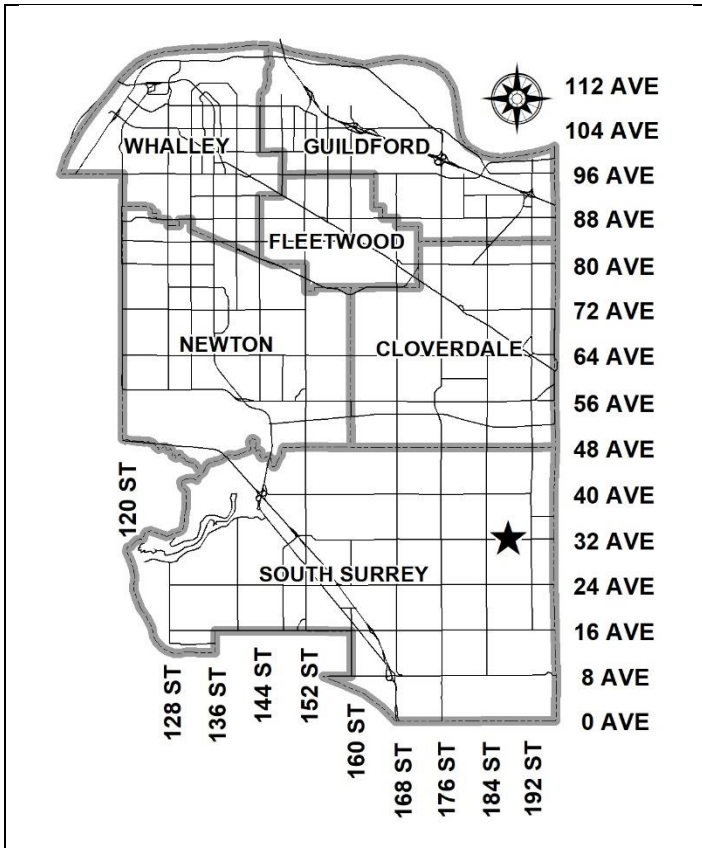


City of Surrey  
**PLANNING & DEVELOPMENT REPORT**

Application No.: 7921-0132-00

Planning Report Date: July 11, 2022



**PROPOSAL:**

- **Development Permit**

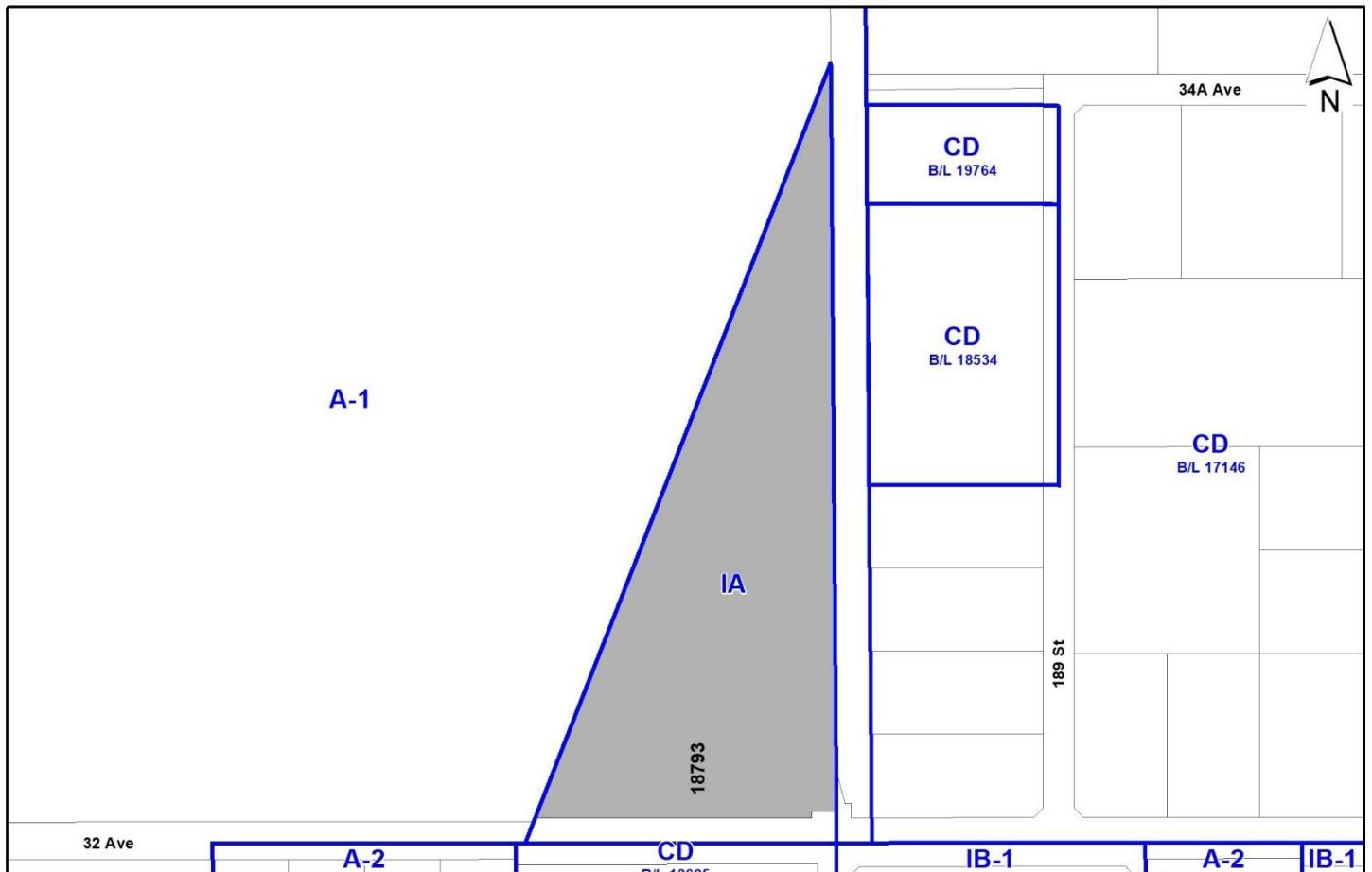
to permit an addition to the Provincial Tree Seed Centre.

**LOCATION:** 18793 - 32 Avenue

**ZONING:** IA

**OCP DESIGNATION:** Agricultural

**NCP/TCP/LAP DESIGNATION:** NA



**RECOMMENDATION SUMMARY**

- Approval to draft Development Permit for Form and Character.

**DEVIATION FROM PLANS, POLICIES OR REGULATIONS**

- None.

**RATIONALE OF RECOMMENDATION**

- The proposal complies with the Agricultural designation in the Official Community Plan (OCP).
- The proposal generally complies with the Development Permit requirements in the OCP for Form and Character.
- The proposed landscaping improvements and fence replacement along the 32 Avenue frontage will improve the existing condition without detracting from the entrance into Campbell Heights to the east of the subject site.
- The addition to the existing industrial building is of high quality design with inclusion of several different materials including cedar shakes designed with an artistic flair on the southeast corner of the building facing 32 Avenue. Cedar shakes are proposed in a pattern on the southeast section of the building that represent an artistic portrayal of a pinecone.

## RECOMMENDATION

The Planning & Development Department recommends that:

1. Council authorize staff to draft Development Permit No. 7921-0132-00 generally in accordance with the attached drawings (Appendix I).
2. Council instruct staff to resolve the following issues prior to approval:
  - (a) submission of a finalized landscaping cost estimate to the specifications and satisfaction of the Planning and Development Department.

## SITE CONTEXT & BACKGROUND

Direction	Existing Use	OCP Designation	Existing Zone
Subject Site	Provincial Tree Seed Centre	Agricultural	IA
North:	City Parkland (Campbell Heights Biodiversity Preserve)	Agricultural	A-1
East:	City Parkland/Campbell Heights Industrial Park	Conservation and Recreation/Mixed Employment	A-1/CD Bylaw No. 17146/CD Bylaw No. 18534
South (Across 32 Avenue):	Industrial Developments	Mixed Employment	CD Bylaw No. 13685
West:	City Parkland (Campbell Heights Biodiversity Preserve)	Agricultural	A-1

### Context & Background

- The subject property is 4.7 hectares in size, located within the Agricultural Land Reserve (ALR) and borders Campbell Heights. The site is designated "Agricultural" in the Official Community Plan (OCP) and is zoned "Agro-Industrial (IA) Zone".
- The BC Tree Seed Centre (TSC), an industrial horticultural and research facility owned and operated by the Provincial Ministry of Forests, Lands and Natural Resource Operations, is located on the subject property. The subject property was rezoned to IA in 1985, with the TSC being constructed immediately afterwards.
- Prior to January 2019, the subject property was a part of the larger A-1 zoned lot to the west. Previous Development Application No. 7913-0195-00 subdivided the parent parcel to create the 57.6 hectare sized parcel which is now City of Surrey parkland. The IA zoned portion of the parent parcel was subdivided to create a single lot that is the current site of the TSC operations.

## DEVELOPMENT PROPOSAL

### Planning Considerations

- The applicant is proposing a Development Permit to allow construction of a 462 square metre addition to accommodate a freezer expansion to the BC Tree Seed Centre. The addition will include a new cooler space and 3 new freezers with warehouse-style shelving to provide additional storage capability for processed tree seeds.

	Proposed
<b>Lot Area</b>	
Gross Site Area:	4.7 hectares
Road Dedication:	N/A
Undevelopable Area:	N/A
Net Site Area:	4.7 hectares
<b>Number of Lots:</b>	1
<b>Building Height:</b>	8.8 metres
<b>Floor Area Ratio (FAR):</b>	0.08
<b>Floor Area</b>	
Existing:	3,200 square metres
Proposed Addition:	462 square metres
Total:	3682 square metres

### Referrals

Engineering: The Engineering Department has no comments on the project.

Parks, Recreation & Culture: No trees or vegetation are to be removed from existing parkland without pre-approval by Parks.

If boulevard/park trees shown to be retained in the arborist report are removed or damaged during construction, the full appraised value of the trees will be required as compensation.

Parks understands that the barbed wire fence adjacent to Campbell Heights Biodiversity Preserve is not being removed or replaced within the scope of this project. However, should the fence need to be removed through further review of the project or during construction, Parks requests that the fence be replaced with high-quality metal picket fencing, powder coated black.

Surrey Fire Department: The Fire Department has no concerns with the proposed development.

### Transportation Considerations

- The existing BC Tree Seed Centre sign falls within City of Surrey road right-of-way along 32 Avenue. The sign will be required to be relocated onto the subject site.



### **Parkland and/or Natural Area Considerations**

- The proposed building addition is outside of the 30 metre Riparian Assessment Area (RAA) for the adjacent watercourses to the west within City Parkland and the frontage ditch along 32 Avenue.
- The proposed building addition is greater than 60 metres from the top of bank associated with the escarpment to the west of the subject site.

### **Sustainability Considerations**

- The applicant has met all of the typical sustainable development criteria, as indicated in the Sustainable Development Checklist.
- The applicant is proposing a roof with a Solar Reflective Index (SRI) value of at least 0.75 or higher, consisting of high albedo value finish material. This is an improvement upon typical roofing materials and will help to reduce the heat island effect in accordance with the objectives of the Climate Adaptation Strategy.
- The purpose of a high-albedo roof is to reduce the internal building temperatures by reflecting sunlight and also to contribute to a lower overall heat island effect, which is an increase in the overall temperature of a developed area.

## **POLICY & BY-LAW CONSIDERATIONS**

### **Regional Growth Strategy**

- The proposal complies with the "Agricultural" designation in the Regional Growth Strategy.

### **Official Community Plan**

#### Land Use Designation

- The proposal complies with the "Agricultural" designation in the Official Community Plan (OCP).

### **Zoning By-law**

- The application complies with the regulations of the "Agro-Industrial (IA) Zone" and does not propose any variances.

#### Parking Requirements

- Parking requirements for the "Agro-Industrial (IA) Zone" are regulated by Part 5 Off-Street Parking and Loading/Unloading of Surrey Zoning By-law, 1993, No. 12000, as amended.
- The 28 existing parking stalls with the addition of 8 new parking stalls for a total of 36 proposed parking stalls meet the parking requirements of the Zoning Bylaw. The applicant is providing one (1) accessible parking stall.

<b>Parking (Part 5)</b>	<b>Required</b>	<b>Proposed</b>
<b>Number of Stalls</b>		
Industrial:	35	35
<b>Bicycle Spaces</b>		
Total:	0	0
<b>Accessible Spaces</b>		
Total:	1	1

## **PUBLIC ENGAGEMENT**

- A development proposal sign was erected on the subject site on January 17, 2022. No comments were received in response.

## **DEVELOPMENT PERMITS**

### **Form and Character Development Permit Requirement**

- The proposed development is subject to a Development Permit for Form and Character.
- The proposed building addition generally complies with the Form and Character Development Permit guidelines in the OCP.

### Building Design

- The proposed building addition will result in a lot coverage of 32.2% and FAR of 0.08 for the subject site upon completion.
- The proposed 462 square metre freezer addition will include a variety of building façade materials to blend the look of typical farm buildings and the agro-industrial nature of the site's operations with its adjacency to Campbell Heights. The siding of the proposed addition and renovated areas will include materials such as charred wood siding, cedar shakes and charred cedar shakes. Cedar shakes are proposed in a pattern on the southeast section of the building that represent an artistic portrayal of a pinecone.
- The roof and exterior wall assemblies of the existing freezer building are proposed to be renovated to match the proposed freezer expansion.

### Signage

- The existing Tree Seed Centre signage falls within City road right-of-way. The proposed plans note this sign is to be removed and relocated on site at a location that is to be determined at a later date.

## Landscaping

- The landscaping plan dated March 14, 2022, was reviewed by Trees & Landscaping staff and found acceptable. A finalized cost estimate is still required.
- The proposed landscaping consists of a 1.5 metre wide landscaping strip with a new 2.4 metre high black metal replacement fence which replaces the existing chainlink/razor wire topped fencing along 32 Avenue.
- Landscaping has been designed with high quality drought resistant plantings. Plantings includes the following trees and shrubs: lodgepole pine, douglas fir, western red cedar, midwinter fire dogwood, salal, Oregon grape, nootka rose and a stabilizer/wildflower seed mix.
- The applicant is required to submit a landscape plan cost estimate prior to Final Approval of the Development Permit, should the application be supported by Council.

## **TREES**

- Glenn Murray, ISA Certified Arborist of Froggers Creek Tree Consultants Ltd. prepared an Arborist Assessment for the subject property.
- The Arborist Assessment states that there are a total of eighty (80) mature trees on the site, excluding Alder and Cottonwood trees. It was determined that all eighty (80) trees will be retained as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of services, building footprints, and proposed grading.
- The 32 new trees on the site proposed under the submitting landscaping plan will consist of a variety of trees including lodgepole pine, douglas fir and western red cedar.

## **INFORMATION ATTACHED TO THIS REPORT**

The following information is attached to this Report:

Appendix I. Site Plan, Building Elevations and Landscape Plans

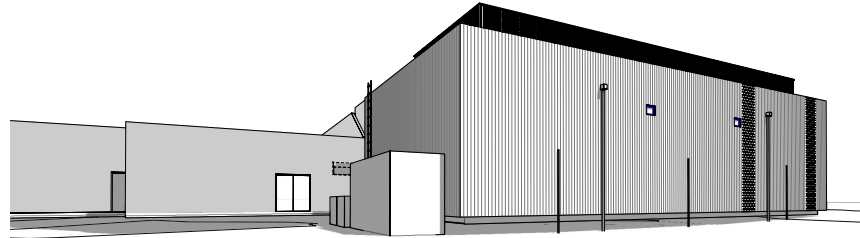
*approved by Shawn Low*

Jeff Arason  
Acting General Manager  
Planning and Development

WS/cm

# BC TREE SEED CENTRE COOLER / FREEZER EXPANSION

ISSUED FOR DEVELOPMENT PERMIT



204 - 309 West Cordova Street  
Vancouver, BC V6B 1E5  
T 604.605.1558

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Issue	
A	2021-05-21 Issued for Development Permit
B	2022-03-07 Issued for DP Prior to Response
C	2022-03-14 Issued for DP Prior to Response 2

Revision	
A	2022-03-14 DP Prior to Response

## Project Directory

**OWNER**  
BC Tree Seed Centre  
Ministry of Forests, Lands, Resource  
Operations and Rural Development  
18793 32nd Avenue  
Surrey BC, V3Z 1A7

**ARCHITECT**  
PH5 Architecture  
#204 - 309 W. Cordova Street  
Vancouver, BC V6B 1E5

**CODE CONSULTANT**  
McCasley Consulting  
#116 - 119 W. Pender Street  
Vancouver, BC V6B 1S5

**STRUCTURAL CONSULTANT**  
WHM Structural Engineers  
#227 Douglas Road  
Burnaby, BC V5C 5A9

**MECHANICAL CONSULTANT**  
Integral Group  
#180 - 200 Granville Street  
Vancouver, BC V6C 1S4

**ELECTRICAL CONSULTANT**  
Integral Group  
#180 - 200 Granville Street  
Vancouver, BC V6C 1S4

**BUILDING ENVELOPE CONSULTANT**  
RDH Building Science  
#600 - 4333 58th Creek Drive  
Burnaby, BC V5C 6S6

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michael.postma@gov.bc.ca  
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(604) 687-1800 x2065

**CONTACT**  
Warren Knowles  
Principal  
wknowles@rdh.com  
(604) 873-1811

**LANDSCAPE CONSULTANT**  
ETA Landscape  
1690 W. 2nd Avenue  
Vancouver, BC V6J 1H4

**ARBORIST**  
Froggers Creek Tree Consultants  
7763 McGregor Avenue  
Burnaby BC V5J 4H4

**HAZARDOUS MATERIALS**  
Sure Habitat  
#101 - 4288 Lozells Avenue  
Burnaby, BC V5A 0C6

**CIVIL ENGINEER**  
Vector Engineering  
#150 - 6450 Roberts Street  
Burnaby, BC V5G 4G2

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(604) 683-1456

**CONTACT**  
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Board Certified Master Arborist  
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(604) 721-6992

**CONTACT**  
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Project Manager  
rverhelst@surehabmat.com  
(604) 444-0204

**CONTACT**  
Victor Radu  
Principal  
vic@vectoreng.ca  
(603) 296-2333

## Drawings List

### Architectural Drawings List

A000	Cover
A001	Building Information
A002	Site Plan Demo
A003	Site Plan Proposed
A004	Fire Access Plan
A005	FAR Plan
A201	Floor Plan Demo
A302	Attic Plan Demo
A203	Roof Plan Demo
A301	Floor Plan Proposed
A302	Attic Plan Proposed
A303	Roof Plan Proposed
A501	Elevations
A502	Elevations
A503	Perspectives
A601	Sections



BC Tree Seed Centre  
Cooler / Freezer Expansion

18793 32nd Ave.  
Surrey BC

Scale	Status
N/A	BP
Date	Project Code
2022-03-08	TSC
Drawn	Checked
HK	PT

Cover

**A000**

**Project Information**

BC Tree Seed Centre, Cooler Addition

Street Address 18793 32nd Avenue, Surrey, BC V3S 0L5

Legal Address Lot 1 Section 28 Township 7 Plan EPP7825 NWD

**Zoning Analysis**

Site Area	509,075 sq ft	47,295 sq m
Site Coverage Area	123,626 sq ft	15,218 sq m
Site Coverage %	24.28%	32.2%
Zoning	IA	
Existing FAR Area	34,861 sq ft	3,220 sq m
Proposed FAR Area	4,975 sq ft	462 sq m
Total FAR Area	39,836 sq ft	3,682 sq m
FAR	0.08 FAR	

Existing Cooler Height (to Parapet)	19' 8 1/4"	6.00 m
Proposed Cooler Height (to Parapet)	22' 0"	6.70 m
Increase of Cooler Height	2' - 3 3/4"	795 mm

**Project Scope**

The BC Tree Centre (TSC) is the primary provider of cone and seed services to BC's forest industry and BC government staff. The facility at 18793 32nd Avenue was constructed in 1986 and is operated by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development to extract, process, and store various tree seeds for the purposes of reforestation on crown lands.

The TSC is proposing to expand their cooler and freezer facility to provide additional storage capacity for processed tree seeds. The proposed expansion area of the storage facility is 455 m<sup>2</sup>, which includes a new cooler space and 3 new freezers with warehouse-style shelving. Due to the age of the existing facility and reports of envelope failure, the existing roof and exterior wall assemblies are proposed to be renovated to match the proposed expansion. The proposed roof and walls will provide a significant increase in the thermal barrier of the facility, and will remedy the water ingress and humidity currently being reported. New mechanical systems for the cooler and freezer will address future climate needs and are designed to meet peak temperatures as described by RCP 8.5.

The additional FAR area requires an increase in parking stalls from 28 to 36 stalls, and the parking layout is revised as a result. The existing access road is to be relocated further south to accommodate the proposed cooler and freezer. Existing signage and perimeter fencing on City property will be removed. New black picket security fencing on the subject property will be installed. A new on site location for signage has been identified.



**Area Calculation**

Room Name	FAR Area (sf)	FAR Area (sq m)
Cooler 1	1,945.1 sf	180.8 sq m
Seed Drying Room	369.8 sf	33.9 sq m
Lab Cooler	147.1 sf	13.7 sq m
Lab Area 1	524.9 sf	48.7 sq m
Lab Area 2	636.7 sf	59.1 sq m
WC	133.5 sf	12.4 sq m
Darkroom	155.8 sf	14.4 sq m
Men's WC	173.9 sf	16.2 sq m
Women's WC	181.4 sf	16.9 sq m
Women's Changingroom	135.9 sf	12.6 sq m
Men's WC	173.9 sf	16.2 sq m
Corridor	182.4 sf	16.9 sq m
Lunch Room	377.6 sf	35.1 sq m
Conference Room	345.3 sf	32.1 sq m
Library	122.2 sf	11.4 sq m
Office	178.4 sf	16.7 sq m
Circulation	176.4 sf	16.4 sq m
Foyer	159.9 sf	14.9 sq m
Office	136.9 sf	12.7 sq m
Ables Conditioning	1,865.7 sf	177.0 sq m
Cone Processing Area	9,938.5 sf	923.3 sq m
Seed Processing	5,073.5 sf	469.9 sq m
Storage	1,161.0 sf	107.9 sq m
Open Office Space	1,238.8 sf	114.8 sq m
Men's Changingroom	144.2 sf	13.4 sq m
Loading	1,254.1 sf	117.4 sq m
Seed Preparation & Shipping	2,001.2 sf	185.9 sq m
Freezer 1	96.9 sf	8.9 sq m
Freezer 3	1,010.8 sf	93.9 sq m
Freezer 2	948.4 sf	88.1 sq m
Canister Suite (separate building)	1,653.6 sf	153.9 sq m
<b>Total Existing Industrial Area (FAR AREA)</b>	<b>32,866.0 sf</b>	<b>3,053.4 sq m</b>

Mechanical Rooms	FAR Area	FAR Area (sq m)
Electrical Room	231.7 sf	21.5 sq m
Mechanical Room	781.0 sf	72.6 sq m
Mechanical Room	782.4 sf	72.7 sq m
<b>Total Existing Mechanical Area (FAR AREA)</b>	<b>1,795.1 sf</b>	<b>166.8 sq m</b>
<b>Total Existing FAR Area</b>	<b>34,661.1 sf</b>	<b>3,220.1 sq m</b>

Proposed Floor Area	FAR Area	FAR Area (sq m)
Cooler 2	1,852.9 sf	171.4 sq m
Freezer 6	1,041.4 sf	96.7 sq m
Freezer 5	859.4 sf	79.1 sq m
Freezer 4	860.9 sf	79.2 sq m
<b>Proposed Industrial Area (FAR AREA)</b>	<b>4,974.6 sf</b>	<b>462.2 sq m</b>
<b>Total Floor Area</b>	<b>34,661.1 sf</b>	<b>3,220.1 sq m</b>
<b>Existing FAR Area</b>	<b>4,974.6 sf</b>	<b>462.2 sq m</b>
<b>Total FAR Area</b>	<b>39,635.7 sf</b>	<b>3,682.3 sq m</b>

**Parking Analysis**

**Parking Stalls Quantity**

City of Surrey Zoning Bylaw

	Rate	Reference	Existing	Required	Proposed
Standard Parking Stalls	Industrial: 1 parking space per 100 sq ft (1,075 sq ft of gross floor area)	SZBL Part 5 Table C.1	23 stalls	35 stalls	31 stalls
Accessible Parking Stalls	2% of required parking spaces	SZBL Part 5 C.3	1 stalls	1 stalls	1 stalls
Small Car Stalls	35%	SZBL Part 5 B.1.c	4 stalls	0 stalls	4 stalls
<b>Total</b>			<b>28 stalls</b>	<b>36 stalls</b>	<b>36 stalls</b>

**Bicycle Stalls Quantity**

City of Surrey Zoning Bylaw

		Reference	Existing	Required	Proposed
Class A stalls	Not required	SZBL Part 5 D.5	0 stalls	0 stalls	0 stalls
Class B stalls	Not required	SZBL Part 5 D.5	0 stalls	0 stalls	0 stalls
<b>Total</b>			<b>0 stalls</b>	<b>0 stalls</b>	<b>0 stalls</b>

**Loading Spaces Quantity**

City of Surrey Zoning Bylaw

		Reference	Existing	Required	Proposed
Loading Stall	Min. 1 loading stall per building	SZBL Part 5 E.1	2 stalls	1 stalls	2 stalls
<b>Total</b>			<b>2 stalls</b>	<b>1 stalls</b>	<b>2 stalls</b>

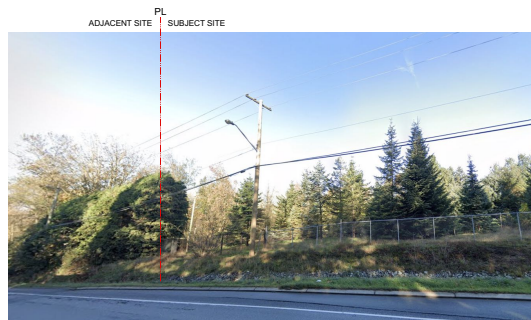
**Issue**

- A 2021-05-21 Issued for Development Permit
- B 2022-03-07 Issued for DP Prior to Response
- C 2022-03-14 Issued for DP Prior to Response 2

**Revision**

- A 2022-03-14 DP Prior to Response

**Existing Streetscape**



32nd Avenue looking Northwest



32nd Avenue at main entrance



32nd Avenue looking Northwest

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Issue

A	2021-05-21	Issued for Development Permit
B	2022-03-07	Issued for DP Prior to Response
C	2022-03-14	Issued for DP Prior to Response 2

Revision

A	2022-03-14	DP Prior to Response
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- 2022-03-11 revision
- Fence & sign on City property removed
  - On-site access road retained west side of bid
  - Steep slope area noted
  - Existing staff patio noted
  - Existing hedges on parking island by caretaker suite noted



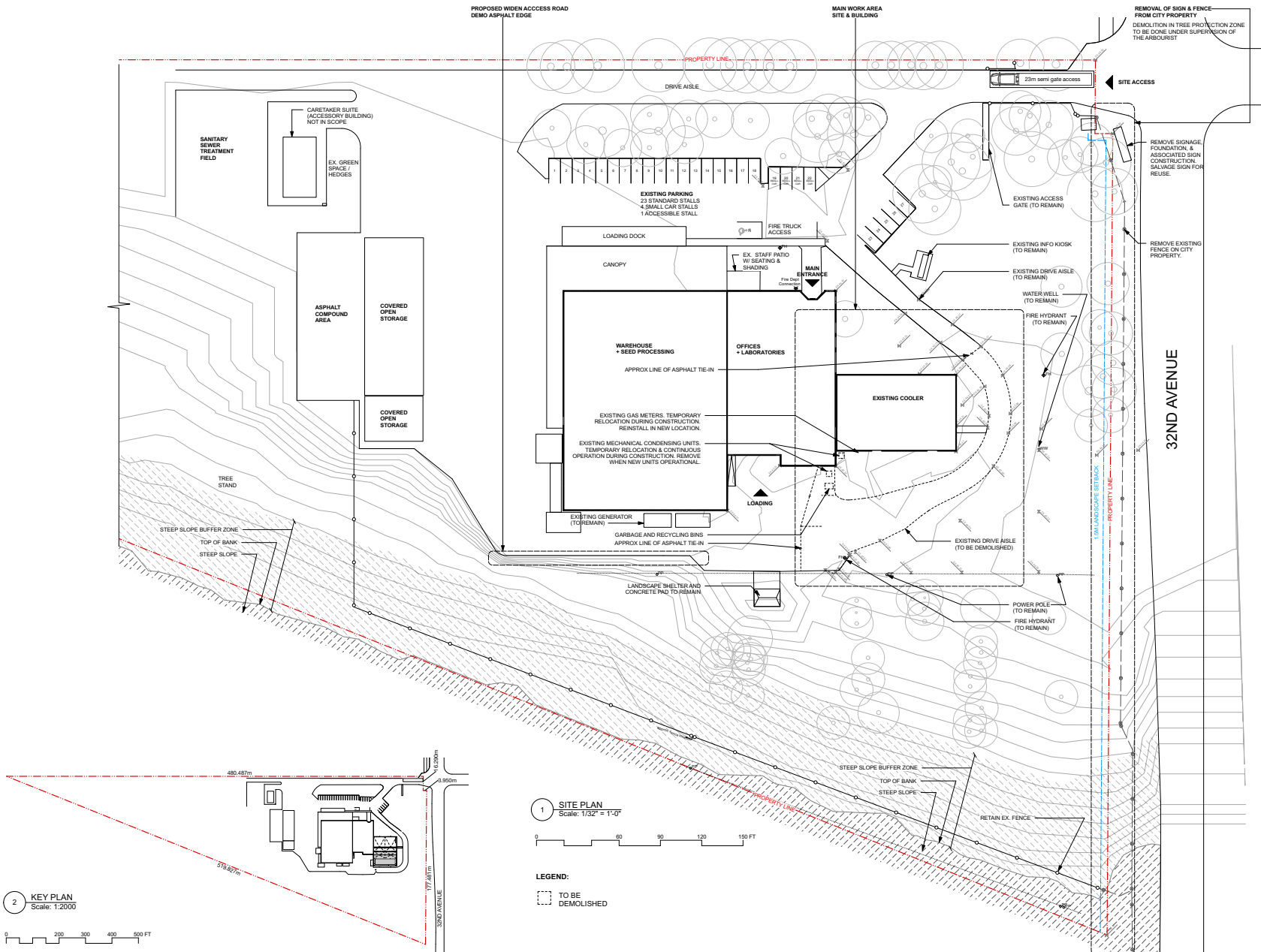
BC Tree Seed Centre  
 Cooler / Freezer Expansion

18793 32nd Ave.  
 Surrey BC

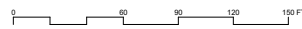
Scale	Status
N/A	BP
Date	Project Code
2022-03-08	TSC
Drawn	Checked
HK	PT

Site Plan Demo

A002

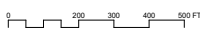


1 SITE PLAN  
 Scale: 1/32" = 1'-0"



LEGEND:  
 [Dashed line symbol] TO BE DEMOLISHED

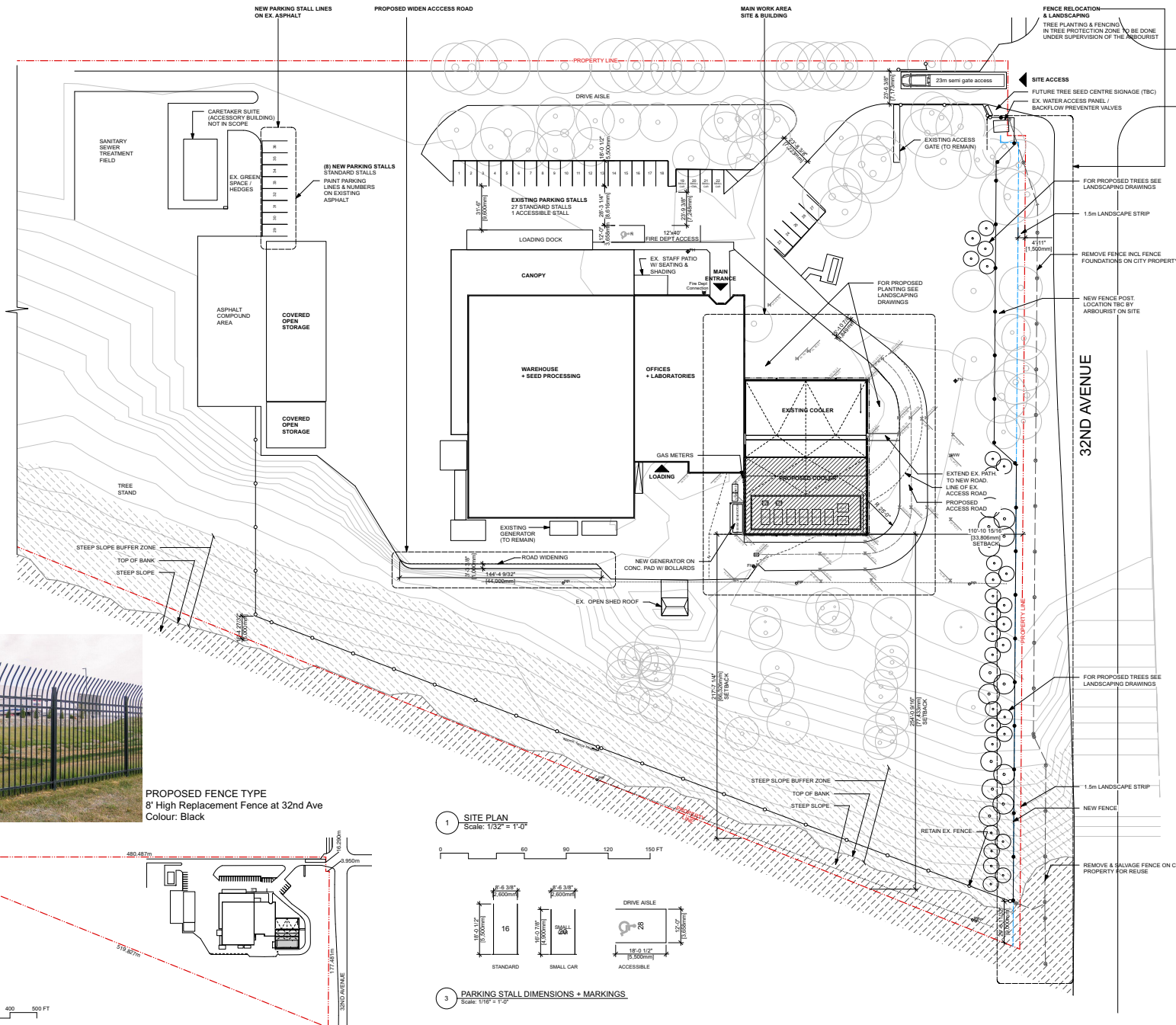
2 KEY PLAN  
 Scale: 1:2000



TSC: 201322\_01.tsc\map\ph5\2022\13 - 13251.PAK



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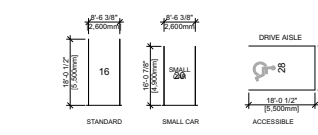
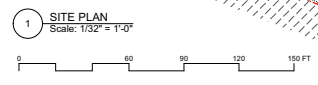
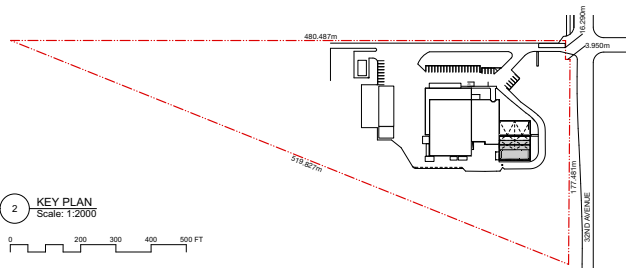
Issue	Revision
A 2021-05-21 Issued for Development Permit	A 2021-05-21 Issued for Development Permit
B 2022-03-07 Issued for DP Prior to Response	B 2022-03-07 Issued for DP Prior to Response
C 2022-03-14 Issued for DP Prior to Response 2	C 2022-03-14 Issued for DP Prior to Response 2

Revision	Date	Description
A	2022-03-14	DP Prior to Response

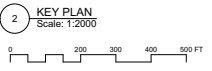
2022-03-11 revisions  
 • New fence & signs on site  
 • On-site access road retained west side of lot  
 • Steep slope area noted  
 • Existing staff patio noted  
 • Existing bridge on parking island by caretaker suite noted  
 • Steep on access road shown



PROPOSED FENCE TYPE  
 8' High Replacement Fence at 32nd Ave  
 Colour: Black



3 PARKING STALL DIMENSIONS + MARKINGS  
 Scale: 1/16" = 1'-0"



2 KEY PLAN  
 Scale: 1:2000



BC Tree Seed Centre  
 Cooler / Freezer Expansion

18793 32nd Ave.  
 Surrey BC

Scale	Status
N/A	BP
Date	Project Code
2022-03-08	TSC
Drawn	Checked
HK	PT

Site Plan Proposed

A003

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A	2022-03-14	DP Prior to Response
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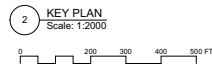
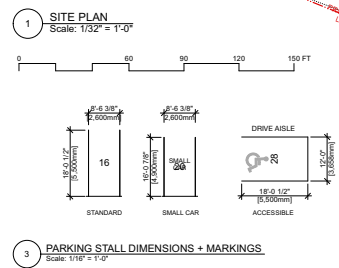
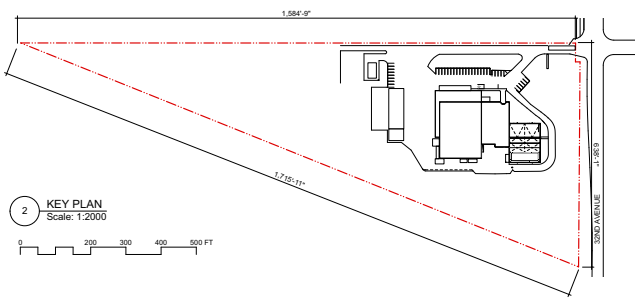
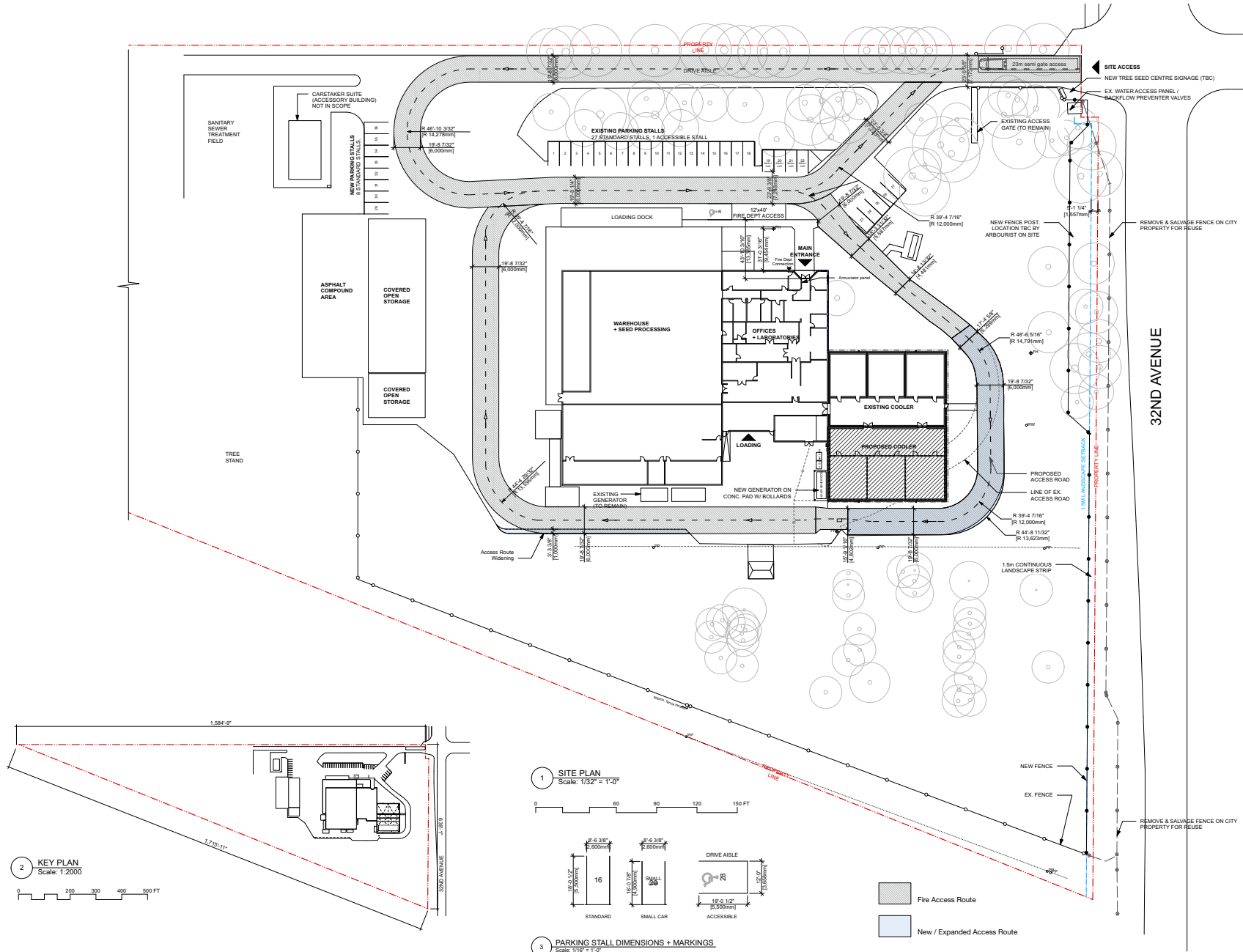
BC Tree Seed Centre  
 Cooler / Freezer Expansion

18793 32nd Ave.  
 Surrey BC

Scale	Status
N/A	BP
Date	Project Code
2022-03-08	TSC
Drawn	Checked
HK	PT

Fire Access Plan

A004

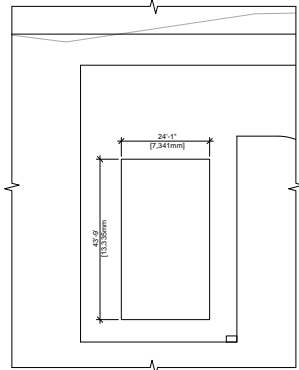


2 KEY PLAN  
 Scale: 1:2000

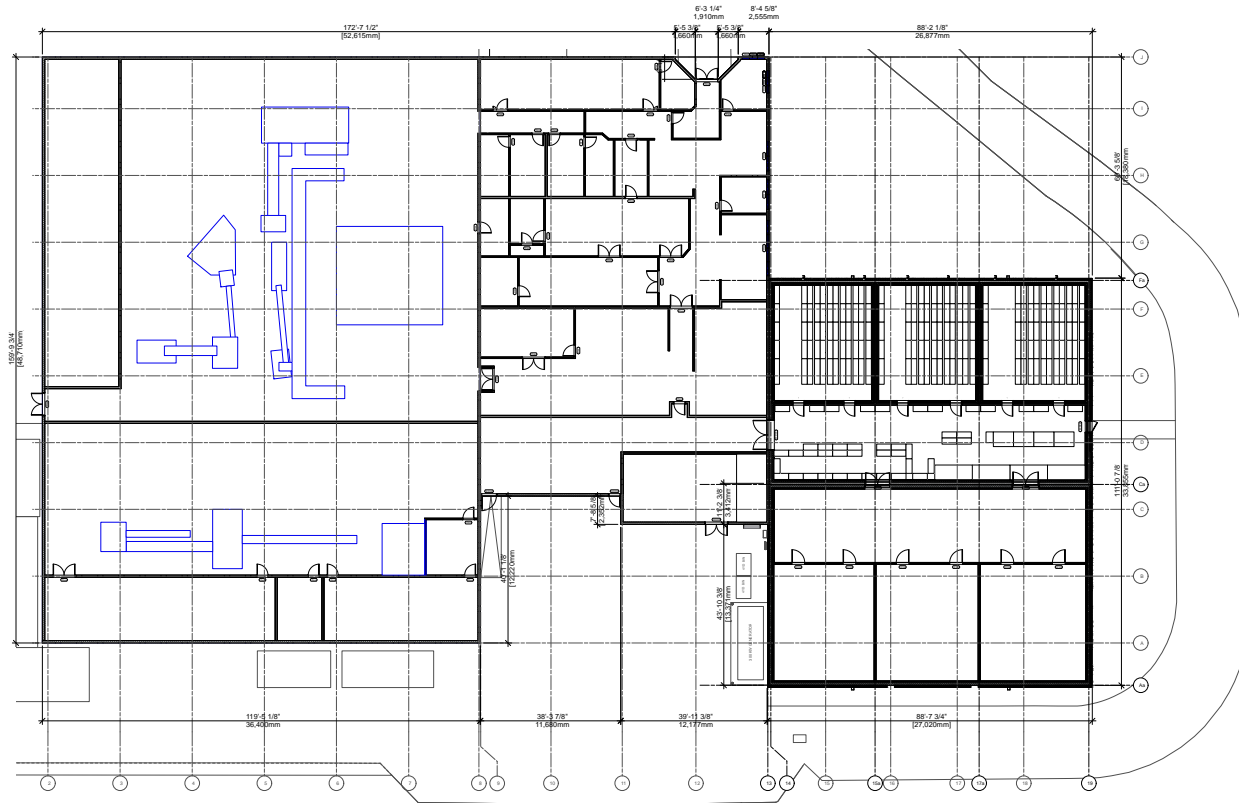
1 SITE PLAN  
 Scale: 1/32" = 1'-0"

3 PARKING STALL DIMENSIONS + MARKINGS  
 Scale: 1/16" = 1'-0"





2 CARETAKER SUITE (ACCESSORY BUILDING)  
Scale: 1/16" = 1'-0"



1 FAR PLAN  
Scale: 1/16" = 1'-0"

204 - 309 West Cordova Street  
Vancouver, BC V6B 1E5  
T 604.605.1556

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Issue	
A	2021-05-21 Issued for Development Permit
B	2022-03-07 Issued for DP Prior to Response
C	2022-03-14 Issued for DP Prior to Response 2

Revision	
A	2022-03-14 DP Prior to Response



## Existing Conditions

Existing Cooler West Elevation

Existing Cooler South Elevation showing Exit Door

Mechanical Room West Elevation

Existing Cooler Interior

Existing Cooler Interior

Existing Generator

LEGEND:		
	EXISTING FAR AREA	
	PROPOSED FAR AREA	
FAR AREA SUMMARY:		
EXISTING FAR AREA	34,661.1 sf	3,220.1 sm
PROPOSED FAR AREA	4,974.6 sf	462.2 sm
TOTAL FAR AREA	39,635.7 sf	3,682.3 sm

BC Tree Seed Centre  
Cooler / Freezer Expansion

18793 32nd Ave.  
Surrey BC

Scale	Status
N/A	BP
Date	Project Code
2022-03-08	TSC
Drawn	Checked
HK	PT

FAR Plan

A005

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**Existing Shelving Schedule**

**Seed Preparation**

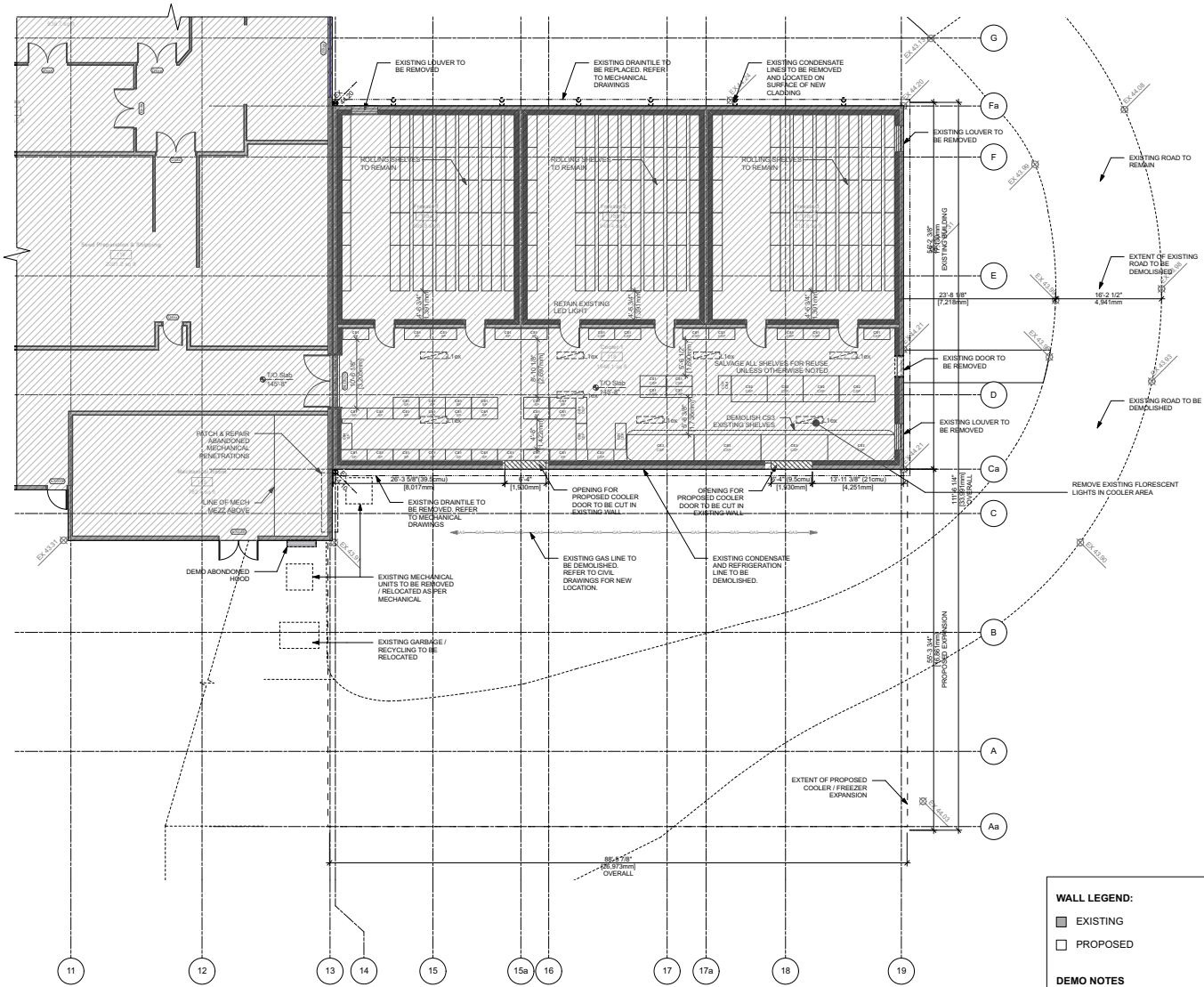
ID	Shelves	Depth (in)	Length (in)	Height (in)	Shelf Storage Area (sf)	Quantity	Total Storage Area (sf)
CS1	3	20	48	77	20	30	600
Total Shelves							30
Total Shelf Area							600 sf

**Cone and Seed Processing**

ID	Shelves	Depth (in)	Length (in)	Height (in)	Shelf Storage Area (sf)	Quantity	Total Storage Area (sf)
CS1	3	20	48	77	20	15	300
CS2	3	48	66	77	66	4	264
CS3	3	48	123	77	123	4	492
CS4	3	24	35	77	17.5	1	17.5
Total Shelves							24
Total Shelf Area							1,074 sf

**Total Existing**

ID	Shelves	Depth (in)	Length (in)	Height (in)	Shelf Storage Area (sf)	Quantity	Total Storage Area (sf)
CS1	3	20	48	77	20	45	900
CS2	3	48	66	77	66	4	264
CS3	3	48	123	77	123	4	492
CS4	3	24	35	77	17.5	1	17.5
Total Existing Shelves							54
Total Existing Shelf Area							1,674 sf



**Issue**

- A 2021-05-21 Issued for Development Permit
- B 2022-03-07 Issued for DP Prior to Response
- C 2022-03-14 Issued for DP Prior to Response 2

**Revision**

- A 2022-03-14 DP Prior to Response

**WALL LEGEND:**

- EXISTING
- PROPOSED

**DEMO NOTES**

1. EXISTING COOLER / FREEZER TO REMAIN FULLY OPERATIONAL DURING CONSTRUCTION.

BC Tree Seed Centre  
Cooler / Freezer Expansion

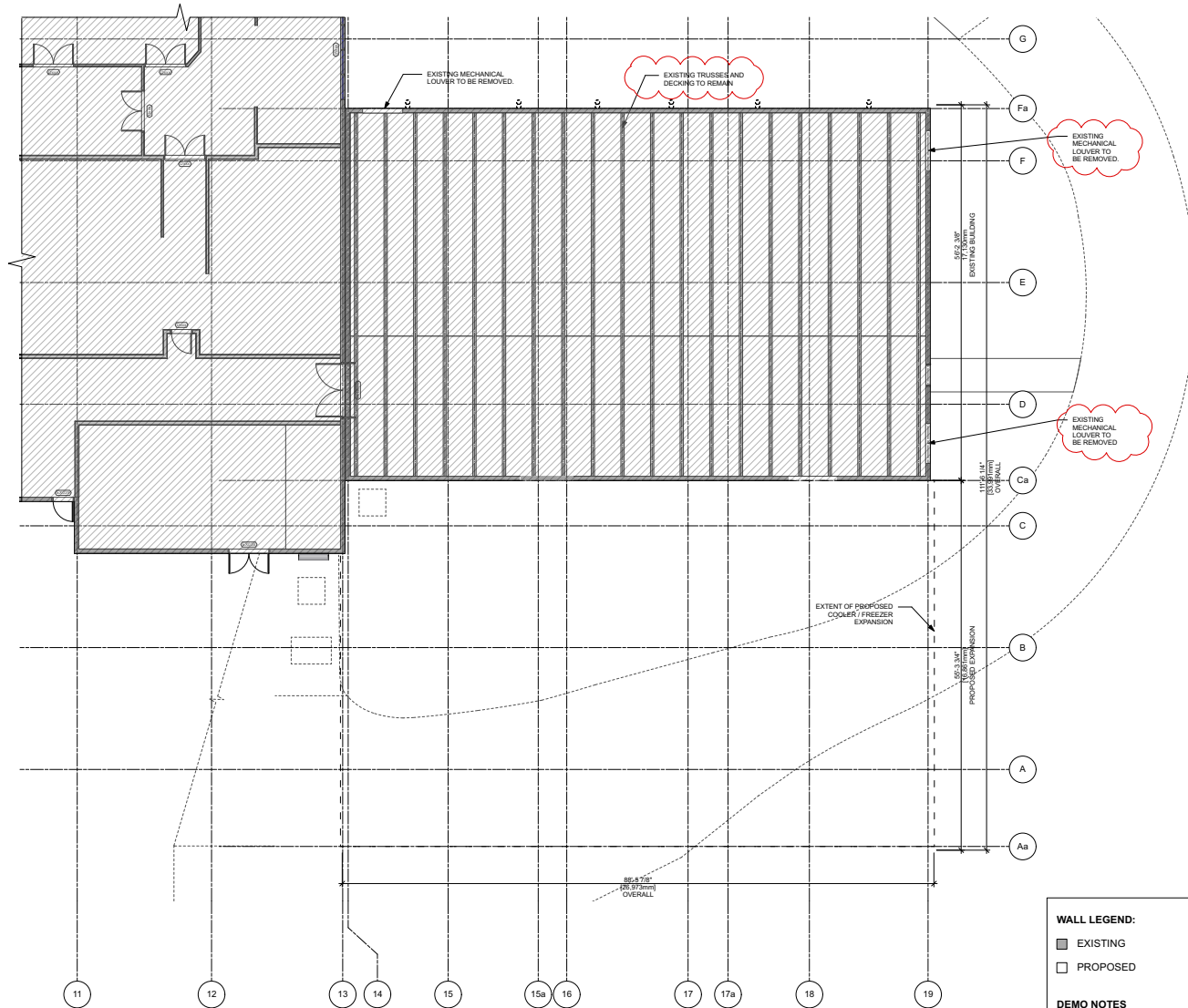
18793 32nd Ave.  
Surrey BC

Scale	Status
1/8" = 1'-0"	BP
Date	Project Code
2022-03-08	TSC
Drawn	Checked
HK	PT

**Floor Plan Demo**

**A201**

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Issue

A	2021-05-21	Issued for Development Permit
B	2022-02-07	Issued for DP Prior to Response
C	2022-03-14	Issued for DP Prior to Response 2

Revision

A	2022-03-14	DP Prior to Response
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2022-03-11 revisions  
 \* Existing trusses on cooler to be retained



BC Tree Seed Centre  
 Cooler / Freezer Expansion

18793 32nd Ave.  
 Surrey BC

**WALL LEGEND:**

■ EXISTING  
 □ PROPOSED

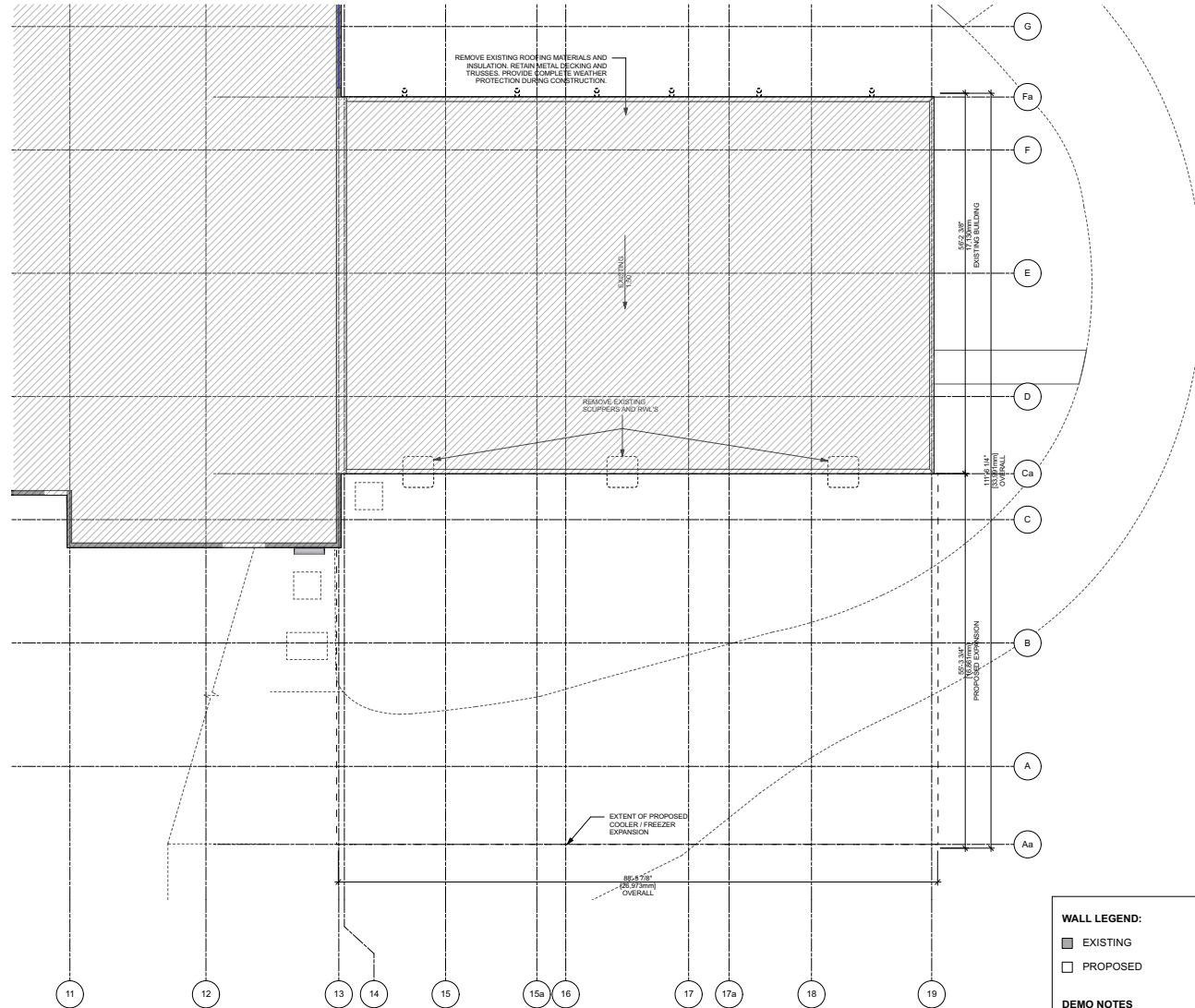
**DEMO NOTES**  
 1. EXISTING COOLER / FREEZER TO REMAIN FULLY OPERATIONAL DURING CONSTRUCTION.

Scale	Status
1/8" = 1'-0"	BP
Date	Project Code
2022-03-08	TSC
Drawn	Checked
HK	PT

Attic Plan Demo

A202

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**WALL LEGEND:**

■ EXISTING

□ PROPOSED

**DEMO NOTES**

1. EXISTING COOLER / FREEZER TO REMAIN FULLY OPERATIONAL DURING CONSTRUCTION.

**Issue**

A	2021-05-21	Issued for Development Permit
B	2022-03-07	Issued for DP Prior to Response
C	2022-03-14	Issued for DP Prior to Response 2

**Revision**

A	2022-03-14	DP Prior to Response
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BC Tree Seed Centre  
 Cooler / Freezer Expansion

18793 32nd Ave.  
 Surrey BC

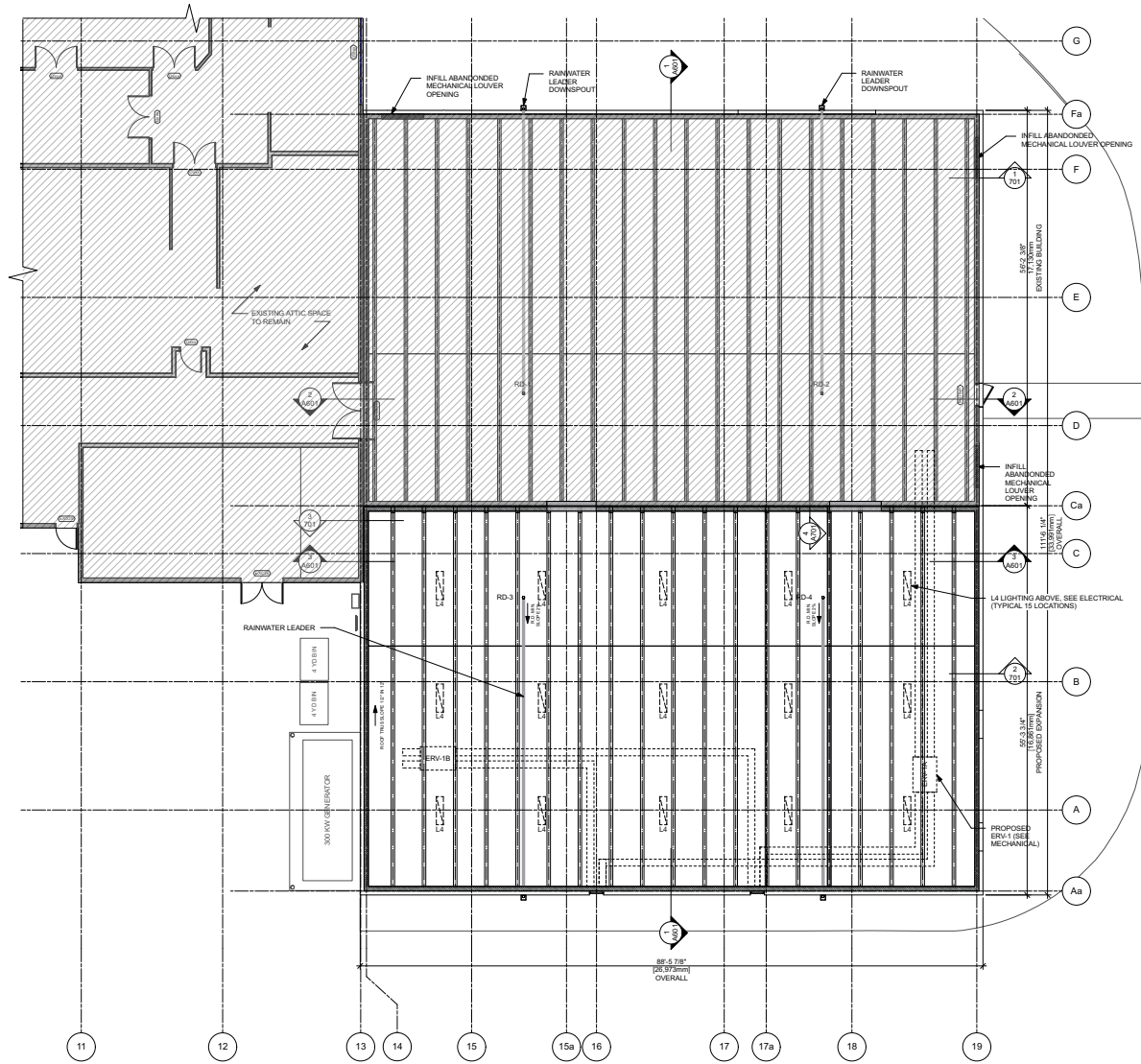
Scale	Status
1/8" = 1'-0"	BP
Date	Project Code
2022-03-08	TSC
Drawn	Checked
HK	PT

Roof Plan Demo

A203



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Issue

A	2021-05-21	Issued for Development Permit
B	2022-03-07	Issued for DP Prior to Response
C	2022-03-14	Issued for DP Prior to Response 2

Revision

A	2022-03-14	DP Prior to Response
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BC Tree Seed Centre  
 Cooler / Freezer Expansion

18793 32nd Ave.  
 Surrey BC

Scale	Status
1/8" = 1'-0"	BP
Date	Project Code
2022-03-08	TSC
Drawn	Checked
HK	PT

Attic Plan Proposed

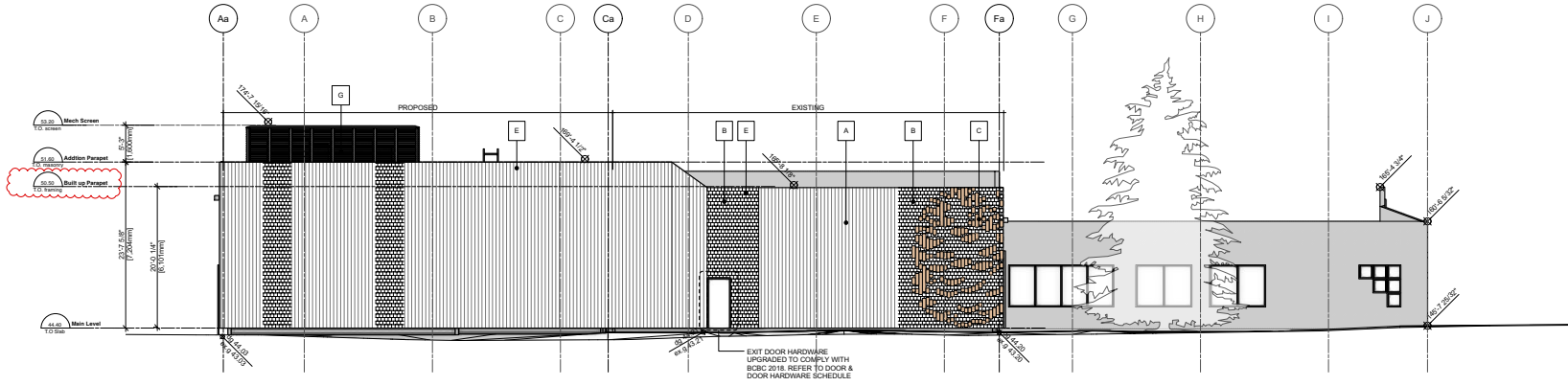
A302

**WALL LEGEND:**

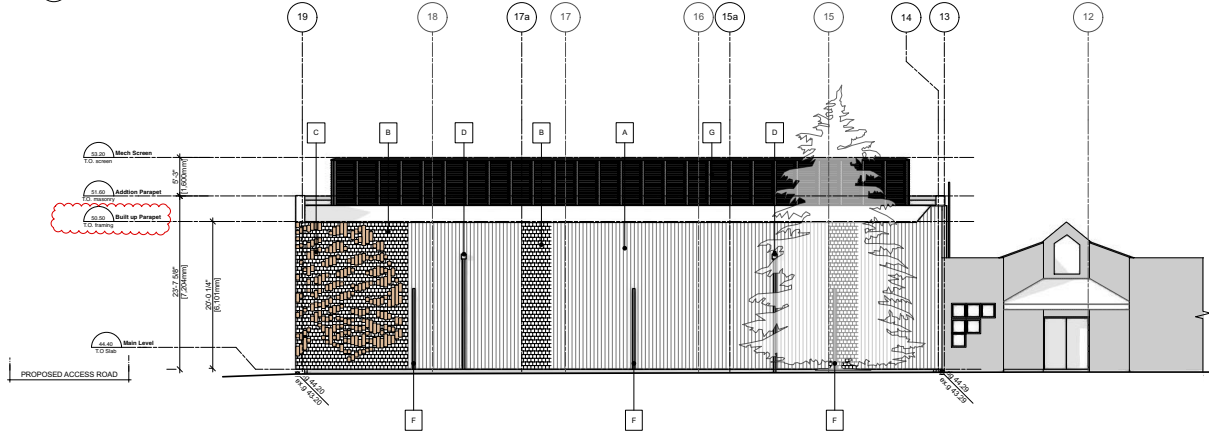
- EXISTING
- PROPOSED



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1 SOUTH ELEVATION  
 Scale: 1/8" = 1'-0"



2 EAST ELEVATION  
 Scale: 1/8" = 1'-0"

**Material Legend**

- A Vertical Charred Wood Boards
- B Charred Wood Shakes
- C Cedar Shake (Clear)
- D Rain Water Leader
- E Proposed scupper
- F Condensate Line
- G Metal Louver Mechanical Enclosure
- H Louver
- I N/A

**Issue**

- A 2021-05-21 Issued for Development Permit
- B 2022-03-07 Issued for DP Prior to Response
- C 2022-03-14 Issued for DP Prior to Response 2

**Revision**

- A 2022-03-14 DP Prior to Response

2022-03-11 revisions  
 \* Existing louvers on cooler to be retained  
 \* parapet height at existing cooler not raised to meet increased snow loads



BC Tree Seed Centre  
 Cooler / Freezer Expansion

18793 32nd Ave.  
 Surrey BC

Scale	Status
1/8" = 1'-0"	BP
Date	Project Code
2022-03-08	TSC
Drawn	Checked
HK	PT

**Elevations**

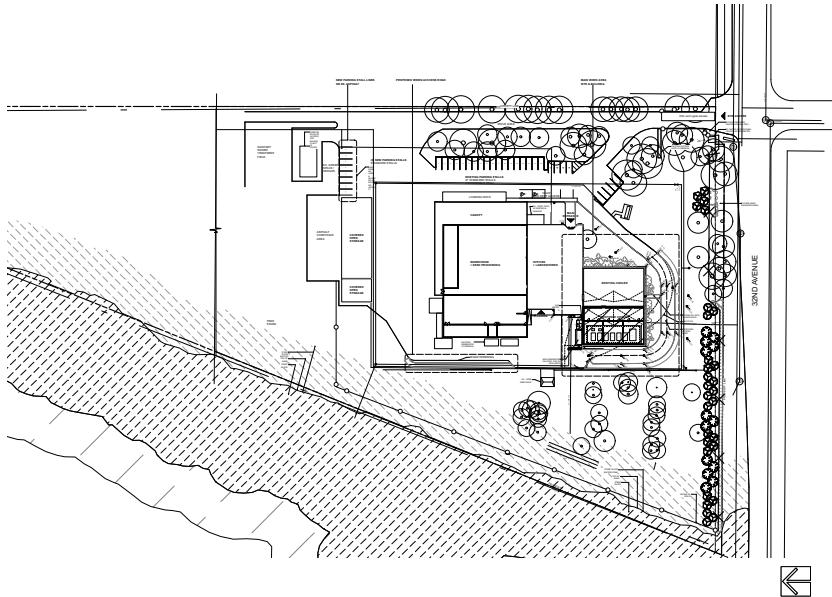
**A501**











# Tree Seed Centre

## for Province of BC

Civic Address: 18793 32nd Ave.

### CONSULTANT TEAM

OWNER: Province of BC  
 ARCHITECT: ph5 architecture inc  
 STRUCTURAL: Integral Group  
 MECHANICAL: Integral Group  
 ELECTRICAL: Vector Engineering  
 ENGINEERING: Vector Engineering  
 LANDSCAPE: eta landscape architecture

### DRAWING LIST

- L0.0 Cover Page
- L0.1 Landscape Notes and Schedules
- L1.0 Tree Management Plan
- L2.0 Demolition Plan
- L3.0 Layout and Grading Plan
- L4.0 Planting Plan
- L5.0 Soil Depth Plan
- L6.0 Softscape Details
- L6.1 Hardscape Details

Revision No.	Date	Revision Notes
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Issue No.	Date	Issue Notes
A	2021-05-21	Issued for DP
B	2021-06-09	DP Application - Tree #159 Revision
C	2022-03-09	Issued for Building Permit
D	2022-03-14	DP Plan to Response

Professional Seal

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Project  
**BC Tree Seed Centre**

18793 32nd Ave  
 Surrey, BC

Drawing Title  
**Cover Sheet**

Legal

Project Manager	Project ID
DT	22102
Client	PH5
TY	AS NOTED
Prepared By	DT
DT	DT
Date	2021-05-20
Scale	<b>L0</b>
Plot Date:	— of —
	8

**ALL PLANTS TO BE NURSERY GROWN  
ALL PLANT MATERIALS AND LABOUR TO CONFORM  
TO THE CURRENT EDITION OF THE CSLA/CLNA STANDARDS.**

**ALL PLANT MATERIAL TO BE INSPECTED PRIOR TO DELIVERY ON SITE. CONTRACTOR  
TO ARRANGE FOR INSPECTION AND MATERIAL TO ASSEMBLED IN ONE LOCATION  
FOR REVIEW.**

IMPORTED GROWING MEDIA SHALL BE A SANDY LOAM OR LOAMY  
SAND TEXTURE NO LESS THAN 50% SAND BY WEIGHT  
CONTAINING 4 AND 15% ORGANIC MATTER DRY WEIGHT  
BASIS).

GROWING MEDIA SHALL BE FREE FROM SUBSOIL,  
WOOD INCLUDING WOOD PLANT PARTS, INVASIVE AND NOxious PLANT AND THEIR  
REPROducible PARTS, PLANT PATHOGENIC ORGANISMS, ORGANIC OR INORGANIC  
MATERIALS, TOXINS, STONES OVER 30mm (1.2"), ANY DEBRIS AND FOREIGN OBJECTS.  
IMPORTED GROWING MEDIA SHALL CONFORM TO AND BE TREATED AS PER SECTION  
6.3.2 TO 6.2.7 INCLUSIVE OF THE CURRENT EDITION CLNA STANDARDS.

GROWING MEDIA SHALL CONFORM TO LEVEL 1 "WELL-GROOMED" AREAS: LOW  
TRAFFIC LAWN AREAS, TREES AND LARGE SHRUBS (L IN TABLE 7.6.3.5.1 OF  
THE CURRENT EDITION OF THE CSLA/CLNA STANDARDS).  
IT SHALL POSSESS THE FOLLOWING QUALITIES:

**TEXTURE:**  
"COARSE GRAVEL LARGER THAN 19mm AND SMALLER THAN 40mm": 0-1%  
"ALL GRAVEL LARGER THAN 20mm AND SMALLER THAN 40mm": 0-5%  
"SAND LARGER THAN 0.075mm AND SMALLER THAN 2mm": 50-70%  
"SAND LARGER THAN 0.075mm AND SMALLER THAN 2mm": 50-70%  
"SAND LARGER THAN 0.075mm AND SMALLER THAN 0.075mm": 10-25%  
"CLAY SMALLER THAN 0.075mm": 0-20%  
"CLAY AND SILT COMBINED": MAXIMUM 25%

**ORGANIC CONTENT:** 3-10%

**Abscise (pH):** 6.0-7.0

**DRAINAGE:** PERCOLATION SHALL BE SUCH THAT NO STANDING WATER IS VISIBLE 60  
MINUTES AFTER AT LEAST 10 MINUTES OF MODERATE TO HEAVY RAIN OR IRRIGATION.  
MINIMUM SOIL DEPTH TO BE AS PER TABLE T.6.3.5.5 OF THE CURRENT EDITION CLNA  
STANDARDS:

	Over prepared subgrade where the subsoil drains rapidly	Over structures or where the subsoil drains poorly
TREES (10cm PER TREE)	610 MM (24")	750 MM (30")
LARGE SHRUBS	610 MM (24")	610 MM (24")
GROUNDCOVERS	300 MM (12")	225 MM (9")
LAWN-IRRIGATED	150 MM (6")	150 MM (6")
LAWN-NOT IRRIGATED	150 MM (6")	225 MM (9")

SOIL DEPTHS WILL BE CHECKED AT TIME OF SUBSTANTIAL COMPLETION REVIEW

SOIL FOR URBAN AGRICULTURE PLOTS IS TO BE URBAN GRD PROVIDED BY VERATEC,  
OR APPROVED ALTERNATIVE. SOIL FOR URBAN AGRICULTURE AREAS IS TO MEET OR  
EXCEED THE GUIDELINES FOR COMPOST QUALITY UNDER CANADIAN CODES OF  
MINISTERS OF THE ENVIRONMENT (COMC).

COMPOST IS TO BE TESTED AND RESULTS SUBMITTED TO CONSULTANT PRIOR TO  
DELIVERY TO SITE.

SEDS TO HAVE 50MM (2") MULCH LAYER (after setting) CONSISTING OF ORGANIC  
COMPOSTED BARK APPLIED.

PLANTED/SODDED AREAS TO BE HAND WATERED FOR THE FIRST 2 YEARS REGULARLY  
FOR PLANT ESTABLISHMENT AND GROWTH. GATOR BAGS TO BE USED ON PROPOSED  
TREES AND FILLED WEEKLY.

CONTRACTOR TO PROVIDE MAINTENANCE FOR 1 YEAR FOLLOWING SUBSTANTIAL  
COMPLETION.

CONTRACTOR TO PROVIDE WRITTEN 1 YEAR WARRANTY ON PLANT MATERIAL

CONTRACTOR TO PROVIDE COPY OF SOIL TEST TO LANDSCAPE CONSULTANT 3 WEEKS  
PRIOR TO DELIVERY ON SITE. TEST TO BE PERFORMED BY AN INDEPENDENT LAB AND  
IS TO INCLUDE RECOMMENDATIONS FOR BOTH LAWN AND PLANTING BEDS.

CONSULTANT TO APPROVE SOIL BEFORE INSTALLATION. THIS DOES NOT PRECLUDE  
THE CONSULTANT FROM PERFORMING AN INDEPENDENT SOIL ANALYSIS AT TIME OF  
SUBSTANTIAL COMPLETION. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL AND  
REPLACEMENT OF SOIL THAT DOES NOT MEET SPECIFICATIONS AT AN EXTRA COST TO  
CLIENT.

CONTRACTOR TO PROVIDE WRITTEN 1 YEAR WARRANTY ON SOIL SPECIFICATIONS.

AN INDEPENDENT SOIL TEST TO BE PROVIDED 1 WEEK PRIOR TO END OF 1 YEAR  
WARRANTY PERIOD CONTRACTOR TO PROVIDE SOIL AMENDMENTS TO BRING SOIL UP  
TO QUALITY RECOMMENDED IN  
SOILS REPORT.

**SITE INSPECTION**  
EXAMINE EXISTING SUBGRADE CONDITIONS AND SIGNIFY ACCEPTANCE IN WRITING TO  
THE CONSULTANT.

ASCERTAIN THE SIZE AND LOCATION OF ALL EXISTING SERVICES AND SUBGRADES  
PRIOR TO THE WORK.

IMMEDIATELY REPAIR DAMAGE RESULTING FROM FAILURE TO EXERCISE SUCH  
PRECAUTIONS AT NO COST TO THE OWNER.

ALL PRUNING TO BE IN ACCORDANCE WITH THE BC/LNA/CSLA STANDARDS CURRENT  
EDITION.

**PLANT COUNTS**  
IN THE CASE OF ANY DISCREPANCY BETWEEN PLANT COUNTS ON PLANT LIST AND  
PLANT SYMBOLS ON DRAWINGS, THE DRAWINGS TAKES PRECEDENT. THE CONTRACTOR IS  
TO VERIFY ALL PLANT COUNTS AND NOTIFY CONSULTANT OF ANY DISCREPANCY.

**BIRD FRIENDLY PLANTING**  
PLANTS THAT ENABLE BIRD-FRIENDLY HABITAT CONSERVATION AND PROMOTION HAVE  
BEEN SELECTED AND CAN BE FOUND THROUGHOUT THE LANDSCAPE. PLANTING IS  
GROUPED IN NATURAL BIRD-FRIENDLY HABITAT GROUPS: TALL SHRUBS, LOW SHRUBS,  
GROUNDCOVERS, MIMICKING THE IDEAL ENVIRONMENTAL CONDITIONS FOR BIRDS.  
THESE LAYERS WILL BE IDENTIFIED BY TEXTURES AND PATTERNS THAT  
ATTRACTS AND PROTECTS MANY BIRD SPECIES. SPECIFIC LOCAL AND NON-INVASIVE  
PLANT SPECIES HAVE BEEN SELECTED BASED ON THEIR ABILITY TO PROVIDE YEAR-  
ROUND FOOD FOR BIRDS AND/OR YEAR-ROUND NESTING OPPORTUNITIES.

**HYDROSEEDING SPEC**

**PART 1 GENERAL**

1.1 **WORK INCLUDED**  
1.1.1 THIS SECTION COVERS ALL SEEDING OF AREAS OF MAINTAINED LAWN (CLASS 2 AREAS), AND GRASS MEADOWS, (CLASS 3 AREAS).  
1.1.2 RELATED WORK  
1.2 SOIL PREPARATION AND PLACEMENT: SECTION 32 21 21  
1.2.1 EXAMINE THE WORK OF OTHER SECTIONS UPON WHICH THE WORK OF THIS SECTION DEPENDS, AND CORRECT ANY DEFECTS.  
1.2.2 **PERTINENT STANDARDS AND LEGISLATION**  
1.3 CANADA SEED ACT  
1.4 **HANDLING AND STORAGE**  
1.4.1 ALL GRASS SEED AND NURSE CROP SEED, HYDRAULIC MULCH, FERTILIZERS AND RELATED MATERIALS, WHERE REQUIRED, SHALL BE STORED IN A DRY, WEATHER-PROOF STORAGE PLACE AND SHALL BE PROTECTED FROM DAMAGE BY HEAT, MOISTURE, RODENTS OR OTHER CAUSES UNTIL TIME OF SEEDING. LABELS AND OTHER IDENTIFICATION SHALL NOT BE REMOVED OR DEFACED.  
1.5 FINISH GRADE PREPARATION  
1.5.1 THE FINISHED GRADE SHALL BE SMOOTH TO THE EXTENT REQUIRED FOR THE CLASS OF SEEDING OR SODDING TO BE CARRIED OUT, FIRM AGAINST FOOTPRINTS, LOSSE TEXTURED, AND FREE OF ALL STONES, ROOTS, BRANCHES, ETC., LARGER THAN THE DIAMETER REQUIRED FOR REMOVAL FOR THE CLASS OF SEEDING OR SODDING TO BE CARRIED OUT.  
1.5.2 AREAS THAT ARE EXCESSIVELY COMPACTED SHALL HAVE THEIR SURFACES LOOSENED BY MEANS OF A THOROUGH SCARIFICATION, DISCING OR HARROWING TO A MINIMUM OF 150 MM DEPTH.  
1.5.3 BEFORE COMMENCEMENT OF SEEDING OR SODDING OPERATIONS, APPROVAL OF SITE PREPARATION SHALL BE OBTAINED.  
1.6 **LAYING OUT WORK**  
1.6.1 ALL WORK SHALL BE LAID OUT BY THE CONTRACTOR, IN ACCORDANCE WITH THE DRAWINGS, WHO SHALL BE FULLY RESPONSIBLE FOR THE ACCURACY THEREOF. THE CONTRACTOR SHALL PROVIDE THE NECESSARY PERSONNEL TO ASSIST THE CONSULTANT IN CHECKING SUCH LINES AND GRADES.  
**PART 2 PRODUCTS**  
2.1 **MATERIALS**  
2.1.1 GRASS SEED  
2.1.2 GRASS SEED SHALL MEET THE REQUIREMENTS OF THE CANADA SEED ACT FOR CANADA NO. 1 SEED, WHERE SPECIFIED. ALL NURSE CROP SEED SHALL MEET THE REQUIREMENTS OF THE CANADA SEED ACT FOR CANADA NO. 1 SEED.  
2.2 SEED MIXTURE SHALL BE SUITED TO THE CLIMATE, LOCALITY, SITE CONDITIONS, AND INTENDED MAINTENANCE PROCEDURES FOR EACH PROJECT OR AREA.  
2.3 SEED SHALL HAVE MINIMUM GERMINATION RATE OF 75% AND MINIMUM PURITY OF 97%, EXCEPT WHERE OTHERWISE REQUIRED BY THE PROFESSIONAL SELECTING THE SEED MIXTURE.  
2.4 SEED SHALL BE PACKED AND DELIVERED IN ORIGINAL CONTAINERS CLEARLY SHOWING NAME OF SUPPLIER, ANALYSIS OF SEED MIXTURE, PERCENTAGE OF PURE SEED, YEAR OF PRODUCTION, NET WEIGHT, DATE AND LOCATION OF BAGGING.  
2.5 THE MIXTURE SHALL BE MIXED AND SUPPLIED BY A RECOGNIZED SEED HOUSE.  
2.6 THE OWNER MAY TEST SEED PURITY AND GERMINATION.  
2.7 SEED MIXTURE TO BE PER PLANT LIST SCHEDULE ON CONSTRUCTION DOCUMENTS.  
2.1.2 **HYDRAULIC MULCH:**  
2.1.2.1 HYDRAULIC MULCH SHALL CONSIST OF FIBER OR OTHER MATERIAL DESIGNED FOR HYDRAULIC SEEDING AND DYED FOR EASE OF MONITORING APPLICATION.  
2.1.2.2 HYDRAULIC MULCH SHALL BE CAPABLE OF DISPERSING RAPIDLY IN WATER TO FORM A HOMOGENEOUS SLURRY AND REMAINING IN SUCH A STATE WHEN AGITATED OR MIXED WITH OTHER SPECIFIED MATERIALS. WHEN APPLIED, THE HYDRAULIC MULCH SHALL BE CAPABLE OF FORMING AN ABSORPTIVE MAT WHICH WILL ALLOW MOISTURE TO PERMEATE INTO THE UNDERLYING SOIL. IT SHALL CONTAIN NO GROWTH OR GERMINATION INHIBITION FACTORS. THE MULCH SHALL BE DRY, FREE OF WEEDS AND ALL OTHER FOREIGN MATERIAL AND SHALL BE SUPPLIED IN PACKAGES BEARING THE MANUFACTURER'S LABEL, CLEARLY INDICATING WEIGHT AND PRODUCT NAME.  
2.1.2.3 THE MULCH MAY CONTAIN A COLOUR POLYMER (OR EQUIVALENT) TACKIFIERS, WHICH SHALL BE ADHERED TO THE MULCH TO PREVENT SEPARATION DURING SHIPMENT AND TO AVOID CHEMICAL AGGLOMERATION DURING MIXING IN HYDRAULIC MULCHING EQUIPMENT.  
2.1.3 **WATER USED IN HYDRAULIC SEEDING AND IRRIGATION SHALL BE FREE OF ANY IMPURITIES THAT MAY HAVE AN INJURIOUS EFFECT ON THE SUCCESS OF SEEDING OR MAY BE HARMFUL TO THE ENVIRONMENT.**

**PART 3 EXECUTION**  
3.1 **DRY SEEDING**  
3.1.1 THE GROWING MEDIUM UNDER ALL SEEDED AREAS SHALL BE SPREAD EVENLY OVER THE APPROVED SUBGRADE TO THE SPECIFIED DEPTH. THE MINIMUM DEPTH OF GROWING MEDIUM UNDER MAINTAINED LAWN AREAS SHALL BE 4 INCHES. THE MINIMUM DEPTH OF GROWING MEDIUM UNDER MEADOW AREAS SHALL BE 2 INCHES.  
3.1.2 THE RATES OF APPLICATION OF FERTILIZERS, SEED MIXTURES, MULCH AND OTHER COMPONENTS SHALL BE BASED ON AN ANALYSIS OF THE SEASON, CLIMATE, TERRAIN, SOIL, AND ESTABLISHMENT AND MAINTENANCE CONDITIONS AFFECTING THE PROJECT. THE REQUIRED FERTILIZER SHALL BE APPLIED TO AND WELL WATERED UNTIL THE GROWING MEDIUM IS DISCING, RAKING OR HARROWING AT THE RATES SPECIFIED.  
3.1.3 SEEDING SHALL BE CARRIED OUT DURING PERIODS THAT ARE MOST FAVORABLE FOR THE ESTABLISHMENT OF A HEALTHY STAND OF GRASS. ALL SEEDING SHALL BE DONE DURING CALM WEATHER AND ON SOIL THAT IS FREE OF FROST, SNOW, AND STANDING WATER, WHEN SEASONAL CONDITIONS ARE LIKELY TO ENSURE SUCCESSFUL GERMINATION AND CONTINUED GROWTH OF ALL VARIETIES OF SEED IN THE GRASS MIX.  
3.1.4 SEED SHALL BE APPLIED BY MEANS OF AN APPROVED MECHANICAL DRY SEEDER AT THE RATE REQUIRED.  
3.1.5 SEED SHALL BE APPLIED IN TWO INTERSECTION DIRECTIONS, EXCEPT WHERE CONDITIONS DICTATE SEEDING IN ONE DIRECTION ONLY.  
3.1.6 ALL GRASS SEED, NURSE CROP SEED, WATER, FERTILIZER, AND MULCH SHALL BE MEASURED ACCURATELY BEFORE BEING APPLIED.  
3.1.7 MULCH MAY BE APPLIED WITH SEED OR IMMEDIATELY FOLLOWING SEEDING WITH AN APPROVED MULCHER. NO AREA SHALL BE SEEDING IN EXCESS OF THAT WHICH CAN BE MULCHED ON THE SAME DAY.  
3.1.8 EROSION CONTROL NETTING SHALL BE INSTALLED IN SEEDED AREAS WHERE REQUIRED.  
3.1.9 WHERE REQUIRED, EROSION CONTROL MESH OR NETTING SHALL BE PLACED AND SECURED WITH STAKES OR STAPLES SUNK FIRMLY INTO THE GROUND TO A MINIMUM DEPTH OF 150 MM AT MAXIMUM INTERVALS OF 4.5 METERS ALONG THE PITCH OF THE SLOPE. STAKES OR STAPLES SHALL BE PLACED HORIZONTALLY ACROSS THE SLOPE AT INTERVALS EQUAL TO THE WIDTH OF THE MESH OR NETTING MINUS 15 CM.  
3.1.10 THE MULCH SHALL BE APPLIED TO FORM AN EVEN, UNIFORM MAT OVER THE ENTIRE AREA.  
3.2 **HYDRAULIC SEEDING**  
3.2.1 SEED, FERTILIZER AND HYDRAULIC MULCH SHALL BE APPLIED, IN THE VARIOUS COMBINATIONS DESCRIBED IN THIS SPECIFICATION, WITH AN HYDRAULIC SEEDER/MULCHER.  
3.2.2 THE HYDRAULIC SEEDER/MULCHER SHALL BE CAPABLE OF SUFFICIENT AGITATION TO MIX THE MATERIALS INTO A HOMOGENEOUS SLURRY AND TO MAINTAIN THE SLURRY IN A HOMOGENEOUS STATE UNTIL IT IS APPLIED. THE DISCHARGE PUMPS AND GUN NOZZLES SHALL BE CAPABLE OF APPLYING THE MATERIALS UNIFORMLY OVER THE DESIGNATED AREAS.  
3.2.3 HYDRAULIC SEEDING SHALL BE DONE WITH CARE TO ENSURE THAT FERTILIZER IN SOLUTION DOES NOT COME IN CONTACT WITH THE FOLIAGE OF ANY TREES, SHRUBS, OR OTHER SUSCEPTIBLE VEGETATION. SEED OR MULCH SHALL NOT BE SPRAYED ON OBJECTS NOT EXPECTED TO GROW GRASS.  
3.2.4 SEED, FERTILIZER AND HYDRAULIC MULCH SHALL BE THOROUGHLY MIXED IN A WATER SLURRY AND SHALL BE DISTRIBUTED UNIFORMLY OVER THE SURFACE AREA WITH AN APPROVED HYDRAULIC MULCHER.  
3.2.5 THE QUANTITIES OF EACH OF THE MATERIALS TO BE CHARGED INTO THE HYDRAULIC SEEDER/MULCHER TANK SHALL BE ACCURATELY MEASURED EITHER BY MASS OR BY A COMMONLY ACCEPTED SYSTEM OF MASS CALIBRATED VOLUME MEASUREMENTS. THE MATERIALS SHALL BE ADDED TO THE TANK WHILE IT IS BEING FILLED WITH WATER, AND IN THE FOLLOWING SEQUENCE: SEED, FERTILIZERS, AND WHERE APPLICABLE, MULCH. THE MATERIALS SHALL BE THOROUGHLY MIXED INTO A HOMOGENEOUS WATER SLURRY AND SHALL BE DISTRIBUTED UNIFORMLY OVER THE SURFACE AREA WITH THE HYDRAULIC SEEDER/MULCHER.  
3.2.6 SEEDS FOR GRASSES AND LEGUMES SHALL BE KEPT IN SEPARATE CONTAINERS PRIOR TO SEEDING.  
3.2.7 IF REQUIRED, LEGUME SEED SHALL BE KEPT IN SEPARATE CONTAINERS PRIOR TO SEEDING. LEGUME SEED SHALL BE INCULCATED WITH STANDARD PRODUCT HUMUS CULTURE BEFORE MIXING WITH GRASS SEED. INCULCATED SEED SHALL BE PROTECTED FROM EXPOSURE TO SUNLIGHT FOR PERIODS OF OVER ONE-HALF HOUR. SEED SHALL BE USED WITHIN EIGHT HOURS FROM INCULCATION OR SHALL BE RE-INCULCATED.  
3.2.8 AFTER CHARGING, NO WATER OR OTHER MATERIAL SHALL BE ADDED TO THE MIXTURE IN THE HYDRAULIC MULCHER.  
3.2.9 SEED, FERTILIZER, MULCH AND WATER SLURRY SHALL NOT BE LEFT IN THE TANK FOR MORE THAN 4 HOURS. SLURRY LEFT IN THE TANK OVER THE MAXIMUM TIME SHALL NOT BE USED FOR SEEDING AND SHALL BE DISPOSED OF OFF-SITE.  
3.2.10 WILD FLOWER SEED, IF REQUIRED, SHOULD BE INCORPORATED INTO HYDROSEED MIX.  
3.3 **MAINTENANCE**  
3.3.1 MAINTENANCE FOR SEEDED AREAS SHALL BEGIM IMMEDIATELY AFTER SEEDING HAS BEEN COMPLETED, AND SHALL CONTINUE UNTIL THE DATE SET FOT TURNING THE AREAS OVER TO THE OWNER FOR FURTHER MAINTENANCE.  
3.3.2 APPLY WATER TO ENSURE MOISTURE PENETRATION OF 2 IN. TO 4 IN. CONTROL WATERING TO PREVENT WASH-OUTS.  
3.3.3 CUT GRASS WHEN IT REACHES HEIGHT OF 3 IN. AND CUT TO THE HEIGHT OF 2 IN. EVENLY DISTRIBUTE (DO NOT REMOVE) CLIPPINGS WHICH EXCEED 1/2 IN. IN DEPTH.  
3.3.4 MAINTAIN GRASSSED AREAS FREE OF WEEDS AND DISEASE.  
3.3.5 ALL SEEDED AREAS SHALL BE ADEQUATELY PROTECTED WITH WARNING SIGNS, TEMPORARY WIRE OR TWINE FENCES, OR OTHER NECESSARY MEANS.  
3.3.6 ANY SEEDED AREAS THAT SHOW DETERIORATION OR BARE SPOTS SHALL BE REPAIRED AND OVERSEEDED IMMEDIATELY.  
3.4 **ACCEPTANCE**  
3.4.1 SEEDER AREAS WILL BE ACCEPTED PROVIDED THAT:  
A. SEEDER AREAS ARE PROPERLY ESTABLISHED AND TRUE TO GRADE.  
B. GRASS IS FREE OF BROODED, BARE OR DEAD SPOTS AND 99% ± FREE OF WEEDS.  
C. NO SURFACE SOIL IS VISIBLE WHEN GRASS HAS BEEN CUT TO 2 IN.  
D. SEEDER AREAS HAVE BEEN CUT AT LEAST TWICE. THE LAST CUTS BEING CARRIED OUT WITHIN 24 HOURS OF ACCEPTANCE.  
3.4.2 AREAS SEEDING IN FALL WILL BE ACCEPTED IN FOLLOWING SPRING ONE MONTH AFTER START OF GROWING SEASON PROVIDED ACCEPTANCE CONDITIONS ARE FULFILLED.  
3.5 **ALL MATERIALS AND OTHER DEBRIS RESULTING FROM SEEDING OPERATIONS SHALL BE REMOVED FROM THE JOB SITE.**

**END OF SECTION 32 22 21**

**PLANT LIST**

ID	QTY	LATIN NAME	COMMON NAME	SPACING	SCHEDULED SIZE	NOTES	ATTRIBUTES
<b>TREES - OFF-SITE</b>							
<b>SHRUBS / GROUNDCOVERS / PERENNIALS - OFF-SITE</b>							
<b>LAWN - OFF-SITE</b>							
			Non-Netted, grown on sand				
<b>TREES</b>							
Pc	16	<i>Pinus contorta</i>	lodgpole pine	as shown	3m H/B&B	full/ bushy canopy	N, E
Pse	13	<i>Pseudotsuga menziesii</i>	Douglas fir	as shown	3.5m H/B&B	full/ bushy canopy	N, E
Tp	13	<i>Thuja plicata</i>	western red cedar	as shown	3.5m H/B&B	full/ bushy canopy	N, E
<b>SHRUBS / GROUNDCOVERS / PERENNIALS</b>							
Camf	119	<i>Cornus sanguinea</i> 'Midwinter Fire'	Midwinter Fire dogwood	1.37m	#45 cont	full/ bushy plants	W
Ge	21	<i>Gaultheria shallon</i>	sasal	0.61m	#42 cont	full/ bushy plants	N, E, B, P, Ed
Maa	21	<i>Mahonia aquifolium</i>	tall Oregon grape	0.7m	#43 cont	full/ bushy plants	N, E, B, P, Ed
Mis	36	<i>Milicentia sinensis</i> 'Morning Light'	Morning Light maiden grass	0.76m	#43 cont	full/ bushy plants	B, W
Ron	58	<i>Rosa nutkana</i>	Nootka rose	0.81m	#42 cont	full/ bushy plants	N, B, P
	0			0m			
<b>SEED MIX</b>							
			Stabilizer/Wildflower mix			Quality Seeds	Hydroseed mix
			Non-Netted, grown on sand				

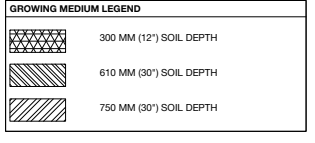
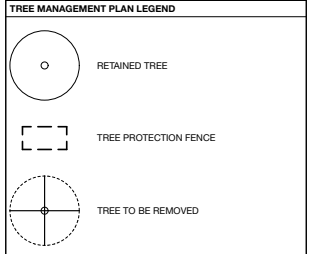
ID	REFERENCE	DESCRIPTION	SIZE	MODEL	MANUFACTURER	COMMENT	COLOUR
F1	21.6.1	FENCE	8' HEIGHT	MONTAGE COMMERCIAL INVINCIBLE	AMERISTAR	OR EQUIVALENT	BLACK
<b>MATERIALS</b>							
ID	REFERENCE	DESCRIPTION	SIZE	MODEL	MANUFACTURER	HIGHLIGHT	COLOUR
M1	11.6.1	DRIP STRIP	-	-	CUSTOM	-	-

**NOTES:**  
1. ALL LANDSCAPE TO CONFORM TO THE CURRENT EDITION OF THE CSLA STANDARDS FOR LEVEL 2 'GROOMED' LANDSCAPE TREATMENT IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANT LIST AND THE PLANTING PLAN, THE PLANTING PLAN TAKES PRECEDENCE.  
2. SEARCH AREA TO INCLUDE BRITISH COLUMBIA, WASHINGTON, AND OREGON  
3. N - NATIVE E - EVERGREEN B - BIRD FRIENDLY P - POLLINATOR Ed - EDIBLE W - WINTER INTEREST

**MATERIALS AND FURNISHINGS**

ID	REFERENCE	DESCRIPTION	SIZE	MODEL	MANUFACTURER	COMMENT	COLOUR
F1	21.6.1	FENCE	8' HEIGHT	MONTAGE COMMERCIAL INVINCIBLE	AMERISTAR	OR EQUIVALENT	BLACK
<b>MATERIALS</b>							
ID	REFERENCE	DESCRIPTION	SIZE	MODEL	MANUFACTURER	HIGHLIGHT	COLOUR
M1	11.6.1	DRIP STRIP	-	-	CUSTOM	-	-

**NOTE:** IN THE EVENT OF A DISCREPANCY BETWEEN THE SITE FURNISHINGS, MATERIALS, AND LIGHTING SCHEDULE QUANTITIES AND THE LANDSCAPE PLANS, THE LANDSCAPE PLANS TAKE PRECEDENCE.



SEED MIX	
	STABILIZER/WILDFLOWER MIX FROM QUALITY SEEDS
	- Birdfoot Trefoil
	- Perennial Ryegrass
	- Tall Fescue
	- Creeping Red Fescue
	- Timothy
	- White Clover
	- New England Aster
	- Wild Blue Lupine
	- Black Eyed Susan
	- Coneflower(Purple)

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Consent will be the acceptance with out an action liability of legal  
the eta landscape architecture inc.

Project

**BC Tree Seed Centre**

18793 32nd Ave  
Surrey, BC

**Notes and Schedules**

Drawing Title

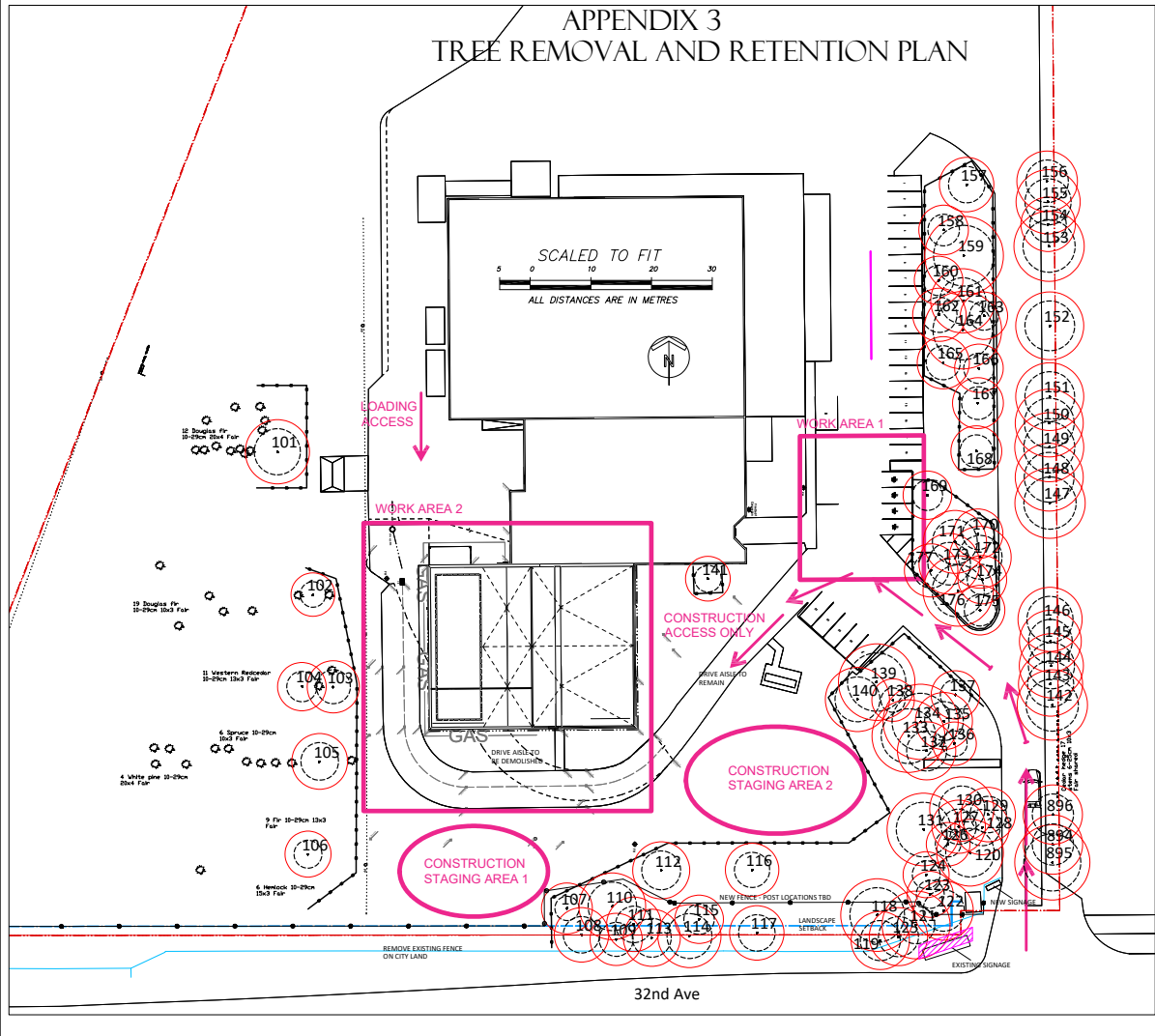
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Prep/Revised By	Project No.
DT	22102
Checked By	
Reviewed By	AS NOTED
DT	
Date	2021-05-20
Scale	
Plot Date	

**L0.1**  
8



## APPENDIX 3 TREE REMOVAL AND RETENTION PLAN



### TREE PROTECTION FENCING

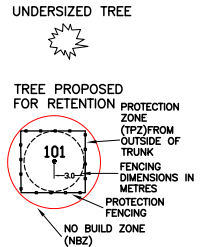
Minimum Radial Distance from trunk				
#	Type	DBH	Metres	Feet
101	Douglas fir	58cm	3.5m	11.4ft
102	Douglas fir	32cm	1.9m	6.3ft
103	White pine	43cm	2.6m	8.6ft
105	Spruce	48cm	2.9m	9.4ft
106	Western Hemlock	36cm	2.2m	7.1ft
107	Western Redcedar	42cm	2.5m	8.3ft
110	Douglas fir	62cm	3.7m	12.2ft
112	Japanese maple	50cm	3.0m	9.8ft
116	Beech	44cm	2.6m	8.7ft
118	Douglas fir	70cm	4.2m	13.8ft
120	Douglas fir	62cm	3.7m	12.2ft
128	Douglas fir	47cm	2.8m	9.3ft
129	Douglas fir	47cm	2.8m	9.3ft
131	Douglas fir	69cm	4.1m	13.6ft
133	Douglas fir	70cm	4.2m	13.8ft
137	Western Redcedar	39cm	2.5m	7.7ft
139	Douglas fir	74cm	4.4m	14.6ft
140	Oak	59cm	3.5m	11.6ft
168	Beech	41cm	2.5m	8.1ft
169	Beech	39cm	2.3m	7.7ft
170	Western Redcedar	40cm	2.4m	7.9ft
171	Douglas fir	57cm	3.4m	11.2ft
172	Douglas fir	56cm	3.4m	11.0ft
175	Tulip	40cm	2.4m	7.8ft
176	Douglas fir	67cm	4.0m	13.2ft
177	Western Redcedar	44cm	2.6m	8.7ft

### TREE INVENTORY

#	Type	Action	DBH	TPZ
101	Douglas fir	Retain	58cm	3.5m
102	Douglas fir	Retain	32cm	1.9m
103	White pine	Retain	43cm	2.6m
104	White pine	Retain	38cm	2.3m
105	Spruce	Retain	48cm	2.9m
106	Western Hemlock	Retain	36cm	2.2m
107	Western Redcedar	Retain	42cm	2.5m
108	Douglas fir	Retain	46cm	2.8m
109	Douglas fir	Retain	43cm	2.6m
110	Douglas fir	Retain	62cm	3.7m
111	Douglas fir	Retain	47cm	2.8m
112	Japanese maple	Retain	50cm	3.0m
113	Douglas fir	Retain	55cm	3.0m
114	Douglas fir	Retain	57cm	3.4m
115	Japanese maple	Retain	39cm	2.3m
116	Beech	Retain	44cm	2.6m
117	Western Redcedar	Retain	46cm	2.8m
118	Douglas fir	Retain	70cm	4.2m
119	Douglas fir	Retain	51cm	3.1m
120	Douglas fir	Retain	62cm	3.7m
121	Douglas fir	Retain	63cm	3.8m
122	Douglas fir	Retain	53cm	3.2m
123	Western Redcedar	Retain	36cm	2.2m
124	Western Redcedar	Retain	36cm	2.2m
125	Douglas fir	Retain	51cm	3.1m
126	Western Redcedar	Retain	32cm	1.9m
127	Douglas fir	Retain	45cm	2.7m
128	Douglas fir	Retain	47cm	2.8m
129	Douglas fir	Retain	47cm	2.8m
130	Douglas fir	Retain	58cm	3.5m
131	Douglas fir	Retain	69cm	4.1m
132	Douglas fir	Retain	51cm	3.1m
133	Douglas fir	Retain	70cm	4.2m
134	Douglas fir	Retain	72cm	4.3m
135	Douglas fir	Retain	50cm	3.0m
136	Western Redcedar	Retain	33cm	1.9m
137	Western Redcedar	Retain	39cm	2.3m
138	Douglas fir	Retain	74cm	4.4m
140	Oak	Retain	59cm	3.5m
141	Douglas fir	Retain	34cm	2.0m
142	Douglas fir	Retain	67cm	4.0m
143	Douglas fir	Retain	59cm	3.5m
144	Douglas fir	Retain	59cm	3.5m
145	Douglas fir	Retain	56cm	3.4m
146	Douglas fir	Retain	59cm	3.5m
147	Douglas fir	Retain	66cm	4.0m
148	Douglas fir	Retain	63cm	3.8m
149	Douglas fir	Retain	65cm	3.9m
150	Douglas fir	Retain	63cm	3.8m
151	Douglas fir	Retain	63cm	3.8m
152	Cottonwood	Retain	64cm	3.8m
153	Douglas fir	Retain	67cm	4.0m
154	Douglas fir	Retain	47cm	2.8m
155	Douglas fir	Retain	58cm	3.5m
156	Douglas fir	Retain	54cm	3.2m
157	Beech	Retain	47cm	2.8m
158	Purple plum	Retain	40cm	2.4m
159	Douglas fir	Retain	77cm	4.6m
160	Purple plum	Retain	38cm	2.3m
161	Douglas fir	Retain	58cm	3.5m
162	Purple plum	Retain	44cm	2.6m
163	Western Redcedar	Retain	37cm	2.2m
164	Douglas fir	Retain	75cm	4.5m
165	Western Redcedar	Retain	43cm	2.6m
166	Western Redcedar	Retain	38cm	2.3m
167	Purple plum	Retain	42cm	2.5m
168	Beech	Retain	41cm	2.5m
169	Beech	Retain	39cm	2.3m
170	Western Redcedar	Retain	40cm	2.4m
171	Douglas fir	Retain	57cm	3.4m
172	Douglas fir	Retain	56cm	3.4m
173	Douglas fir	Retain	54cm	3.2m
174	Western Redcedar	Retain	33cm	2.3m
175	Tulip	Retain	40cm	2.4m
176	Douglas fir	Retain	67cm	4.0m
177	Western Redcedar	Retain	44cm	2.6m
894	Douglas fir	Retain	53cm	3.2m
895	Douglas fir	Retain	72cm	4.3m
896	Douglas fir	Retain	50cm	3.1m
897	Douglas fir	Retain	44cm	2.6m
898	Douglas fir	Retain	50cm	3.1m
899	Douglas fir	Retain	44cm	2.6m

TRIGGER POINTS:  
EXISTING SIGN TO  
BE REMOVED  
UNDER ARBORIST  
SUPERVISION.

### LEGEND



- NOTES:
- SITE LAYOUT INFORMATION AND TREE SURVEY DATA PER SUPPLIED DRAWING
  - REFER TO ATTACHED TREE PROTECTION REPORT FOR INFORMATION CONCERNING TREE SPECIES, STEM DIAMETER, HEIGHT, CANOPY SPREAD AND CONDITION.
  - ALL MEASUREMENTS ARE METRIC

Professional Seal

Issue No.	Date	Issue Notes
A	2021-05-21	Issued for DP
B	2021-06-09	DP Application - Tree #159 Deleted
C	2022-03-09	Issued for Staking Permit
D	2022-03-14	DP Rev for Responses



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Project: **BC Tree Seed Centre**

18793 32nd Ave  
Surrey, BC

Drawing Title: **Tree Management Plan**

**Froggers Creek  
Tree Consultants Ltd**

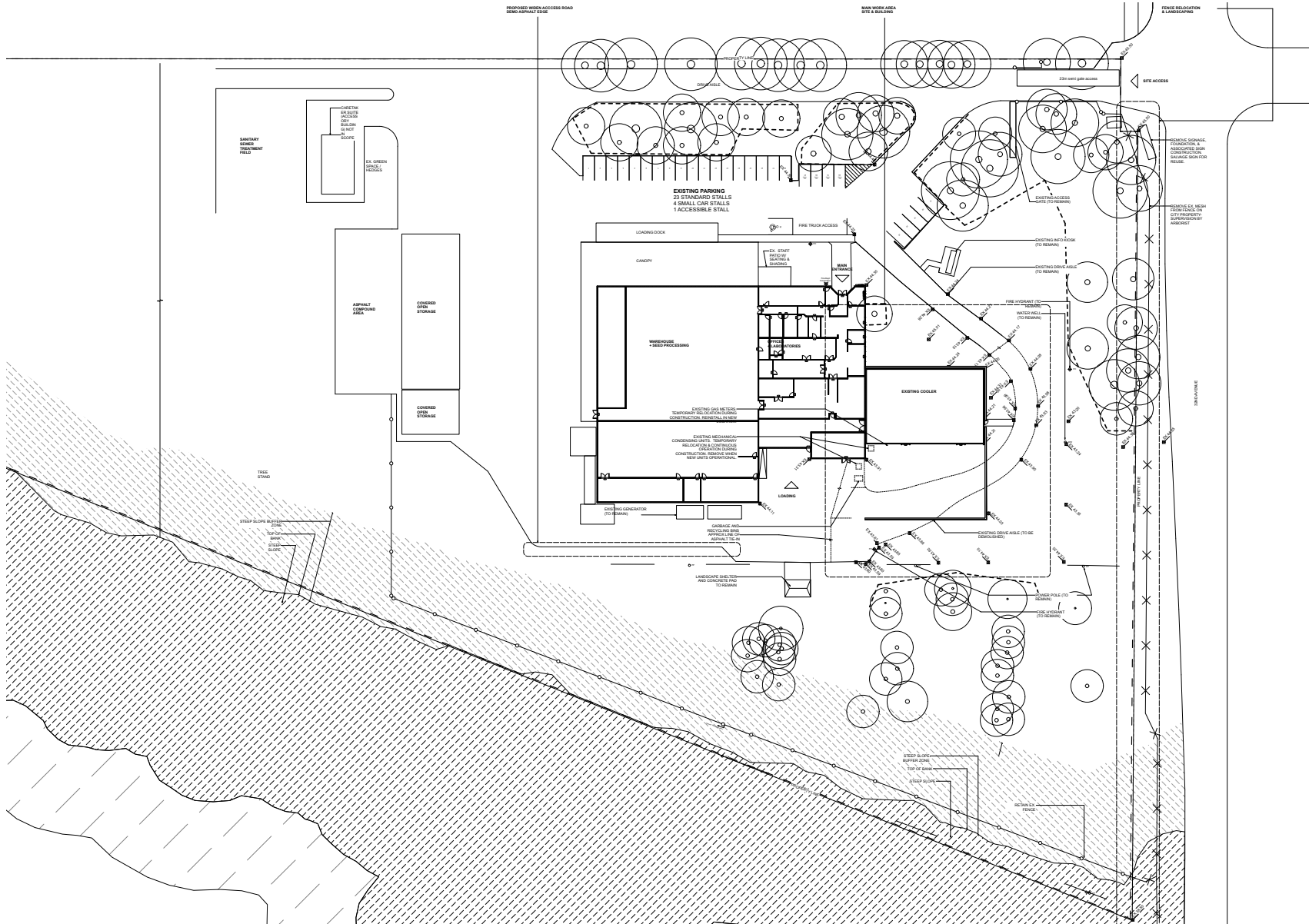
7763 McGregor Avenue Burnaby BC V5J 4H4  
Telephone: 604-721-6002 Fax: 604-437-0870

18793 32nd Ave, Surrey, BC

**TREE REMOVAL AND RETENTION PLAN**  
THE DRAWING PLOTS ALL TREES, PROPOSED FOR  
RETENTION, REMOVAL, THEIR PROTECTION ZONES  
AND PROTECTION FENCING IN RELATION TO  
PROPOSED LAYOUT

March 2, 2022

Project Manager	Project ID
DT	22102
Drawn By	DT
Checked By	AS NOTED
Approved By	DT
Date	2021-05-20
Scale	L1.0
Plot Date:	8



Revision  
No. Date Revision Notes

Issue No.	Date	Issue Notes
A	2021-05-21	Issued for DP
B	2021-06-09	DP Application - Tree #159 Revision
C	2022-03-09	Issued for Building Permit
D	2022-03-14	DP Prep for Response

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Project

**BC Tree Seed Centre**

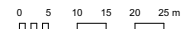
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Surrey, BC

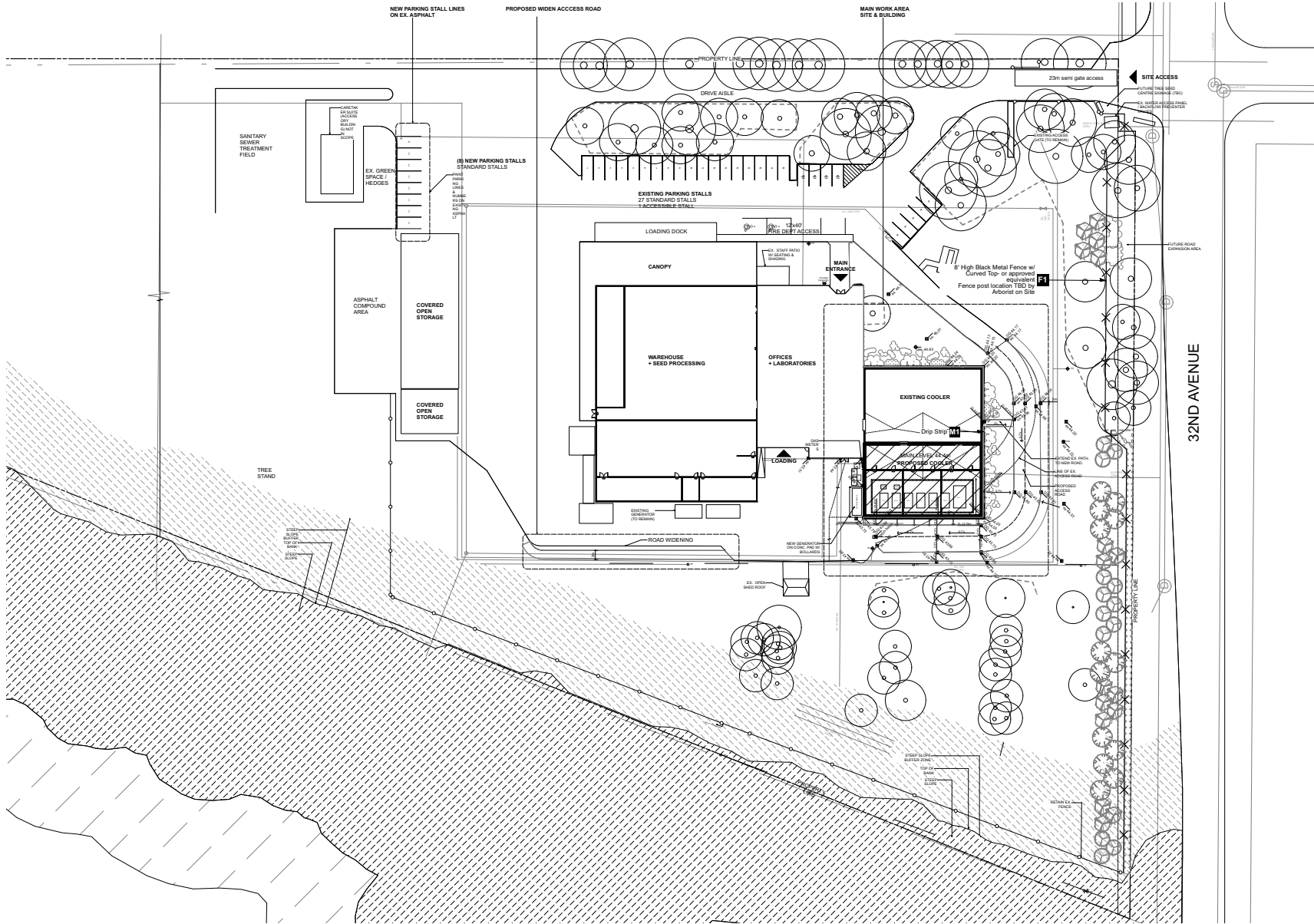
Drawing Title

**Demolition Plan**

Legal

Project Manager DT	Project ID 22102
Client TY	Scale
Drawn By DT	Drawing No.
Date 2021-05-17	<b>L2.0</b>
Plot Date:	8





Revision No.	Date	Revision Notes
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Issue No.	Date	Issue Notes
A	2021-05-21	Issued for DP
B	2021-06-09	DP Application - Tree #159 Revision
C	2022-03-09	Issued for Building Permit
D	2022-03-14	DP Draw for Response

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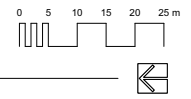
Drawing Title  
**Layout and Grading Plan**

Legal

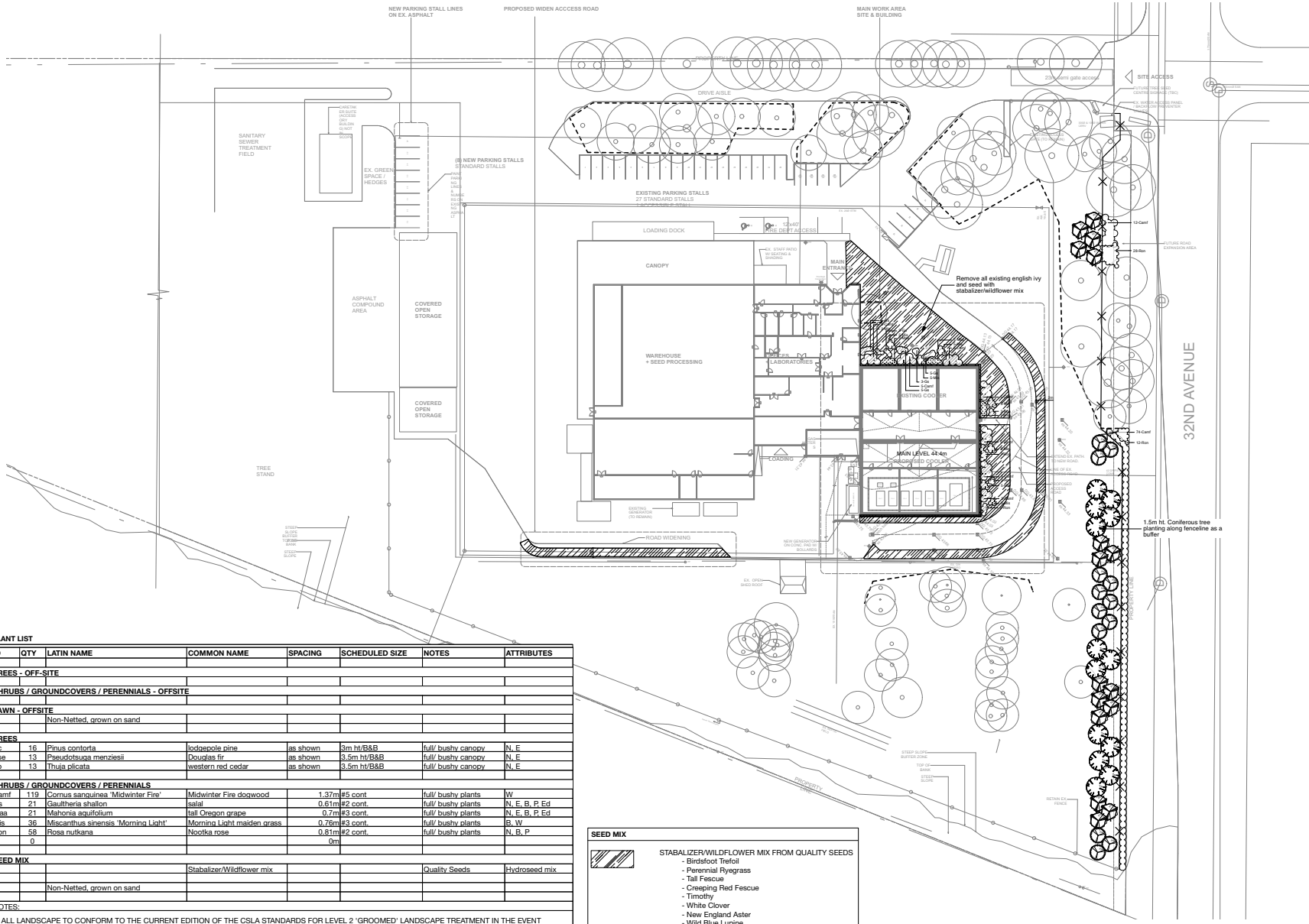
Project Manager DT	Project ID 22102
Client TY	Scale AS NOTED
Drawn By DT	Checked By
Date 2021-05-20	Project No. <b>L3.0</b>
	Sheet No. 8

Plot Date:

NOTE:  
TOTAL COVERAGE OF HYDROSEEDING TO BE CONFIRMED ON SITE. EXTENT OF SEEDING MAY BE MORE THAN 2 METERS.







Revision No.	Date	Revision Notes
A	2021-05-21	Issued for DP
B	2021-06-09	DP Application - Tree #159 Revision
C	2022-03-09	Issued for Building Permit
D	2022-03-14	DP Final for Response

Professional Seal



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Project  
**BC Tree Seed Centre**

18793 32nd Ave  
Surrey, BC

Drawing Title  
**Planting Plan**

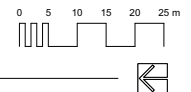
Project Manager DT	Project ID 22102
Client TY	Status AS NOTED
Prepared By DT	Created By DT
Date 2021-05-20	Scale L4.0
Plot Date	Page 8

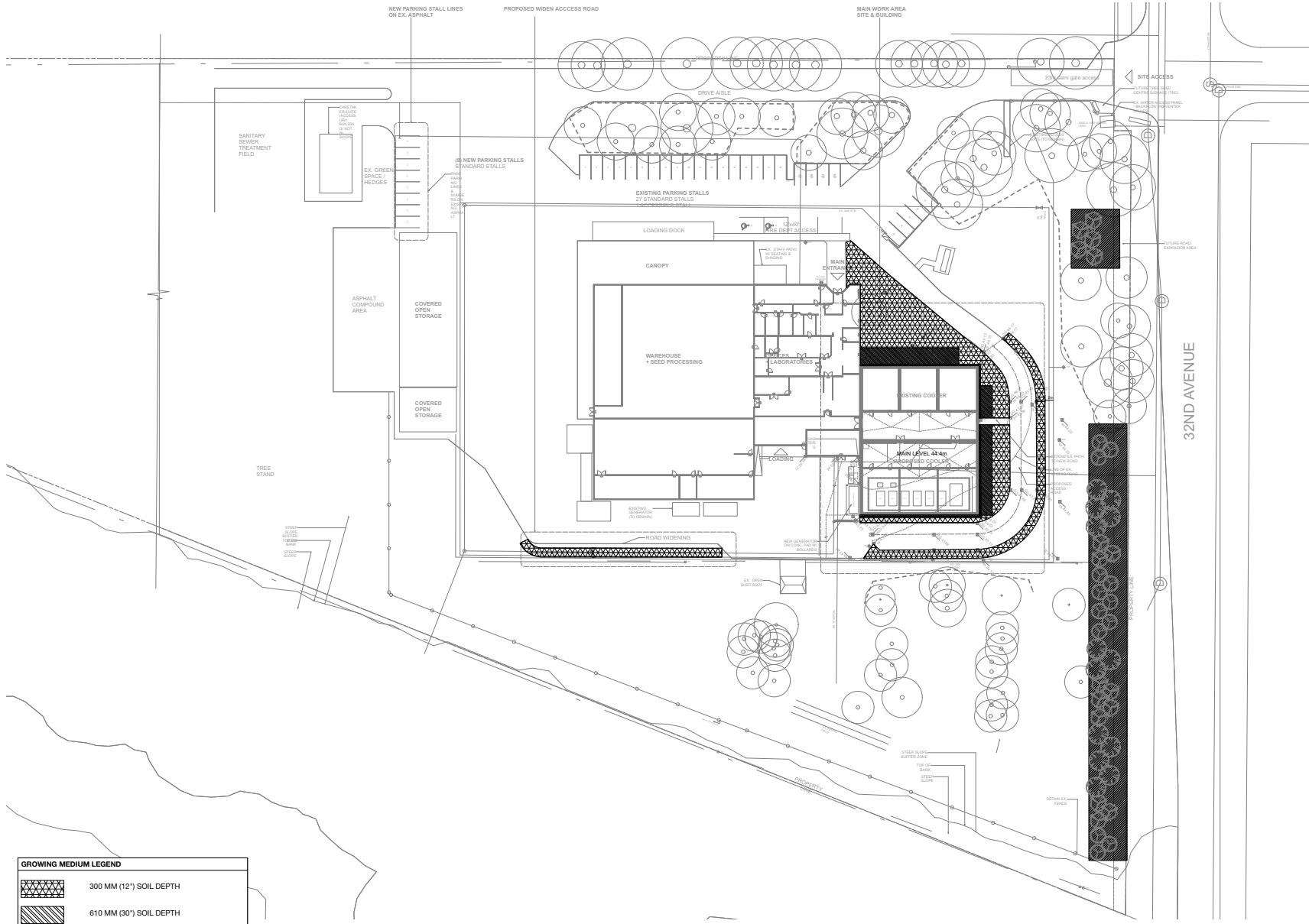
ID	QTY	LATIN NAME	COMMON NAME	SPACING	SCHEDULED SIZE	NOTES	ATTRIBUTES
<b>TREES - OFF-SITE</b>							
<b>SHRUBS / GROUNDCOVERS / PERENNIALS - OFFSITE</b>							
<b>LAWN - OFFSITE</b>							
						Non-Netted, grown on sand	
<b>TREES</b>							
Pc	16	Pinus contorta	lodgepole pine	as shown	3m ht/B&B	full/ bushy canopy	N, E
Psa	13	Pseudotsuga menziesii	Douglas fir	as shown	3.5m ht/B&B	full/ bushy canopy	N, E
To	13	Thuja plicata	western red cedar	as shown	3.5m ht/B&B	full/ bushy canopy	N, E
<b>SHRUBS / GROUNDCOVERS / PERENNIALS</b>							
Camf	119	Cornus sanguinea 'Midwinter Fire'	Midwinter Fire dogwood		1.37m #5 cont.	full/ bushy plants	W
Ga	21	Gaillardia xanthiflora	salix		0.61m #2 cont.	full/ bushy plants	N, E, B, P, Ed
Maa	21	Mahonia aquifolium	tall Oregon grape		0.7m #3 cont.	full/ bushy plants	N, E, B, P, Ed
Mis	36	Miscanthus sinensis 'Morning Light'	Morning Light maiden grass		0.76m #3 cont.	full/ bushy plants	B, W
Ron	58	Rosa rugkana	Nootka rose		0.81m #2 cont.	full/ bushy plants	N, B, P
	0				0m		
<b>SEED MIX</b>							
			Stabilizer/Wildflower mix			Quality Seeds	Hydroseed mix
							Non-Netted, grown on sand

**SEED MIX**

STABILIZER/WILDFLOWER MIX FROM QUALITY SEEDS

- Birdfoot Trefoil
- Perennial Ryegrass
- Tall Fescue
- Creeping Red Fescue
- Timothy
- White Clover
- New England Aster
- Wild Blue Lupine
- Black Eyed Susan
- Coneflower(Purple)





Revision

No.	Date	Revision Notes
A	2021-05-21	Issued for DP
B	2021-06-09	DP Application - Tree #159 Revision
C	2022-03-09	Issued for Building Permit
D	2022-03-14	DP Prep for Response

Issue

No.	Date	Issue Notes
A	2021-05-21	Issued for DP
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D	2022-03-14	DP Prep for Response

Professional Seal

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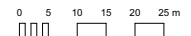
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Project  
**BC Tree Seed Centre**  
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Drawing Title  
**Soil Depth Plan**

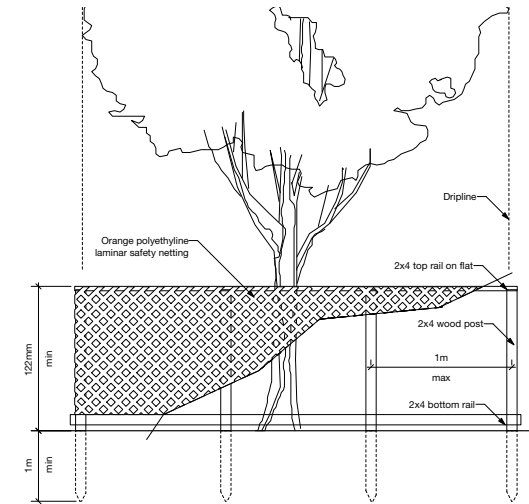
Legend

Project Manager DT	Project ID 22102
Client TY	Scale AS NOTED
Prepared By DT	Drawing No.
Date 2021-05-20	<b>L5.0</b>
	of 8



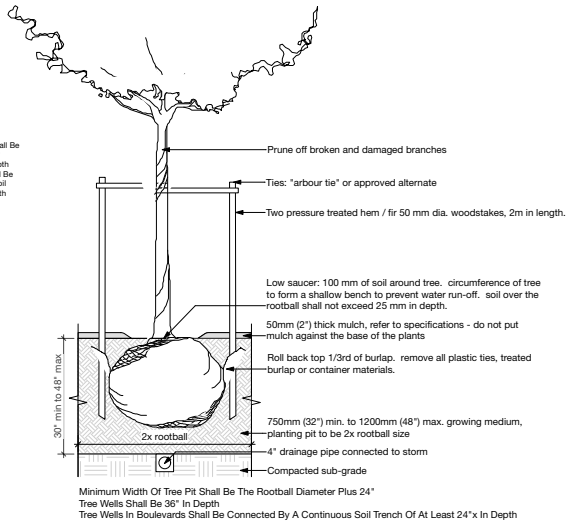
**GROWING MEDIUM LEGEND**

	300 MM (12") SOIL DEPTH
	610 MM (30") SOIL DEPTH
	750 MM (30") SOIL DEPTH

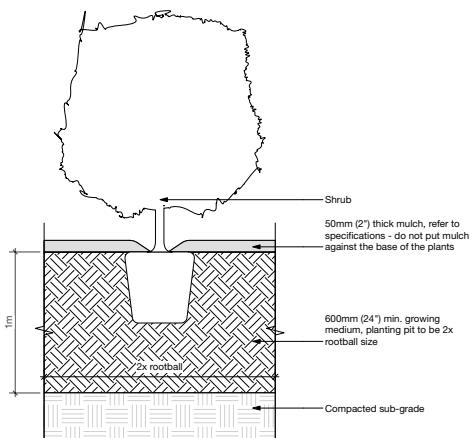


1 DETAIL: Tree Protection Fence  
Scale: 1:20

**NOTES:**  
 -Minimum Width Of Tree Pit Shall Be The Rootball Diameter Plus 24"  
 -Tree Wells In Boulevards Shall Be Connected By A Continuous Soil Trench Of At Least 24"x In Depth



2 TREE AT GRADE  
Scale: 1:20



3 SHRUB AT GRADE  
Scale: 1:10

Revision No.	Date	Revision Notes
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Issue No.	Date	Issue Notes
A	2021-05-21	Issued for DP
B	2021-06-09	DP Application - Tree #159 Revision
C	2022-03-09	Issued for Building Permit
D	2022-03-14	DP Permit to Reopen

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Project

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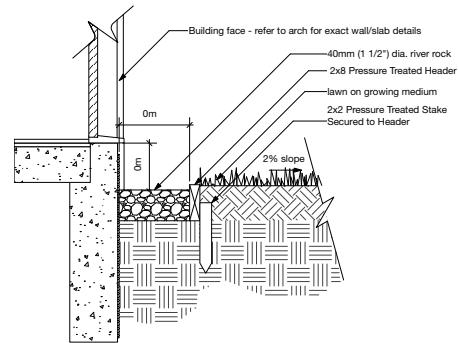
Drawing Title

**Softscape Details**

Legal

Project Manager	Project ID
DT	22102
Client	eta
TY	AS NOTED
DT	DT
Date	2021-05-20
Project No.	<b>L6.0</b>
Sheet No.	8

Plot Date:

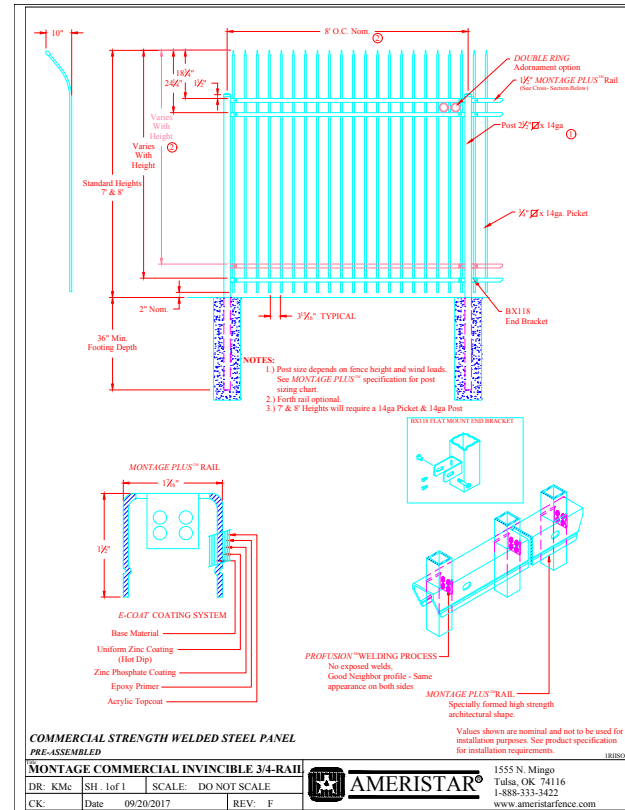


Revision No.	Date	Revision Notes
A	2021-05-21	Issued for DP
B	2021-06-09	DP Application - Tree #159 Revision
C	2022-03-09	Issued for Building Permit
D	2022-03-14	DP Plan to Responses

Issue No.	Date	Issue Notes
A	2021-05-21	Issued for DP
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C	2022-03-09	Issued for Building Permit
D	2022-03-14	DP Plan to Responses

1 DRIP STRIP AT GRADE  
Scale: 1:10



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**Hardscape Details**

Legal	
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Prepared By	Drawing No.
DT	
Date	
2021-05-20	<b>L6.1</b>
	8

2 Montage Commercial Invincible Fence  
Scale: NTS

**COMMERCIAL STRENGTH WELDED STEEL PANEL**  
PRE-ASSEMBLED

DR: KMc	SH: lof l	SCALE: DO NOT SCALE	REV: F	1555 N. Mingo Tulsa, OK 74116 1-888-333-3422 www.ameristarfence.com
CK:	Date 09/20/2017			<b>AMERISTAR®</b>