

# City of Surrey PLANNING & DEVELOPMENT REPORT File: 7917-0077-00

Planning Report Date: November 20, 2017

### **PROPOSAL:**

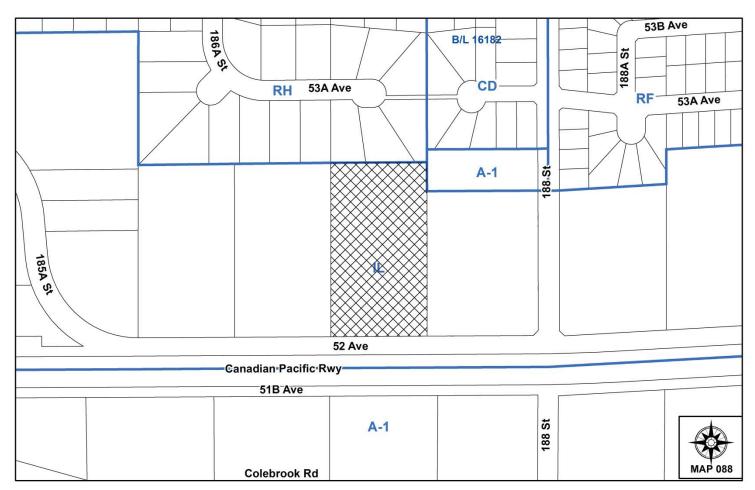
### • Development Permit

to permit the development of two industrial buildings.

LOCATION: 18725 - 52 Avenue OWNER: 467306 B.C. Ltd.

ZONING: IL

**OCP DESIGNATION:** Industrial



### **RECOMMENDATION SUMMARY**

• Approval to draft Development Permit.

### **DEVIATION FROM PLANS, POLICIES OR REGULATIONS**

None.

### **RATIONALE OF RECOMMENDATION**

- Complies with the Industrial designation in the OCP and with the regulations of the IL Zone.
- The proposed density and building form are appropriate for this part of the 52 Avenue industrial area.
- Landscaping is proposed along the 52 Avenue frontage and within a 10-metre (33 ft.) wide buffer area along the north and northeast property lines, adjacent to residential lands.
- Proposed outside storage is entirely screened from the public realm.

### **RECOMMENDATION**

The Planning & Development Department recommends that:

1. Council authorize staff to draft Development Permit No. 7917-0077-00 generally in accordance with the attached drawings (Appendix II).

- 2. Council instruct staff to resolve the following issues prior to approval:
  - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
  - (b) submission of a finalized landscaping plan and landscaping cost estimate to the specifications and satisfaction of the Planning and Development Department;
  - (c) resolution of all urban design issues to the satisfaction of the Planning and Development Department;
  - (d) submission of a truck turning movement plan to the loading bays along the western elevation;
  - (e) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect; and
  - (f) registration of a Section 219 Restrictive Covenant to ensure the full parking requirements are satisfied should the anticipated tenant change or if additions to the floor area of the building are proposed in the future.

#### **REFERRALS**

Engineering: The Engineering Department has no objection to the project

subject to the completion of Engineering servicing requirements as

outlined in Appendix III.

### **SITE CHARACTERISTICS**

Existing Land Use: Vacant lot.

### Adjacent Area:

Direction	<b>Existing Use</b>	OCP Designation	Existing Zone
North:	Single family dwellings.	Suburban	RH

Direction	Existing Use	OCP Designation	Existing Zone
East:	Large manufacturing building currently under construction and a single family dwelling with a childcare on an acreage.	Industrial	IL and A-1
South (Across 52 Avenue and rail right-of-way):	Agricultural land within the ALR.	Agricultural	A-1
West:	Industrial park.	Industrial	IL

#### **DEVELOPMENT CONSIDERATIONS**

- The subject property is located at 18725 52 Avenue and encompasses an area of 1.63 hectares (4.0 acres). The subject property is designated Industrial in the Official Community Plan (OCP), and is zoned "Light Impact Industrial Zone (IL)".
- The site slopes upwards approximately 3.5%, or 8.5 metres (28 ft.) from the southwest corner of the site to the northeast corner of the site.
- The site borders residential suburban properties to the north and northeast corner. To the west is a multi-building industrial park and to the east is a large industrial building currently under construction. The Canadian Pacific Railway is located to the south across 52 Avenue.
- The applicant is proposing a Development Permit to allow two industrial buildings. The proposed northern building is intended for a metal fabricator but can be converted to nine industrial units in the future. The proposed south building is intended for a drilling company and is designed to be potentially converted to four industrial units in the future
- The two proposed buildings will have a total floor area of 5,861 square metres (63,000 sq. ft.). The proposal represents a floor area ratio (FAR) of 0.34 and a lot coverage of 36% which is below the maximum FAR of 1.0 and lot coverage of 60% permitted in the IL Zone.
- The applicant hopes to occupy the proposed industrial buildings by the end of 2018.

### **PRE-NOTIFICATION**

• A development sign was installed on the property in May 2017 and staff have not received any responses.

#### DESIGN PROPOSAL AND REVIEW

• The applicant proposes two single tenant industrial buildings with potential for conversion to potentially 13 industrial units in the future. The two proposed buildings are both concrete tilt-up construction. The height of the proposed building is 10.9 metres (36 ft.), which is below the maximum 18 metres (60 ft.) permitted in the IL Zone.

• There is a potential for the up-lying residential properties to the north to overlook the roofs of the buildings. The applicant has provided roof top screening details for both buildings.

### Southern Building

- The proposed southern building is 3,905 square metres (42,000 sq. ft.) in size with 3,534 square metres (38,040 sq. ft.) proposed to be warehouse and 371 square metres (4,000 sq. ft.) proposed for office. The building is designed so it can be converted to four industrial units in the future.
- The building is primarily light and dark grey panels of concrete tilt-up.
- The east elevation is designed as the primary entry façade if the building redevelops in the future with four entrances, substantial glazing and black steel canopies for weather protection.
- The south elevation includes substantial glazing and a canopy along the eastern portion as well as the entrance for the office component of the building. The western extent of the elevation includes a wall extension to screen loading areas.
- The north and west elevations include loading doors with a row of windows along the upper portion of the building to provide natural lighting within the building.

### Northern Building

- The proposed northern building is 1,870 square metres (20,125 sq. ft.) in size with 1,672 square metres (18,000 sq. ft.) proposed to be warehouse and 186 square metres (2,000 sq. ft.) proposed for office. The building is designed so it can be converted to nine industrial units in the future.
- The building design and colour scheme is similar to the southern building.
- The southern elevation includes the primary entrance and includes canopies that cover the entire length of the elevation. Eleven loading doors are evenly spaced along the elevation with the two most western loading bays designed for longer semi-trailers and the other bays intended for smaller trucks.
- The northern elevation acts as a retaining wall for a landscaped buffer.
- The eastern elevation includes glazing wrapped around the southern portion and a 1 metre (3 ft.) wide fire access walkway running along the east side of the building. If the building converts to multiple units in the future, the applicant will need to install an internal walkway along the rear of the building to provide for fire escape.

• The western elevation is constructed at the lot line and is primarily a grey wall with linear details to provide some visual interest. A loading bay is proposed at the southern portion of the building and windows are present to provide for security.

### Site Access, Parking and Outside Storage

- Two (2) driveway accesses are proposed off of 52 Avenue. The proposed driveways will be highlighted by saw cut concrete.
- For the proposed southern building, the 12 loading areas are located away from the street alongside the western drive aisle and will be screened from 52 Avenue by an extension of the southern façade.
- The proposed northern building is being constructed for a single tenant but is designed that it
  can be split into nine smaller units in the future. The proposed building has two loading bays
  along the west property line. Conversion of the northern building into multiple units in the
  future will require an exit corridor to be constructed within the rear of the building that will
  exit at the eastern side of the building.
- Surrey Zoning By-law No. 12000 requires 1 parking space for every 100 square metres (1,075 sq.ft.) of gross floor area for light impact industrial uses and 2.5 parking spaces for every 100 square metres (1,075 sq. ft.) of gross floor area for office uses. As such, the proposal requires a total of 70 on-site parking spaces and the applicant is providing 82 spaces.
- As employee and visitor parking may be problematic for a more intensive industrial use, a restrictive covenant will be required that prohibits building expansion (including the addition of mezzanine space) or change of intended use of the building, unless the minimum required parking spaces can be provided.
- Between the two buildings is a 1,380 square metres (0.34 acre) outside storage area which can potentially be converted to additional parking in the future. The applicant proposes to store drilling related equipment within this area. The proposed storage area will have black vinyl chain link fencing and will not be visible from the public realm as it will be screened by the southern building.

### Landscaping, Retaining Walls and Lighting

- A 10-metre (33 ft.) wide landscaped buffer is proposed along the north and east property lines adjacent to the residential areas and consists of a variety of deciduous and coniferous trees and shrubs. The proposed buffer will help transition the grade down from the property to the north with its approximate slope of 3:1.
- The proposed northern building is proposed to act as a retaining wall to offset the transition to the property to the north.
- Along 52 Avenue, the applicant proposed 14 trees including cypress, ash and maple trees within a 3 metres (10 ft.) wide buffer.

• Within the parking lot, the applicant proposes nine landscape islands which will include structural soil to ensure healthy trees.

- Along the majority of the west property line, the applicant proposes a 1 metre (3 ft.) landscaping strip to protect off site landscaping on the neighbouring property.
- A 5-metre (16 ft.) wide drainage easement exists along the east property line which the applicant proposes to maintain as grass. The applicant proposes retaining walls along the western edge of the easement to assist with transitioning to the existing retaining walls constructed on the property to the east (18787 188 Street). The proposed walls range from 0.6 metre (2 ft.) to 1.85 metres (6 ft.) in height and are not visible from 52 Avenue.
- Within the 10-metre (33 ft.) buffer area to the east of the northern building, the applicant is proposing a retaining wall that ranges from 3.7 metres (12 ft.) to 5 metres (16 ft.) in height to assist with the approximate 5 metre (16 ft.) grade transition from the building and walkway to the neighbouring property line to the east. The proposed retaining wall will be screened by a row of 11 cypress trees.
- The applicant does not propose a garbage compound as part of the current development as both tenants prefer internal garbage storage. In the future, if the buildings redevelop to multiple units, two proposed garbage compounds will be located to the north of the southern building and will not be visible from 52 Avenue, as they are located behind buildings.
- The applicant proposes surface wall lighting on the building. No pole lighting is proposed within the development.

### **Signage**

- The applicant is not proposing a free-standing sign as part of the development.
- The applicant has identified fascia signage locations for each future unit which are proposed to be located above the canopy. Proposed signage panels are approximately 2 metres (7 ft.) wide and 0.3 metre (1 ft.) tall and the signage will be comprised of individual channel letters. Proposed signage complies with the Sign By-law.

### **TREES**

• Shan Tennyson, ISA Certified Arborist of KD Planning and Design Ltd. prepared an Arborist Assessment for the subject property. The table below provides a summary of the tree retention and removal by tree species:

**Table 1: Summary of Tree Preservation by Tree Species:** 

Tree Species	Existing	Remove	Retain
Alder	and Cottonwood	d Trees	
Alder	2 2		0
	Coniferous Tree	es	
Douglas Fir	15	15	0

Tree Species	Existing		Remove	Retain
Deciduous Tree				
Garry Oak	1	[	1	0
<b>Total</b> (excluding Alder and Cottonwood Trees)	16		16	0
	_	l		
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		71		
Total Retained and Replacement Trees			71	
Contribution to the Green City Fund			o	

- The Arborist Assessment states that there are a total of 16 protected trees on the site, excluding Alder and Cottonwood trees. Two (2) existing trees, approximately 11% of the total trees on the site, are Alder trees. It was determined that no trees can be retained as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of services, building footprints, road dedication and proposed lot grading.
- A row of trees was planted along the east property line of the neighbouring property to the west (18677 52 Avenue). The applicant is proposing a 1 metre (3 ft.) landscaping strip to protect this landscaping and allow for healthy maturation. Existing landscaping on residential properties to the north and east will also be protected during construction.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 1 to 1 replacement ratio for Alder trees, and a 2 to 1 replacement ratio for all other trees. This will require a total of 34 replacement trees on the site. The applicant is proposing 71 replacement trees, exceeding City requirements.
- The new trees on the site will consist of a variety of trees including maple, oak, fir, false cypress and pine.
- In summary, a total of 71 trees are proposed to be replaced on the site.

### SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on November 15, 2018. The table below summarizes the applicable development features of the proposal based on the seven (7) criteria listed in the Surrey Sustainable Development Checklist.

Sustainability	Sustainable Development Features Summary
Criteria	
Site Context &	Site is zoned IL and has OCP designation of Industrial.
Location	
(A1-A2)	

Sustainability Criteria	Sustainable Development Features Summary
2. Density & Diversity (B1-B7)	• N/A
3. Ecology & Stewardship (C1-C4)	<ul> <li>Applicant is planting 71 trees as part of the development.</li> <li>Recycling facilities will be provided.</li> </ul>
4. Sustainable Transport & Mobility (D1-D2)	• N/A
5. Accessibility & Safety (E1-E3)	CPTED principals are integrated into the site plan.
6. Green Certification (F1)	• N/A
7. Education & Awareness (G1-G4)	• N/A

### INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I. Lot Owners and Action Summary (Confidential) and Project Data Sheets

Appendix II. Site Plan, Building Elevations, Landscape Plans and Perspective

Appendix III. Engineering Summary

Appendix IV. Summary of Tree Survey and Tree Preservation

original signed by Ron Gill

Jean Lamontagne General Manager Planning and Development

JKS/da

# APPENDIX I HAS BEEN

# REMOVED AS IT CONTAINS

**CONFIDENTIAL INFORMATION** 

## **DEVELOPMENT DATA SHEET**

**Existing Zoning: IL** 

Required Development Data	Minimum Required / Maximum Allowed	Prop	oosed
LOT AREA* (in square metres)			
Gross Total		16,25	55 m <sup>2</sup>
Road Widening area			-
Undevelopable area			
Net Total	1,800 m²	16,25	55 m <sup>2</sup>
LOT COVERAGE (in % of net lot area)			
Buildings & Structures	6o%	34.	.4%
Paved & Hard Surfaced Areas			
Total Site Coverage			
SETBACKS ( in metres)		Northern Building	Southern Building
Front	7.5 m	138.3	17.24 m
Rear	7.5 m	10 M	77.6 m
Side #1 (East)	0	11.3 m	19 m
Side #2 (West)	7.5 m	0	25.4 m
BUILDING HEIGHT (in metres/storeys)			
Principal	18 m	10.	4 m
Accessory			
FLOOR AREA: Residential			
FLOOR AREA: Commercial			
Retail			
Total			
		Northern Building	Southern Building
FLOOR AREA: Industrial		1,685 m <sup>2</sup>	3,534 m <sup>2</sup>
FLOOR AREA: Office		185 m²	371 m²
TOTAL BUILDING FLOOR AREA		1,870 m²	3,905 m <sup>2</sup>

<sup>\*</sup> If the development site consists of more than one lot, lot dimensions pertain to the entire site.

## Development Data Sheet cont'd

Required Development Data	Minimum Required / Maximum Allowed	Proposed
DENSITY		
# of units/ha /# units/acre (gross)		
# of units/ha /# units/acre (net)		
FAR (gross)	1.0	0.34
FAR (net)	1.0	0.36
AMENITY SPACE (area in square metres)		
Indoor		
Outdoor		
PARKING (number of stalls)		
Office	14	14
Industrial	53	68
Residential Bachelor + 1 Bedroom		
2-Bed		
3-Bed		
Residential Visitors		
Institutional		
Total Number of Parking Spaces		82
Number of accessible stalls		
Number of small cars		
Tandem Parking Spaces: Number / % of Total Number of Units		
Size of Tandem Parking Spaces width/length		

Heritage Site	NO	Tree Survey/Assessment Provided	YES
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## **MULTI-TENANT BUILDINGS for MDZ DEVELOPMENTS**

CONTACT: CURTIS GRAY

KD MECHANICAL CONSULTANTS LTD. 400 - 34077 GLADYS AVENUE ABBOTSFORD B.C. V2S 3E8 P. 604.853.8831 F. 604.853.1580

MECHANICAL

PROPOSED BUILDINGS FOR SRL & TRAXXON: 18725 - 52 AVENUE. SURREY, BC PROJECT TEAM

KRAHN ENGINEERING LTD. 400 - 34077 GLADYS AVENUE ABBOTSFORD B.C. V2S 3E8 P. 604.853.8831 F. 604.853.1580

CONTACT: PETER KIDDIE

STRUCTURAL

ARCHITECT OF RECORD

LARRY PODHORA ARCHITECT 1952 BRACKMAN WAY SAANICH B.C. V8L0C2

CONTACT: LARRY PODHORA

BUILDING DESIGN

KRAHN ENGINEERING LTD. 400 - 34077 GLADYS AVENUE ABBOTSFORD B.C. V2S 3E8 P. 604.853.8831 F. 604.853.1580

CONTACT: CURTIS GRAY

#### SHEET LIST

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M2.1 FOUNDATION PLAN
M3.1 MAIN PLOOP PLAN PLUMBING
M3.1 MAIN PLOOP PLAN
M3.1 MAIN PLOOP PLAN
M3.2 SELARGED PLAN PLUMBING
M3.3 ENLARGED PLAN PLUMBING
M3.3 ENLARGED PLAN PLUMBING
M3.4 MAIN PLOOP PLAN H-HVAC
M3.5 SECOND PLOOP PLAN +HVAC
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M3.5 MECHANICAL DETAILS
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M3.5 MECHANICAL SPECIFICATIONS
M6.1 MECHANICAL SPECIFICATIONS STHUCTURAL
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\$2.0 FOUNDATION PLANS
\$2.1 ROOF FRAMING PLANS
\$2.2 ROOF DECK DIAGRAM
\$3.0 PANEL ELEVATIONS
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ELECTRICAL

KD ELECTRICAL CONSULTANTS LTD. 400 - 34077 GLADYS AVENUE ABBOTSFORD B.C. V2S 3E8 P. 604.853.8831 F. 604.853.1580

CONTACT: RODRIGUE ROUHANA

ELECTRICAL

E.10 SITE PLAN

E.20 MAIN FLOOR POWER LAYOUTS &
EMERGENCY SYSTEMS

E.21 MAIN FLOOR HIGHTING LAYOUTS

E.30 MEZZAMBR FLOOR POWER
LAYOUTS, LIGHTING & EMERGENCY

E.40 ROOF PLAN POWER LAYOUTS

E.50 SCHEDULES & SCHEMATICS

E.51 SCHEM

CIVIL

KM CIVIL CONSULTANTS LTD. 400 - 34077 GLADYS AVENUE ABBOTSFORD B.C. V2S 3E8 P. 604.853.8831 F. 604.853.1580

CONTACT: STUART MCGREGOR

CIVII

CI LOCATION PLAN & GENERAL NOTES
C2 SITE GRADING PLAN
C3 SITE SERVICING PLAN
C4 STORM WATER MANAGEMENT PLAN
C5 WATER METER DESIGN AND
LOCATION PLAN
C5 DRAINAGE WORKS PROFILES
C7 CONSTRUCTION DETAILS

LANDSCAPE

LANDSCAPE

GEOTECHNICAL

GEOPACIFIC 1779 W 75 AVENUE VANCOUVER, BC, V6P 6P2 P. 604.439.0922 F. 604.439.9189

CONTACT: MARIAN LETAWAY

L1.0 OVERALL LANDSCAPE PLAN L2.0 PLANTING PLAN BLOW UPS L3.0 DETAILS AND NOTES

KD PLANNING AND DESIGN LTD. 400 - 34077 GLADYS AVENUE ABBOTSFORD B.C. V2S 3E8 P. 604.853.8831 F. 604.853.1580

CONTACT: SHAN TENNYSON

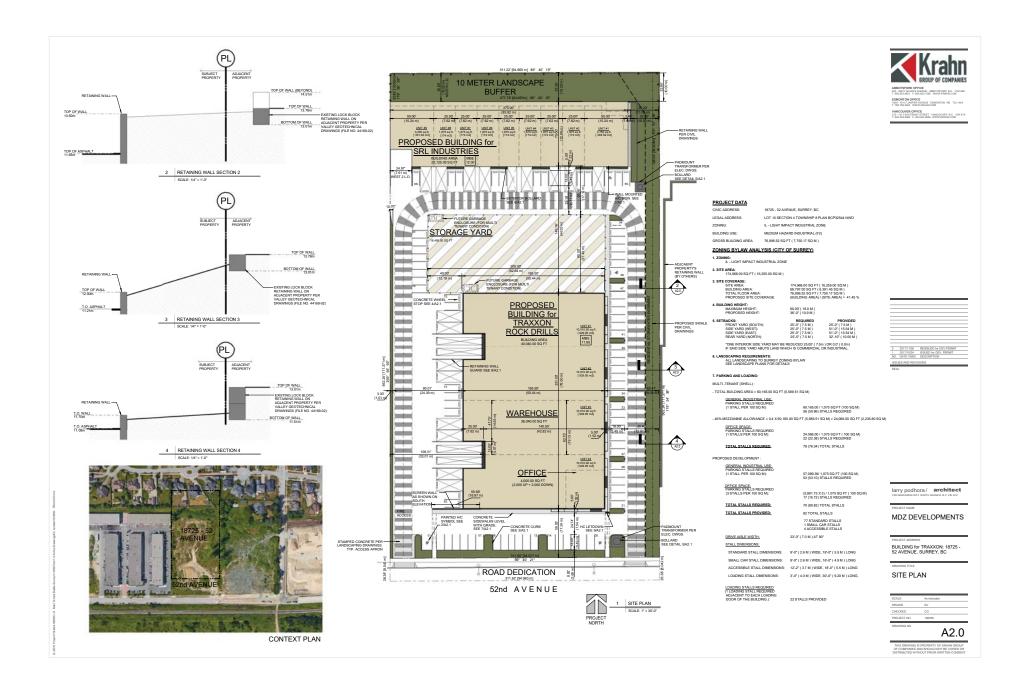
larry podhora/ architect

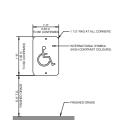
MULTI-TENANT BUILDINGS for MDZ DEVELOPMENTS

PROPOSED BUILDINGS FOR SRL & TRAXXON: 18725 - 52 AVENUE, SURREY, BC

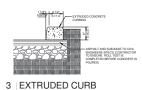
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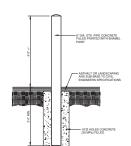
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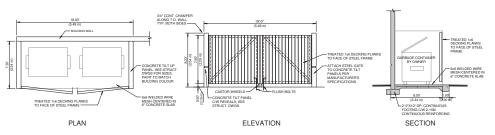


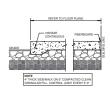
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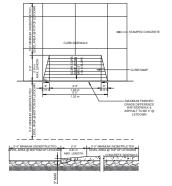
4 | CONCRETE WHEEL STOP

5 BOLLARD





6 | GARBAGE ENCLOSURE



7 | SIDEWALK DETAIL

larry podhora/ architect

MDZ DEVELOPMENTS

BUILDING for TRAXXON: 18725 - 52 AVENUE, SURREY, BC

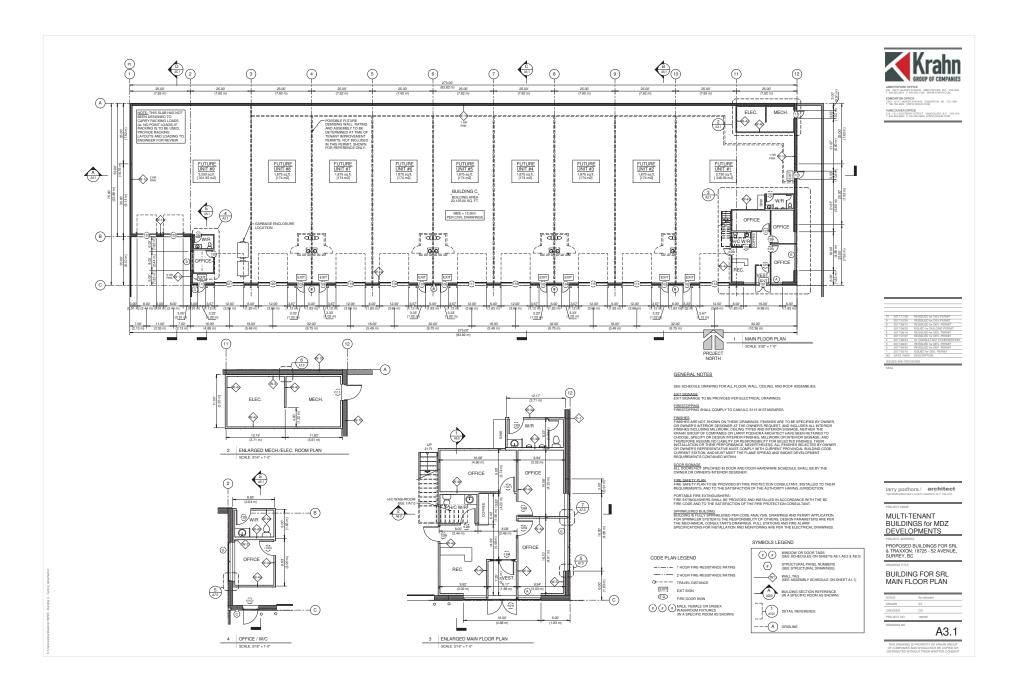
SITE DETAILS

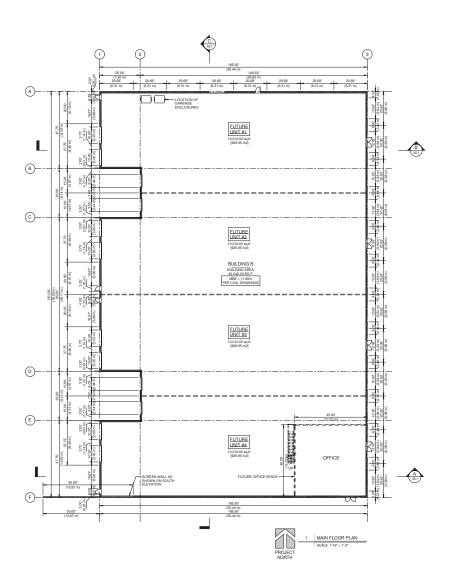
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8	RETAINING	WALL	GUARDRAIL	

9 ACCESSIBLE LETDOWN/ CURB RAMP
SCALE: 1/2" = 1'.0"







GENERAL NOTES

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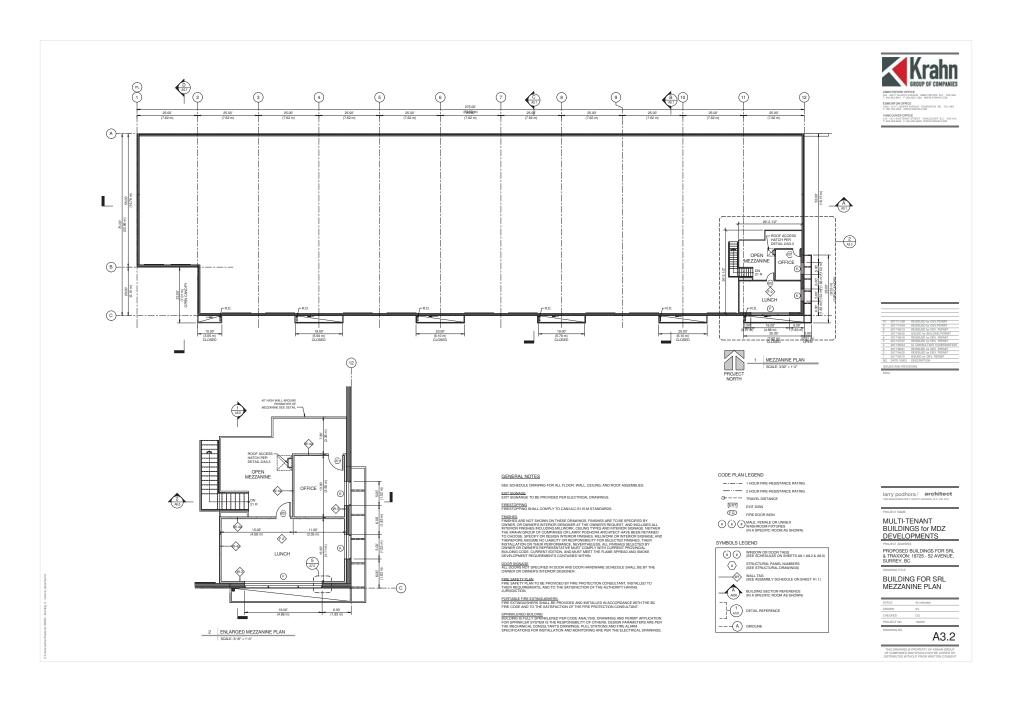
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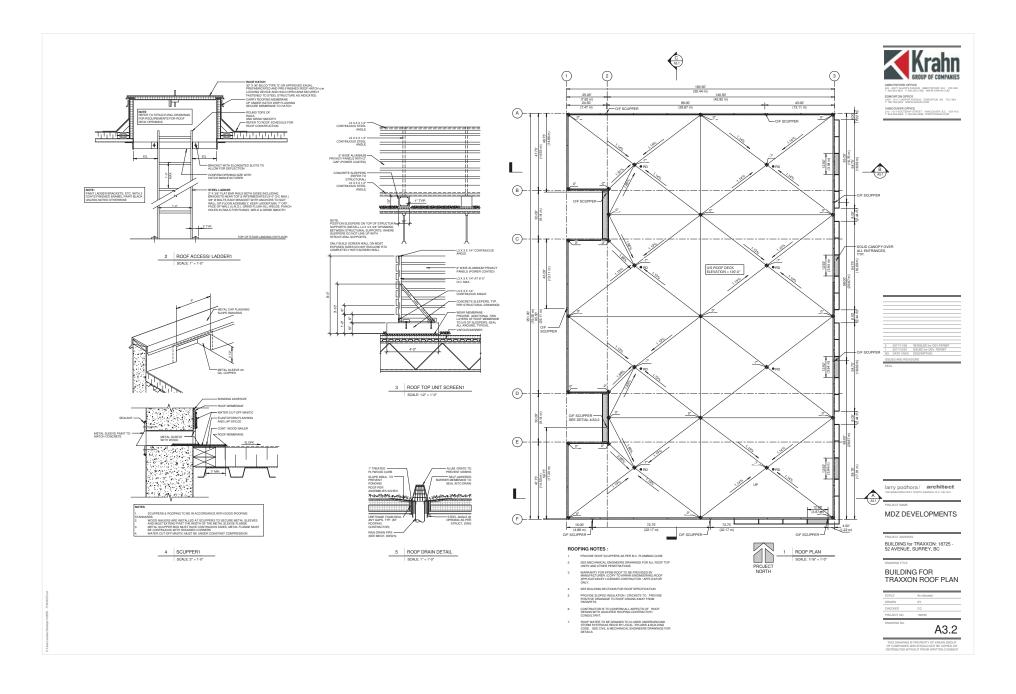
MDZ DEVELOPMENTS

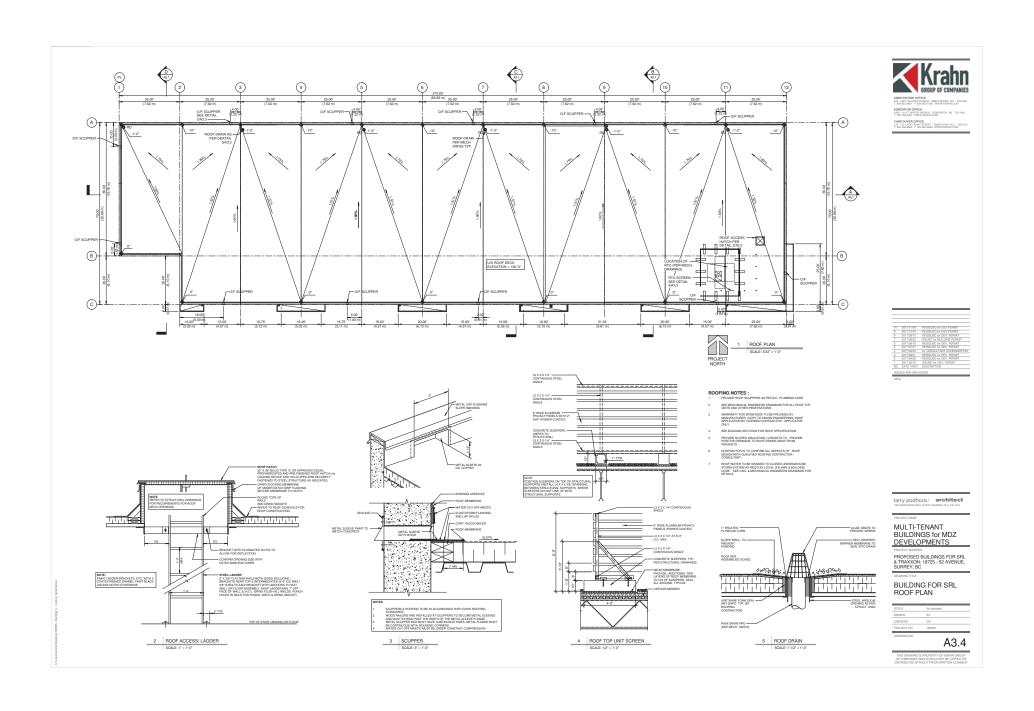
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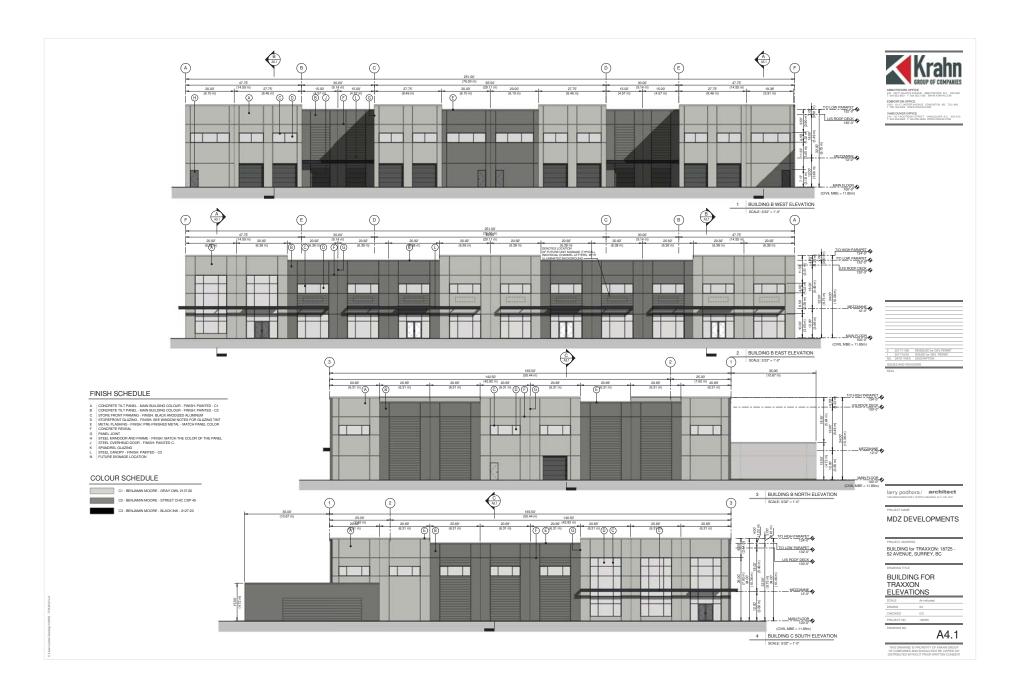
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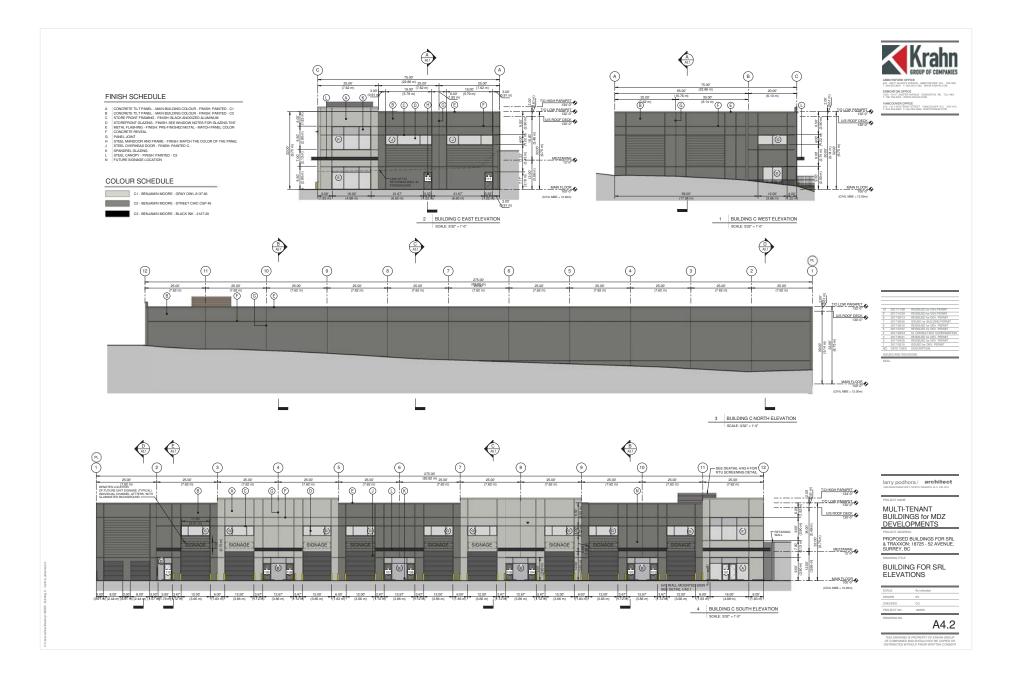
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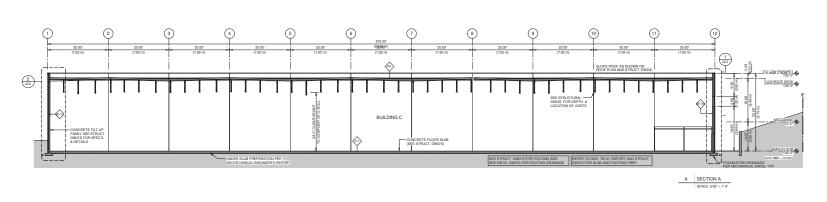




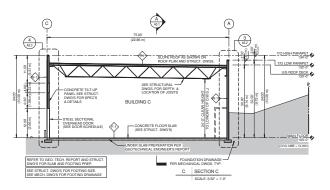


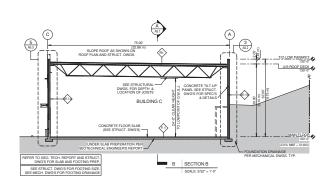




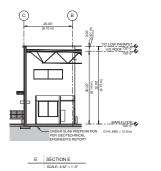


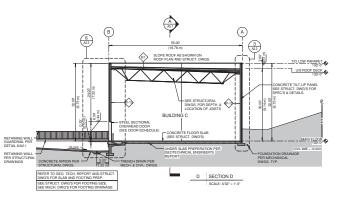






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9	2017/10/24	REISSUED for DEV PERMIT
5	2017/09/13	REISSUED for DEV. PERIMIT
7		ISSUED for BUILDING PERMIT
6	2017/06/16	REISSUED for DEV. PERMIT
5	2017/07/07	REISSUED for DEV. PERIMIT
4		for CONSULTANT COORDIANTION
	2017/06/21	REISSUED for DEV. PERIMIT
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larry podhora/ architect

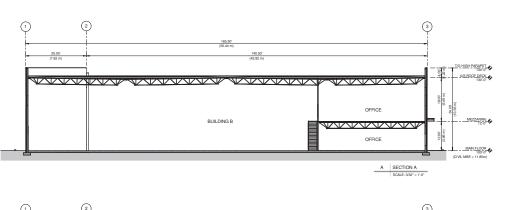
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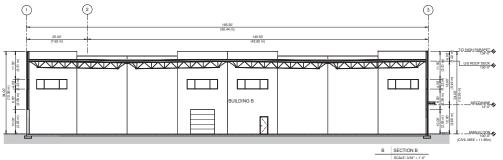
BUILDING FOR SRL SECTIONS

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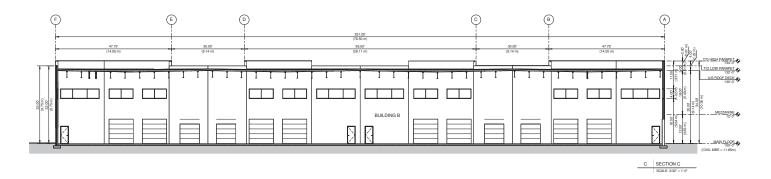
THIS DRAWING IS PROPERTY OF KRAHN GROUP OF COMPANES AND SHOULD NOT BE COPIED OF











larry podhora/ architect

JECT NAME

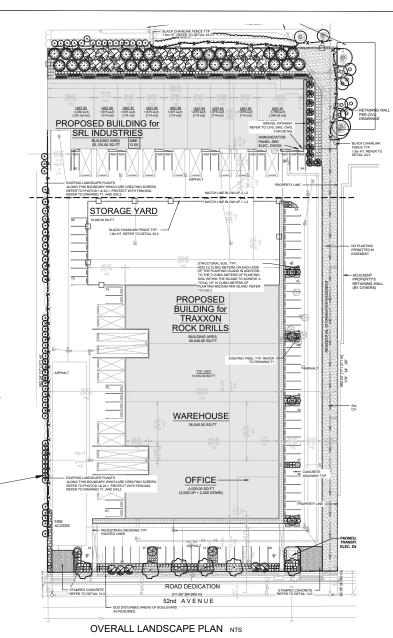
MDZ DEVELOPMENTS

PRIOLECT ADDRESS
BUILDING for TRAXXON: 18725 52 AVENUE, SURREY, BC

BUILDING FOR TRAXXON SECTIONS

A5.1

THIS DRAWING IS PROPERTY OF KRAHN OR



FILE FOLDER NO. 7917-0077-00 09/11/17 RE-ISSUED FOR DP

7 23/08/17 ISSUED FOR BP 6 07/07/17 REVISED PER COM

5 30/05/17 REVISED FOR COORDINAT 4 18/05/17 ISSUED FOR COORDINAT 02/05/17 ISSUED FOR COORD

\*DRAWING TO BE PRINTED AT 11X17 SIZE\* CIVIL ENG. PLANS UPDATED NOV.9,



MULTI-TENANT BUILDINGS FOR MDZ DEVELOPMENTS

OVERALL

LANDSCAPE PLAN

L1



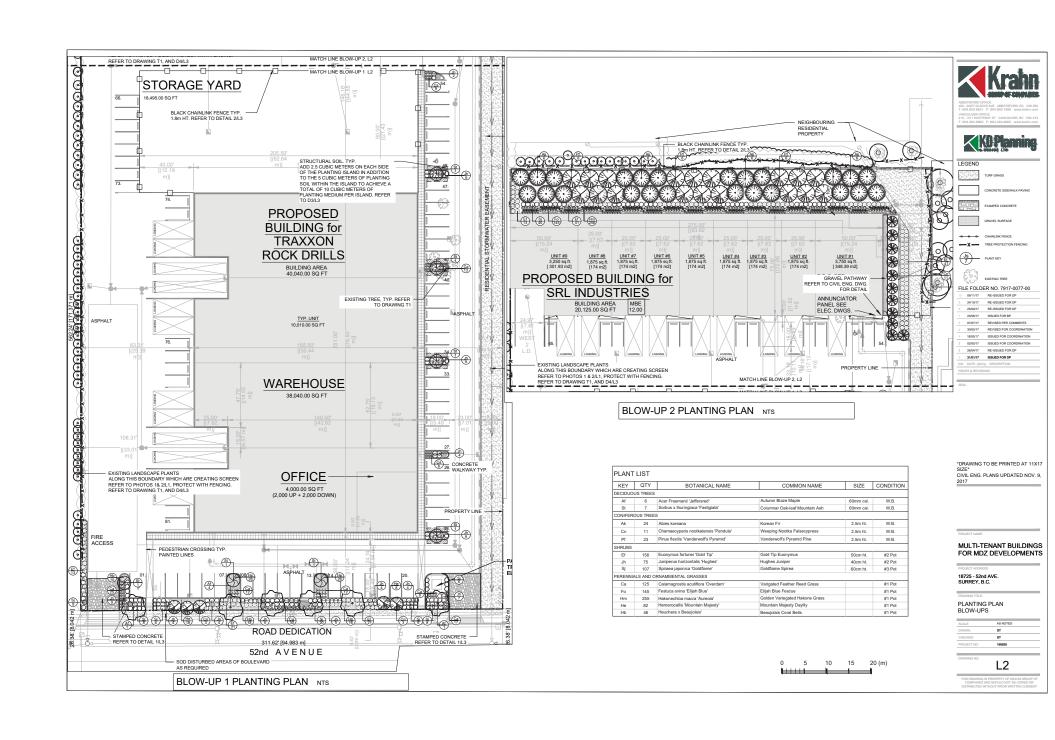
PHOTO 2. EXISTING LANDSCAPE CONTINUES ALONG WEST PERIMETER N.T.S.

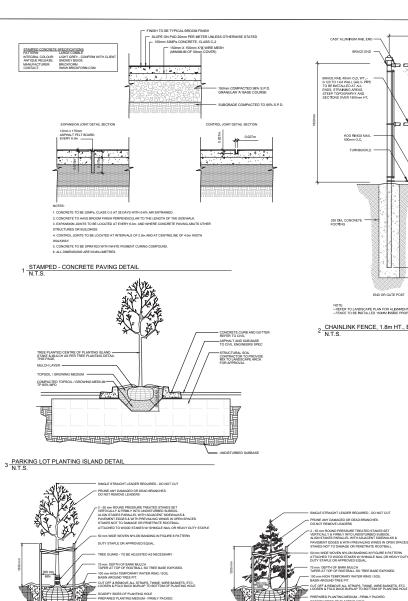


PHOTO 1. EXISTING LANDSCAPE AT WEST PERIMETER OF PROPERTY N.T.S.



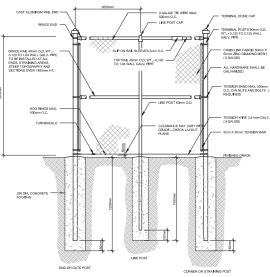
2. CONFIRM ALL MEASUREMENTS ON SITE. DO NOT SCALE DRAWINGS. CONFIRM EXISTING AND PROPOSED GRADES PRIOR TO BEGINNING CONSTR





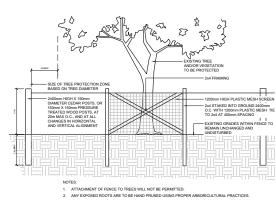
DECIDUOUS TREE

CONIFEROUS TREE



NOTE: - REPER TO LANDSCAPE PLAN FOR ALIGNMENT AND CIVIL PLAN FOR GRADES. - FENCE TO BE INSTALLED 190MM INSIDE PROPERTY LINES.

2 CHAINLINK FENCE, 1.8m HT., BLACK VINYL N.T.S.



- 3. UNDER NO CIRCUMSTANCES SHALL ANY CONSTRUCTION MATERIALS, EQUIPMENT OR VEHICLES BE PLACES
- 4. ALL TREE PROTECTION TO BE ERECTED PRIOR TO ANY CONSTRUCTION ACTIVITY AND IS TO REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS BEEN COMPLETED. OBTAIN WRITTEN APPROVAL FROM CONTRACT ADMINISTRATOR PRIOR TO REMOVAL OF FENCING.

### 4 TREE PROTECTION FENCING N.T.S.

75 mm DEPTH OF BARK MULCH TAPER AT TOP OF ROOTBALL AT BASE OF SH

SHRUB AND PERENNIAL PLANTING DETAIL

SOIL DEPTH 450 mm MINIMUM IN ALL SHRUB PLANTING BEDS AND GRASSED AREAS.

- 2. PLANT MATERIAL SUBSTITUTIONS WILL NOT BE ACCEPTED WITHOUT PRIOR WRITTEN APPRO
- ALL PLANT MATERIAL SHALL BE THOROUGHLY WATERED AND SOAKED AT THE TIME OF PLANTING.
- TREE PROTECTION: PER THE MUNICIPAL DETAIL IF REQUIRED.

- 9.3. Weed removal
- 9.4. Disease control

- I SODED AREAS AS SHOWN ON THE PLANTING PLAN ARE TO BE C STRONG FERDUE ROOT SYSTEM, THICK AND HEAVY GROWTH COS LANDSCAPE STANDONG, AND OF THE FOLLOWING MLX OR APPROVI 40%. BLEND OF 59 WARETIES OF KENTUCKY BLUEGRASS 40%. CREENING REP (FECUL) 20%. PERSINNAL RYCGRASS USE LATEST APPROVED CULTIVARS OF GRASS IN PROVINCE

- AREAS TO BE SODDED SHALL HAVE A MINIMUM 150MM TOPSOIL BASE.
- LOOSEN SOIL SURFACE PRIOR TO SODDING. ELIMINATE BUMPS AND HOLLOWS. ROLL LIGHTLY WHEREVER TOPSOIL IS EXCESSIVELY LOOSE.
- 3. PRIOR TO SODDING, OBTAIN APPROVAL THAT FINISHED GRADE AND DEPTH OF TOPSOIL ARE SATISFACTORS





	09/11/17	RE-ISSUED FOR DP
	24/10/17	RE-ISSUED FOR DP
	25/09/17	RE-ISSUED FOR DP
	23/08/17	ISSUED FOR BP
	07/07/17	REVISED PER COMMENTS
	30/05/17	REVISED FOR COORDINATION
	18/05/17	ISSUED FOR COORDINATION
3	02/05/17	ISSUED FOR COORDINATION
2	26/04/17	RE-ISSUED FOR DP
	31/01/17	ISSUED FOR DP
NO:	DATE: (d/m/y)	DESCRIPTION:

\*DRAWING TO BE PRINTED AT 11X17 CIVIL ENG. PLANS UPDATED NOV. 9,

#### MULTI-TENANT BUILDINGS FOR MDZ DEVELOPMENTS

18725 - 52nd AVE. SURREY, B.C.

DETAILS AND NOTES

SCALE:	AS NOTED	
DRAWN:	ST	
CHECKED:	ST	
PROJECT NO:	160555	

L3

#### A. CITY GENERAL NOTES

- FOR THE PURPOSE OF CONSTRUCTION AND ACCOUNTABILITY THE DEVELOPER MUST ADVISE THE SURREY CITY INSPECTOR, IN WRITING, WHICH OF THE CITY NOTES IS GOING TO BE THE RESPONSIBILITY OF THE DEVELOPER'S CONTRACTOR.
- 2. CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CITY OF SURREY HIGHWAY AND TRAFFIC RYLAW NO. 13007. SURDIVISION RYLAW NO. 8830 AND THE APPLICABLE. MUNICIPAL MASTER SPECIFICATIONS AND STANDARD DETAIL DRAWNINGS, CITY OF SURREY STANDARD CONSTRUCTION DOCUMENTS, SUPPLEMENTARY SPECIFICATIONS & STANDARD DRAWNINGS AND CITY DESIGN CRITERIA.
- TRAFFIC CONTROL IS THE RESPONSIBILITY OF THE DEVELOPER AND THE DEVELOPER SHALL COMPLY WITH SECTION 52 OF THE INDUSTRIAL HEALTH AND SAFETY REGULATIONS OF THE WORKERS' COMPENSATION BOARD OF B.C. AND THE INSTRUCTIONS OUTLINED ON THE CITY ROAD AND RIGHT-OF-WAY PERMIT AND TRAFFIC OBSTRUCTION PERMIT ISSUED BY THE CITY.

THE DEVELOPER IS TO HAVE, ON SITE, A COPY OF THE CURRENT "B.C. TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS" AS PUBLISHED BY THE MINISTRY OF RANSPORTATION AND HIGHWAYS.

- 4. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ALL CITY PERMITS FOR WORK WITHIN THE CITY ROAD ALLOWANCE
- WHERE UTILITY OR SERVICE CROSSINGS ARE REQUIRED ACROSS EXISTING PAVEMENTS, AN UNDERGROUND METHOD OF INSTALLATION IS REQUIRED UNLESS SPECIAL APPROVAL IS GIVEN FROM THE CITY FOR AN OPEN CUT OPERATION. ALL EXISTING PAVEMENTS, BOULEVARDS, DRIVEWAYS, ETC., ARE TO BE REINSTATED TO ORIGINAL OR BETTER CONDITION AND IN ACCORDANCE WITH CITY SPECIFICATIONS AND THE PAVEMENT CUT POLICY.
- SURREYS ISA MONUMENT(S) ARE TO BE PROTECTED AND SHOULD THEY REQUIRE
  RAISING OR RELOCATING, THE DEVISIONER WILL NOTIFY SURREYS SURVEY
  DEPARTMENT AT (86)4591-4253 FORTY-EIGHT (48) HOURS IN ADMINISE OF
  SCHEDULING WORK AFFECTING THEM. AN ISA MONUMENT SHALL BE CONSIDERED TO

  14. BE DISTURBED OR DESTROYED, BY THE DEVELOPER, IF THE CONSTRUCTION FOR THE
- (1) LOWERS THE GRADE OF THE ROAD AT THE LOCATION OF AN ISA
- (2) RAISES THE GRADE OF THE ROAD AT THE LOCATION OF AN ISA MONUMENT(S) (3) INSTALLS ANY UNDERGROUND UTILITIES (INCLUDING BC GAS, BC HYDRO, B
- TELEPHONE, GVRD WATER/SANITARY SEWER/OR DRAINAGE ETC.) WITHIN 1.500

  B. CITY ROADWORK NOTES
  METRE RADUIS OF THE ISA MONIMENT(S). THE CITY WILL INVOICE THE DEVELOPER A NON REFUNDABLE FLAT RATE FEE OF
  \$1,750.00 FOR EACH ISA MONUMENT DISTURBED OR DESTROYED

-\$3,150 FOR EACH HIGH PRECISION SECONDARY BENCHMARK DISTURBED OR DESTROYED £7 750 FOR EACH HIGH RECISION NETWORK RENCHMARK DISTURRED OR

ALL STREET, TRAFFIC, AND ADVISORY SIGNS, PAVEMENT MARKINGS AND NO-POST

- WHERE INFILLING OF EXISTING DITCHES IS REQUIRED OR WHERE SERVICES ARE CONSTRUCTED IN A FILL SECTION, FILL MATERIAL IS TO BE IN ACCORDANCE WIT CITY SPECIFICATIONS AND IS TO BE COMPACTED TO 95 % OF MODIFIED PROCTOR
- 9. DRIVEWAY BOULEVARD CROSSINGS TO EACH OF THE PROPOSED LOTS ARE TO BE INSTALLED IN ACCORDANCE WITH THE CITY STANDARD DRAWINGS.
- 10. RESIDENTS DIRECTLY AFFECTED BY CONSTRUCTION OF THIS PROJECT MUST BE GIVEN 48 HOURS WRITTEN NOTICE OF THE PROPOSED START OF CONSTRUCTION.

THE DEVELOPER WILL REQUIRE WRITTEN AUTHORIZATION FROM A PRIVATE PROPERTY OWNER, WITH A COPY TO THE CITY, PRIOR TO ANY ENTRY ONTO PRIVATE PROPERTY AND A WRITTEN RELEASE, FROM THE PROPERTY OWNER, WHEN

- 11. WHEN NATIVE SITE GRANULAR BACKFILL IS PROPOSED FOR USE IN TRENCHES THE DEVELOPER SHALL EMPLOY A PROFESSIONAL ENGINEER WITH EXPERIENCE IN GEOTECHNICAL ENGINEERING FOR PERFORMANCE OF IN PLACE DENSITY AND SIEVE TESTING. SELECTION OF THE PROFESSIONAL ENGINEER AND USE OF THE SITE MATERIAL IS TO BE APPROVED BY THE CITY. THE SITE MATERIAL MUST FALL WITHIN ONE OF THE GRANULAR BACKFILL MATERIAL SPECIFICATIONS. RIVER SAND IS NOT ACCEPTABLE AS TRENCH BACKFILL MATERIAL
- 12. THE DEVELOPER SHALL FACILITATE AND SUPPLY ALL NECESSARY SAFETY EQUIPMENT D. CITY WATER WORKS NOTES REQUIRED UNDER THE WCB REGULATIONS FOR THE CITY OR IT'S REPRESENTATIVES OR THE ENGINEER OF RECORD TO INSPECT THE SANITARY SEWER AND STORM SEWER SYSTEMS. THE EQUIPMENT SHALL BE SUPPLIED UNTIL SUCH TIME AS A CERTIFICATE OF COMPLETION IS ISSUED BY THE CITY.
- UTILITY CROSSINGS, PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF RECORD OF ANY CONFLICTS.
- . THE DEVELOPER SHALL EMPLOY A PROFESSIONAL ENGINEER TO DESIGN A SEDIMENT AND EROSION CONTROL SYSTEM IN THE DEVELOPMENT IN ORDER TO PREVENT SILT DISCHARGES TO THE STORM DRAINAGE SYSTEM AND WATERCOURSES.
- 15. THE "TREE CUTTING AND PRESERVATION BYLAW NO. 12880" REQUIRES THAT CUTTING PERMIT BE OBTAINED BEFORE ANY TREES ARE REMOVED FROM THE SITE. OTHER PROVISIONS OF THE BYLAW MAY ALSO BE APPLICABLE.

- 1. THE DEVELOPER SHALL EMPLOY A PROFESSIONAL ENGINEER WITH EXPERIENCE IN GEOTECHNICAL ENGINEERING FOR PERFORMANCE OF IN PLACE TESTING DURING THE
  7. NO CAST IRON VALVES ON FITTINGS. GEDIELMICAL ENGINEERING FOR PERFORMANCE OF IN PLACE. IESTING DURING THE PREPARATION OF THE SUB-GRADE AND CONSTRUCTION OF THE ROAD STRUCTURE NO VERIFY THE ADEQUACY OF THE PROPOSED AND EXISTING ROAD STRUCTURE AND SUB-GRADE. SELECTION OF THE PROFESSIONAL ENGINEER IS TO BE APPROVED BY
- 2. EXISTING VALVE BOXES, MANHOLES, ETC. WITHIN THE ROAD ALLOWANCE MUST BE ADJUSTED TO SUIT THE PROPOSED FINISHED GRADE.
- 3. ALL LOOSE, ORGANIC, OTHERWISE DELETERIOUS MATERIALS OR SOFT SPOT(S) ARE

TO BE EXCAVATED AND REMOVED FROM THE ROADWAY AND UTILITY TRENCHES IN THE ROADWAY AS PER THE GEOTECHNICAL CONSULTANT'S REPORT OR AS DIRECTED BY THE CITY.

#### C. CITY SANITARY SEWER AND STORM SEWER NOTES

- UNLESS PRIOR APPROVAL IS GIVEN TO THE DEVELOPER BY THE CITY, TIE-INS AND CONNECTIONS TO EXISTING SANITARY SEWERS ARE TO BE PERFORMED BY THE CITY AT THE DEVELOPER'S COST.
- ALL SERVICE CONNECTIONS SHALL BE MADE TO THE MAIN WHEREVER POSSIBLE. SHOULD A CONNECTION HAVE TO BE MADE TO A MANHOLE, THE CONNECTION INVERT SHALL BE AT THE SAME ELEVATION AS THE CROWN OF THE HIGHEST SEWER.
- 3. ALL MANHOLES ARE TO BE A MINIMUM OF 1050 MM DIAMETER UNLESS OTHERWISE
- ALL SANITARY SEWER AND STORM SEWER SERVICE CONNECTIONS ARE TO RE A
- 5. ALL GRANULAR PIPE BEDDING SHALL BE EITHER TYPE 1 OR TYPE 2 ONLY AS PER THE

- 1. THE DEVELOPER SHALL SUPPLY ALL MATERIALS AND FITTINGS REQUIRED FOR THE TIE-IN OF THE NEW WATER MAINS BY THE CITY.
- 2. ALL NEW WATER MAINS, AT TIE-IN POINTS, ARE TO BE CAPPED 1.5 M FROM THE EXISTING WATER MAIN. THE PROPOSED WATER MAIN IS TO BE SET AT THE LINE AND GRADE TO MEET THE EXISTING WATER MAIN.
- TIE-INS TO EXISTING WATER MAINS AND FINAL TESTING AND CHLORINATION OF NEW MAINS IS TO BE PERFORMED BY THE CITY AT THE DEVELOPER'S COST.
- 4. ALL DOMESTIC SERVICE CONNECTIONS WILL BE A MINIMUM OF 19 MM DIAMETER
- WHERE 100 MM DIAMETER PIPE IS USED IT WILL BE DUCTILE IRON (D.I.) AND SHALL CONFORM TO THE CITY SPECIFICATIONS.
- 6. NO MCAVITY FITTINGS OR VALVES ETC. ARE TO BE USED.

	DRAWING INDEX
SHEET NO.	DRAWING TITLE
1	LOCATION PLAN AND GENERAL NOTES
2	SITE GRADING PLAN
3	SITE SERVICING PLAN
4	STORM WATER MANAGEMENT PLAN
5	WATER METER DESIGN AND LOCATION PLAN
6	DRAINAGE WORKS PROFILES
7	CONSTRUCTION DETAILS

LEGEND		
PROPOSED	EXISTING	DESCRIPTION
	8	BENCH MARK - GEODETIC DATUM
<b>经现代的股份</b>	14 15 16 16 16 18 18	GRAVEL SURFACE TREATMENT
AV AV AV		EDGE OF PAVEMENT
		CURB AND GUTTER
<b>→•</b> -s—	——∞-s—	SANITARY SEWER
	—— ғм —	SANITARY FORCE MAIN
		SANITARY SEWER SERVICE (c/w INSPECTION CHAMBER)
	DO-D-	STORM SEWER
		STORM SEWER SERVICE (c/w INSPECTION CHAMBER)
	◪	CATCH BASIN - TOP INLET
=	⊟	CATCH BASIN - SIDE INLET
2	0	LAWN DRAIN
$\longrightarrow$	$\longrightarrow$	SWALE
~>~>	$\sim \sim \sim$	DITCH
	W W W	SIDEWALK (ASPHALT)
77777		SIDEWALK (CONCRETE)
—,—,—w—	w-	WATERMAIN
		WATER SERVICE CONNECTION
	⋈w	WATER VALVE
w		AIR VALVE
	⋈	HYDRANT AND VALVE ASSEMBLY
	w-=	CAPPED END
	w-⇒□	BLOW-OFF
w-	w→	TEMPORARY BLOW-OFF
	•	JUNCTION BOX
E/T	ε/t	UNDERGROUND HYDRO/TELEPHONE
c_	c_	GAS MAIN
¢	¢	UTILITY POLE
	ф⊸¤	UTILITY POLE WITH LIGHT
	o—¤	STREET LIGHT

#### A. CONSULTANT'S SUPPLEMENTARY GENERAL NOTES:

- 1. FIGURED DIMENSIONS SHALL GOVERN OVER SCALED DIMENS
- 2. ALL DIMENSIONS AND ELEVATIONS ARE METRIC.
- THE CONTRACTOR SHALL REFERENCE THE ARCHITECTURAL DRAWINGS FOR THE SITE TO CONFIRM BUILDING AND CURB ALIGNMENTS/LAYOUT.
- 4. THE LOCATION OF EXISTING UNDERGROUND SERVICES IS NOT GUARANTEED, AND HAS BEEN COMPILED FROM A COMBINATION OF "AS-CONSTRUCTED" DRAWINGS AND GROUND SIRVEYS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND SERVICES BY HAVID EXCAVATION OR HYDRO-VACUUM EXCAVATION TO CONFIRM THEIR LINE AND GRADE PRIOR TO COMMENCEMENT OF SITE SERVICING. ANY AND ALL DISCREPANCIES SHALL BE COMMUNICATED TO KM CIVIL CONSULTANTS LTD. IMMEDIATELY.
- SHOP DRAWINGS, IF REQUIRED, SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW AND COMMENT PRIOR TO ORDERING MATERIALS, COMMENTS PROVIDED BY THE CONSULTANT REFER TO GENERAL ARRANGEMENT OF SHOP DRAWING COMPONENTS (DIMENSIONS AND ELEVATIONS) ONLY AND DO NOT CONSTITUT A DETAILED DESIGN REVIEW OF INDIVIDUAL COMPONENT DETAILS, WHICH IS THE RESPONSIBILITY OF THE MANUFACTURER
- 6. THE CONTRACTOR SHALL ENSURE THAT THEY ARE WORKING FROM A CERTIFIED COPY OF THE 'ISSUED FOR CONSTRUCTION' DRAWINGS PRIOR TO COMMENCING CONSTRUCTION. ANY DRAWINGS NOT BEARING THE "ISSUED FOR CONSTRUCTION" REVISION NOTE SHALL NOT BE USED FOR CONSTRUCTION.

#### B. CONSULTANT'S SUPPLEMENTARY ROADWORKS NOTES:

- THE CONTRACTOR SHALL COORDINATE ALL COMPACTION/DENSITY TESTING WITH THE DEVELOPER'S GEOTECHNICAL ENGI ROAD SURGRADE, AND PLACEMENT OF SUR BASE FILLS AND PAVEMENT STRUCTURE GRAVELS.
- 2. ALL CHANGES IN GRADE SHALL BE FORMED USING SMOOTH VERTICAL CURVES. 3. COMPACTED ROAD SUB BASE AND BASE MATERIALS SHALL EXTEND A MINIMUM OF 0.30m BEYOND THE SIDEWALK AND/OR CURB AND GUTTER
- 4. CONDITIONS FOR PLACEMENT OF ASPHALT OR PORTLAND CEMENT CONCRETE SHALL CONFORM TO THE SPECIFICATIONS DETAILED UNDER THE MMCD SPECIFICATIONS AND THE CITY SUPPLEMENTARY SPECIFICATIONS.

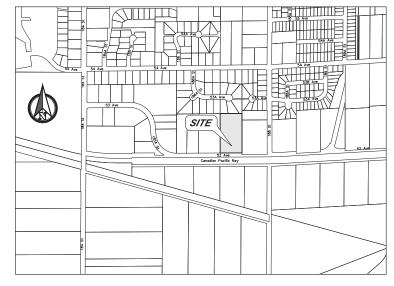
#### C. CONSULTANT'S SUPPLEMENTARY SANITARY AND STORM SEWER NOTES:

ALL ON-SITE PIPEWORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE BO BUILDING CODE, PART 7, PLUMBING SERVICES.

- 2. ALL STORM MAIN PIPE SHALL BE PVC DR35. WHERE STORM MAINS ARE TO BE INSTALLED LINDER BUILDINGS, ALL PIPE SHALL BE PVC DWV.
- 3. ALL SANITARY MAIN PIPE SHALL BE PVC DR28 (150mm DIAMETER) OR PVC DR35 (200mm DIAMETER AND GREATER). WHERE SANITARY MAINS ARE TO BE INSTALLED UNDER BUILDINGS, ALL PIPE SHALL BE PVC DWV.
- 4. ALL STORM SEWER PIPES WITH LESS THAN 1.0m COVER TO BE CONCRET ENCASED OR DWV PIPE IN ACCORDANCE WITH BRITISH COLUMBIA BUILDING CODE. 2006. PLUMBING SERVICES (PART 7).
- 5. STORM AND SANITARY SERVICE CONNECTIONS SHALL BE INSTALLED TO WITHIN STORM AND SMALLER SERVICE CURRENT LIDNES SPAUL BE INSTALLED IN WITH LIBERT STATES. THE ONTRACTOR SHALL CORDINATE WITH THE BUILDING PULMBING CONTRACTOR TO ENSURE THAT SERVICE CONNECTIONS ARE INSTALLED AT LINE AND READER THAT WILL FACILITATE CONNECTIONS OF THE BUILDING DRAINAGE/SANITARY SYSTEM.
- ALL CLEANOUTS INSTALLED WITHIN THE TRAVELLED PORTION OF THE ROADWAY
   SHALL BE COMPLETE WITH LIDS CAPABLE OF SUPPORTING H20 TRAFFIC
   LOADING.

#### D. CONSULTANT'S SUPPLEMENTARY WATERWORKS NOTES:

- 1. ALL WATERMAINS SHALL BE INSTALLED WITH MINIMUM 1.2m COVER FROM TOR OF PIPE TO FINISHED GRADE, UNLESS OTHERWISE NOTED. FOR INSTALLATIONS WITH LESS THAN 1.2m COVER, A CONCRETE PIPE CAP, PER MMCD STD G7 -ALTERNATIVE 2 SHALL BE UTILIZED.
- 2. ALL WATERMAIN SHALL BE PVC C-900 OR DUCTILE IRON PC350, UNLESS
- 3. WATERMAIN SERVICE CONNECTIONS SHALL BE INSTALLED TO WITHIN 1.0m OF BUILDING FOUNDATIONS. THE CONTRACTOR SHALL COROBINATE WITH THE BUILDING PUMBING CONTRACTOR TO BISINGE HAT SERVICE CONNECTIONS ARE INSTALLED AT A LINE AND GRADE THAT WILL FACILITATE CONNECTION TO THE BUILDING WATER SERVICE OF THE STALLED AT A LINE AND GRADE THAT WILL FACILITATE CONNECTION TO
- 4. ON-SITE DOMESTIC AND FIRE WATER SYSTEM PRESSURE, DISINFECTION, AND ON-SITE DOMESTIC AND FIRE WATER SYSTEM PRESSURE, DISINFECTION, AND BACTERIOLOGICAL TESTING SHALL BE PREPORMED BY A CERTIFIED TESTING FIRM, RETAINED BY THE CONTRACTOR AT THE CONTRACTORS COST, UNDER WITHESS BY THE CONSULTANT MEREMAN TEST RESULTS SHALL BE FORWARDED TO THE CONSULTANT IMMEDIATELY UPON RECEIPT FOR REVIEW AND DISTRIBUTION TO THE CLTY.
- PRESSURE TESTING OF BOTH DOMESTIC AND FIRE WATER SYSTEMS SHALL BE CONDUCTED IN ACCORDANCE WITH AWWA C600 STANDARDS. DISINFECTION AND BACTERIOLOGICAL TESTING OF BOTH DOMESTIC AND FIRE WATER SYSTEMS SHALL BE CONDUCTED IN ACCORDANCE WITH AWWA C651 STANDARDS.
- 6. TIE-IN OF ON-SITE WATER SYSTEM TO MUNICIPAL SYSTEM TO BE COMPLETED B



LOCATION PLAN

42	7	2017.11.10	RE-ISSUED FOR DP	GIL	JC	ILC	LEGAL
100	6	2017.10.24	RE-ISSUED FOR DP	GIL	JC	ILC	PLA
988	5	2017.10.19	REVISED SITE PLAN	GIL	JC	ILC	]
10,2011	4	2017.08.22	ISSUED FOR BUILDING PERMIT	NWP	SJB	ILC	BENCE
Mov 10 (90) 3	3	2017.07.06	RE-ISSUED FOR DEVELOPMENT PERMIT	NWP	GL	ILC	ELE
DATE	2	2017.05.02	ISSUED FOR DEVELOPMENT PERMIT	NWP	GL	ILC	DATI
200	No.	DATE	REVISION	DRN	TECH	ENG	EL.=

IL DESCRIPTION: 7 10, SECTION 4, TOWNSHIP 8, NEW WESTMINSTER DISTRICT IN BCP32544

VEMANUS.

EVATIONS ARE IN METRES AND DERIVED FROM GEODETIC
TIUM (CVD28GVRD). MONUMENT No.5168 LOCATED AT 184 ST.
ID 52 AVE.

#6.236m

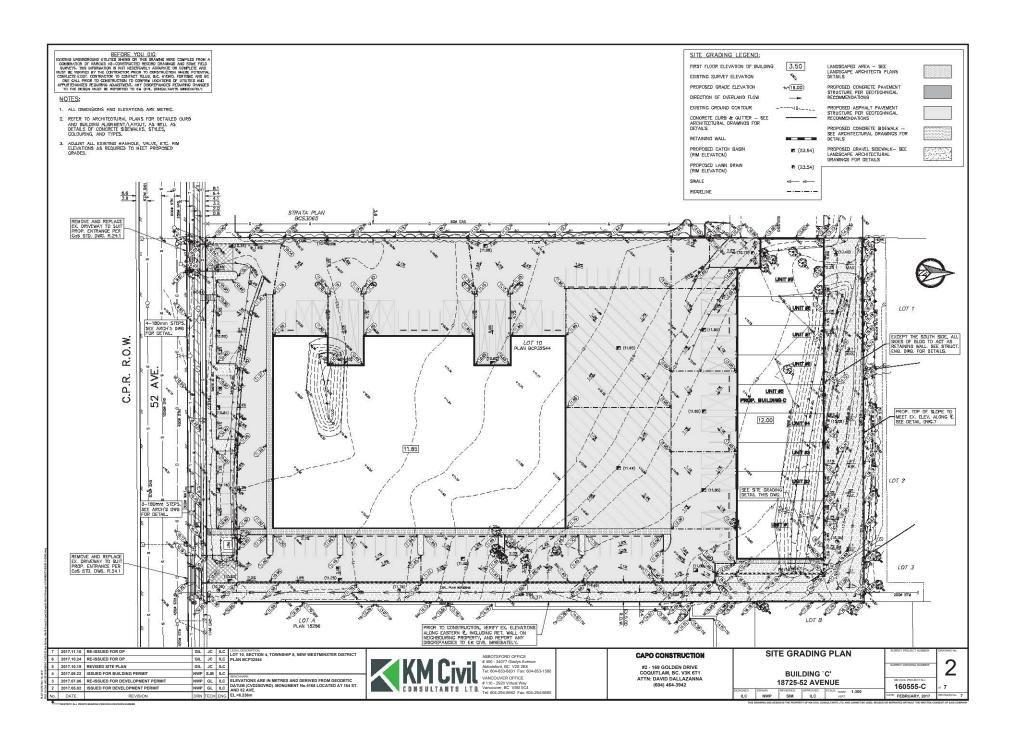


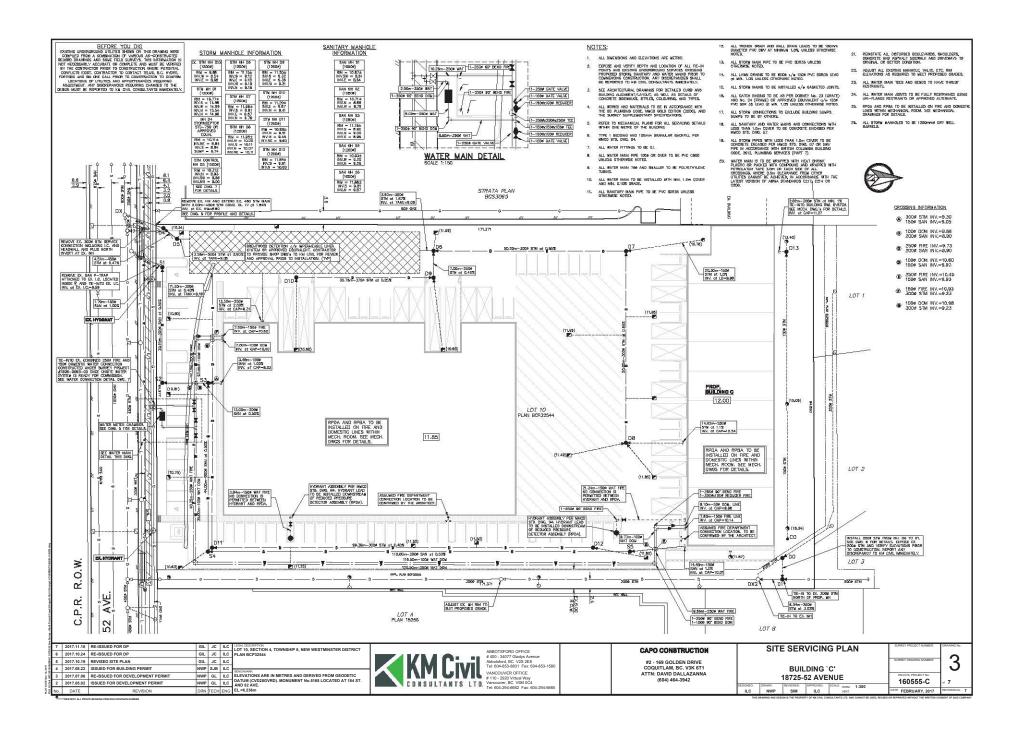
Abbotsford, BC V2S 2E8 Tel: 604-853-8831 Fax: 604-853-1 VANCOUVER OFFICE

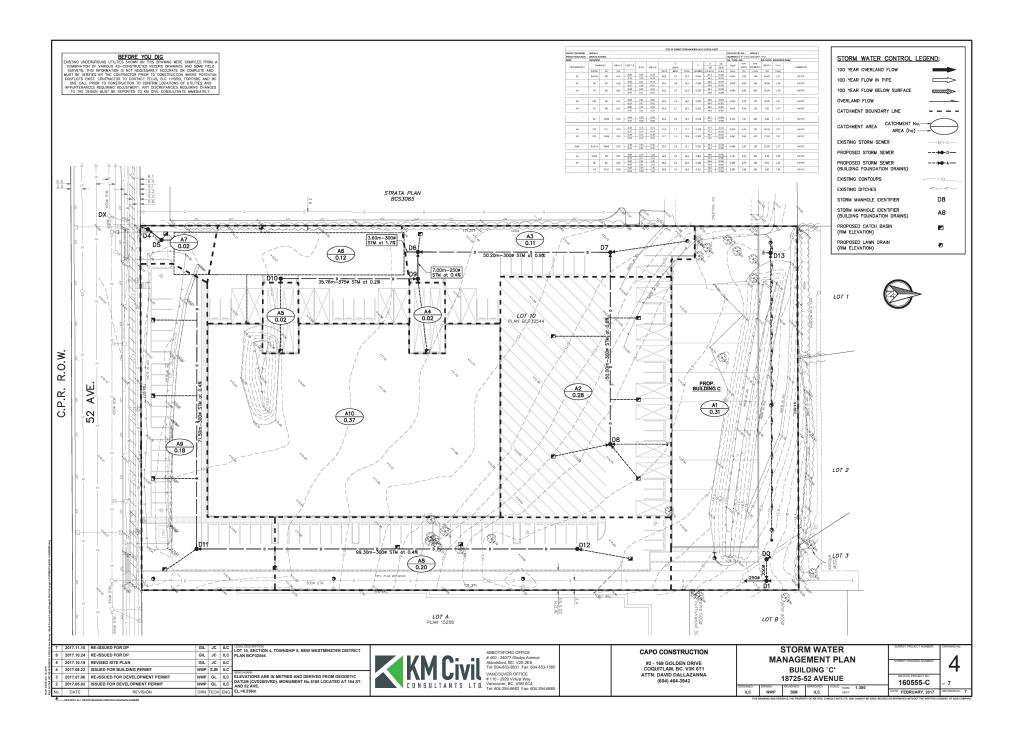
CAPO CONSTRUCTION

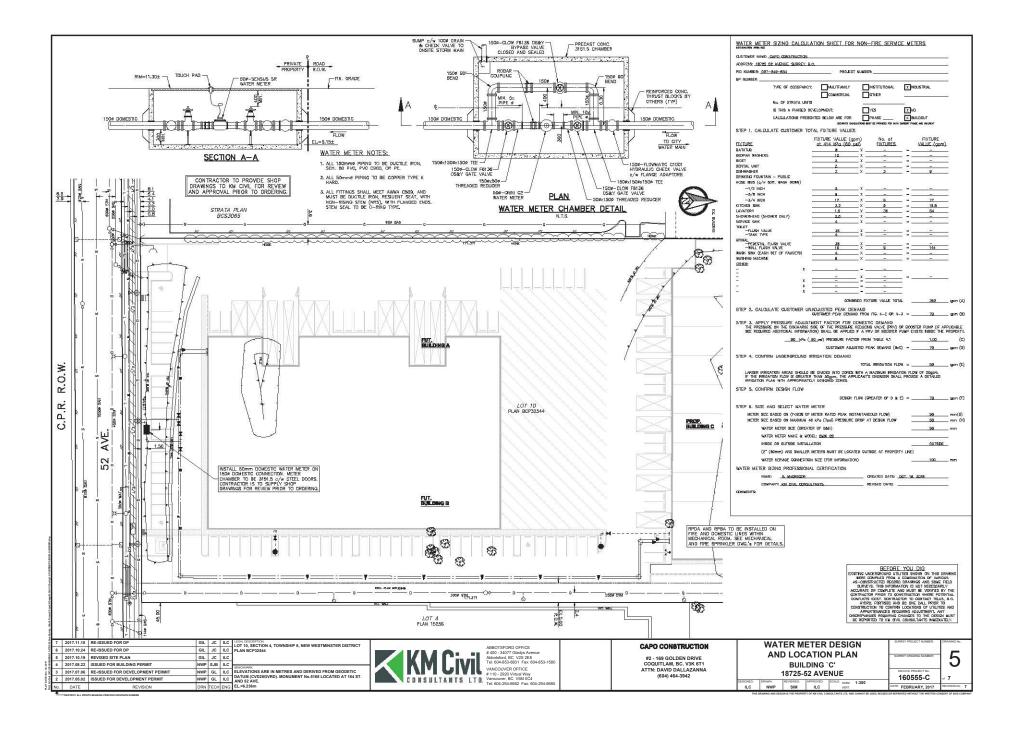
#2 - 169 GOLDEN DRIVE COQUITLAM, BC, V3K 6T1 ATTN: DAVID DALLAZANNA

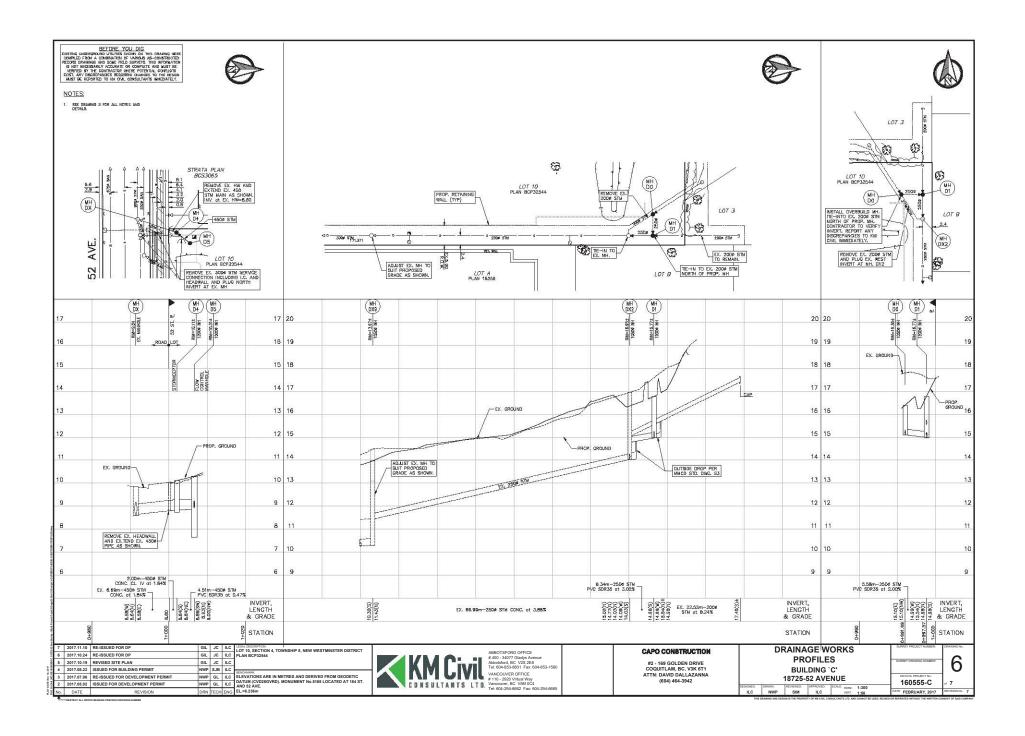
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	G	ENER	AL NO	OTES		SURREY DRAWING NUMBER:	1
		BUIL	DING `	C'			
			52 AVE			160555-C	a 7
DESIGNED:	NWP	REVIEWED: SIM	APPROVED:	SCALE: HORZ. VERT.	AS SHOWN	DATE: FEBRUARY, 2017	REVISION No. 7
THIS	RAWING AND DESI	GN IS THE PROPER	TY OF KM CIVIL CO	VSULTANTS LTD. AN	D CANNOT BE USED, REUSED	OR REPRINTED WITHOUT THE WRITTEN CO	NSENT OF SAID COMPAN

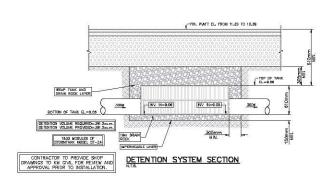


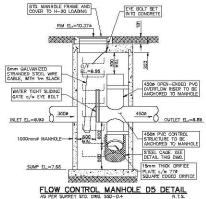












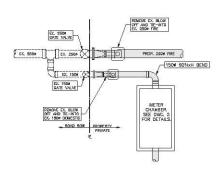
ORIFICE SIZING:

HEAD (HIGHWATER LEVEL TO DUTLET INVERT) = 0.80 DIA. =  $\sqrt{\frac{40}{16}\sqrt{2gh}}$  DIA. =  $\sqrt{\frac{4 \times 0.01141}{11 \times 0.62\sqrt{2g9}}}$  =0.077m (77mm)

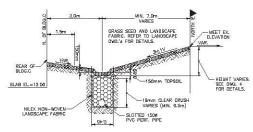
TRANCES STELL
MACHINE SOREN
BRACKET WELDED

12 GAUGE STANCESS
STELL WIRE MESH (1792)

STEEL MESH CAGE DETAIL

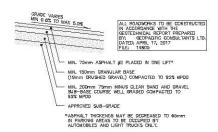


WATER CONNECTION DETAIL N.T.S.



TYPICAL DETAIL ALONG BUILDING C AND NORTH P



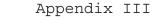


### TYPICAL ASPHALT STRUCTURE SECTION

4 22	7	2017.11.10	RE-ISSUED FOR DP	GIL	JC	ILC	LOT 10. SECTION 4. TOWNSHIP 8. NEW WESTMINSTER DISTRICT
182	6	2017.10.24	RE-ISSUED FOR DP	GIL	JC	ILC	PLAN BCP32544
980	5	2017.10.19	REVISED SITE PLAN	GIL	JC	ILC	
10,201	4	2017.08.22	ISSUED FOR BUILDING PERMIT	NWP	SJB	ILC	RENCHMARK
Nov 10		2017.07.06	RE-ISSUED FOR DEVELOPMENT PERMIT	NWP	GL	ILC	ELEVATIONS ARE IN METRES AND DERIVED FROM GEODETIC
DATE	2	2017.05.02	ISSUED FOR DEVELOPMENT PERMIT	NWP	GL	ILC	DATUM (CVD28GVRD). MONUMENT No.5168 LOCATED AT 184 ST. AND 52 AVE.
51	No.	DATE	REVISION	DRN	TECH	ENG	EL.=6.236m
	*	- DOCUMENT OF STREET	DE DE ADAM DE DESCRIPTION AL MARCE				



CAPO CONSTRUCTION		CONS	TRUC	TION	DETAILS	SURREY PROJECT NUMBER:	DRAWING No.:
#2 - 169 GOLDEN DRIVE COQUITLAM, BC. V3K 6T1			BUIL	DING `	C'	SURREY DRAWING NUMBER:	1
ATTN: DAVID DALLAZANNA (604) 464-3942	DESIGNED	18725-52 AVENUE					a 7
	ILC	NWP	SIM	ILC	SCALE: HORZ. N.T.S. VERT.	DATE: FEBRUARY, 2017	REVISION No. 7





# INTER-OFFICE MEMO

TO:

Manager, Area Planning & Development

- North Surrey Division

**Planning and Development Department** 

FROM:

**Development Services Manager, Engineering Department** 

DATE:

November 14, 2017

PROJECT FILE:

7817-0077-00

RE:

**Engineering Requirements (Industrial)** 

Location: 18725 52 Ave

#### **DEVELOPMENT PERMIT**

There are no engineering requirements relative to issuance of the Development Permit. The following issues are to be addressed as a condition of the issuance of the building permit:

#### Works and Services

- Construct 9.0 metre concrete letdowns at each of the proposed driveway accesses.
- Provide on-lot source controls in accordance with the Cloverdale-McLellan Integrated Stormwater Management Plan (ISMP) along with a water quality/sediment control inlet chamber.
- Provide water, storm, and sanitary service connections to service the proposed development if not utilizing the service connections installed under Surrey Project 7806-0063-00.
- Register legal documents as determined through the Building Permit review process.

A Servicing Agreement is not required as part of this application.

Rémi Dubé, P.Eng.

Development Services Manager

CE<sub>4</sub>

**Table 1: Summary of Tree Preservation by Tree Species:** 

Tree Species	Existing	Remove	Retain
Alde	er and Cottonwood	Trees	
Alder	2	2	Ø
Cottonwood			
	Deciduous Trees		•
(excludin	g Alder and Cottonv	vood Trees)	
Apple			
Mountain Ash			
Trembling Aspen			
Paper Birch			
Cherry			
Crabapple			
Katsura			
Maidenhair Tree			
Red Maple			
Garn Oak	l l	1	Ø
	3,000		
	Coniferous Trees	· · · · · · · · · · · · · · · · · · ·	
Atlas Cedar			1400
Deodar Cedar			
Western Red Cedar			
Douglas Fir	15	15	Ø
Falsecypress			
Scots Pine			
Spruce			
Norway Spruce			
Samuel Control			
Total (excluding Alder and	1/	16	OX.
Cottonwood Trees)	16	10	Ø
Additional Trees in the proposed			
Open Space / Riparian Area			
Open Space / Riparian Area			
Total Replacement Trees Proposed			21
(excluding Boulevard Street Trees)			71
Total Retained and Replacement			
Trees		71	

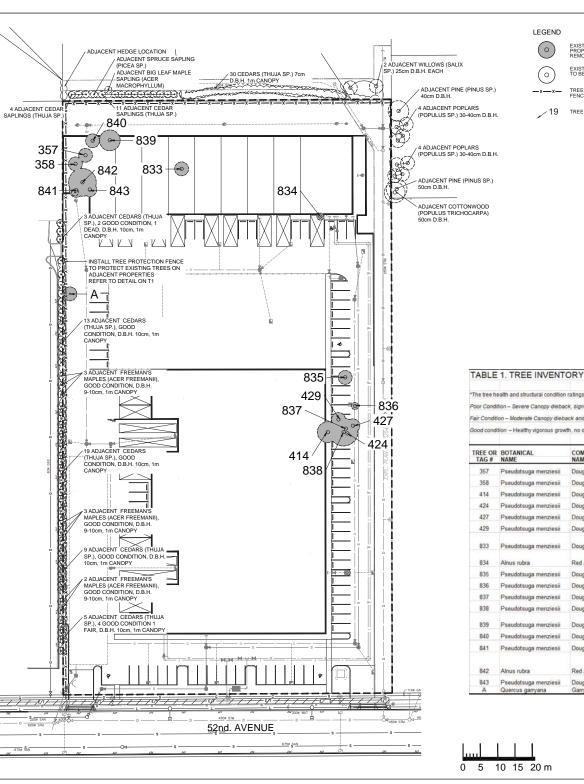
# **Tree Preservation Summary**

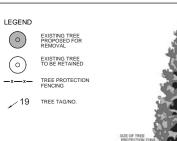
Surrey Project No: 7917-00 77-00 Address: 18725 52<sup>nd</sup> AVE. Registered Arborist: Shan Tenny Son #ON-0964A

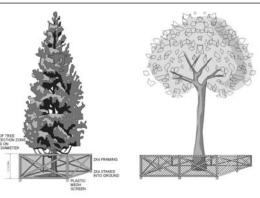
On-Site Trees	Number of Trees
Protected Trees Identified	
(on-site and shared trees, including trees within boulevards and proposed streets	18
and lanes, but excluding trees in proposed open space or riparian areas)	
Protected Trees to be Removed	18
Protected Trees to be Retained	a
(excluding trees within proposed open space or riparian areas)	<i>₩</i>
- Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio  X one (1) = 2  - All other Trees Requiring 2 to 1 Replacement Ratio  16	34
Replacement Trees Proposed Replacement Trees in Deficit	7
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	Ø

Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	
Total Replacement Trees Required:	
- Alder & Cottonwood Trees Requiring 1 to 1 Replacement RatioX one (1) = 0	0
- All other Trees Requiring 2 to 1 Replacement RatioX two (2) = 0	
Replacement Trees Proposed	Ø
Replacement Trees in Deficit	0

Summary, report and plan prepared and submitted by:









Signage to be posted on each tree protection barrier (weather-proof, 11X17" minimum size)

25-Sep-17

#### NO ENTRY

#### TREE PROTECTION ZONE

No grade change storage of material or equipm is permitted within this fenced area. Tree protection barrier must remain in place for the duration of construction.

For information call Trees & Landscape Section (604) 591-4675

#### TREE PROTECTION FENCE DETAIL

Poor Condit	tion - Severe Canopy dieba	ck, significant lean, de	ecayed, missing lea	der, signfica	nt disease or paras	sitic plant presence	
air Conditio	on – Moderate Canopy diebi	ack and/or lean, limb	defects, multiple st	ems, modera	ate foliage damage	from stress, moderate damage from	n disease or parasite.
Good condit	tion - Healthy vigorous grow	rth, no or minor visible	e defects or damag	e			
TREE OR	BOTANICAL NAME	COMMON NAME	DBH (cm)	CANOPY RAD. (m)	CONDITION*	COMMENTS	RECOMMENDATION
357	Pseudotsuga menziesii	Douglas Fir	50	2	Good-Fair	One-sided growth	Remove for development
358	Pseudotsuga menziesii	Douglas Fir	50	2	Good		Remove for development
414	Pseudotsuga menziesii	Douglas Fir	55	3	Fair	Canopy dieback	Remove for development
424	Pseudotsuga menziesii	Douglas Fir	35	3	Good		Remove for development
427	Pseudotsuga menziesii	Douglas Fir	55	2	Good		Remove for development
429	Pseudotsuga menziesii	Douglas Fir	50	2	Good	Canopy dieback	Remove for development
833	Pseudotsuga menziesii	Douglas Fir	40	2	Poor	Topped, severe canopy dieback	Remove for health and development
834	Alnus rubra	Red Alder	42	1	Poor	Missing leader, severe canopy dieback, decay, insect holes	Remove for health and development
835	Pseudotsuga menziesii	Douglas Fir	55	2	Good		Remove for development
836	Pseudotsuga menziesii	Douglas Fir	32	1	Good		Remove for development
837	Pseudotsuga menziesii	Douglas Fir	30	2	Fair	Canopy dieback, leaning	Remove for development
838	Pseudotsuga menziesii	Douglas Fir	40	4	Good		Remove for development
839	Pseudotsuga menziesii	Douglas Fir	52, 33	2, 3	Good-Fair	2 stems at ground, 1 has corrected lean, canopy dieback	Remove for development
840	Pseudotsuga menziesii	Douglas Fir	32	2	Good		Remove for development
841	Pseudotsuga menziesii	Douglas Fir	40	2	Good		Remove for development
842	Alnus rubra	Red Alder	35, 32	3, 4		2 stems at 1m off ground, 1 has broken leader and is leaning, included bark, canopy dieback	Remove for development
843 A	Pseudotsuga menziesii Quercus garryana	Douglas Fir Garry Oak	40 10	2 2	Good Good		Remove for development Remove for development

0 5 10 15 20 m

SUMMARY: SURREY 18 SIGNIFICANT TREES ASSESSED

18 TREES PROPOSED FOR REMOVAL: 2 FOR POOR OR FAIR-POOR HEALTH

AND DEVELOPMENT 16 FOR DEVELOPMENT

0 TREES PROPOSED FOR RETENTION

File Folder No. 7917-0077-00

23/10/2017 REVISED PER COORDINATION 17/06/2017 ISSUED WITH REPORT 08/03/2017 ISSUED FOR DP APPLICATION

Assessment Done March 7, 2017 By Shan Tennyson, I.S.A. # ON-0969A

Revised October 23, 2017

Civil Eng. plans updated Oct.23, 2017



MULTI-TENANT BUILDINGS FOR MDZ DEVELOPMENTS

18725 - 52nd AVE. SURREY, B.C.

TREE LOCATION PLAN, INVENTORY CHART, AND DETAIL

T1