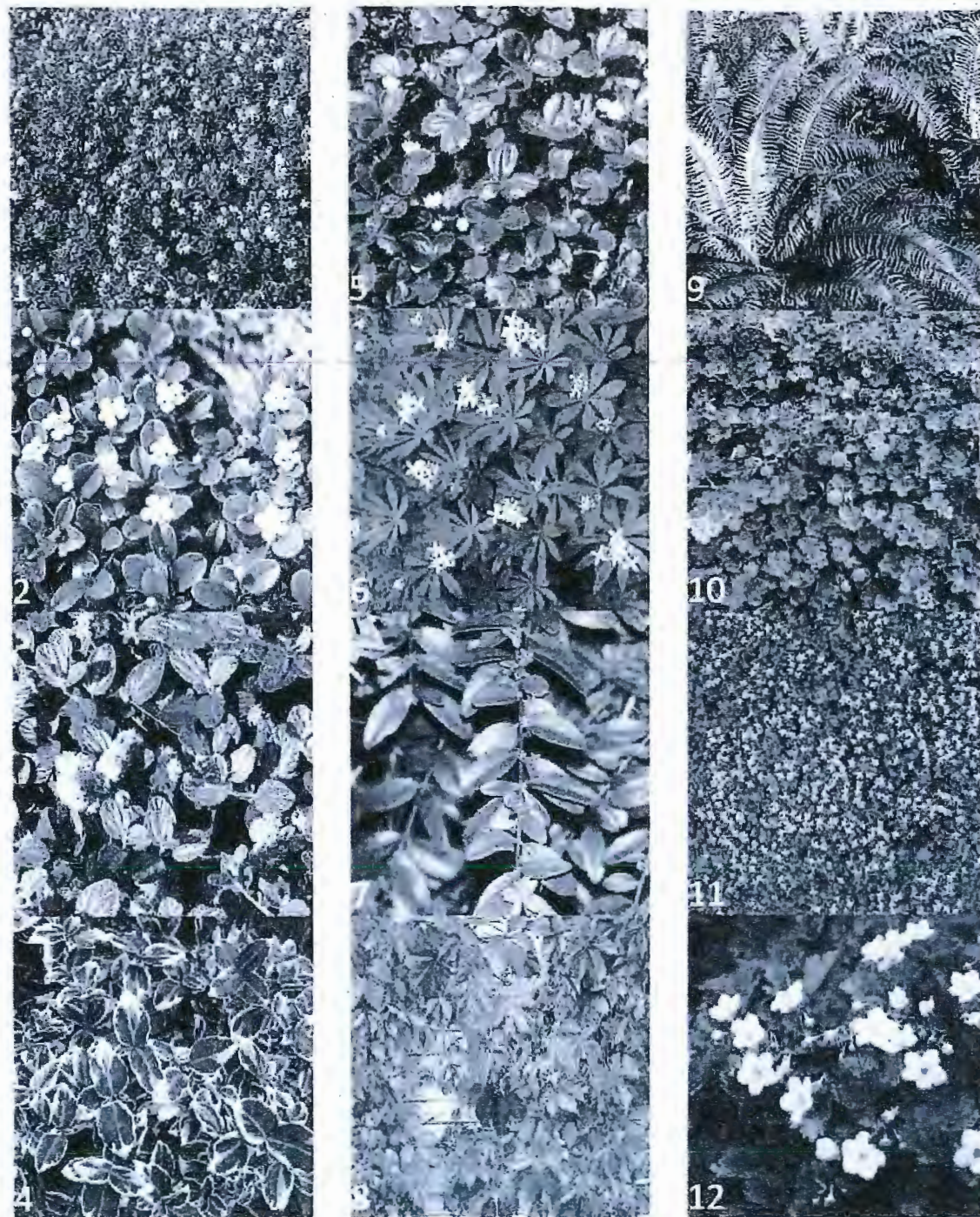
SUNNY CONDITION GENERIC
PLANT LIST

Drawing Number

DP 11-566011

JUL 13 2016

Reference



DRAFT

PLANT LIST - SIERRA SLOPE WALL PART SUN CONDITIONS

SHADY ORIENTATION PLANTS

ID	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
1	10%	Arctostaphylos uva-ursi	Kinnikinnick	4" pot	15" o.c
2	10%	Cotoneaster dammeri	Little-Leaf Cotoneaster	4" pot	18" o.c
3	10%	Ceanothus griseus horizontalis	Creeping California Lilac	4" pot	15" o.c
4	10%	Euonymus fortunei 'Emerald Gaiety'	Emerald Gaiety Euonymous	4" pot	15" o.c
5	15%	Fragaria chiloensis	Beach Strawberry	4" pot	15" o.c
6	10%	Galium odoratum	Sweet Woodruff	4" pot	15" o.c
7	5%	Pachistima myrsinites	Mountain Boxwood	4" pot	15" o.c
8	Base	Parthenocissus quinquefolia	Virginia Creeper	#1 pot	24" o.c
9	10%	Polystichum munitum	Western Sword Fern	4" pot	18" o.c
10	10%	Rubus calycinioides 'Emerald Carpet'	Creeping Raspberry	4" pot	15" o.c
11	5%	Thymus pseudolanuginosus	Wooly Thyme	4" pot	15" o.c
12	5%	Waldsteinia ternata	Waldesteinia	4" pot	15" o.c

NOTES:

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Issue/Revisions

Issue/Revisions	Issue/Revisions	Issue/Revisions	Issue/Revisions

Project Number

Project

SIERRA 3H:8V SLOPE
GENERIC DESIGN

Sheet Title

PART SUN CONDITION GENERIC
PLANT LIST

Drawing Number

DP 11-566011

JUL 13 2015

Reference

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SHARP & DIAMOND
LANDSCAPE ARCHITECTURE

DRAFT

PLANT LIST - SIERRA SLOPE WALL SHADY CONDITIONS

SHADY ORIENTATION PLANTS

ID	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
1	10%	Blechnum spicant	Deer Fern	4" pot	18" o.c.
2	10%	Cotoneaster dammeri	Little-Leaf Cotoneaster	4" pot	18" o.c.
3	10%	Fragaria chiloensis	Beach Strawberry	4" pot	15" o.c.
4	10%	Fragaria Vesca	Woodland Strawberry	4" pot	15" o.c.
5	10%	Galium odoratum	Sweet Woodruff	4" pot	15" o.c.
6	10%	Gaultheria shallon	Salaal	4" pot	18" o.c.
7	15%	Oxalis oregana	Redwood Spurge	4" pot	15" o.c.
8	10%	Pachysandra terminalis	Japanese Spurge	4" pot	15" o.c.
9	Base	Parthenocissus quinquefolia	Virginia Creeper	4" pot	24" o.c.
10	10%	Polystichum munitum	Western Sword Fern	4" pot	18" o.c.
11	5%	Waldsteinia ternata	Waldesteinia	4" pot	15" o.c.

NOTES:

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Issue/Revisions

Issue/Revisions	Issue/Revisions	Issue/Revisions	Issue/Revisions

Project Number

Date Drawn

Scale

NTS

Designed By

Drawn By

Checked By

Project

SIERRA 3H:8V SLOPE
GENERIC DESIGN

Sheet Title

SHADY CONDITION GENERIC
PLANT LIST

Drawing Number

DP 11-566011

JUL 13 2015

Reference



City of
Richmond

Report to Development Permit Panel

To: Development Permit Panel

Date: June 21, 2016

From: Wayne Craig
Director of Development

File: DP 16-727168

Re: Application by Pritam Samra for a Development Permit at 7311 No. 5 Road

Staff Recommendation

That a Development Permit be issued which would permit the construction of a single-family dwelling with a detached garage on a site with an Environmentally Sensitive Area designation at 7311 No. 5 Road, on a site zoned Agriculture (AG1).

Wayne Craig
Director of Development

DCB:blg

Staff Report

Origin

Pritam Samra has applied to the City of Richmond for permission to develop a single-family dwelling with a detached garage at 7311 No. 5 Road on a 2,023 m² (21,776 ft²) site with an Environmentally Sensitive Area (ESA) designation at 7311 No. 5 Road. The site is zoned "Agriculture (AG1)", and is currently vacant as the previous dwelling was removed.

The site will not require a rezoning as the proposed use conforms to the existing "Agriculture (AG1)" zoning.

Development Information

The development proposal involves the construction of a single-family dwelling with a detached garage and a new driveway. The front 50 m of the site are proposed to be filled to accommodate the 590.34 m² (6,352.2 ft²) house and to address the flood construction elevation requirements. A separate soil fill application is not required where the area of fill is less than 0.2 ha. The rear portion of the lot will be retained at the existing grades, but replacement and upgrading of the existing septic field will encroach into the Environmentally Sensitive Area (ESA) which currently covers approximately half of the site (985 m²).

A detailed report by Keystone Environmental (report dated Jun 8, 2016) indicates that the development project will result in identifiable negative impacts to the environmentally sensitive features on the site over an area of approximately 300 m². A mitigation/compensation plan to address the proposed encroachment is outlined later in this report.

Please refer to the attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant bylaw requirements.

Background

Development surrounding the subject site is as follows:

- To the north and south: Lots of similar size (approximately 1,656 m² to 2,023 m²) all zoned Agriculture (AG1) and containing single-family dwellings.
- On the east side of No. 5 Road: are large (typically 13,100 m² to 30,400 m² sized lots) zoned Agriculture (AG1). These lots are either farmed or tree covered.
- To the west: A heavily treed, 20 m wide, un-opened roadway designated as an Environmentally Sensitive Area (ESA). West of that are large farmed lots (typically 2.73 ha [6.74] in size) zoned "Agriculture (AG1)".

Rezoning and Public Hearing Results

Rezoning is not required for this application as the use conforms to both the Official Community Plan and the existing Agricultural (AG1) zoning.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the Environmentally Sensitive Area issues and other staff comments identified as part of the review of the subject Development Permit application.

Zoning Compliance/Variations

The application is in compliance with both the "Agriculture" land use designation in the Official Community Plan (OCP) and to the site's "Agriculture (AG1)" zoning designation. No variances are being requested through this application.

AnalysisSite Planning Issues

The applicant proposes to raise the front of the property slightly above the grade of the adjacent properties to the north and south and a retaining wall system and storm drainage will be required as part of the Building Permit plan submission.

The house, detached garage and driveway are all accommodated within the 50 m maximum setback from No. 5 Road as per the Agriculture (AG1) zone. Compensation planting will be provided.

Arborist Report

An Arborist Report prepared by Arbortech Consulting (report dated February 16, 2016) indicates the presence of 10 bylaw-sized trees on the site and in the vicinity of the proposed residential construction. All of these trees are European Birch species. The report notes that nine (9) of the 10 bylaw-sized trees have pre-existing defects, health constraints, or are considered hazardous and the Arborist has recommended that all nine (9) trees be removed and replacement trees be provided. The City's Tree Preservation Coordinator has concurred with the Arborist's assessment and has noted that the Birch trees have bronze birch borer infestations which have made these trees unsuited for retention.

The Arborist Report also notes that four (4) European Birch trees on the adjacent site to the south are within "influencing distance of the project". These trees have been assessed as in "poor condition". The report recommends that these trees also be removed, subject to the adjacent owner's permission. The applicant has indicated that the adjacent owner has agreed to have these trees removed and the applicant will make an application for tree removal and replacements. A requirement is included in the Development Permit Considerations for submission of an acceptable tree removal permit and replacement securities. The trees must be retained if authorization is not obtained from the adjacent owners.

Biologist Report

An Environmentally Sensitive Area assessment and planting plan was prepared by Keystone Environmental for the site (report dated June 8, 2016).

The report indicates that approximately 49% (985 m²) of the site is currently designated as an Environmentally Sensitive Area (ESA). Detailed ground-truthing by Keystone Environmental indicates that the actual area of sensitive habitat on site (after accounting for invasive species

encroachment and prior impacts from the single family use) is approximately 746 m². The proposed development will encroach into this remaining ESA by approximately 300 m² in order to accommodate the placement of the house, driveway and the septic field. The total ESA area to be retained will be approximately 440 m².

The required compensation planting plan includes approximately 295 native shrubs and 22 trees. The replacement trees include four (4) Paper Birch, two (2) Shore Pine, three (3) Black Hawthorn, and 13 Western Red Cedar. The proposed replacement planting will exceed the Official Community Plan 2 for 1 ratio and will also address a prior tree removal permit replacement requirement of three trees.

The proposed landscaping plan shows that the majority of the planting will occur at the rear of the site supplemented by new planting along the northern property line and the property frontage adjacent to No. 5 Road. Removal of invasive species such as Himalayan Blackberry and Japanese Knotweed are also contemplated in the enhancement plan. The planting report indicates that the total area proposed for planting will be 310 m² exceeding the area of encroachment by approximately 10 m². The proposed ESA response aims to improve the quality of the habitat at this site by retaining higher value vegetation, removing undesirable invasive vegetation and planting enhancement aimed at diversifying the mix of native plants and making the habitat better suited to a wider variety of birds and animals.

The biologist's report outlines a monitoring and maintenance package for both the construction period and post construction that will allow the owner to properly maintain and allow the new plantings to establish. The report recommends an ongoing environmental monitoring period of three years; with annual reporting to the City during that period. Keystone reports that the cost for the plant materials, installation and three years of monitoring will amount to \$5,713.75. The Development Permit Considerations include requirements submission of a landscape security in the amount of \$6,285.13 (including a 10% contingency), submission of a contract with a Qualified Environmental Professional to undertake the three years of monitoring and registration of a legal agreement to ensure that the ESA planting is not removed.

Conclusion

Staff recommend support for the Development Permit application as the proposed planting compensation and enhancement plan adequately addresses and offsets the anticipated impacts to the Environmentally Sensitive Area (ESA) features on the subject site.



David Brownlee
Planner 2
(604-276-4200)

DCB:blg

The following are to be met prior to forwarding this application to Council for approval:

- Receipt of a Letter-of-Credit for landscaping and monitoring over a 3 year period in the amount of \$6,285.13.

- Receipt of a contract with a Qualified Environmental Professional to undertake the 3 year monitoring as outlined in the report by Keystone Environmental dated June 8, 2016.
- Submission of an acceptable tree removal permit and replacement securities for removal and replacement of four (4) off-site trees on the neighbouring lot as identified in the Arbourtech Consulting report dated February 16, 2016.
- Submission of proof that protective fencing has been installed to protect the ESA as indicated on the Planting Plan (Plan #2).
- Registration of an agreement on Title ensuring that the Environmental enhancements will be maintained and not removed.

NOTE: staff to ensure that landscape estimates include a 10% contingency cost.

Prior to future Building Permit issuance, the developer is required to complete the following:

- The applicant is required to obtain a Building Permit for any construction hoarding associated with the proposed development. If construction hoarding is required to temporarily occupy a street, or any part thereof, or occupy the air space above a street or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. *For further information on the Building Permit, please contact Building Approvals Department at 604-276-4285.*
- Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Department (<http://www.richmond.ca/services/ttp/special.htm>).
- If applicable, payment of latecomer agreement charges associated with eligible latecomer works.



DP 16-727168

Attachment 1

Address: 7311 No. 5 Road

Applicant: Pritam Samra

Owner: Pritam Samra and Baljit Samra

Planning Area(s): East Richmond

Floor Area Gross: 590.34 m² (6,352.2 ft²)

	Existing	Proposed
Site Area:	2,023 m ²	Same
Land Uses:	Agriculture	Same
OCP Designation:	Agriculture	Same
Zoning:	Agriculture (AG1)	Same
Number of Units:	0 (previous SFD removed)	1

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.6 FAR	0.3	none permitted
Lot Coverage:	No Maximum	34.1%	None
Setback – Front Yard:	Min. 6.0 m	More than 6.0 m	None
Setback – Side Yard:	Min. 1.2 m	1.2 m	None
Setback – Side Yard:	Min. 3.0 m	3.65 m	None
Setback – Rear Yard:	Min. 6.0 m	More than 6.0 m	None
Height (m):	Max. 10.5 m and 2.5 storeys	9.2 m	None
Lot Size:	820 m ²	2,023 m ²	None
Flood Construction Elevation	2.9 m GSC	2.475 m GSC	None
Total off-street Spaces:	2.0	4.0	None



City of Richmond

Development Permit

No. DP 16-727168

To the Holder: PRITAM SAMRA
Property Address: 7311 NO. 5 ROAD
Address: 7311 NO. 5 ROAD
RICHMOND, BC V6Y 2V2

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #2 attached hereto.
4. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
5. As a condition of the issuance of this Permit, the City is holding the security in the amount of \$6,285.13 to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to three years after inspection of the completed landscaping in order to ensure that plant material has survived.
6. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

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7. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

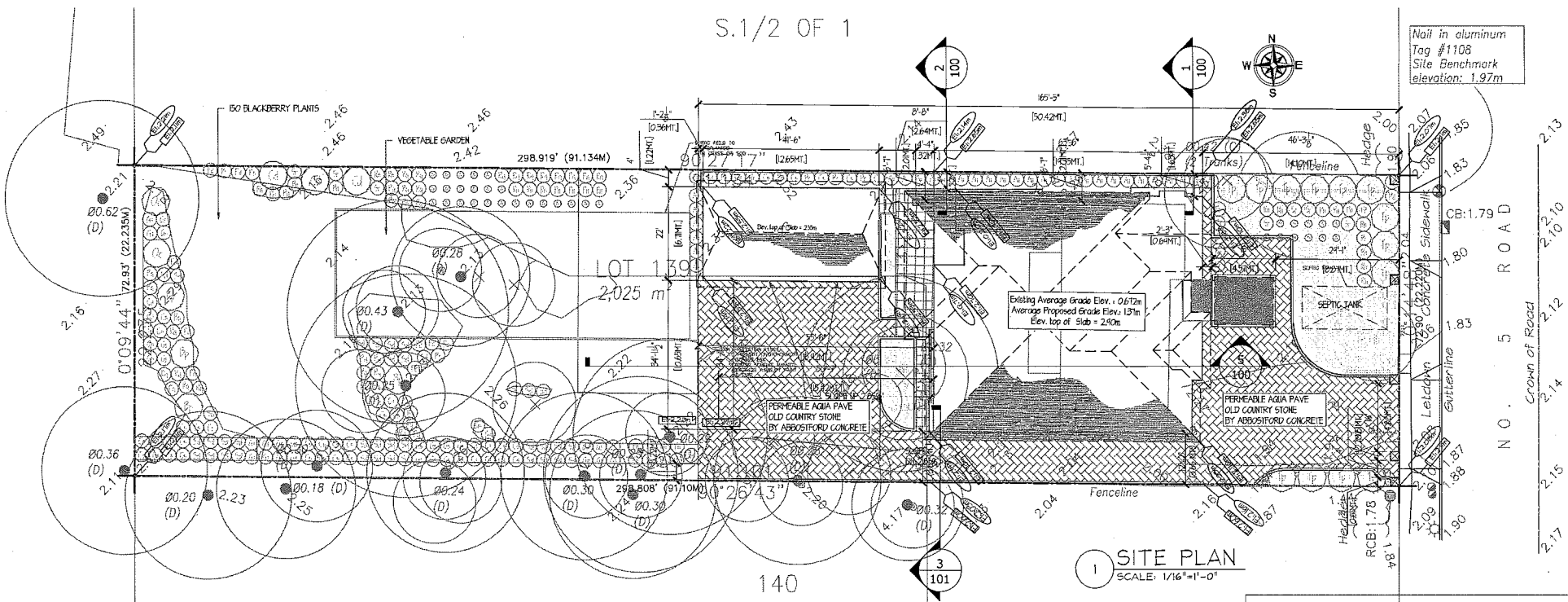
This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO.
DAY OF , .

ISSUED BY THE COUNCIL THE

DELIVERED THIS DAY OF , .

MAYOR



LEGAL DESCRIPTION

LOT 139, SEC. 13, BLOCK 4 NORTH RANGE 6 WEST
Tag #1108
NWD PLAN 32652
PID-006-690-114

CIVIC ADDRESS

7311 NO. 5 ROAD, RICHMOND, BC

SITE RECONCILIATION

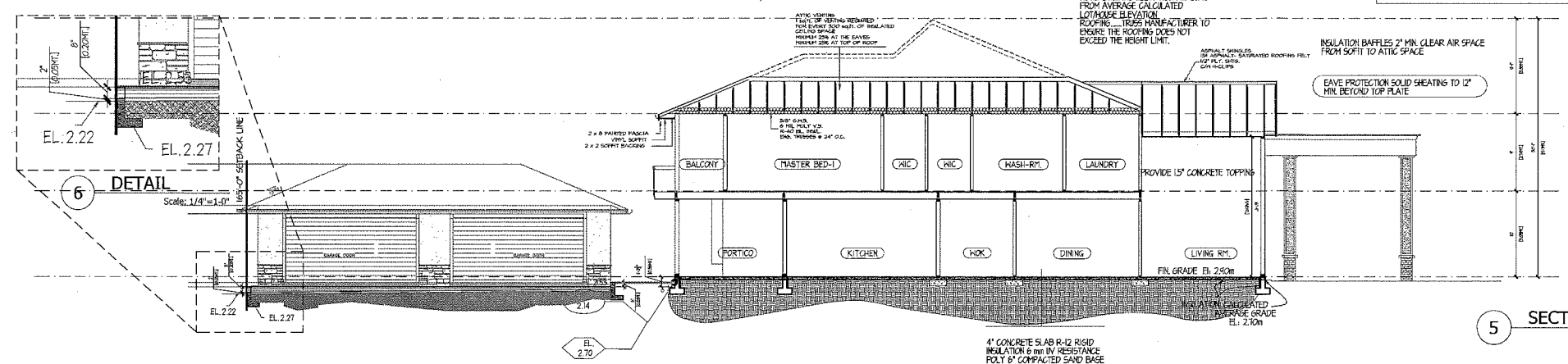
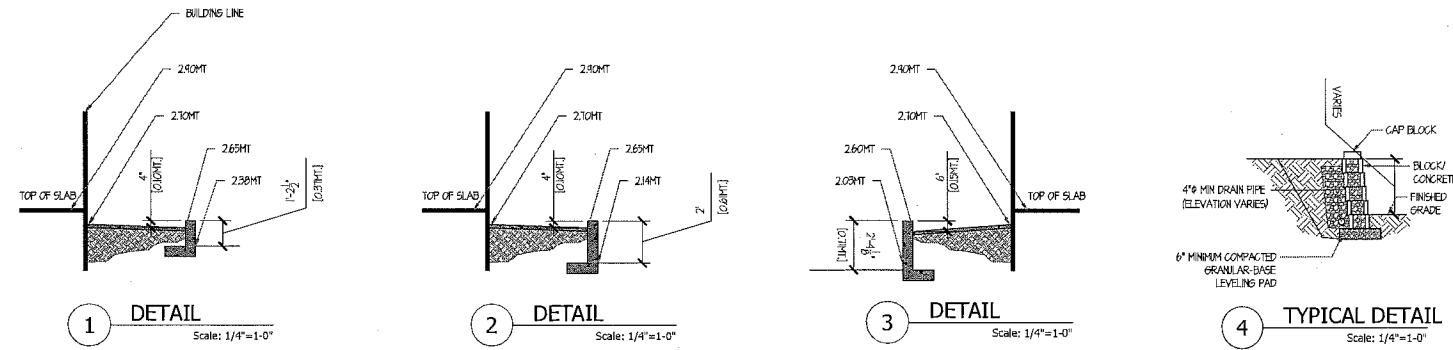
SITE AREA : 2023 SQ.M
ZONING : AG1
FAR PROPOSED: 6,352.20 SQ.FT. (590.94 SQ.MT.)
EXTERIOR COVERS: 633.00 SQ.FT.
GARAGE ACTUAL: 913 SQ.FT. (84.85 SQ.MT.)
BUILDING HEIGHT = MAX. 10.5m OR 2.5 STOREYS
PROPOSED 9.17m OR 30'-1"
LOT COVERAGE = MAX. 35% PROPOSED 34.10%
CLIMATE ZONE: 4

GENERAL NOTES:

- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE B.C. BUILDING CODE AND ALL OTHER LOCAL CODES AND BYLAWS OF THE CITY OF RICHMOND.
- THE CONTRACTOR AND ALL SUB TRADES ARE RESPONSIBLE FOR THE REVIEW OF ALL DRAWINGS AND SITE CONDITIONS PRIOR TO START OF ANY WORK OR ORDERING OF MATERIALS, AND SHALL REPORT ANY PROPOSED REVISIONS, OR ANY ERRORS OR DISCREPANCIES, TO THE DESIGNER IMMEDIATELY.
- ALL CONCRETE TO BE PLACED ON FIRM, UNDISTURBED SOIL, FREE OF ANY LOOSE, ORGANIC OR FROSTY MATERIAL.
- SITING OF BUILDINGS MUST BE VERIFIED BY A LEGAL LAND SURVEYOR PRIOR TO PLACING ANY CONCRETE, AND MUST BE IN ACCORDANCE WITH ALL LOCAL BY-LAWS AND REGULATIONS.
- ALL TRUSSES TO BE PRE-ENGINEERED, AND SPANS AND DETAILS VERIFIED BY THE TRUSS SUPPLIER ON SITE PRIOR TO ANY FABRICATION.
- DRAWINGS ARE NOT INTENDED TO BE SCALED, AND LARGE SCALE DRAWINGS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.
- MSG DESIGN MUST BE GIVEN FULL ACCESS TO ALL THE WORK IN PROGRESS.
- THE CONTRACTOR SHALL SUPPLY THREE COPIES OF ALL SHOP DRAWINGS TO THE ARCHITECTURAL CONSULTANT FOR REVIEW.
- ALL ROOF SPACES SHALL BE VENTILATED WITH SOFFIT AND ROOF VENTS. SEE THE ROOF PLAN AND THE 2012 BUILDING CODE SECTION 9.19.1. THE VENTILATION MUST BE DISTRIBUTED WITH A MINIMUM 25% AT THE TOP OF THE ROOF, AND 25% AT THE EAVES.
- DOOR FRAMES TO OPENINGS FOR ENTRANCE AND EXTERIOR DOORS TO DWELLING UNITS AND DOORS BETWEEN DWELLING UNITS AND ATTACHED GARAGES SHALL BE SOLIDLY BLOCKED BETWEEN THE DOOR FRAME AND THE FRAMING AT THE HEIGHT OF THE DEADBOLT AS TO RESIST SPREADING BY THE WAY OF FORCE.
- ALL GLASS IN DOORS, OR SIDELIGHTS TO WELDED WIRE GLASS OR SAFETY GLASS.
- ALL EXTERIOR HINGED DOORS SHALL HAVE HINGES AND PINS SUCH THAT THE DOORS CANNOT BE REMOVED FROM THE OUTSIDE IN THE CLOSED POSITION.
- EXTERIOR WALL DIMENSIONS IN PLAN ARE TO THE OUTSIDE FACE OF PLYWOOD SHEATHING OR TO THE OUTSIDE FACE OF FOUNDATION WALLS.
- PROVIDE A MINIMUM OF TWO HOSE BIBS PER UNIT, LOCATION TO BE DETERMINED BY THE DEVELOPER.
- RAINWATER LEADERS ARE NOT SHOWN ON THE ELEVATIONS OR THE PLANS, LOCATION TO BE DETERMINED BY THE DEVELOPER.
- THE DIMENSIONS FOR U.P.O. CALCULATIONS ARE 2" SMALLER IN EACH DIRECTION FROM THE SIZES GIVEN ON PLAN.
- APPROVED SMOKE ALARMS TO BE INSTALLED.
- THESE DRAWINGS COMPLY WITH 2012 BC BUILDING CODE INCLUDING 2014 REVISIONS.
- O.H. GARAGE DOOR TO BE WEATHER STRIPPED AROUND ENTIRE PERIMETER, IF HEATED, DOOR REQUIRED TO HAVE MIN. R VALUE OF 6.0.
- ALL DUCTING RUNNING THROUGH UNCONDITIONED SPACE, TO BE INSULATED TO MIN. R16.
- ALL NON-GASKET DEVICES INSTALLED IN INSULATED ASSEMBLIES ARE PROVIDED WITH BACKING TO ALLOW SEALING OF SHEET POLY TO POLY.
- ATTIC ACCESS HATCH TO BE INSULATED WITH RIGID INSULATION & HAVE MIN. R15 VALUE.
- ALL WINDOWS & DOORS SHALL CONFORM TO AAM 4/10M 4/ CSA 101/15.2/ A440.
- NAFS FOR WINDOWS, SKYLIGHTS AND DOORS AND A440S1-04 CANADIAN SUPPLEMENTS TO AAM/10M/ CSA 101/15.2/ A440.
- ALL AIR BARRIER JOINTS ARE TO BE OVERLAPPED, SEALED & SECURED OVER STRUCTURAL MEMBERS.
- WINDOWS ARE TO HAVE A MAXIMUM U VALUE OF 1.0.
- SKYLIGHTS NEED TO MEET THE NEW ENERGY RATINGS OF U 2.9. SKYLIGHT SHAFTS ARE TO MEET THE NEW EFFECTIVE INSULATION LEVELS FOR THE WALL ASSEMBLIES.
- THE ATTIC INSULATION LEVEL CAN BE TAPERED FOR A MAX. OF 1.2M FROM THE EDGE OF THE OUTSIDE WALLS. HOWEVER THERE MUST BE A MIN. R20 VALUE AT THE JOINT OF THE TOP FLOOR WALL PLATES AND THE TRUSSES. TRUSS HEAD IS TO BE A MIN. OF 1.5" TO ALLOW FOR THE INSULATION AND VENTILATION BAFFLES.
- DUCTS LOCATED OUTSIDE OF THE INSULATED AREA ARE TO BE SEALED AND INSULATED TO THE WALL INSULATION LEVELS.
- WATER PIPING MUST BE INSULATED FOR 2.0M ON EITHER SIDE OF THE HOT WATER TANK TO A MIN. OF AT LEAST 12MM THICK.
- PIPING OUTSIDE THE HEATED ENVELOPE MUST BE INSULATED TO NOT LESS THAN THE EFFECTIVE R-VALUE OF THE EXTERIOR WALLS.
- HEATED GARAGE REQUIRES WEATHER STRIPPED GARAGE DOOR.
- GASKETED ELECTRICAL BOXES REQUIRE THE WIRES INTO THE BOX BE SEALED.
- METAL CHIMNEYS ARE TO BE SEALED WITH HIGH TEMPERATURE SEALANT AT THE VAPOR BARRIER LOCATION.
- HEATING AND AIR CONDITIONING EQUIPMENT MUST BE LOCATED IN THE CONDITIONED SPACE UNLESS IT IS DESIGNED TO BE LOCATED OUTSIDE. DOCUMENTATION WILL BE REQUIRED IF IT IS PROPOSED TO BE OUTSIDE.
- HEATING AND COOLING THERMOSTATS MUST BE ACCURATE TO 0.5°C.
- THE PRINCIPAL VENTILATION FAN IS TO RUN CONTINUOUSLY. IT IS PREFERRED THAT THE SWITCH FOR THE LOW SPEED IS LOCATED IN THE MECHANICAL ROOM AND IS LABELED 'PRINCIPAL VENTILATION EXHAUST FAN'.
- BEDROOMS ARE REQUIRED TO BE VENTILATED CONTINUOUSLY.
- A 4" x 6" FLEX DUCT IS TO BE TIED INTO THE RETURN AIR PLENUM A MIN. OF 10'-0" AND A MAX. OF 15'-0" FROM THE FURNACE.
- THE FURNACE FAN IS TO RUN CONTINUOUSLY.
- MIN. 60% OF WALL R VALUE IS REQUIRED BEHIND BEAMS IF THEY LAND ON AN OUTSIDE WALL.
- ALL PLUMBING FIXTURES ON EXTERIOR WALL TO HAVE WATER AND DRAIN LINES IN FLOOR.
- AIR BARRIER SYSTEM ON INTERIOR OF WALL.

1 SITE PLAN
SCALE: 1/16"=1'-0"

PROPOSED AVERAGE GRADE ANALYSIS:
FINISHED LOT GRADE CALCULATIONS:
NW CORNER OF PROPERTY: EL:2.11M
NE CORNER OF PROPERTY: EL:2.11M
SW CORNER OF PROPERTY: EL:2.11M
SE CORNER OF PROPERTY: EL:2.11M
TOTAL : EL:8.44M
AVERAGE GRADE EL FOR PROPERTY: EL:2.11M
FINISHED HOUSE GRADE CALCULATIONS:
NW CORNER OF PROPERTY: EL:2.20M
NE CORNER OF PROPERTY: EL:2.20M
SW CORNER OF PROPERTY: EL:2.20M
SE CORNER OF PROPERTY: EL:2.20M
TOTAL : EL:10.8M
AVERAGE GRADE EL FOR PROPERTY: EL:2.20M
AVERAGE GRADE EL FOR BOTH : EL:2.11M+2.20M/2
= 2.405M



5 SECTION
Scale: 1/8"=1'-0"

REV	DATE	DESCRIPTION	BY
01	10 MAR 2016	ISSUED FOR DP	JG

REV	DATE	DESCRIPTION	BY
01	10 MAR 2016	ISSUED FOR DP	JG

SINGLE FAMILY DWELLING
7311-NO. 5 ROAD Richmond, B.C.
Owner
FRITAH SARNA

START DATE: JUNE 2015
PROJECT No.: 2015-06
DR.: JG
CH.: JG
SCALE: AS SHOWN
PROJECT No.: 2015-06
A100

SUITE 215 - 12160 AVE.
SURREY, B.C. V3W 0V3
778-891-0107
jassabadi@yahoo.ca

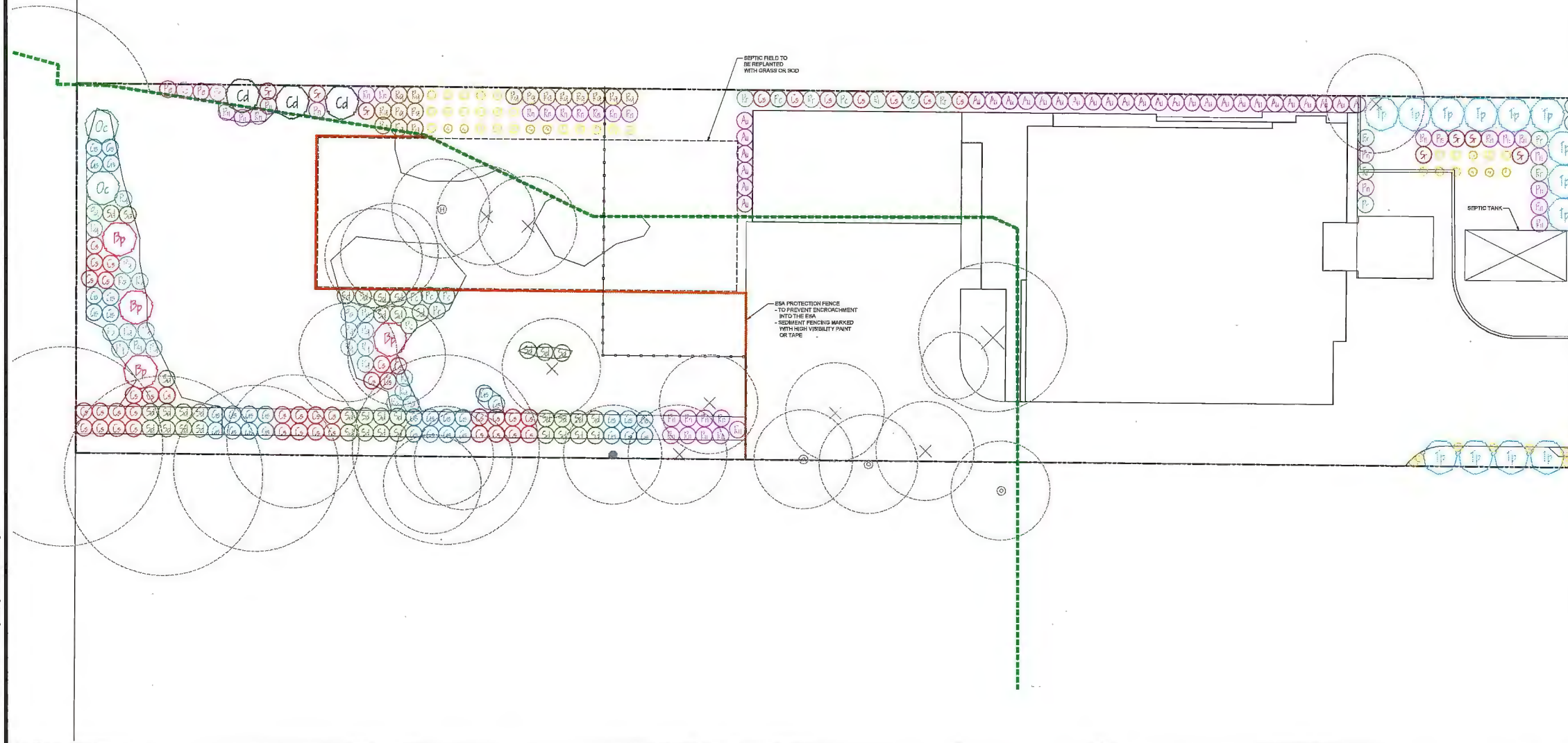
DO NOT SCALE THE DRAWING

Plan #1

DP 16-727168
JUL 13 2016

CADD FILE NO. 122016-727168-01.dwg

PLOT SCALE: 1:1



SHRUBS					ECCOLOGICAL VALUE
SYMBOL	COMMON NAME	LATIN NAME	COUNT	POT SIZE	
	Douglas Fir	<i>Abies douglasii</i>	43	20cm	Green in moist open areas, and attracts butterflies
	Pacific Honeysuckle	<i>Phytolacca sp.</i>	10	2 gal	Litter inputs, shade value
	Red-Choke Dogwood	<i>Cornus stolonifera</i>	43	2 gal	Fruit bearing, slope stability, shade value
	Red Elderberry	<i>Sambucus racemosa</i>	7	no. 3 pot	Fruit bearing, shade value
	Spicebush	<i>Lonicera spicata</i>	2	no. 3 pot	Fruit bearing, slope stability, shade value
	Elderberry	<i>Sambucus racemosa</i>	2	no. 2 pot	Fruit bearing, slope stability, shade value
	Noddy rose	<i>Rosa nutkana</i>	41	no. 3 pot	Litter inputs, shade value
	Smooth sumac	<i>Rhus glabra</i>	16	no. 3 pot	Litter inputs, shade value
	Huckleberry	<i>Rubus parviflorus</i>	9	50 plugs	Shade value, nesting habitat
	Hawthorn	<i>Spiraea douglasii</i>	37	1 gal	Litter inputs, shade value
	Shrub	<i>Gaultheria phillyifolia</i>	32	1 gal	Litter inputs, shade value
	Big Leafed Tree	<i>Rhododendron macrocarpum</i>	23	1 gal	Litter inputs, shade value
	Conifer	<i>Arctostaphylos uva-ursi</i>	30	1 gal	Litter inputs, shade value
TREES					
	Paper Birch	<i>Betula papyrifera</i>	4	no. 3 pot	Shade value, nesting habitat
	Shore Line Plant	<i>Clusia cordata</i>	2	no. 3 pot	Erosion control and attracts birds
	Black Hawthorn	<i>Crataegus douglasii</i>	5	no. 3 pot	Litter inputs, fruit bearing
	Western Red Cedar	<i>Thuja plicata</i>	13	no. 3 pot	Shade value, nesting habitat
TOTAL			310		

NO. 5 FID.

LEGEND	
	SITE
	PROPOSED BUILDING OUTLINE
	WETLAND ESA AREA
	ADJACENT TREE PROTECTION FENCE
	ESA PROTECTION FENCE
	HIGH RISK TREE PROPOSED TO BE REMOVED
	TREE TO BE REMOVED
	OFF-SITE TREE TO BE PROTECTED
	PROPOSED RETENTION TREE

No.	DATE	DESCRIPTION	BY	APPROVED
03	5/04/16	Issued for Client Review	A.B.	J.M.T.
02	4/28/16	Issued for Client Review	A.B.	J.M.T.
01	3/21/16	Issued for Client Review	A.B.	J.M.T.
00	3/17/16	Issued for Client Review	A.B.	J.M.T.
REVISIONS				

NOTES:
1. THIS DRAWING IS FOR GENERAL INFORMATION ONLY.
2. LOT BOUNDARIES AND FEATURES ARE APPROXIMATE.
3. BASE DRAWING PROVIDED BY MRS. ARCHITECTURE.



7311 No. 5 Road
Richmond, B.C.

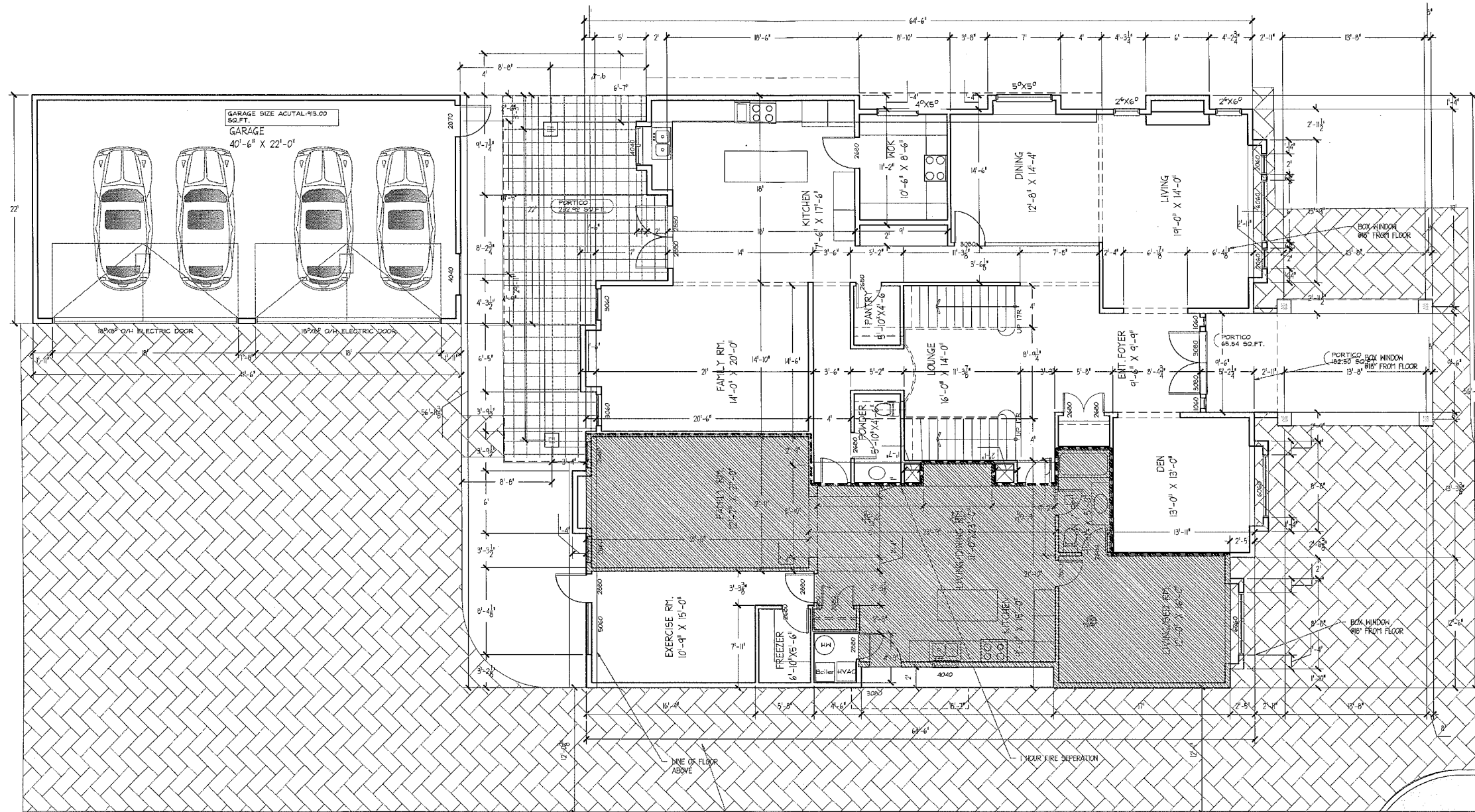
Keystone Environmental Ltd.
Ste. 320 4400 Dominion Street
Burnaby, British Columbia

DESIGN	APPROVED
DRAWN A.B.	CHECKED
SCALE 	SCALE: 1:150 (approx.)

CLIENT	DATE
Pritam Samra	3/16/16
Planting Plan	SHEET No. 1 of 1
	PROJECT No. 12701-108
	REVISION No. 03
	DRAWING No. 16-12701-01

Plan # 2b

DP 16-727168 JUL 13 2016



- NOTES:
- ALL DEATHS AND LINTELS
2 - 2 x 10 U.N.G.
 - ALL BEDROOM WINDOWS
AS PER B.C.B.C. 9.9.10.1
 - ALL HAND RAILS
AS PER B.C.B.C. 9.8.7
 - ALL GUARD RAILS
AS PER B.C.B.C. 9.8.8
 - ALL SMOKE ALARMS TO BE
INTERCONNECTED A/C
 - ATTIC HATCH TO BE
HEATHER-STRIPPED
 - ALL SPATIAL SEPARATIONS
AS PER B.C.B.C. 9.10.15

MAIN FLOOR

AREA (MAIN FLOOR) 3390.40 SQ. FT.
GARAGE: 915.00 SQ. FT.
LESS GARAGE: 535.21 SQ. FT.
TOTAL: 3765.20 SQ. FT.

1 MAIN FLOOR LAYOUT
SCALE: 3/16"=1'-0"

REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
01	18 MAR 2016	ISSUED FOR DP	JG				

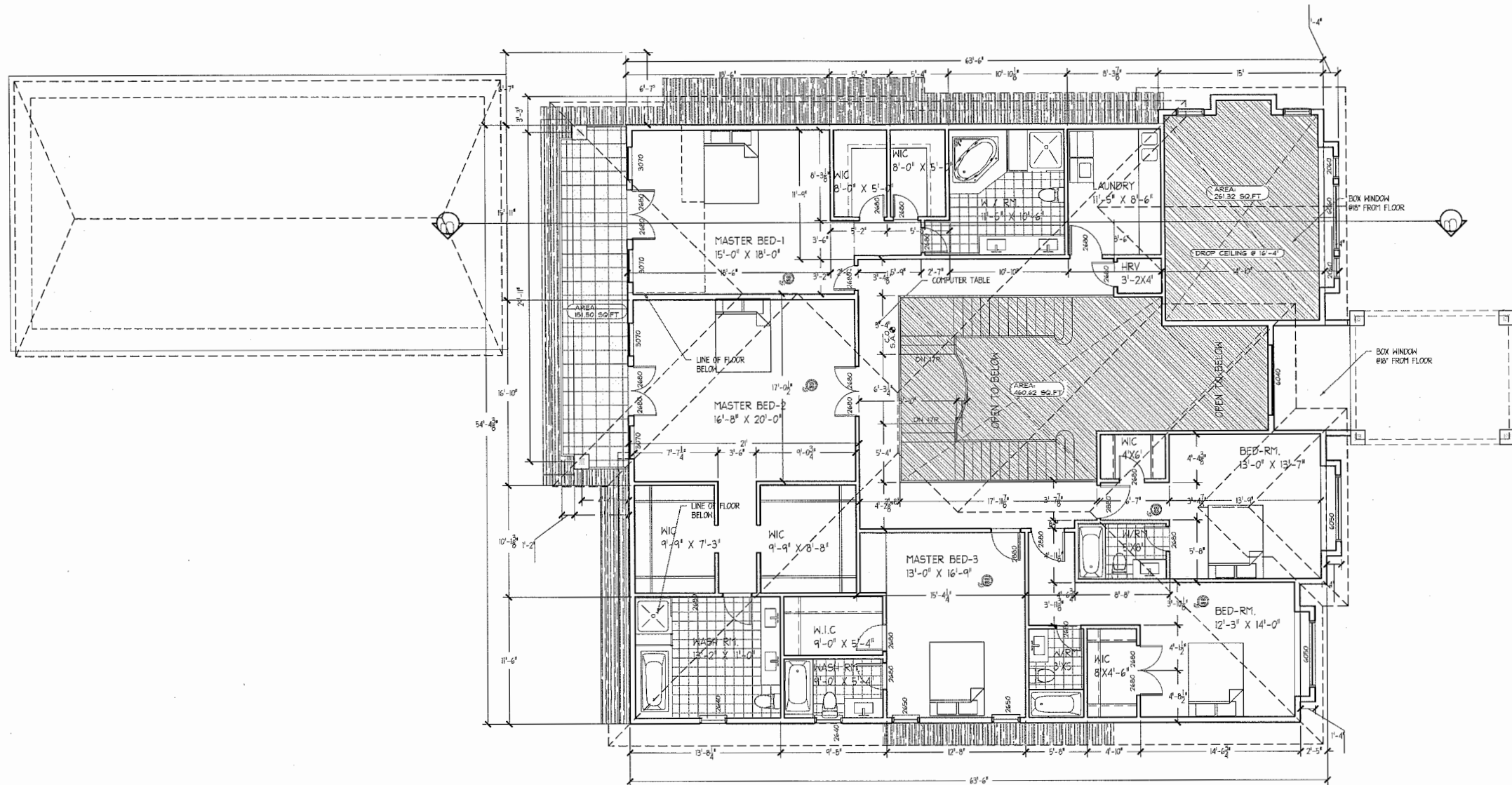
SUITE 215 - 12160 AVE.
9011 HAVEN
SURREY, B.C. V3W 0V3
778-891-0167
jassabir@yahoo.ca

Project Name	SINGLE FAMILY DWELLING
7311- NO. 5 ROAD Richmond, B.C.	
Owner	PRITAM SAMRA
START DATE	JUNE 2015
PROJECT No.	2015-06
DR.	JG
CH.	JG
SCALE	AS SHOWN
REV No.	01
PROJECTING No.	2015-06
A201	

Reference

JUL 13 2016

DP 16-727168



NOTES :

- ALL BEAMS AND LINTELS
2 - 2 x 10 U.N.O.
- ALL BEDROOM WINDOWS
AS PER B.C.B.C. 4.9.10.1
- ALL HAND RAILS
AS PER B.C.B.C. 4.6.7
- ALL GUARD RAILS
AS PER B.C.B.C. 4.6.8
- ALL SMOKE ALARMS TO BE
INTERCONNECTED A/C
- ATTIC HATCH TO BE
WEATHER-STRIPPED
- ALL SPATIAL SEPARATIONS
AS PER B.C.B.C. 4.10.15

SECOND FLOOR
AREA (1ST FLOOR) : 3404.50 SQ.FT.
LESS : 724.00 SQ.FT.
LESS STAIR CREDIT : 107.64 SQ.FT.
TOTAL : 2572.86 SQ.FT.

1 SECOND FLOOR LAYOUT
SCALE: 3/16"=1'-0"

REV	DATE	DESCRIPTION	BY
01	18 MAR 2016	ISSUED FOR DP	JG

Project Name SINGLE FAMILY DWELLING 7311-NO. 5 ROAD Richmond, B.C.	
Owner PRITAN SAMRA	
START DATE JUNE 2015	PROJECT No. 2015-06
DR. JG	PROJECT No. 2015-06
CH. JG	SCALE AS SHOWN
A202	

Reference

DP 16-727168
JUL 13 2016