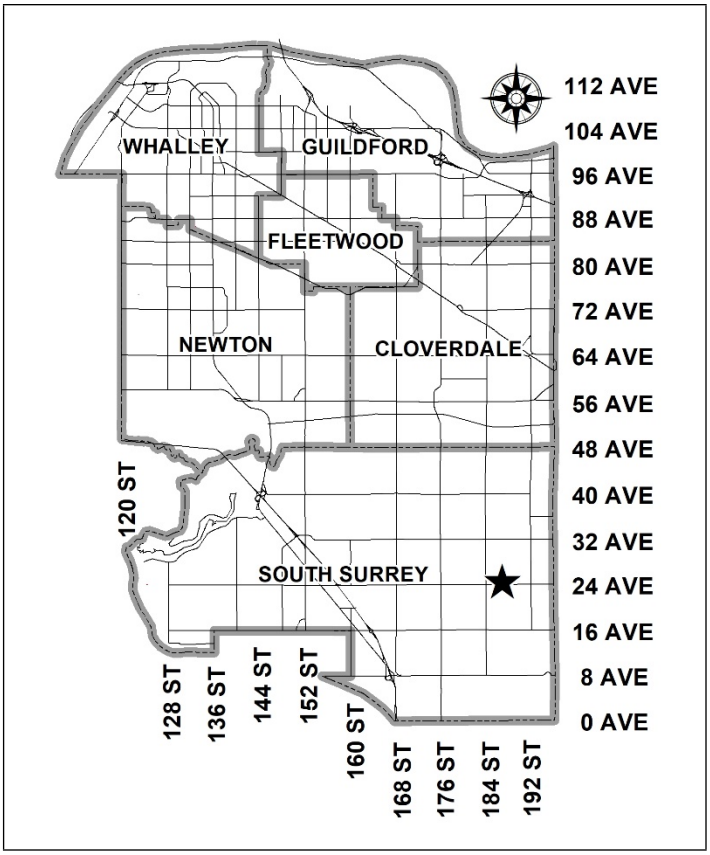


City of Surrey
PLANNING & DEVELOPMENT REPORT
Application No.: 7921-0354-00

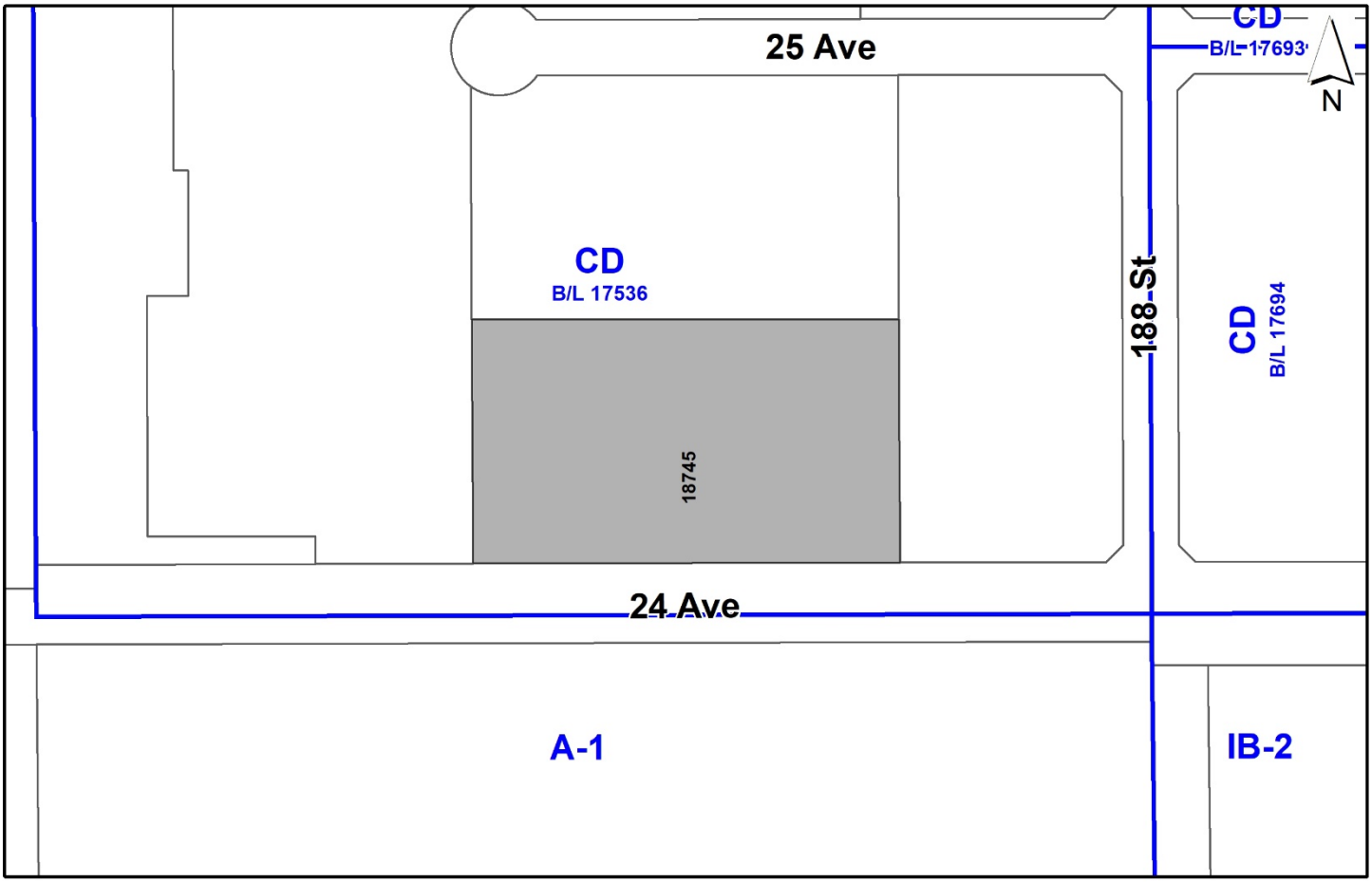
Planning Report Date: July 25, 2022

PROPOSAL:

- **Development Permit**
- **Development Variance Permit**

to permit the development of a 7,045 square metre purpose-built single-tenant cold storage facility.

LOCATION:	18745 – 24 Avenue
ZONING:	CD (By-law No. 17536)
OCP DESIGNATION:	Mixed Employment
LAP DESIGNATION:	Technology Park or Business Park and Landscaping Strips



RECOMMENDATION SUMMARY

- File Temporary Use Permit No. 7920-0317-00 and close Land Development Application No. 7920-0317-00 and all applications associated with this project.

- Approval to draft Development Permit for Form and Character, Sensitive Ecosystems, and Farm Protection.

- Approval for Development Variance Permit to proceed to Public Notification.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- The applicant is proposing to reduce the setback and building height requirements of the CD Zone (By-law No. 17536) and to reduce the industrial parking rate for the cold storage floor area.

RATIONALE OF RECOMMENDATION

- A previous Development Application (7920-0317-00) for the subject site proposed a Temporary Use Permit to allow truck parking. Following Council's direction at the March 8, 2021, Regular Council Land Use meeting to bring forward a Temporary Use Permit application on the subject site for support, the property was purchased by new owners who did not wish to pursue the Temporary Use Permit, instead opting to develop the site in keeping with the intended land use in the Campbell Heights Local Area Plan (LAP).

- The proposal complies with the Mixed Employment designation in the Official Community Plan (OCP).

- The proposal complies with the Technology Park or Business Park and Landscaping Strips designation in the Campbell Heights LAP.

- The proposal complies with the Mixed Employment designation in the Metro Vancouver Regional Growth Strategy (RGS).

- The proposal generally complies with the Development Permit requirements in the OCP for Sensitive Ecosystems (Streamside Areas and Green Infrastructure Areas).

- The proposal complies with the Development Permit requirements in the OCP for Farming Protection.

- The proposal generally complies with the Development Permit requirements in the OCP for Form and Character.

- The proposed variance for rear yard building setback will not negatively impact the existing industrial development to the north.

- The proposed variance to increase the building height is required to operate the automated system that has been designed for the proposed cold storage warehouse. The increased building height represents one form of industrial intensification as identified in the Official Community Plan (OCP) and general employment intensification trends in the region.

- The proposed vehicle parking variance is supportable as the applicant has demonstrated that the number of parking spaces provided is sufficient to meet the peak parking demand based on the maximum employee shift requirements.

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council file Temporary Use Permit No. 7920-0317-00 and close Land Development Application No. 7920-0317-00 and all applications associated with this project.

2. Council authorize staff to draft Development Permit No. 7921-0354-00 generally in accordance with the attached drawings (Appendix I) and the draft Ecosystem Development Plan.

3. Council approve Development Variance Permit No. 7921-0354-00 (Appendix III) varying the following, to proceed to Public Notification:

    (a) to reduce the minimum north (rear) yard setback of the CD Zone (By-law No. 17536) from 7.5 metres to 3.6 metres to the principal building face;

    (b) to vary the maximum building height of the CD Zone (By-law No. 17536) allowed from 14 metres to 20.2 metres; and

    (c) to reduce the rate at which parking is calculated for industrial floor area associated with the cold storage facility from 1 parking space per 100 square metres to 0.26 parking spaces per 100 square metres.

4. Council instruct staff to resolve the following issues prior to final 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) resolution of all urban design issues to the satisfaction of the Planning and Development Department;

    (c) submission of a finalized landscaping plan and landscaping cost estimate to the specifications and satisfaction of the Planning and Development Department;

    (d) submission of a finalized Ecosystem Development Plan to the satisfaction of City staff;

    (e) registration of a Section 219 Restrictive Covenant requiring additional parking spaces should the use on the property change in the future;

    (f) registration of a Section 219 Restrictive Covenant for "no build" over, and installation and maintenance of, the Green Infrastructure landscape buffer; and

    (g) registration of a Section 219 Restrictive Covenant advising future homeowners of the potential farm operations of the adjacent agricultural lands.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	LAP Designation	Existing Zone
Subject Site	Vacant	Technology Park or Business Park and Landscaping Strips	CD (By-law No.. 17536)
North:	Existing industrial building	Technology Park or Business Park	CD (By-law No.. 17536)
East:	Existing Industrial building	Technology Park or Business Park and Landscaping Strips	CD (By-law No.. 17536)
South (Across 24 Avenue):	Agricultural Land Reserve agricultural property	Technology Park or Business Park	A-1
West (Across ROW):	Vacant industrial-zoned property.	Technology Park or Business Park	CD (By-law No.. 17536)

Context & Background

- The subject site is approximately 1.31 hectares in size and is located at the western boundary of Campbell Heights along 24 Avenue.

- The site is designated "Mixed Employment" in the Official Community Plan (OCP) and "Technology Park or Business Park" and "Landscaping Strips" in the Campbell Heights Local Area Plan (LAP).

- The subject site was rezoned to "Comprehensive Development Zone (CD By-law 17536)" under Development Application No. 7910-0301-00, which received Final Adoption on November 5, 2012.

- Development Application No. 7910-0301-00 also included a subdivision, which created the subject lot as well as a statutory north-south right-of-way along the subject site's western boundary, which provides ultimate access to the site from 24 Avenue and connecting to 25 Avenue.

DEVELOPMENT PROPOSAL

Planning Considerations

- The applicant proposes a Development Permit and Development Variance Permit to permit the construction of a 7,045 square metre purpose-built single tenant cold storage facility.

	Proposed
Lot Area	
Gross Site Area:	1.3 ha
Road Dedication:	n/a
Undevelopable Area:	n/a
Net Site Area:	1.3 ha
Number of Lots:	1
Building Height:	20.2 metres
Unit Density:	n/a
Floor Area Ratio (FAR):	0.54
Floor Area	
Industrial:	6,209 square metres (plus 181 square metres of stairways)
Office:	655 square metres
Total:	7,045 square metres

Referrals

Engineering:	The Engineering Department has no objection to the project subject to the completion of Engineering servicing requirements as outlined in Appendix II.
Surrey Fire Department:	No concerns.
Agriculture, Environment, and Investment Advisory Committee (AEIAC):	The subject application was sent to the AEIAC for information purposes only and therefore, there are no comments.
Advisory Design Panel:	The application was not subject to review by the ADP but was reviewed by staff and found satisfactory.

Transportation Considerations

- The subject development will be accessed via a statutory right-of-way that connects 24 Avenue to 25 Avenue. Two driveway accesses to the loading court and passenger vehicle parking area is proposed from the right-of-way.

- The subject development is proposing to provide 33 passenger vehicle parking stalls on the site. Based on the Zoning By-law parking rate for "industrial" and "office" uses, a total of 79 parking stalls is required on the site.

- The proposed parking meets the Zoning By-law required for the related office use area. However, due to the automated nature of the facility, the warehouse cold storage component of the building requires less staff than what is needed for a typical distribution warehouse.

- The applicant has provided a Parking Study prepared by Bunt and Associates Engineering Ltd. in support of the proposed parking variance. The applicant has also confirmed that at peak demand, there will be a maximum of 15 office employees and 15 warehouse employees. The additional stalls are intended to provide additional visitor stall spaces or room for future business growth.

- Based on the proposed 33 parking stalls, the applicant proposes to vary the parking rate for "industrial" uses from 1 parking space per 100 square metres to 0.26 parking spaces per 100 square metres.

- Should the proposed use for the subject site change in the future, the site would need to meet the parking requirement associated with the new use.

- The proposed reduced parking rate will allow the applicant to better utilize the entirety of the site for the industrial use, meeting the policy recommendations in the Official Community Plan and trends in the region for employment intensification.

- The subject site is approximately 50 metres from a bus stop at the corner of 24 Avenue and 188 Street. TransLink Bus Route No. 531 runs along 24 Avenue connecting to White Rock to the west and Willowbrook to the east.

- In support of the proposed variance to the parking rate, the applicant has agreed to construct the sidewalk on the north side of 24 Avenue fronting the subject site to connect with the existing bus stop at the corner of 24 Avenue and 188 Street as a means of providing convenient access to the bus stop.

- On 24 Avenue there are currently both eastbound and westbound dedicated bicycle lanes, which connect to 184 Street and 192 Street and elsewhere within the Campbell Heights Business Park.

Sustainability Considerations

- The applicant has met all of the typical sustainable development criteria, as indicated in the Sustainable Development Checklist.

- In addition, the applicant has committed to providing a high-albedo roof with a Solar Reflectance Index (SRI) of a minimum value of 0.75.

POLICY & BY-LAW CONSIDERATIONS

Regional Growth Strategy

- The proposal complies with the "Mixed Employment" land use designation in the Metro Vancouver Regional Growth Strategy (RGS).

Official Community Plan

Land Use Designation

- The proposal complies with the "Mixed Employment" land use designation in the Official Community Plan.

Themes/Policies

- B6.6 – Design buildings to enhance the activity, safety and interest of adjacent public streets, plazas, and spaces.

  (The proposed development is oriented towards 24 Avenue with expansive two-level glazing at the southwest corner of the building and there are also two employee amenity areas along this frontage.)

- C2.38 – Ensure the loading and on-site access of goods delivery vehicles is considered in conjunction with the overall site design.

  (The proposed loading court is partially visible to the public realm along 24 Avenue and the statutory right-of-way lane. To address this issue, the applicant proposes a 4.2 metre tall concrete screen wall along 24 Avenue and a 2.5 metre tall continuous decorative screen wall in corrugated metal along the right-of-way.)

- E1.5 – Encourage the full utilization and efficient use of industrial and other employment lands in order to maximize jobs and economic activity per hectare; and

- E1.7 – Develop flexible zoning regulations and bylaws to support more intensive use of existing employment lands.

  (The proposed variances to building height, the rear yard setback, and parking will ensure efficient use of the lands thereby maximizing the jobs and economic activity per hectare without the need for unnecessary additional parking. The building height increase, setback reduction, and parking reduction will allow for employment intensification and is consistent with recommendations in the Official Community Plan and trends in the region.)

- E1.20 – Encourage the continued expansion of high-tech, research and development and light manufacturing to locate within the Mixed Employment areas that are accessible to major transportation corridors and/or frequent transit services.

  (The proposed development is compatible with the Mixed Employment designation and builds upon the employment lands in Campbell Heights. The subject site is also located near the major transportation corridors of 24 Avenue, Highway 15, and 192 Street and is also near two border crossings. Transit service is provided along 24 Avenue through TransLink bus route no. 531 and new east-west cycle tracks will be implemented in the long-term along 24 Avenue providing dedicated cycling infrastructure.)

- E1.31 – Support and encourage the high-quality, environmentally responsible, sustainable development of employment lands.

  (The development proposes to preserve a 17.2 metre-wide corridor fronting 24 Avenue as a Green Infrastructure Network Corridor, in keeping with the Biodiversity Conservation Strategy.)

Secondary Plans

Land Use Designation

- The proposal complies with the "Technology Park or Business Park" and "Landscaping Strips" land use designations in the Campbell Heights Local Area Plan.

Themes/Objectives

- 6.5.1.4 – Design Guidelines: Business Park – The use of glass and high-quality materials and finishes is required of buildings facing the street. Blank walls should be avoided.

  (The proposed development incorporates expansive two-level glazing at the southwest corner of the building where the office component is located. While the remainder of the 24 Avenue frontage is made up of concrete tilt-up panels, this frontage is enlivened by the pattern of coloured-concrete tilt-up.)

- 6.5.1.4 – Design Guidelines: Business Park – The exterior of buildings should be coordinated in the design on all elevations, with regard to colours, materials, architectural form, and detailing to achieve design harmony and continuity.

  (The proposed development is architecturally coordinated with a modern appearance that promotes harmony through its use of cladding materials, colours, glazing, signage, and landscaping.)

CD By-law

- The table below provides an analysis of the development proposal in relation to the requirements of the existing CD By-law No. 17536, and parking requirements.

CD Zone (By-law No. 17536)	**Permitted and/or Required**	**Proposed**
Floor Area Ratio:	1.0	0.54
Lot Coverage:	60%	49.6%
Yards and Setbacks		
Front (South):	16.0 m/7.5 m	18.0 m
Side (East):	7.5 m or 3.6 m for one side if abutting industrial	3.6 m
Side (West):	7.5 m	39.4 m
Rear (North):	7.5 m	3.6 m
Height of Buildings		
Principal buildings:	14 m	20.2 m

CD Zone (By-law No. 17536)	Permitted and/or Required	Proposed
Accessory buildings:	6 m	n/a
Streamside (Part 7A)	**Required**	**Proposed**
Streamside Setbacks		
Class B (yellow-coded) Stream:	15 m	>15 m
Parking (Part 5)	**Required**	**Proposed**
Number of Stalls		
Industrial: Office Total: Small (%):	62.1 16.4 79 28 (max 35% permitted)	16.6 16.4 33 10 (30%)
Bicycle Spaces		
Employee/Visitor:	n/a	3

Setback, Height, and Parking Variances

- The applicant is requesting the following variances:

  (a) to reduce the minimum north (rear) yard setback of the CD Zone (By-law No. 17536) from 7.5 metres to 3.6 metres to the principal building face;

  (d) to vary the maximum building height of the CD Zone (By-law No. 17536) allowed from 14 metres to 20.2 metres; and

  (g) to reduce the rate at which parking is calculated for industrial floor area associated with the cold storage facility from 1 parking space per 100 square metres to 0.26 parking spaces per 100 square metres.

- The proposed variance for the rear yard building setback will not negatively impact the existing industrial development to the north.

- The proposed variance to increase the building height is required to operate the automated system that has been designed for the proposed cold storage warehouse. The increased building height represents one form of industrial intensification as identified in the Official Community Plan and general employment intensification trends in the region.

- The subject development is proposing to provide 33 passenger vehicle parking stalls on the site. Based on the Zoning By-law parking rate for "industrial" and "office" uses, a total of 79 parking stalls is required on the site. The applicant has demonstrated that the number of parking spaces provided is sufficient to meet the peak parking demand based on the maximum employee shift requirements.

- The proposed parking meets the Zoning By-law required for the related office use area. However, due to the automated nature of the facility, the warehouse cold storage component of the building requires less staff than what is needed for a typical distribution warehouse.

- The applicant has provided a Parking Study prepared by Bunt and Associates Engineering Ltd. in support of the proposed parking variance. The applicant has also confirmed that at peak demand there will be a maximum of 15 office employees and 15 warehouse employees. The additional stalls are intended to provide additional visitor stall spaces or room for future business growth.

- Based on the proposed 33 parking stalls, the applicant proposes to vary the parking rate for "industrial" uses from 1 parking space per 100 square metres to 0.26 parking spaces per 100 square metres.

- Should the proposed use for the subject site change in the future, the site would need to meet the parking requirement associated with the new use.

- The proposed reduced parking rate will allow the applicant to better utilize the entirety of the site for the industrial use, and represents one form of industrial intensification as identified in the Official Community Plan and general employment intensification trends in the region.

- In support of the proposed variance to the parking rate, the applicant has agreed to construct the sidewalk on the north side of 24 Avenue fronting the subject site to connect with the existing bus stop at the corner of 24 Avenue and 188 Street as a means of providing alternative transportation options.

- Staff support the requested variances to proceed for consideration.

PUBLIC ENGAGEMENT

- The Development Proposal Sign was installed on June 23, 2022. Staff did not receive any responses from neighbouring residents or businesses.

DEVELOPMENT PERMITS

Sensitive Ecosystems (Streamside Areas) Development Permit Requirement

- The subject property falls within the Sensitive Ecosystems Development Permit Area (DPA) for Streamside Areas in the OCP, given the location of an existing Class B (yellow-coded) watercourse (Erickson Creek) to the west. The Sensitive Ecosystems (Streamside Areas) Development Permit is required to protect aquatic and terrestrial ecosystems associated with streams from the impacts of development.

- In accordance with Part 7A Streamside Protection setbacks of the Zoning By-law, a Class B (yellow-coded) watercourse requires a minimum streamside setback of 15 metres, as measured from the top of bank. The proposed setbacks comply with the requirements outlined in the Zoning By-law.

- The riparian area associated with Erickson Creek was previously protected through Development Application No. 7910-0301-00, which relocated the watercourse to its current location west of the adjacent property located at 18699 – 25 Avenue, was protected through conveyance of land to the City. The watercourse is beyond the streamside setbacks outlined in Part 7A of the Zoning By-law and therefore, no further protection is needed through this application.

- An Ecosystem Development Plan, prepared by Richard Couture, *R.P. Bio*., of EXP Services Inc. and dated April 29, 2022, was reviewed by an independent peer reviewer (Matt McTavish of McTavish Resource & Management Consultants Ltd.) and staff and found to be generally acceptable, with modifications to some details, content and format of the report still required. The finalized report and recommendations will be incorporated into the Development Permit.

Sensitive Ecosystems (Green Infrastructure Areas) Development Permit Requirement

- The subject property falls within the Sensitive Ecosystems DPA for Green Infrastructure Areas in the OCP, given the location of a Biodiversity Conservation Strategy (BCS) Green Infrastructure Network (GIN) Corridor located along the southern side of 24 Avenue. The Sensitive Ecosystems (Green Infrastructure Areas) Development Permit is required to protect environmentally sensitive and/or unique natural areas from the impacts of development.

- The City of Surrey Biodiversity Conservation Strategy (BCS) Green Infrastructure Network (GIN) map, adopted by Council on July 21, 2014 (Corporate Report No. R141; 2014), identifies a Regional BCS Corridor within the subject site, in the Campbell Heights BCS management area, with a Medium ecological value.

- The BCS further identifies the GIN area of the subject site as having a Moderate habitat suitability rating, derived from species at risk presence, species accounts and known ecosystem habitat inventories. The BCS recommends a target Corridor width of 100 meters.

- The development proposal conserves/enhances 2,444 square meters of the subject site by Providng for a enhanced Landscape Buffer which is approximately 19 % of the total gross area of the subject site. The GIN Corridor itself is approximately 27 metres wide on the subject property, while the applicant proposes to retain a 17.2 metre wide GIN Corridor. This method of GIN retention/enhancement will assist in the long-term protection of the natural features and allows the City to better achieve biodiversity at this location consistent with the guidelines contained in the BCS.

- In order for the proposal to fully comply with the BCS target recommendations, an additional 1,450 square meters of the GIN area (approximately 10 metres of additional width) would be required on the subject site but has not been provided by the development proposal due to the limited size of the lot and resulting developable area after GIN protection.

- An Ecosystem Development Plan, prepared by Richard Couture, *R.P. Bio*., of EXP Services Inc. and dated April 29, 2022, was reviewed by an independent peer reviewer (Matt McTavish of McTavish Resource & Management Consultants Ltd.) and staff and found to be generally acceptable, with modifications to some details, content and format of the report still required. The finalized report and recommendations will be incorporated into the Development Permit.

Farming Protection Development Permit Requirement

- The subject property falls within the Farming Protection Development Permit Area (DPA) in the OCP, given that it is located within 50 metres of the Agricultural Land Reserve (ALR) boundary. The Farm Protection Development Permit is required to reduce agricultural-urban conflicts through increased setbacks and vegetated buffering.

- The Farming Protection Development Permit guidelines for non-residential uses are outlined below (*with staff comments in italics*):

    - The minimum building setback for the ALR boundary is 30 metres.

        - *Staff comments: The proposed building setback of 18.1 metres, inclusive of a 17.2 metre wide landscape buffer/GIN Corridor, combined with the 30-metre-wide road right-of-way (24 Avenue) exceeds the typical setback requirements associated with industrial developments located adjacent to the ALR.*

    - The minimum vegetated buffer width is 15 metres.

        - *Staff comments: A 17.2 metre wide landscape buffer is proposed to be placed along 24 Avenue fronting the proposed building, exceeding the minimum 15 metres.*

    - Any proposed vegetated buffer should include a mix of appropriate deciduous and coniferous trees, spaced a minimum of 2 metres to 4 metres apart. Existing mature trees and riparian areas within the proposed buffer area should be preserved and infill planting considered in order to provide a fuller vegetated buffer.

        - *Staff comments: The 17.2 metre landscape buffer is within a Green Infrastructure Corridor. The detailed planting plan will be developed by the Qualified Environmental Professional and Landscape Architect and is proposed to contain a variety of coniferous and deciduous trees, low lying shrubs, rain garden, and a swale.*

    - For any property within 50 metres of the ALR boundary, a Section 219 Restrictive Covenant is required to inform future owners of farm practices in the area that may produce noise, odour and dust.

        - *Staff comments: The Restrictive Covenant to advise future owners of nearby farming activities and potential nuisance impacts will be registered on title as part of the development application.*

Form and Character Development Permit Requirement

- The proposed development is subject to a Development Permit for Form and Character and is also subject to the urban design guidelines in the Campbell Heights Local Area Plan (LAP).

- The proposed development generally complies with the Form and Character Development Permit guidelines in the OCP and the design guidelines in the Campbell Heights Local Area Plan (LAP).

- The applicant has worked with staff to resolve several challenges on the site, including accommodating a 17.2 metre wide GIN Corridor along 24 Avenue and to adequately screen the loading court from public view.

- Overall, the building is proposed to have a modern, linear appearance with articulation emphasizing the separation between the office and industrial warehouse components. Architectural emphasis is placed on the office component at the southwest corner of the building, which is to be constructed of a curtain-wall glazing and spandrel glazing.

- In addition to the curtain-wall office glazing, the building is proposed to be constructed of concrete tilt-up panels in white with several accent colours for visual interest.

- The building is proposed with a TPO high-albedo roofing material with at least 0.75 Solar Reflectance Index to minimize the urban heat island effect, meeting the Climate Adaptation Strategy policy.

- The applicant proposes a fascia sign at the top of the building along the 24 Avenue frontage, complying with the Sign By-law. No other signs are proposed at this time, however, should any signs be proposed in the future the applicant will need to ensure they comply with the Sign By-law.

Landscaping

- The proposed landscaping consists of a 17.2 metre wide GIN Corridor along 24 Avenue fronting the building. A 1.5 metre wide landscape buffer is provided along the statutory right-of-way lane, separating the lane from the sidewalk that is proposed to be constructed.

- The proposed landscaping for the site consists of a variety of trees, including Serbian Spruce, Kousa Dogwood, and Japanese Snowbell. The tree plantings are complimented by a variety of shrubs and groundcover.

- The landscaping for the GIN Corridor is proposed to consist of a series of habitat areas with distinct plantings. This includes an upland forest area, lowland forest area, grassland/shrub area, rain garden, and a bioswale. Trees that are proposed to be planted in the GIN Corridor include: Vine Maple, Douglas Fir, Western Red Cedar, and Bitter Cherry. The detailed planting plans will be developed by the Qualified Environmental Professional in consultation with the Landscape Architect.

Outstanding Items

- There are a limited number of Urban Design items that remain outstanding, and which do not affect the overall character or quality of the project. These generally include minor formatting revisions to the Landscape Plans.

- The applicant has been provided a detailed list identifying these requirements and has agreed to resolve these prior to Final Approval of the Development Permit, should the application be supported by Council.

TREES

- Tim Vandenberg, ISA Certified Arborist of Mike Fadum and Associates Ltd. attended the site for the purpose of confirming the presence or absence of protected trees under Surrey Tree By-law No. 16100. The Arborist confirmed that there are no trees onsite offered protection by size or by species under Surrey Tree By-law No. 16100.

- The new trees on the site will consist of a variety of trees including Serbian Spruce, Kousa Dogwood, Japanese Snowbell, Western Red Cedar, Vine Maple, and Bitter Cherry.

- In summary, a total of 112 new trees are proposed to be planted on the site.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Plan, Building Elevations, Landscape Plans and Perspective
Appendix II.	Engineering Summary
Appendix III	Development Variance Permit No. 7921-0354-00

approved by Shawn Low

Jeff Arason
Acting General Manager
Planning and Development

KS/cm

ISSUE DATE: JUNE 29, 2022

SHEET LIST

ARCHITECTURE

A01	GENERAL NOTES & PROJECT DATA
A02	PERSPECTIVES
A10	BASE SITE PLAN
A11	SITE PLAN
A13	FIRE TRUCK ACCESS PLAN
A15	SITE DETAILS
A16	SITE SECTIONS
A21	MAIN FLOOR
A22	MEZZANINE FLOOR
A23	ROOF PLAN
A24	ENLARGED PLANS
A25	UNIT SUB STATION
A31	BUILDING ELEVATIONS
A32	BUILDING ELEVATIONS
A33	BUILDING SECTIONS
A34	BUILDING SECTIONS - OFFICE

PROJECT No. 212116-CT

PROJECT TEAM

ARCHITECT of RECORD

CTA ARCHITECTURE+DESIGN Ltd.
#110 - 2920 VIRTUAL WAY,
VANCOUVER, BC, V5M 0C4
PHONE: 604-736-2554
EMAIL: iscanlan@ctadesign.net
TECH LEAD: IAN SCANLAN

CIVIL

KM CIVIL LTD.
400 - 34077 GLADYS AVENUE
CITY, PROV POSTAL CODE
PHONE: 604.852.8831
EMAIL: STUARTM@KRAHN.COM
PRINCIPAL IN CHARGE: STUART MCGREGOR
PROJECT MANAGER: PROJECT MANAGER
TECH LEAD: TECH LEAD

LANDSCAPE

PROSPECT & REFUGE
102 - 1661 WEST 2ND AVENUE,
VANCOUVER, BC, V6J 1H3
PHONE: 604-553-0821
EMAIL: kristina@prospectrefuge.ca
PROJECT MANAGER: KRISTINA ZALITE

ZONING BY-LAW ANALYSIS

PROJECT DATA

CIVIC ADDRESS: 18745 24TH AVENUE, SURREY, BC
LEGAL ADDRESS: LOT 14 SECTION 21 TOWNSHIP 7 NEW WESTMINSTER DISTRICT PLAN EPP24887

BUILDING USE: WAREHOUSE

GROSS BUILDING AREA: 6,501.93 m² 69,986.2 ft²

ZONING BYLAW ANALYSIS (CITY OF SURREY)

1. ZONING: CD

2. SITE AREA:

PROPERTY-GROSS	13,368.81 m²	1.34 hectare	143,900.70 ft²	3.30 acres
PROPERTY-NET	13,106.49 m²	1.31 hectare	141,077.09 ft²	3.24 acres

3. SITE COVERAGE + BUILDING AREAS:

BUILDING FOOTPRINT AREA CALCULATIONS

SITE AREA		PROP. SITE COVERAGE	BUILDING AREA		MAXIMUM SITE COVERAGE		
SQ M	SQ FT		SQ M	SQ FT	%	SQ M	SQ FT
13,106.49	141,077.1	49.6%	6,501.93	69,986.2	60.00%	7,863.89	84,646.3

GROSS FLOOR AREA CALCULATIONS

LEVEL	OCCUPANCY	AREA CLASSIFICATION	FLOOR AREA SQ M	FLOOR AREA SQ FT
MAIN FLOOR	-	STAIR	24.06	258.9
MAIN FLOOR	D	OFFICE	213.24	2,295.3
MAIN FLOOR	F2	INDUSTRIAL	6,346.74	68,315.7
MEZZANINE FLOOR	-	STAIR	19.86	213.8
MEZZANINE FLOOR	D	OFFICE	442.03	4,758.0
TOTAL			7,045.93	75,841.7

FAR CALCULATIONS

PROPOSED FAR	ALLOWABLE FAR
0.54	1

**NOTE: MAX. FAR OF 1.0 IS PERMITTED, IF AMENITITIES PER SCHEDULE G OF SURREY BYLAW IS PROVIDED

4. BUILDING HEIGHT:
MAXIMUM HEIGHT: 14.00 m (45'-11 1/4")
PROPOSED HEIGHT: 15.75 m (51'-8 1/4") VARIANCE REQUIRED

5. REQUIRED SETBACKS:

	REQUIRED	PROVIDED
FRONT YARD (SOUTH) 24 AVE:	9.00 m (29'-6 1/4")	N/A
IF ONLY LANDSCAPE AND NO PARKING	7.50 m (24'-7 1/4")	18.04 m (59'-2 1/4")
REAR YARD (NORTH):	7.50 m (24'-7 1/4")	3.60 m (11'-9 3/4") VARIANCE REQUIRED
SIDE YARD (WEST) LANE:	16.00 m (52'-5")	39.42 m (129'-4")
SIDE YARD (EAST):	7.50 m (24'-7 1/4")	3.60 m (11'-9 3/4") VARIANCE REQUIRED

6. LANDSCAPING REQUIREMENTS:
LANDSCAPING AREA, LANDSCAPING SCREENS, AND FENCING SHALL COMPLY WITH SECTION 111

7. VEHICLE PARKING AND LOADING:
REFER TO LOCAL ZONING REQUIREMENTS FOR USE CLASSIFICATION AND PARKING REQUIREMENTS. ALL AREAS ARE BASED ON GROSS AREA CALCULATIONS, UNLESS NOTED OTHERWISE.

VEHICLE PARKING REQUIREMENT CALCULATIONS

LEVEL	PARKING CLASSIFICATION	LOCAL BYLAW REQUIREMENTS				
		GROSS AREA SQ M	GROSS AREA SQ FT	SPACES	AREA (SM)	SPACES REQUIRED
MAIN FLOOR	INDUSTRIAL	6,209.52	66,836.7	1	100.00 m²	62.1
MAIN FLOOR	MECH & STAIR	161.28	1,736.0	0		0.0
MAIN FLOOR	OFFICE	213.24	2,295.3	2.5	100.00 m²	5.3
MEZZANINE FLOOR	OFFICE	442.03	4,758.0	2.5	100.00 m²	11.1
MEZZANINE FLOOR	STAIR	19.86	213.8	0		0.0
TOTAL VEHICLE PARKING SPACES REQUIRED:		7,045.93	75,841.7			78.5

TOTAL REQUIRED PARKING STALLS=79
35% SMALL CARS ALLOWED= 27
2% ACCESSIBLE STALLS REQUIRED=2
50% OF ACCESIBLE STALLS SHOULD BE VAN ACCESSIBLE STALLS

VEHICLE PARKING PROVIDED

PARKING TYPE	No. of SPACES
ACCESSIBLE PARKING	2
SMALL CAR	10
STANDARD PARKING	21
TOTAL PARKING SPACES PROVIDED	33

STALL DIMENSIONS:
STANDARD STALL DIMENSIONS: 2.60 m (8'-6 1/4") W, 5.50 m (18'-0 1/2") L. *NOTE: 2.9 m WIDE STALL FOR 6.1m DRIVE AISLE
ACCESSIBLE STALL DIMENSIONS: 4.00 m (13'-1 1/2") W, 5.50 m (18'-0 1/2") L, 1.50 m (4'-1") SHARED AISLE
VAN ACCESSIBLE STALL DIMENSIONS: 4.90 m (16'-1") W, 5.50 m (18'-0 1/2") L, 1.50 m (4'-1") SHARED AISLE
SMALL CAR STALL DIMENSIONS: 2.60 m (8'-6 1/4") W, 4.90 m (16'-1") L

DRIVE AISLE WIDTH: 7.00 m (22'-11 1/2")at 90° (TWO WAY)

LOADING CALCULATION:
TOTAL LOADING SPACES REQUIRED 1/ PER LOADING DOOR=10
LOADING SPACES PROVIDED

LOADING DIMENSIONS: 4.00 m (13'-1 1/2") W, 9.20 m (30'-2 1/4") L
MANEUVERING AISLE WIDTH: 7.50 m (24'-7 1/4")

8. BICYCLE PARKING:
OCCUPANCY #1: OFFICE
BICYCLE PARKING REQUIRED: NOT APPLICABLE

OCCUPANCY #2: WAREHOUSE
BICYCLE PARKING REQUIRED: NOT APPLICABLE

2 CONTEXT PLAN
SCALE: 1 : 3500

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2	22.04.29	RE-ISSUED FOR DP

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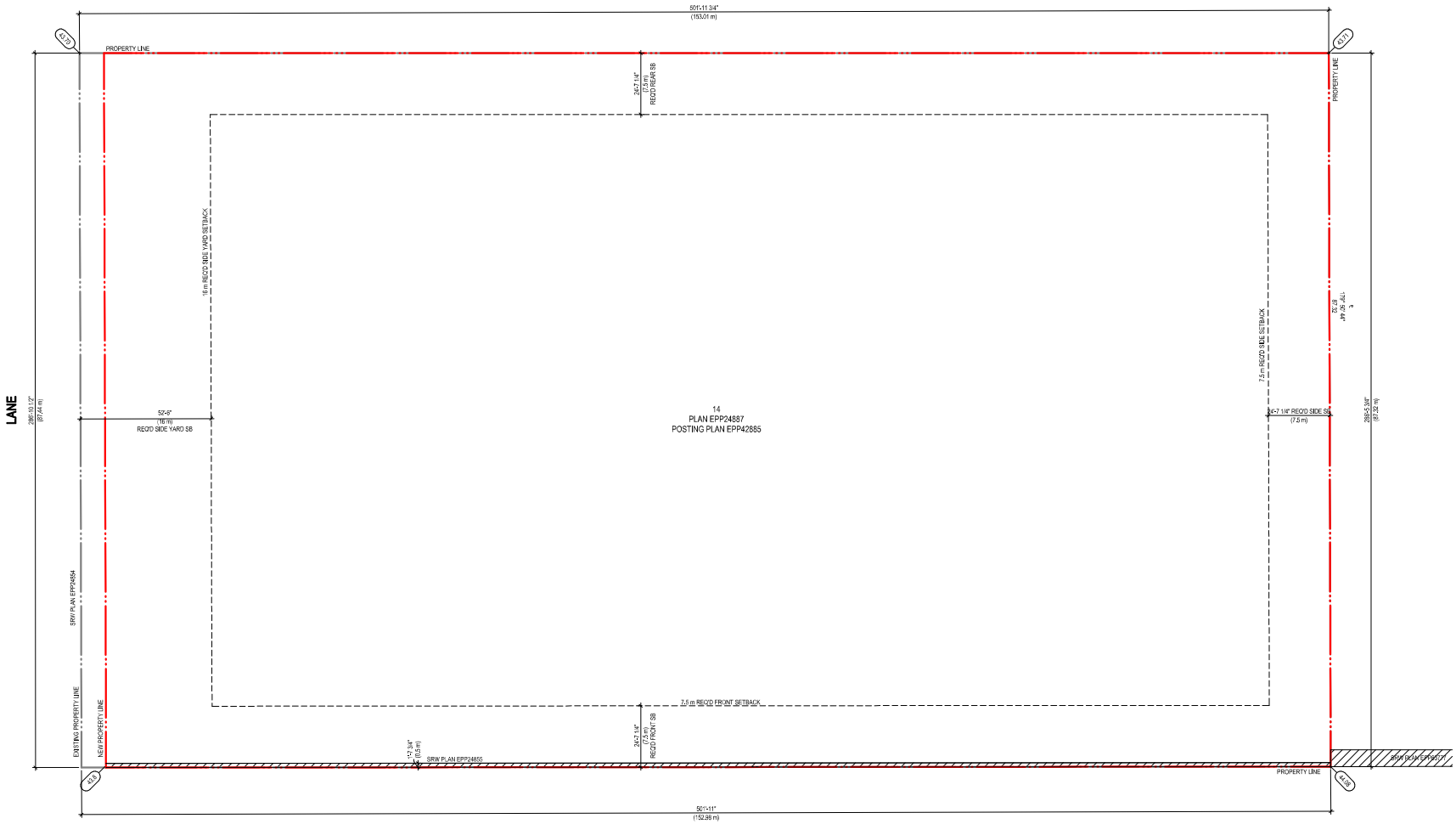

1 BASE SITE PLAN

SCALE: 1" = 20'-0"

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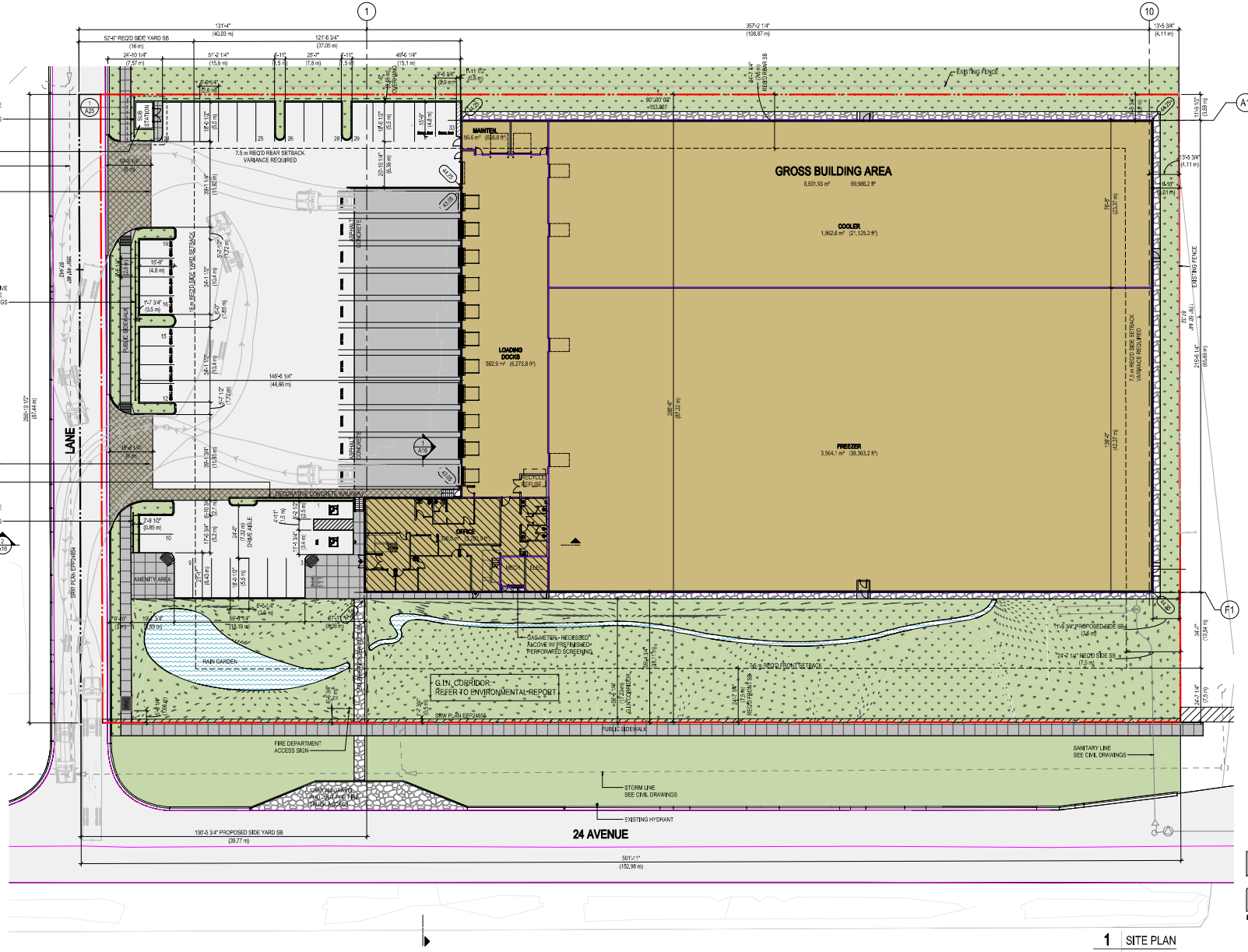

1 SITE PLAN
SCALE: 1 : 250

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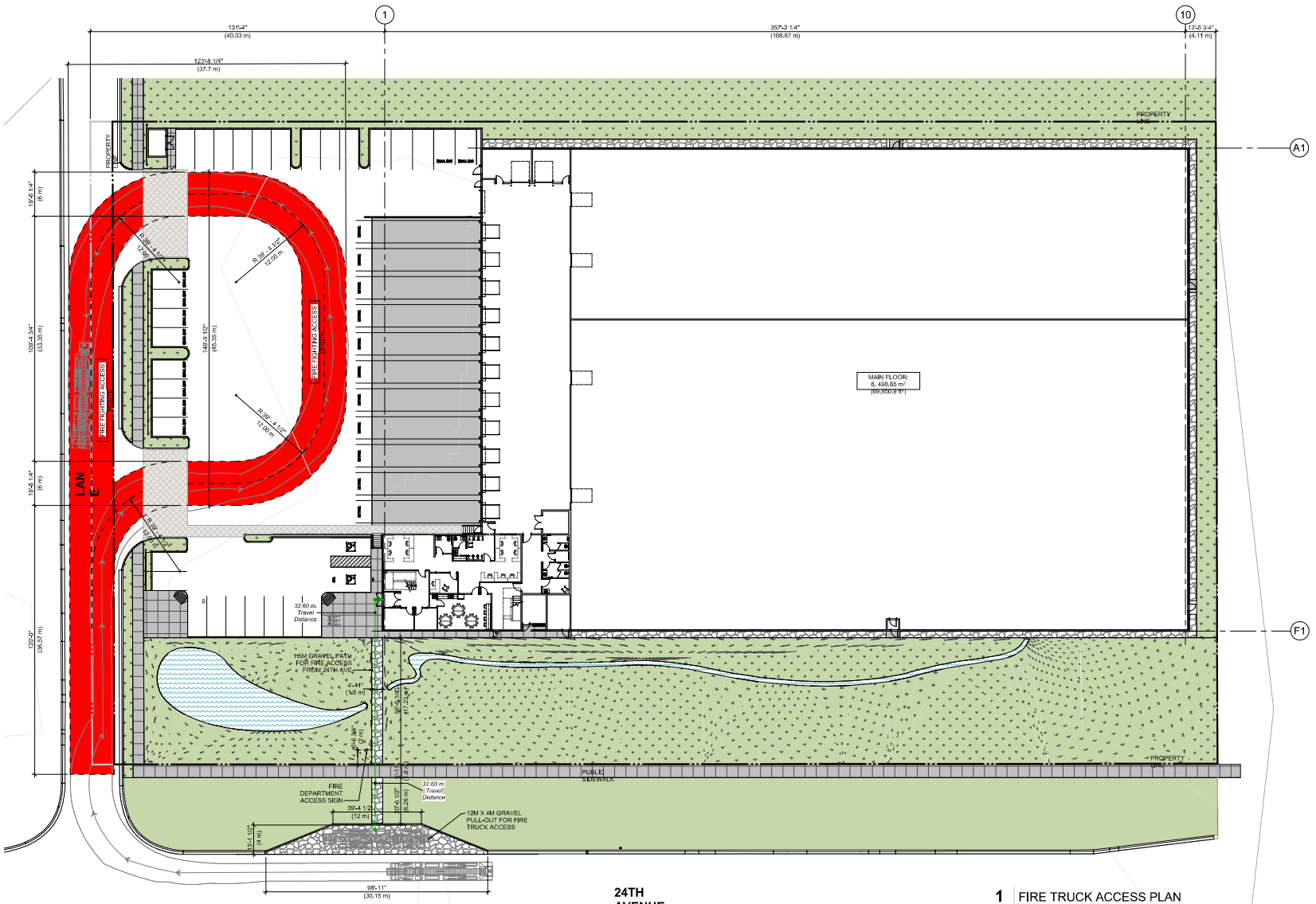

1 FIRE TRUCK ACCESS PLAN

SCALE:1 : 250

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2	22.04.29	RE-ISSUED FOR DP

2 | 12116-CT | A13

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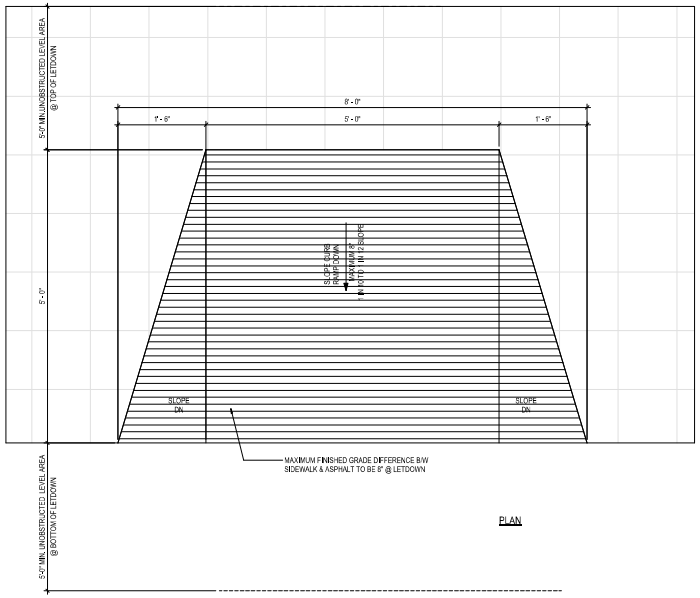
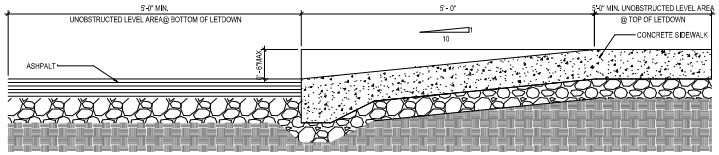


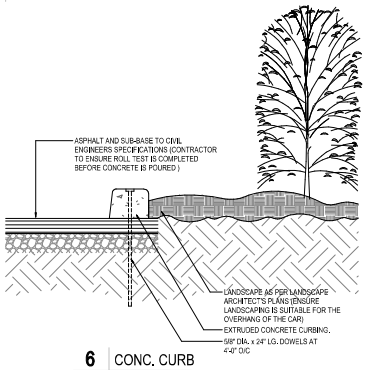
PLAN



SECTION

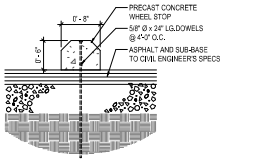
1 HC LETDOWN/BURD RAMP

SCALE: 1" = 1'-0"



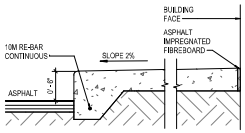
6 CONC. CURB

SCALE: 1" = 1'-0"



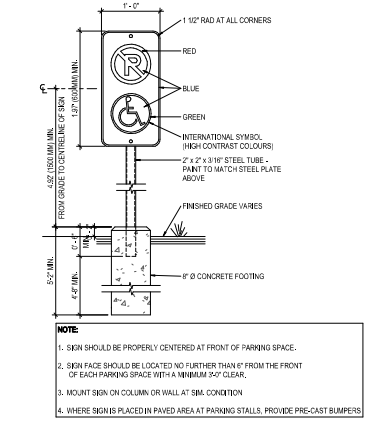
7 CONCRETE WHEEL STOP FOR VEHICLE

SCALE: 1" = 1'-0"



8 SIDEWALK EDGE DETAIL

SCALE: 1" = 1'-0"

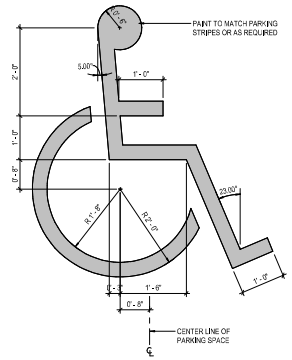


NOTE:

1. SIGN SHOULD BE PROPERLY CENTERED AT FRONT OF PARKING SPACE.
2. SIGN FACE SHOULD BE LOCATED NO FURTHER THAN 6" FROM THE FRONT OF EACH PARKING SPACE WITH A MINIMUM 3'-0" CLEAR.
3. MOUNT SIGN ON COLUMN OR WALL AT SIM. CONDITION
4. WHERE SIGN IS PLACED IN PAVED AREA AT PARKING STALLS, PROVIDE PRE-CAST BUMPERS

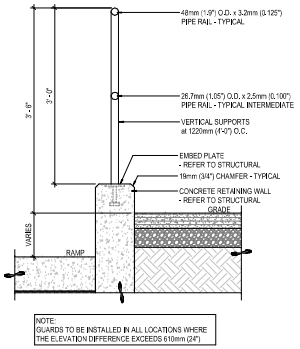
2 ACCESSIBLE POST MOUNTED SIGN

SCALE: 1" = 1'-0"



3 ACCESSIBLE PAINTED SYMBOL

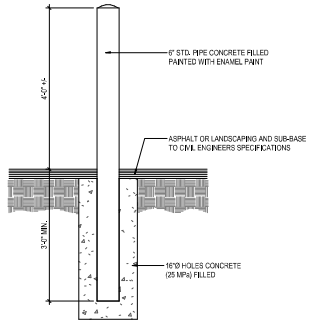
SCALE: 3/4" = 1'-0"



NOTE:
GUARDS TO BE INSTALLED IN ALL LOCATIONS WHERE THE ELEVATION DIFFERENCE EXCEEDS 610mm (24")

4 RETAINING WALL GUARDRAIL

SCALE: 1" = 1'-0"



5 EXTERIOR BOLLARD

SCALE: 1 1/2" = 1'-0"

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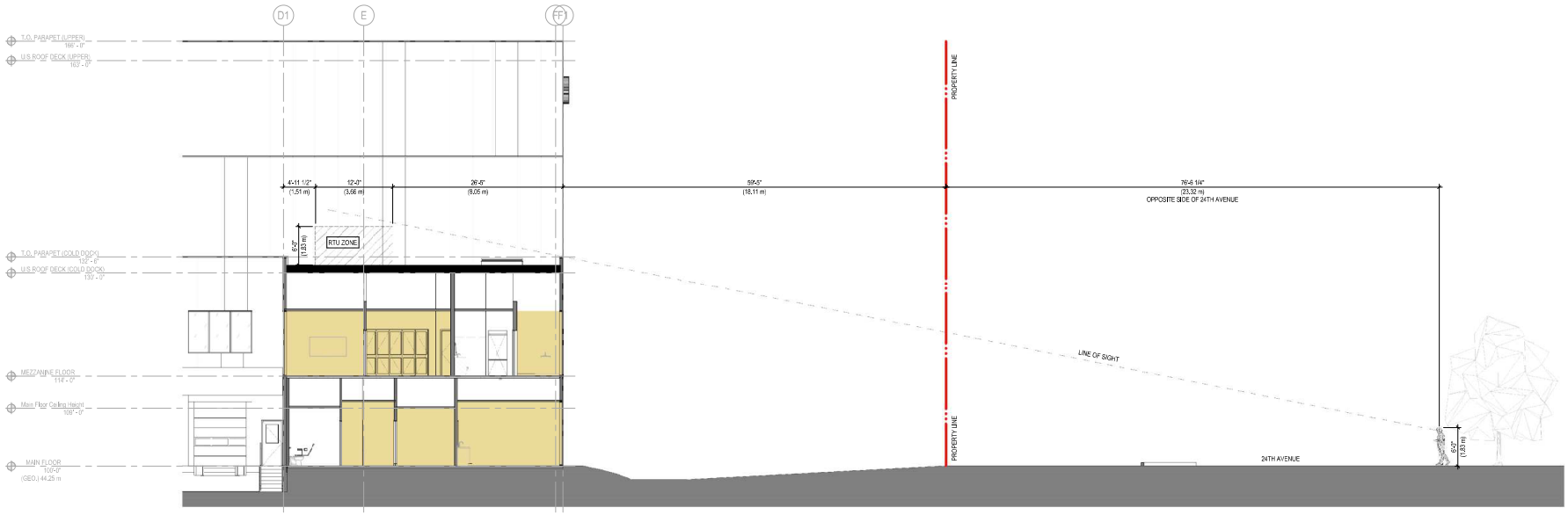
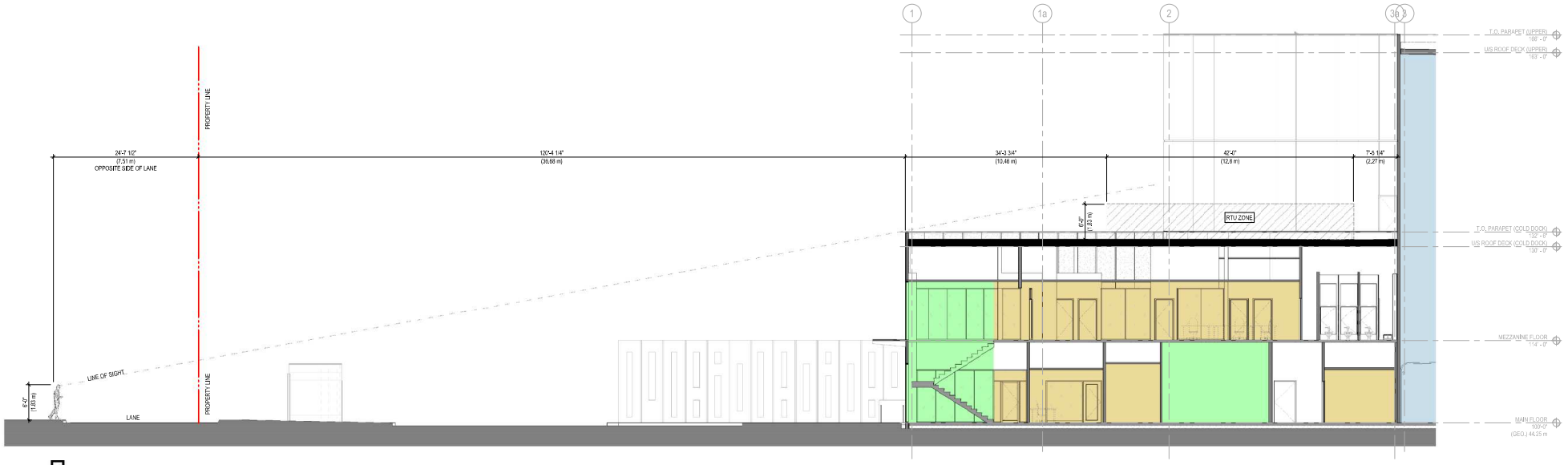


1 SITE SECTION - RTU ZONE - OPPOSITE SIDE OF 24TH AVENUE

SCALE: 1/8" = 1'-0"



2 SITE SECTION - RTU ZONE - OPPOSITE SIDE OF LANE

SCALE: 1/8" = 1'-0"

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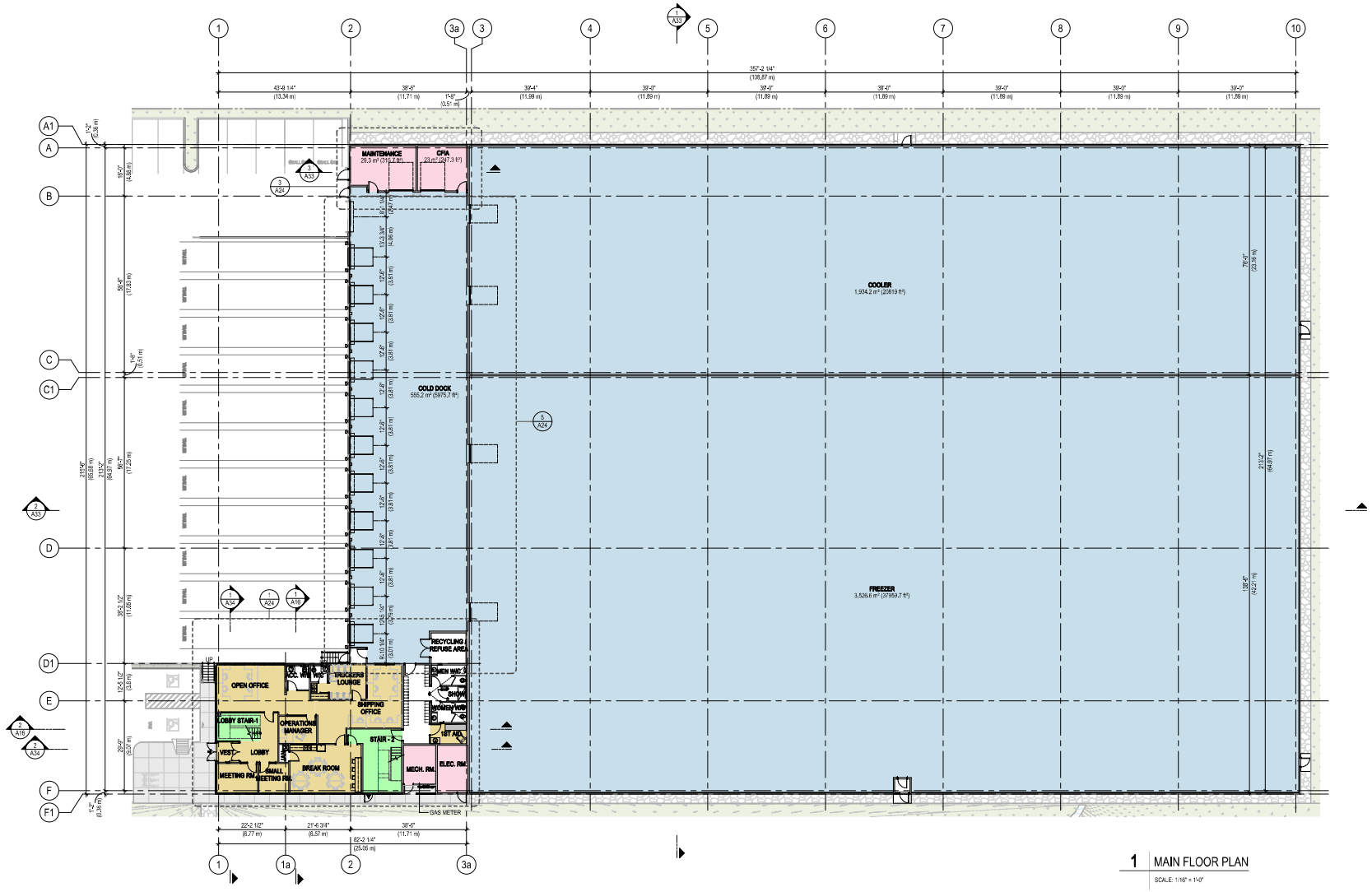

1 MAIN FLOOR PLAN

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

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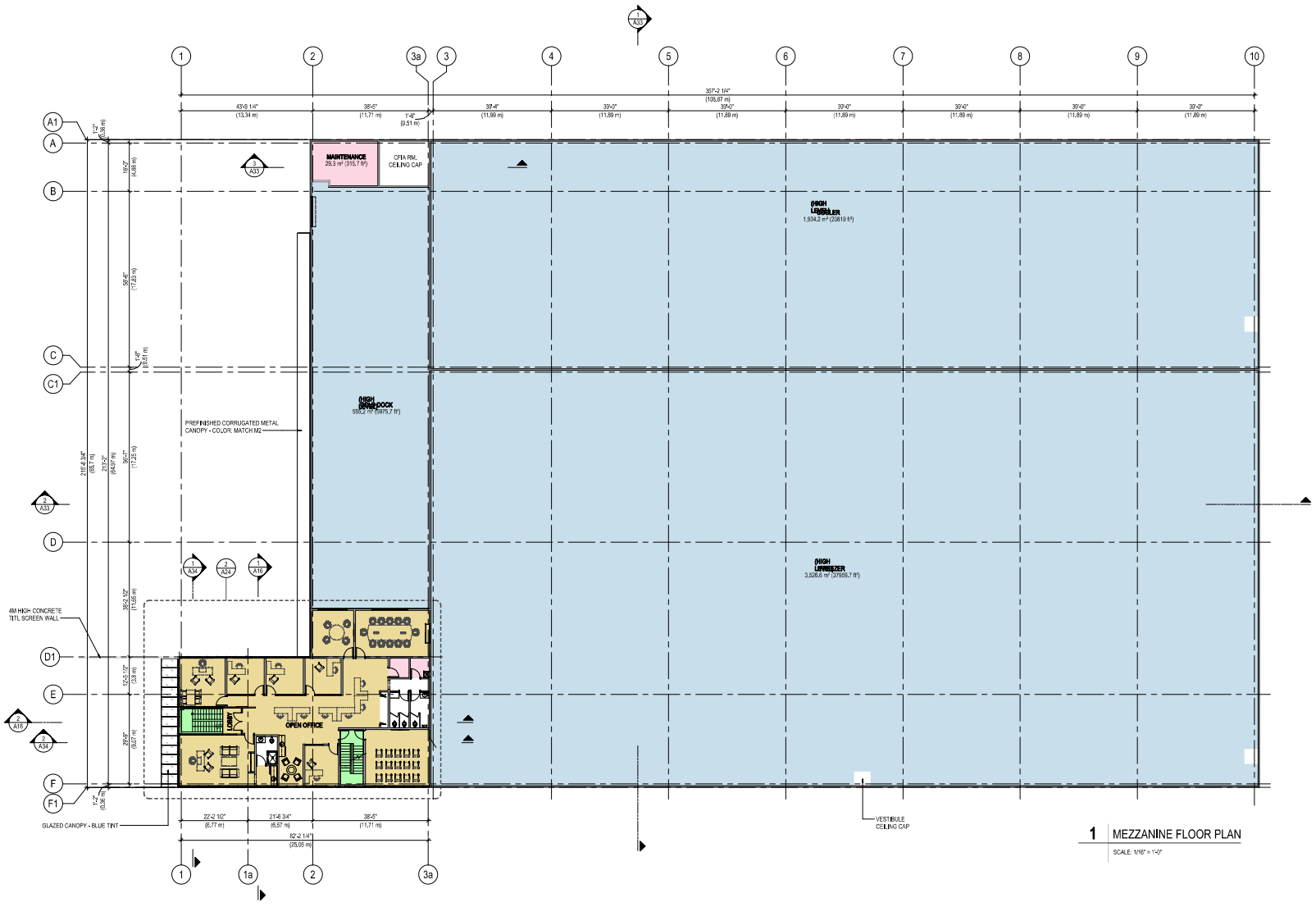

1 MEZZANINE FLOOR PLAN

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

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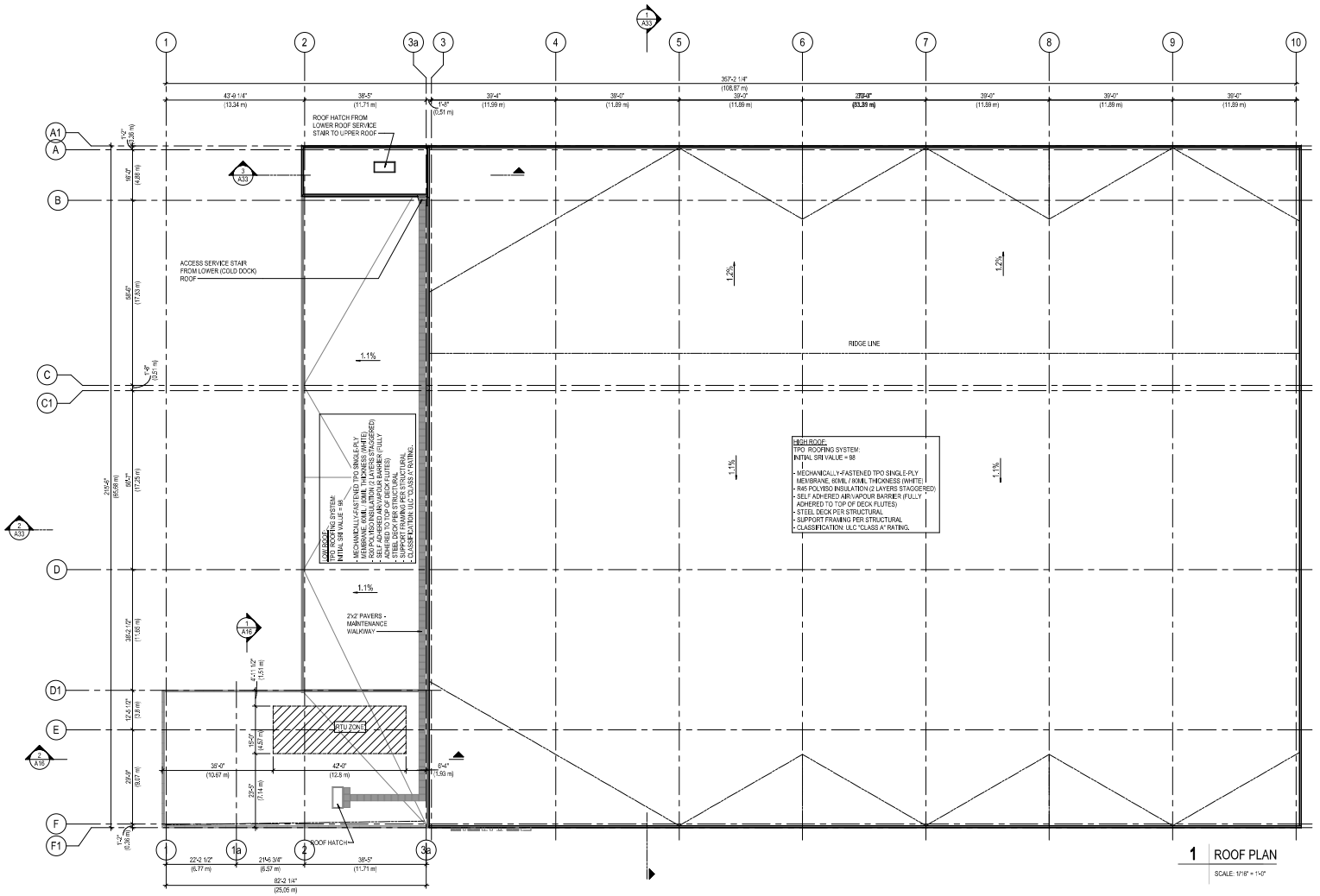

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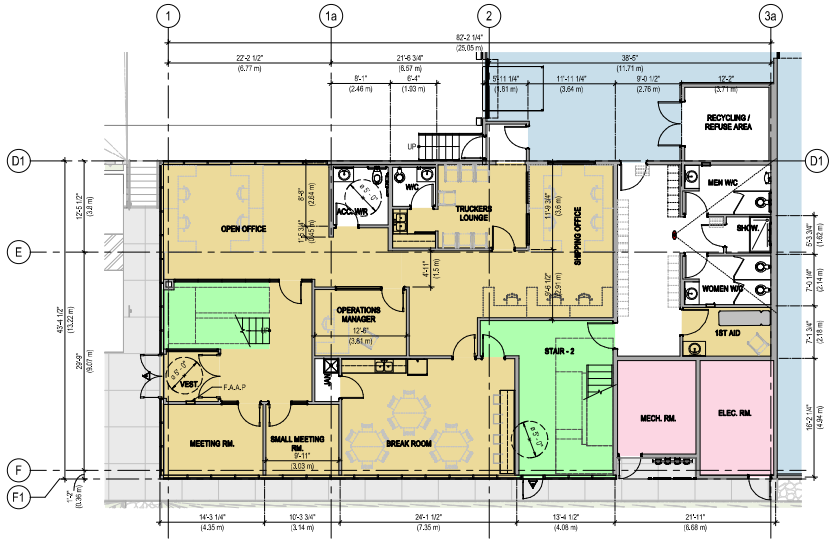
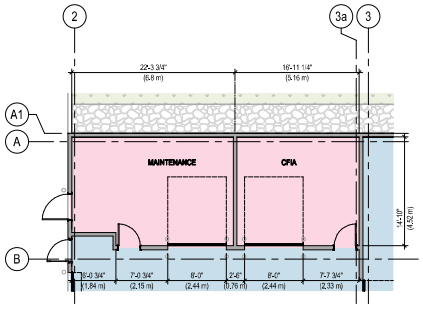
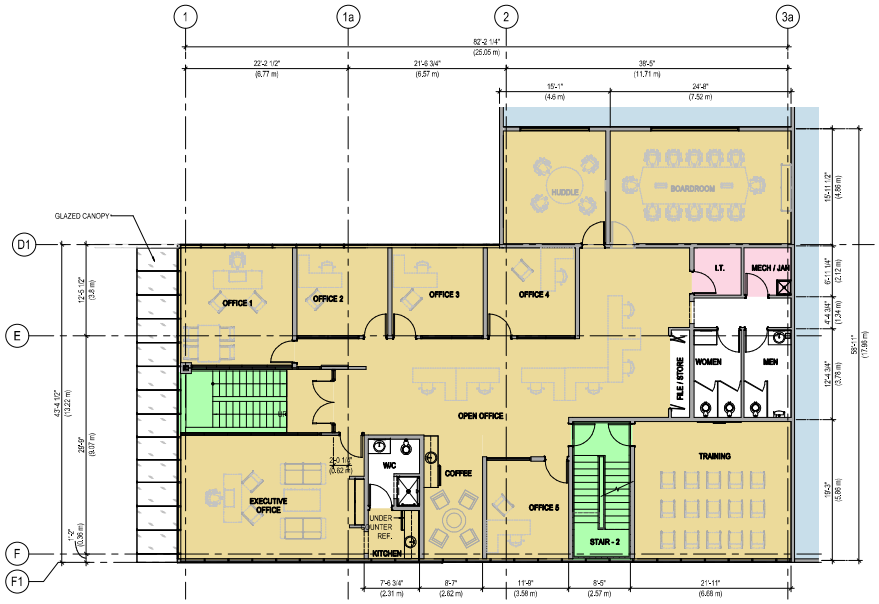


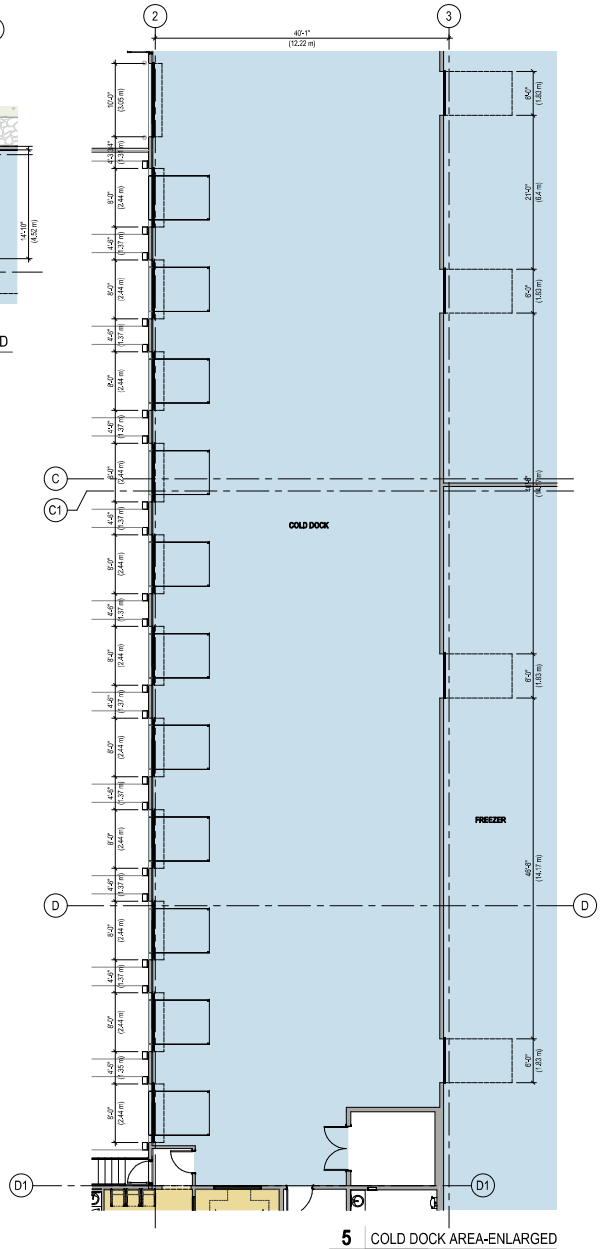
1 MAIN FLOOR OFFICES -ENLARGED
A21 SCALE: 1/8" = 1'-0"



3 MAINTENANCE-CFIA -ENLARGED
SCALE: 1/8" = 1'-0"



2 MEZZANINE FLOOR -ENLARGED
A22 SCALE: 1/8" = 1'-0"



5 COLD DOCK AREA-ENLARGED
SCALE: 1/8" = 1'-0"

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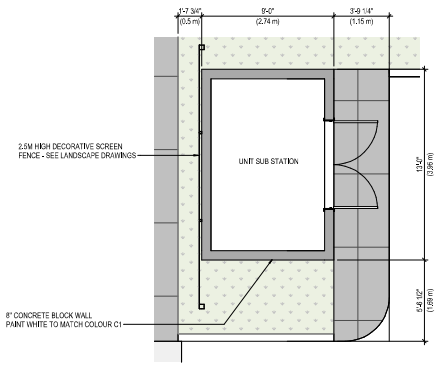
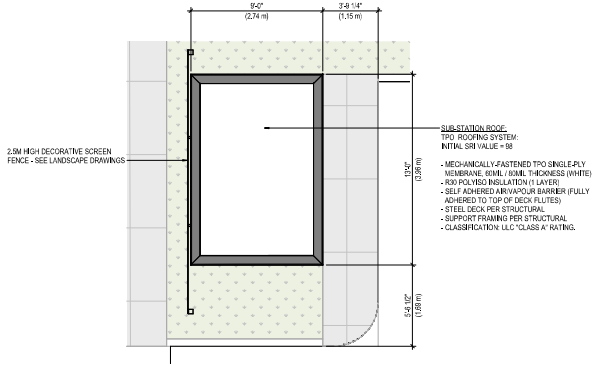


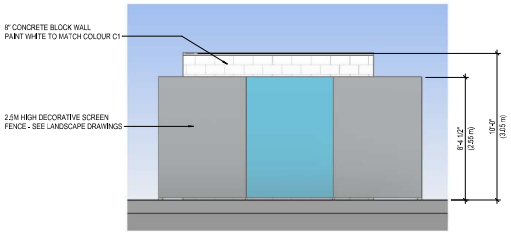
1 UNIT SUB-STATION - FLOOR PLAN

SCALE: 1/4" = 1'-0"



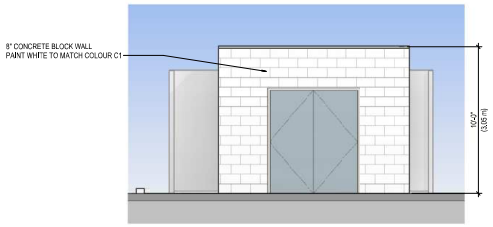
2 UNIT SUB-STATION - ROOF PLAN

SCALE: 1/4" = 1'-0"



3 SUB STATION ELEVATION - WEST (LANE)

SCALE: 1/4" = 1'-0"



4 SUB STATION ELEVATION - EAST

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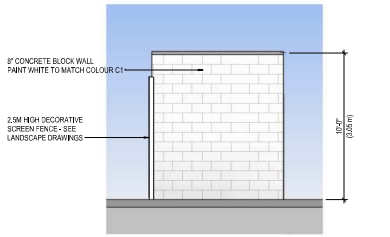

5 SUB STATION ELEVATION - NORTH / SOUTH

SCALE: 1/4" = 1'-0"

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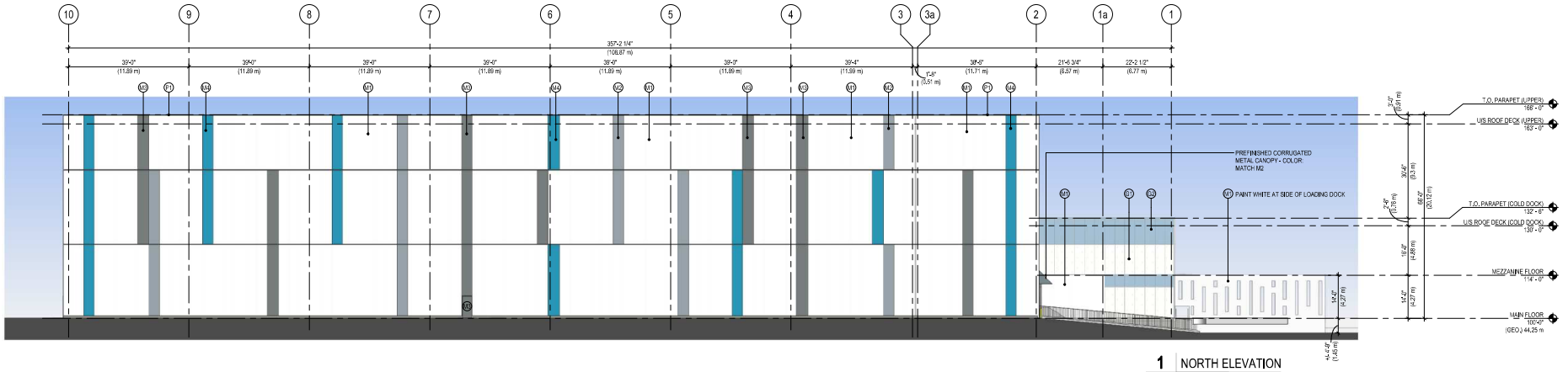
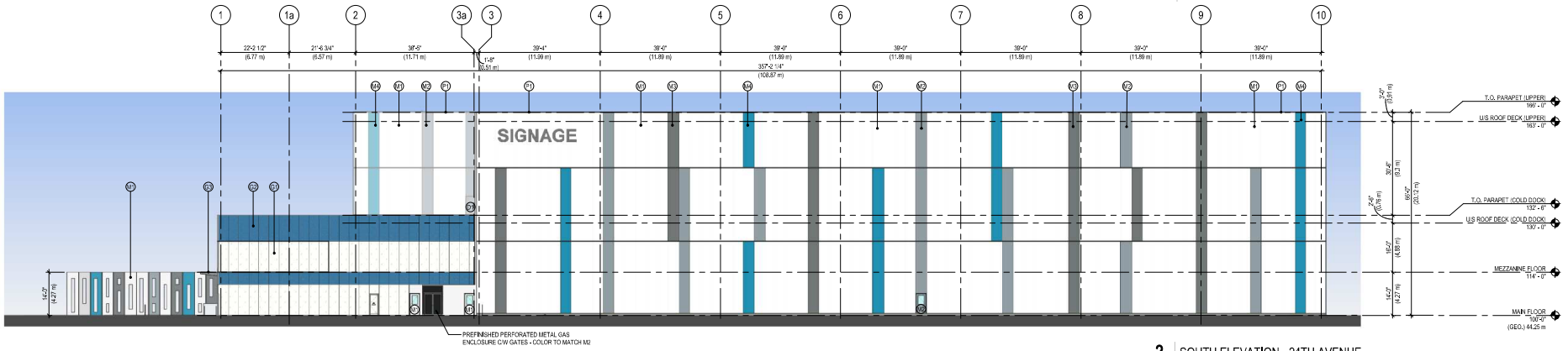


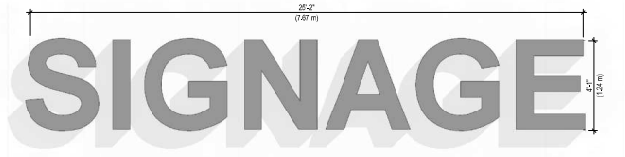
1 NORTH ELEVATION

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



2 SOUTH ELEVATION - 24TH AVENUE

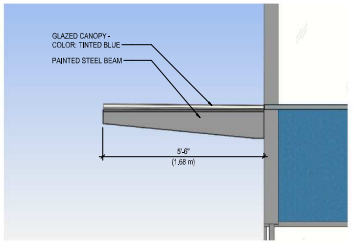
SCALE: 1/16" = 1'-0"



NOTE:
- SIGNAGE FOR REFERENCE ONLY, SEPARATE PERMIT APPLICATION
- SIGNAGE CONTRACTOR TO SUBMIT SIGNAGE SHOP DRAWINGS PRIOR TO INSTALLATION.
- SIGNAGE TO CONFORM TO CORPORATE BRANDING

4 SOUTH ELEVATION

SCALE: 3/8" = 1'-0"



5 GLAZED CANOPY DETAIL

SCALE: 1/2" = 1'-0"

MATERIAL LEGEND

TYPE	DESCRIPTION
D1	STEEL DOOR - PAINTED - DOOR / FRAME COLOR TO MATCH M2
D2	OVERHEAD DOOR - COLOR TO MATCH M2
G1	CURTAIN WALL GLAZING - COLOR: BLUE TINT
G2	SPANDREL GLAZING - COLOR: "ICD" BLUEBERRY
G3	GLAZED CANOPY - COLOR: BLUE TINT
M1	<varies>
M2	<varies>
M3	<varies>
M4	IMP - COLOR: CORNFLOWER BLUE
P1	PREFINISHED METAL CAP FLASHING - COLOR: WHITE

IMP M1 - WHITE
IMP M2 - ADVENTURA GREY
IMP M3 - BASALT GREY
IMP M4 - CORNFLOWER BLUE
GLAZING - BLUE TINT
SPANDREL - BLUEBERRY BLUE

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CLIENT:
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BRADNER COLD STORAGE

COLDBOX STORAGE WAREHOUSE
18745 24TH AVENUE
SURREY, BC V3S 9V2

4	22.06.29	UPDATES PER DP COMMENTS
3	22.06.20	RE-ISSUED FOR DP
2	22.04.29	RE-ISSUED FOR DP

212116-CT | A31

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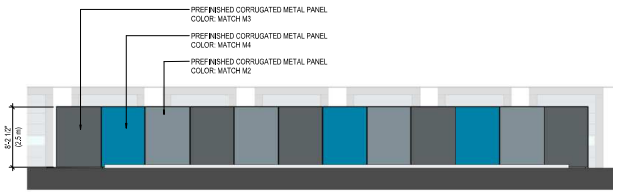
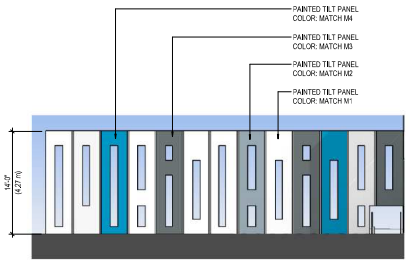


NOTE:
PREFINISHED CORRUGATED METAL DECORATIVE SCREEN WALL
ON PAINTED STEEL POSTS AND BEAMS. SEE LANDSCAPE DRAWINGS

4 DECORATIVE SCREEN WALL DETAIL

SCALE: 1/8" = 1'-0"



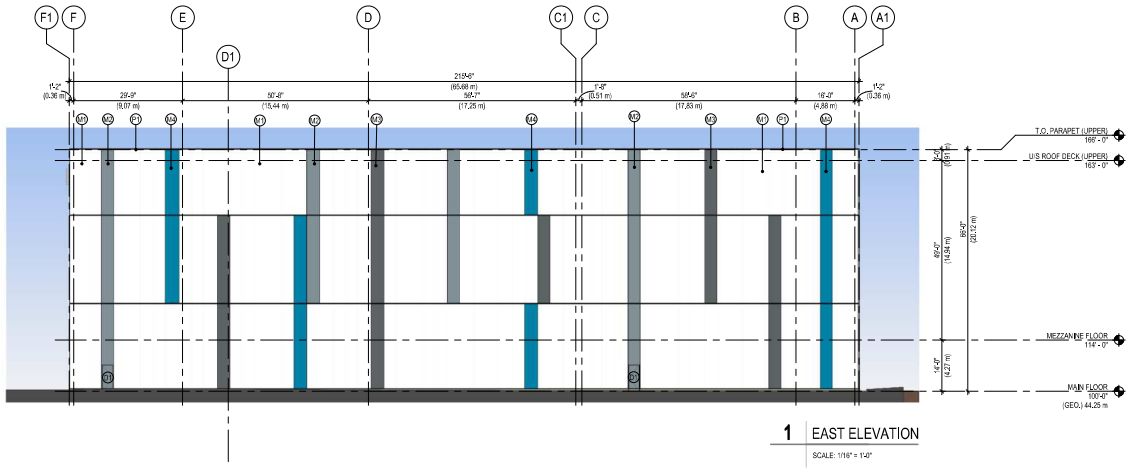
5 DECORATIVE CONCRETE TILT SCREEN WALL

SCALE: 1/8" = 1'-0"

MATERIAL LEGEND

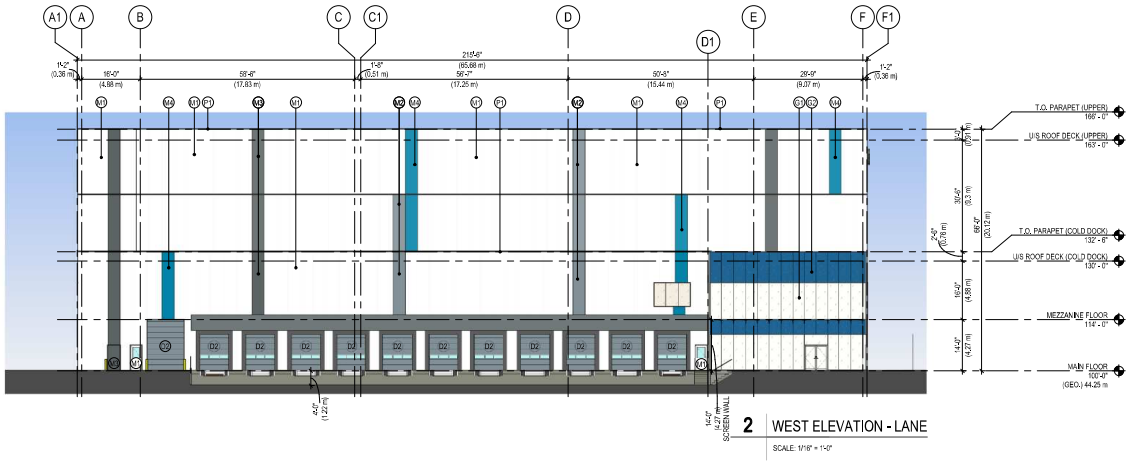
TYPE	DESCRIPTION
D1	STEEL DOOR - PAINTED - DOOR / FRAME COLOR TO MATCH M2
D2	OVERHAD DOOR - COLOR TO MATCH M2
G1	CURTAIN WALL GLAZING - COLOR: BLUE TINT
G2	SPANDREL GLAZING - COLOR: "ICE" BLUEBERRY
G3	GLAZED CANOPY - COLOR: BLUE TINT
M1	<varies>
M2	<varies>
M3	<varies>
M4	IMP - COLOR: CORNFLOWER BLUE
P1	PREFINISHED METAL CAP FLASHING - COLOR: WHITE

IMP M1 - WHITE
IMP M2 - ADVENTURA GREY
IMP M3 - BASALT GREY
IMP M4 - CORNFLOWER BLUE
GLAZING - BLUE TINT
SPANDREL - BLUEBERRY BLUE



1 EAST ELEVATION

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



2 WEST ELEVATION - LANE

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

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4	22.06.29	UPDATES PER DP COMMENTS
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2	22.04.29	RE-ISSUED FOR DP

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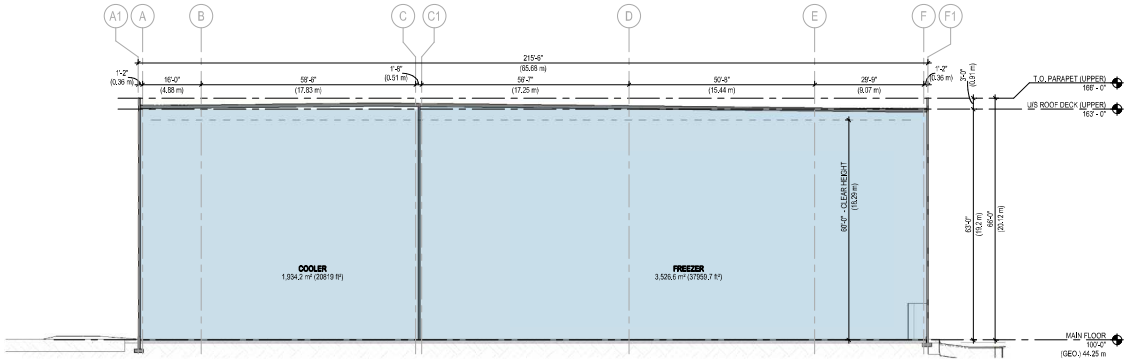
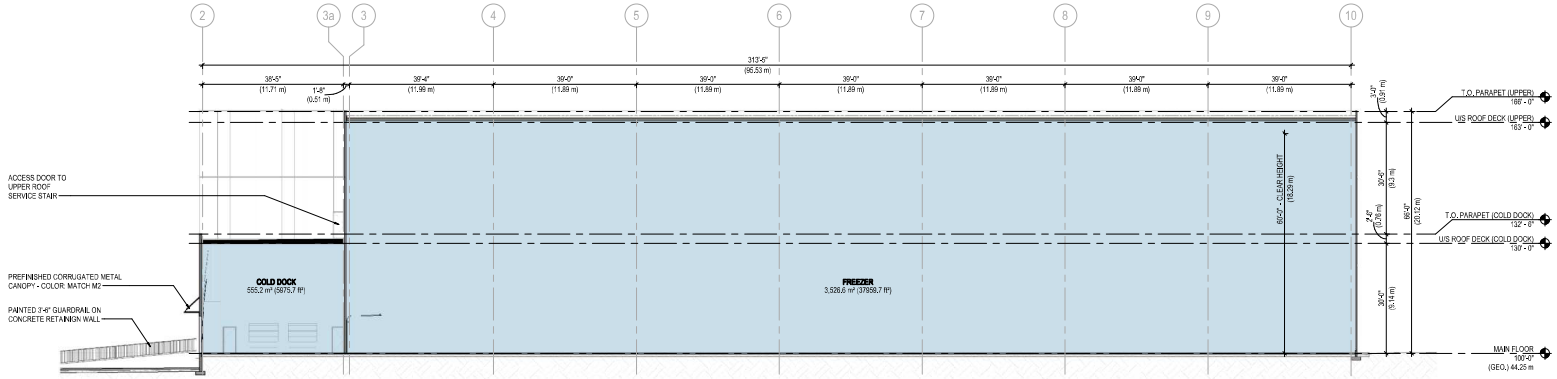


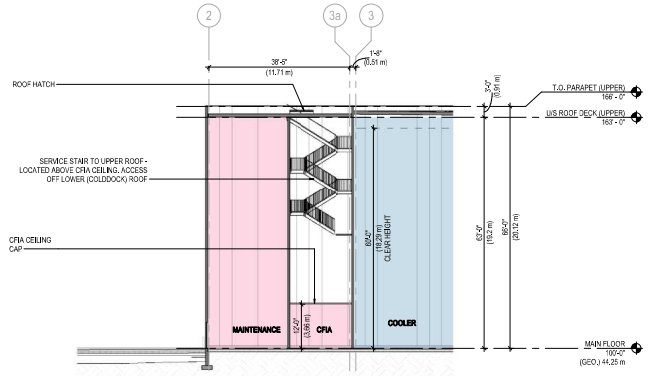
1 BUILDING SECTION 1

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



2 BUILDING SECTION 2

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



3 PARTIAL SECTION

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

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4	22.06.29	UPDATES PER DP COMMENTS
3	22.06.20	RE-ISSUED FOR DP
2	22.04.29	RE-ISSUED FOR DP

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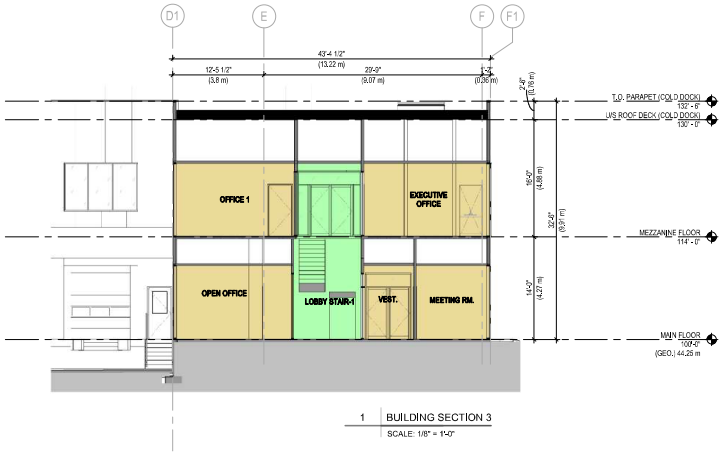

1 BUILDING SECTION 3

SCALE: 1/8" = 1'-0"

2 BUILDING SECTION 4

SCALE: 1/8" = 1'-0"

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4	22.06.29	UPDATES PER DP COMMENTS
3	22.06.20	RE-ISSUED FOR DP
2	22.04.29	RE-ISSUED FOR DP

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BICYCLE RACK

TRASH RECEPTACLE

WHEELCHAIR ACCESSIBLE PICNIC TABLE

GRAVEL STRIP

GENERAL LANDSCAPE NOTES:

1. All materials and execution of landscape works shall conform to the CLS/BCNTA Landscape standard.

2. Do not construct from these drawings unless marked "issued for construction".

3. All landscape works to be performed under this contract to meet the applicable provisions and recommendations set forth in the Master Municipal Specifications & Standards Details/Canadian Landscape Standards and respect all Municipal Bylaws.

4. The latest edition of the standards and codes referenced in these notes and on the landscape drawings shall apply.

5. The existing conditions were compiled from base plans of the site prepared by others. Although every effort has been made to accurately locate all conditions, actual conditions may vary from those shown. The contractor shall make a full review of all existing conditions of the site and shall report discrepancies to the landscape architect before starting work. The contractor shall assume responsibility for actual conditions as they exist on site.

6. The landscape contractor shall be responsible for visiting the site to determine the extent of demolition, preperation, and removals necessary (whether shown on the drawings or not) to construct the proposed site improvements. The landscape contractor shall report, in writing, any discrepancies between the existing and proposed work to the landscape architect prior to proceeding with construction. Failure to inspect, notice, or report these discrepancies prior to construction shall not relieve the landscape contractor from their responsibility to perform the necessary operation for the successful completion of the proposed improvements without any changes to fee.

7. The landscape contractor shall verify dimensions shown on the drawings and notify the landscape architect of any discrepancies prior to the start of the final layout prior to construction.

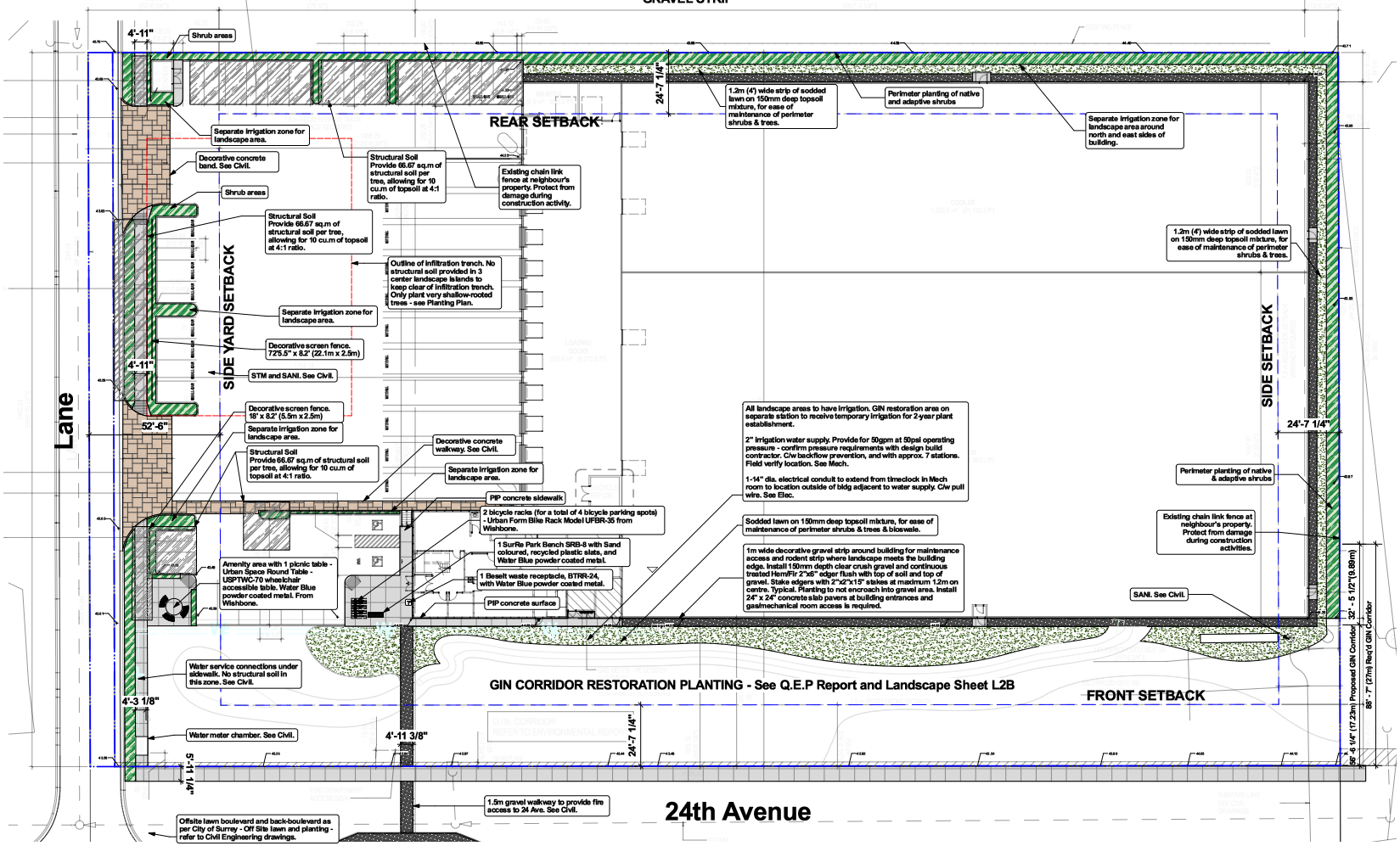
8. Contractor to repair any damage resulting from work on site.

9. The landscape contractor shall refer any questions on materials, finishes, labour and/or products specified herein to the landscape architect.

10. Provide positive grades away from buildings and toward lawn drains and catch basins. Slope away from building at a minimum of 2%. Slope towards lawn basins at minimum 4%. Slope lawn and grass areas minimum 2% and maximum 3:1 slopes. Slope grass swales (without additional erosion protection) along invert minimum 1% and maximum 10% and along side slopes minimum 6:1 slope and maximum 3:1 slope.

7. Protection of existing trees/shrubs to remain: Install temporary tree protection fencing at drip line of existing hedges, trees, and shrub beds which are to remain. Maintain the fencing during construction. No storage of materials or equipment, or any other activities are allowed within the protection zone during construction until final landscape work is being done in the vicinity. Remove protective fencing as directed and landscape as directed.

15. All landscaping to have high efficiency irrigation system to IIABC standards.



LEGEND

HARDSCAPE MATERIALS:

PIP Concrete

Decorative Round River Rock

SOFTSCAPE MATERIALS:

Planting Shrub Bed

Non-netted Sand-based Sod

DETAIL

DRAWING LEGEND

L1	MATERIALS & LAYOUT PLAN
L2A	PLANTING PLAN
L2B	GIN REVEGETATION PLAN
L3	DETAILS
L4	DETAILS

	Date	Issue Notes
P	2022-06-30	Issue for DP Prior To Revisions
O	2022-06-20	Issue for DP Prior To Revisions
N	2022-06-09	GIN coordination
M	2022-05-24	GIN Coordination
L	2022-05-20	Consultant Coordination
K	2022-05-10	30% DD
J	2022-05-05	Revised for City Comments
I	2022-04-29	For prelim. Planning review (L2A)
H	2022-04-29	Reissue for DP
G	2022-04-08	For coordination
F	2022-02-14	Reissue for DP
E	2022-01-24	For coordination
D	2021-10-14	Issue for DP
C	2021-10-12	For coordination
B	2021-10-05	For coordination
A	2021-09-24	For client review

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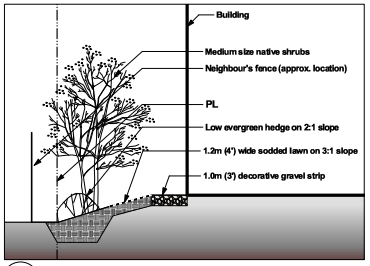
Prospect & Refuge
LANDSCAPE ARCHITECTS
#102-1681 W 2nd Ave Vancouver, BC V6J 1H3
604-669-9303 info@prospectrefuge.ca
Building on over 25 years of history as Jonathan Losee, Ltd.

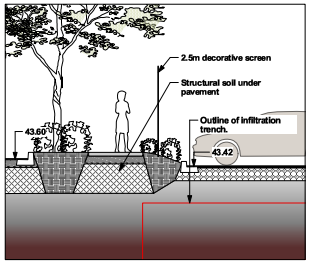
Project Title and Address
COLDBOX STORAGE WAREHOUSE
18745 24th Avenue, Surrey BC

Sheet Title
Landscape Materials and Layout Plan

Project Manager: KZ	Project No.: 2021-35
Drawn By: KZ	Scale: 1" = 20'
Reviewed By: AS	Sheet No.: L1
Date: 2020-03-23	



1 Perimeter Planting
Scale: 3/16" = 1'-0"



2 Lane Planting
Scale: 3/16" = 1'-0"

PLANT LIST					
ID	Latin Name	Common Name	Quantity	Scheduled Size	Notes
TREES					
Ag	Acer griseum	Paperbark maple	2	5cm cal.	B & B
AnES	Acer Plantanoides 'Easy Street'	Easy Street Maple	4	6cm cal	B&B
Ck-S	Cornus kousa	Kousa Dogwood	4	#10 pot	Cont.
Cn	Cornus nuttallii 'Eddies White Wonder'	Western flowering dogwood	1	6 cm cal.	B & B
FsPT	Fagus sylvatica 'Purpurea Tricolor'	Tricolour European Beech	1	5cm	B & B
FpC	Fraxinus pennsylvanica 'Cimmaron'	Cimmaron Green Ash	1	6cm cal	B & B
LSs	Liquidambar styraciflua 'Slender Silhouette'	'Slender Silhouette' Sweet Gum	1	#10 pot	Cont.
LaW	Liquidambar styraciflua 'Worplesdon'	Worplesdon Sweet Gum	2	6cm	B & B
Po-B	Picea omorika 'Bruns'	Bruns Serbian Spruce	4	2 M ht.	B & B
QuGP	Quercus palustris 'Green Pillar'	Green Pillar Pin Oak	3	6cm cal.	B & B
Qr	Quercus rubra	Red Oak	1	5cm cal	B & B
Ss	Stewartia pseudocamellia	Japanese Stewartia	1	5cm cal	B & B
Si	Styrax japonicus 'Emerald Pagoda'	Emerald Pagoda Japanese Snowbell	3	6cm cal	B & B
SHRUBS					
Cala	Calamagrostis x acutiflora 'Karl Foerster'	Foerster Feather Reed Grass	44	#5 pot	Cont.
Hdl	Holodiscus discolor	Oceanspray	40	#3 pot	Cont.
Lo	Lonicera nitida 'Red Tips'	Red Tip Honeysuckle	218	#3 pot	Cont.
Ms g	Miscanthus sinensis 'Gracillimus'	Maiden Grass	1	#3 pot	Cont.
Rs	Ribes sanguineum	Red flowering currant	32	#3 pot	Cont.
Rn	Rosa nutkana	Nootka rose	31	#3 pot	Cont.
Rusp	Rubus spectabilis	Salmonberry	20	#3 pot	Cont.
Vd	Viburnum davidii	David Viburnum	178	#3 pot	Cont.
GROUNDCOVER					
rf	Rudbeckia fulgida 'Goldsturm'	Black Eyed Susan	75	#1 pot @ 1'-6" OC	Cont.
RGP	Rosa 'Gourmet Popcorn	Gourmet Popcorn Rose	59	#2 pot	Cont.
Rub	Rubus calycinoides	Creeping Bramble	392	4"	Cont.
Assorted perennials selected by Landscape Architect			100	#1 pot	Cont.

PLANTING LANDSCAPE NOTES

1. All materials and execution of landscape works shall conform to the current edition of the Canadian Landscape Standard (CLS) as a minimum acceptable standard. Refer to document for complete landscape documentation.

2. Plant material to the satisfaction of the Landscape Standards for nursery stock. Extend search for plant material to Washington and BC.

3. Top soil mixtures for the project shall be tested for particle size, Ph, and Nutrient levels, and recommendations provided and amendments made to bring the soil up to acceptable horticultural quality for the desired plant material, trees, or turf planting. Provide verification of fertilizer and lime applications and rates during the installation and maintenance periods. Soil analysis to be provided to the landscape architect for review and comment prior to delivery on site. Soil report shall be no older than one month.

4. Off slab minimum soil depths are as follows unless noted differently on plans:
6" (150mm) for lawn areas
18" (450mm) for shrub beds
36" (900 mm) for trees

5. The prepared sub-grade shall be approved by the Consultant prior to application of top soil mixtures and finish grading. Scarify compacted subgrades to a minimum depth of 6" (150mm) immediately before placing growing medium.

6. All plant material shall meet minimum size requirements as indicated on plant list. Quality of plant material and grading of site to conform to Canadian Landscape Standard for container grown stock.

7. Discrepancies between plant numbers on the plant list and on the plan should be reported to the landscape architect prior to ordering plant material. In the case where there is a discrepancy between plant numbers on the plant list and on the plan, the plan shall supercede the list.

8. All plant material to be supplied on the job site must be obtained from a nursery participating in the BCLNA Phytophthora ramorum Certification Program. Plant material provided by the contractor found to be carring Pr will be removed, disposed of and replaced at the contractor's expense.

9. Obstructions - If obstructions or other conditions detrimental to healthy plant growth are encountered, notify the Landscape Consultant and request additional instructions. The exact location of trees shall be determined on site and field fit subject to obstructions where applicable.

10. Plants shall be nursery grown under climatic conditions similar to those in the location of the project. Plants shall be healthy, vigorous and of normal habit of growth for the species. They shall be free from diseases, insects, insect eggs and larvae and shall equal or exceed the size indicated on the plant list. The plants shall not be pruned prior to delivery except upon special approval.

11. Root balls to be free of pernicious weeds.

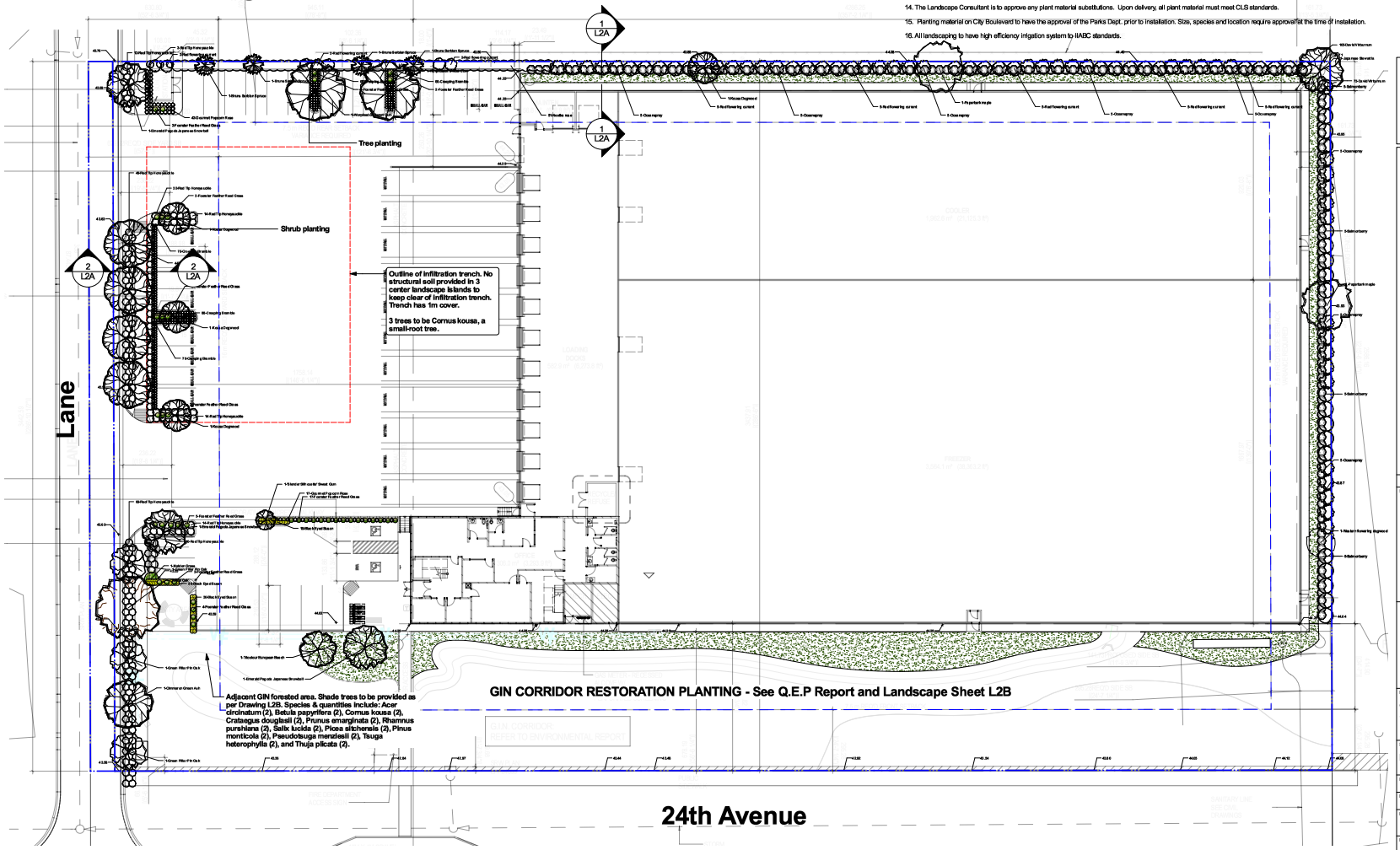
12. Install 2" (50mm) of composted organic mulch on all shrub beds after planting and rake smooth.

13. Landscape Contractor is to provide 55 days of maintenance after the date of Substantial Completion. Maintain to level 2 'Groomed' as per Canadian Landscape Standards. Contractor to provide a one year guarantee for all plant material. Plants installed prior to June (Between Jan 1 and June 1) shall be under extended warranty until the June 1 of the following year.

14. The Landscape Consultant is to approve any plant material substitutions. Upon delivery, all plant material must meet CLS standards.

15. Planting material on City Boulevard to have the approval of the Parks Dept. prior to installation. Size, species and location require approval at the time of installation.

16. All landscaping to have high efficiency irrigation system to IIABC standards.



DRAWING LEGEND

L1	MATERIALS & LAYOUT PLAN
L2A	PLANTING PLAN
L2B	GIN REVEGETATION PLAN
L3	DETAILS
L4	DETAILS

Date	Issue Notes
P 2022-06-30	Issue for DP Prior To Revisions
O 2022-06-20	Issue for DP Prior To Revisions
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M 2022-05-24	GIN Coordination
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A 2021-09-24	For client review

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Project Title and Address
COLDBOX STORAGE WAREHOUSE
18745 24th Avenue, Surrey BC

Sheet Title
Landscape Planting Plan

Project Manager: KZ	Project No.: 2021-35
Drawn By: KZ	Scale: 1" = 20'
Reviewed By: AS	Sheet No.: L2A
Date: 2020-03-23	

CITY OF SURREY BIODIVERSITY DESIGN ACTION STRATEGIES FOR 18745 24TH AVENUE GIN AREA

1. HABITAT STRUCTURES to include bird nest boxes, nesting platform, raptor perch, bat box, wildlife trees, boulder pile, large woody debris (LWD).

2. LIGHT AND NOISE STRATEGIES to include bird friendly lighting, natural darkness, earth berm.

3. ROAD ECOLOGY n/a

4. DRAINAGE STRATEGIES to include Low-Impact-Development capture of site-level precipitation via a bioswale and wetland and a connection between green infrastructure features and the landscaping around the building and adjacent lot.

5. GREEN ROOF & WALLS STRATEGIES n/a

To comply with the BC Weed Control Act, invasive plants to be contained or eradicated prior to introducing new plantings. Methods of invasive species removal to meet the requirements from the Invasive Species and Noxious Weed Management Plan, to be developed by the Developer per the City's requirements. As per QEP Report.

Per the "Minimum safeguarding" option for protection of the GIN corridor, annual monitoring, maintenance, and reporting on the GIN corridor area to be conducted for 5 years. During each annual site visit, monitor and document the vegetation growth and survival success using the Photo-Viewpoint and the Reconnaissance Assessment methods. As per QEP Report.

As per BCMOE (2008) Riparian Restoration Guidelines:
1. Plantings to be based on 1 tree or shrub per 1 square meter density (see plant spacing note)
2. All tree/shrub species to be guaranteed BCLNA nursery stock
3. Use botanical name when ordering stock to ensure that the desired native species is being purchased.
4. Plant stock during fall (Sept/Oct) and spring (March/April) to ensure greatest likelihood of survival. Water regularly during plant establishment.
5. Coniferous trees to comprise not less than 10% nor more than 25% of tree stock planted.
6. Tree stock to be min. 1.2m (4') height.
7. Planting on a given area being enhanced must be successful to an 80% take. If more than 20% of species die over one year, replant as necessary.
8. Salvage large woody debris and stumps from development site. Place in riparian areas to provide structural habitat features.
9. Salvage mossy rocks to help seed the restored area with native groundcover species.

PLANT LIST - GIN RESTORATION AREAS

ID	Latin Name	Common Name	Quantity	Scheduled Size	Notes
FOREST TREES					
Ac	Acer circinatum	Vine maple	7	2M ht.	B & B
Bpap	Betula papyrifera	Paper Birch, Canoe Birch	7	3cm cal	B & B
Ck-S	Cornus kousa	Kousa Dogwood	7	#10 pot	Cont.
Cmb	Crataegus douglasii	Black Hawthorn	7	#10 pot	Cont.
Ps	Picea sitchensis	Sitka spruce	7	2M ht.	B & B
Pcc	Pinus monticola	Western White Pine	7	#10 pot	Cont.
Pe	Prunus emarginata	Bitter cherry	7	4cm cal.	B&B
Df	Pseudotsuga menziesii	Douglas fir	7	2.5M ht	B & B
Rhpu	Rhamnus purshiana	Cascara	7	#1 Qoot	Cont.
Sl	Salix lucida ssp. lasiandra	Pacific willow	7	#10 pot	Cont.
Tp	Thuja plicata	Western redcedar	7	2.5M Ht.	B & B
Tsug	Tsuga heterophylla	Western Hemlock	7	2.5M Ht.	B & B
			0		

PLANT SPACING:
Trees 4m (13') o.c
Shrubs 1m (3') o.c
Forbs 600mm (2') o.c.

PLANT LIST - GIN RESTORATION AREAS

ID	Latin Name	Common Name	Quantity	Scheduled Size	Notes
FOREST SHRUBS					
Alc	Alnus crispa ssp. sinuata	Sitka alder	86	#3 pot	Cont.
---	Amelanchier alnifolia	Saskatoon berry	87	---	Cont.
CsK	Cornus sericea	Redosier Dogwood	86	#3 pot	Cont.
Cc-1	Corylus cornuta	Beaked Hazelnut	86	#3 pot	Cont.
Hdi	Holodiscus discolor	Oceanspray	86	#3 pot	Cont.
Poa	Physocarpus capitatus	Pacific Ninebark	86	#3 pot	Cont.
Pruv	Prunus virginiana	Chokecherry	86	#3 pot	cont
Rn	Rosa nutkana	Nootka rose	86	#3 pot	Cont.
Rp	Rubus parviflora	Thimbleberry	86	#3 pot	Cont.
Rusp	Rubus spectabilis	Salmonberry	86	#3 pot	Cont.
Hook	Salix hookeriana	Hooker's Willow	86	10 twig bundle	Bundle
Sscou	Salix scouleriana	Coulter's Willow	86	10 twig bundle	Bundle
Sitka	Salix sitchensis	Sitka Willow	86	10 twig bundle	Bundle
Sra	Sambucus racemosa	Red elderberry	86	#3 pot	Cont.
Sorbu	Sorbus sitchensis	Sitka Mountain Ash	86	#3 pot	Cont.
Sa	Symphoricarpos alba	Snowberry	86	#3 pot	Cont.
Vdp	Vaccinium parvifolium	Red huckleberry	86	#3 pot	Cont.
			0		
FOREST FORBS					
Lupi	Lupinus polyphyllus 'Gallery Blue'	Gallery Blue Lupine	2027	#1 pot	Cont.
Pm	Polystichum munitum	Sword Fern	19	#3 pot	Cont.
Sa	Symphyotrichum subspicatum	Douglas Aster	1153	#1 pot	Cont.
Spr	Trifolium wormskioldii	Springbank clover	2027	#1 pot	Cont.
			0		

PLANT LIST - GIN RESTORATION AREAS

ID	Latin Name	Common Name	Quantity	Scheduled Size	Notes
CONSTRUCTED WETLAND SEDGES					
Cob	Carex obnupta	Rough sedge	29	72 plug	Cont.
Juef	Juncus effusus	Soft Rush	29	72 plug	Cont.
Scir	Scirpus microcarpus	small flowered bullrush	29	72 plug	Cont.
			0		
CONSTRUCTED WETLAND FORBS					
Lupi	Lupinus polyphyllus 'Gallery Blue'	Gallery Blue Lupine	88	#1 pot	Cont.
Pm	Polystichum munitum	Sword Fern	88	#3 pot	Cont.
Sa	Symphyotrichum subspicatum	Douglas Aster	88	#1 pot	Cont.
Spr	Trifolium wormskioldii	Springbank clover	88	#1 pot	Cont.
			0		
BIOSWALE					
Cob	Carex obnupta	Rough sedge	43	72 plug	Cont.
Juef	Juncus effusus	Soft Rush	43	72 plug	Cont.
Lupi	Lupinus polyphyllus 'Gallery Blue'	Gallery Blue Lupine	43	#1 pot	Cont.
Pm	Polystichum munitum	Sword Fern	43	#3 pot	Cont.
Scir	Scirpus microcarpus	small flowered bullrush	43	72 plug	Cont.
Ss	Symphyotrichum subspicatum	Douglas Aster	43	#1 pot	Cont.
Spr	Trifolium wormskioldii	Springbank clover	43	#1 pot	Cont.
			0		
GRASSLAND FORBS					
Achi	Achillea millefolium	Common Yarrow	445	72 plug	Cont.
Fire	Chamaenerion angustifolium	Common Fireweed	445	72 plug	Cont.
Gaill	Gaillardia aristata	Blanket Flower, Brown eyed susan	445	72 plug	Cont.
			0		
GRASSLAND SHRUBS					
Alc	Alnus crispa ssp. sinuata	Sitka alder	119	#3 pot	Cont.
CsK	Cornus sericea	Redosier Dogwood	119	#3 pot	Cont.
Cc-1	Corylus cornuta	Beaked Hazelnut	119	#3 pot	Cont.
Hdi	Holodiscus discolor	Oceanspray	119	#3 pot	Cont.
Sa	Symphoricarpos alba	Snowberry	119	#3 pot	Cont.
			0		

CONSTRUCTED WETLAND
Receives rooftop precipitation drainage from warehouse building. The water will flow through the bioswale to the wetland. The wetland is to be sized and designed to allow for flooding. This feature will be attractive to various species of wildlife (birds, small mammals) for use as a source of clean water for drinking or bathing. Aquatic invertebrates, amphibians and reptiles will be attracted to this area due to the moist or wet conditions.

WESTERN UPLAND FOREST
This habitat area will consist of a gently sloped area to the north and west of the constructed wetland. To maximize plant diversity, the area will be planted with 7 deciduous tree species, in addition to 4 coniferous tree species. Maximum tree heights at maturity can vary from 2-70m. Trees will provide significant shade when mature and will be excellent nesting and foraging habitat for birds, insects, and small mammals including bats The upland forest floor will be planted with a palette of 14 species of shrub and 3 forb species. Shrub heights when mature may vary from 1-12m. This vegetation will provide excellent ground cover for many wildlife species as well as provide edible fruit. Many of the species are berry producing.

WESTERN LOWLAND FOREST
This habitat area will consist of a gently sloped area to the south and east of the constructed wetland. To maximize plant diversity, the area will be planted with 5 deciduous tree species, in addition to 4 coniferous tree species. Maximum tree heights at maturity can vary from 2-70m. Trees will provide significant shade when mature and will be excellent nesting and foraging habitat for birds, insects, and small mammals including bats. The lowland forest floor will be planted with a palette of 16 species of shrub and 3 forb species. Shrub heights when mature may vary from 1-12m. This vegetation will provide excellent ground cover for many wildlife species as well as provide edible fruit. 9 of the species are berry producing.

BIOSWALE
Receives rooftop precipitation drainage from warehouse building. The water will flow through the bioswale to the wetland. This feature will be attractive to various species of wildlife (birds, small mammals) for use as a source of clean water for drinking or bathing. Aquatic invertebrates, amphibians and reptiles will be attracted to this area due to the moist or wet conditions.

MAINTAINED LAWN AREA
This habitat area is the north of the bioswale and will be planted with a sodded lawn. This will be maintained and will form a smooth transition edge to the GIn Corridor along the south side of the warehouse building.

EASTERN LOWLAND FOREST
This habitat area will consist of a gently sloped area to the west of the constructed wetland. To maximize plant diversity, the area will be planted with 8 deciduous tree species, in addition to 4 coniferous tree species. Maximum tree heights at maturity can vary from 2-70m. Trees will provide significant shade when mature and will be excellent nesting and foraging habitat for birds, insects, and small mammals including bats. The lowland forest floor will be planted with a palette of 14 species of shrub and 3 forb species. Shrub heights when mature may vary from 1-12m. This vegetation will provide excellent ground cover for many wildlife species as well as provide edible fruit. Many of the species are berry producing.

GRASSLAND / SHRUB
This habitat area will consist of a mounded area in the eastern GIN Corridor area. The grassland/shrub habitat area will be planted with a palette of 4 grass species, 5 shrub species, and 3 forb species. The grassland/shrub habitat will provide excellent ground cover, shelter and food for many wildlife and insect species. This habitat area will prove attractive to both small mammals as well as reptiles. 3 shrub species are berry producing.

NATURAL HEDGE ROW
around building is connected to the natural forest patch and adjacent property with natural vegetation.

1.5m gravel walkway to provide fire access to 24 Ave. With culvert over bioswale area. See Civil.

STM and SANI See Civil.

2m

2m

For ease of maintenance, keep 2m clear either side of walkway of tall shrubs and trees. Suitable for planting Indian plum, snowberry, forbs and sedges.

HABITAT STRUCTURES as per QEP Report.
Bird nesting boxes
Large woody debris/log piles
Rock pile
Bat houses
Raptor perch pole

Lane

24th Avenue

32' - 5 1/2" (9.89m) Proposed GIN Corridor

56' - 7" (17.26m) Req'd GIN Corridor

56' - 6 1/4" (17.22m) Proposed GIN Corridor

Landscape Area- Constructed Wetland - Forbs-131.027 sq m
25%- Gallery Blue Lupine- Lupinus polyphyllus 'Gallery Blue'- 88
25%- Douglas Aster- Symphyotrichum subspicatum- 88
25%- Springbank clover- Trifolium wormskioldii- 88
25%- Sword Fern- Polystichum munitum- 88

Landscape Area- Constructed Wetland - Sedges -32.316 sq m
33.3%- Rough sedge- Carex obnupta- 29
33.3%- Soft Rush- Juncus effusus- 29
33.3%- small flowered bullrush- Scirpus microcarpus- 29

Landscape Area- Western Forest Shrubs-336.568 sq m
5.9%- Redosier Dogwood- Cornus sericea- 24
5.9%- Beaked Hazelnut- Corylus cornuta- 24
5.9%- Oceanspray- Holodiscus discolor- 24
5.9%- Pacific Ninebark- Physocarpus capitatus- 24
5.9%- Chokecherry- Prunus virginiana- 24
5.9%- Nootka rose- Rosa nutkana- 24
5.9%- Thimbleberry- Rubus parviflora- 24
5.9%- Salmonberry- Rubus spectabilis- 24
5.9%- Red elderberry- Sambucus racemosa- 24
5.9%- Snowberry- Symphoricarpos alba- 24
5.9%- Red huckleberry- Vaccinium parvifolium- 24
5.9%- Sitka alder- Alnus crispa ssp. sinuata- 24
5.9%- Hooker's Willow- Salix hookeriana- 24
5.9%- Coulter's Willow- Salix scouleriana- 24
5.9%- Sitka Willow- Salix sitchensis- 24
5.9%- Sitka alder- Alnus crispa ssp. sinuata- 24
5.9%- Saskatoon berry- Amelanchier alnifolia- 24

Landscape Area- Western Forest Forbs-336.568 sq m
34.3%- Gallery Blue Lupine- Lupinus polyphyllus 'Gallery Blue'- 1243
23.9%- Douglas Aster- Symphyotrichum subspicatum- 359
34.3%- Springbank clover- Trifolium wormskioldii- 1243
8.6%- Sword Fern- Polystichum munitum- 19

Landscape Area- Western Forest Trees-336.589 sq m
8.3%- Vine maple- Acer circinatum- 2
8.3%- Paper Birch, Canoe Birch- Betula papyrifera- 2
8.3%- Kousa Dogwood- Cornus kousa- 2
8.3%- Black Hawthorn- Crataegus douglasii- 2
8.3%- Bitter cherry- Prunus emarginata- 2
8.3%- Cascara- Rhamnus purshiana- 2
8.3%- Pacific willow- Salix lucida ssp. lasiandra- 2
8.3%- Sitka spruce- Picea sitchensis- 2
8.3%- Western White Pine- Pinus monticola- 2
8.3%- Douglas fir- Pseudotsuga menziesii- 2
8.3%- Western Hemlock- Tsuga heterophylla- 2
8.3%- Western redcedar- Thuja plicata- 2

Landscape Area- Eastern Forest Trees-875.049 sq m
8.3%- Vine maple- Acer circinatum- 5
8.3%- Paper Birch, Canoe Birch- Betula papyrifera- 5
8.3%- Kousa Dogwood- Cornus kousa- 5
8.3%- Black Hawthorn- Crataegus douglasii- 5
8.3%- Bitter cherry- Prunus emarginata- 5
8.3%- Cascara- Rhamnus purshiana- 5
8.3%- Pacific willow- Salix lucida ssp. lasiandra- 5
8.3%- Sitka spruce- Picea sitchensis- 5
8.3%- Western White Pine- Pinus monticola- 5
8.3%- Douglas fir- Pseudotsuga menziesii- 5
8.3%- Western Hemlock- Tsuga heterophylla- 5
8.3%- Western redcedar- Thuja plicata- 5

Landscape Area- Eastern Forest Shrubs-875.049 sq m
5.9%- Redosier Dogwood- Cornus sericea- 52
5.9%- Beaked Hazelnut- Corylus cornuta- 52
5.9%- Oceanspray- Holodiscus discolor- 52
5.9%- Pacific Ninebark- Physocarpus capitatus- 52
5.9%- Chokecherry- Prunus virginiana- 52
5.9%- Nootka rose- Rosa nutkana- 52
5.9%- Thimbleberry- Rubus parviflora- 52
5.9%- Salmonberry- Rubus spectabilis- 52
5.9%- Red elderberry- Sambucus racemosa- 52
5.9%- Snowberry- Symphoricarpos alba- 52
5.9%- Red huckleberry- Vaccinium parvifolium- 52
5.9%- Sitka Mountain Ash- Sorbus sitchensis- 52
5.9%- Hooker's Willow- Salix hookeriana- 52
5.9%- Coulter's Willow- Salix scouleriana- 52
5.9%- Sitka Willow- Salix sitchensis- 52
5.9%- Sitka alder- Alnus crispa ssp. sinuata- 52
5.9%- Saskatoon berry- Amelanchier alnifolia- 52

Landscape Area- Eastern Forest Forbs-875.049 sq m
33.3%- Gallery Blue Lupine- Lupinus polyphyllus 'Gallery Blue'- 784
33.3%- Douglas Aster- Symphyotrichum subspicatum- 784
33.3%- Springbank clover- Trifolium wormskioldii- 784

Landscape Area- Bioswale-268.784 sq m
14.3%- Soft Rush- Juncus effusus- 43
14.3%- Rough sedge- Carex obnupta- 43
14.3%- small flowered bullrush- Scirpus microcarpus- 43
14.3%- Gallery Blue Lupine- Lupinus polyphyllus 'Gallery Blue'- 43
14.3%- Douglas Aster- Symphyotrichum subspicatum- 43
14.3%- Springbank clover- Trifolium wormskioldii- 43
14.3%- Sword Fern- Polystichum munitum- 43

GRASSLAND / SHRUB
Hydro seed with the following species. Rates as per QEP Report.
Poa palustris (Fowl Bluegrass)
Festuca campestris (Rough Fescue)
Festuca rubra ssp. prurinosa (Native Red Fescue)
Festuca occidentalis (Western Fescue)

Landscape Area- Grassland - Forbs-496.919 sq m
33.3%- Common Yarrow- Achillea millefolium- 445
33.3%- Common Fireweed- Chamaenerion angustifolium- 445
33.3%- Blanket Flower, Brown eyed susan- Gaillardia aristata- 445

Landscape Area- Grassland - Shrubs-496.919 sq m
20%- Oceanspray- Holodiscus discolor- 119
20%- Snowberry- Symphoricarpos alba- 119
20%- Beaked Hazelnut- Corylus cornuta- 119
20%- Redosier Dogwood- Cornus sericea- 119
20%- Sitka alder- Alnus crispa ssp. sinuata- 119

See Plant Tables at top of page for total plant quantities.

Prospect & Refuge Landscape Architects are working with Richard Couture, R.P.Bio (QEP) to prepare this GIN planting plan. The QEP is preparing the plant palette as part of the restoration plan, and PRLA is drafting these plans for consistent construction documentation.

See QEP Report for invasive species eradication, proposed seeding rates, habitat structure details, installation timing and sequencing.

See Civil for Constructed Wetland Design details.

DRAWING LEGEND

L1	MATERIALS & LAYOUT PLAN
L2A	PLANTING PLAN
L2B	GIN REVEGETATION PLAN
L3	DETAILS
L4	DETAILS

Date	Issue Notes
P 2022-06-30	Issue for DP Prior To Revisions
O 2022-06-20	Issue for DP Prior To Revisions
N 2022-06-09	GIN coordination
M 2022-05-24	GIN Coordination
L 2022-05-20	Consultant Coordination
K 2022-05-10	30% DD
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E 2022-01-24	For coordination
D 2021-10-14	Issue for DP
C 2021-10-12	For coordination
B 2021-10-05	For coordination
A 2021-09-24	For client review

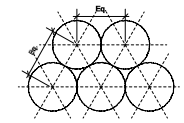
Seal

Prospect & Refuge
LANDSCAPE ARCHITECTS
#102-1661 W 2nd Ave Vancouver, BC V6J 1H3
604-669-9303 info@prospectref.ge.ca
Building on over 25 years of history as Jonathan Losee, Ltd.

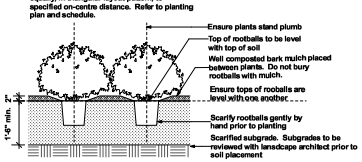
Project Title and Address
COLDBOX STORAGE WAREHOUSE
18745 24th Avenue, Surrey BC

Sheet Title
GIN Revegetation Plan

Project Manager: KZ	Project No.: 2021-35
Drawn By: KZ	Scale: 1" = 20'
Reviewed By: AS	Sheet No.: L2B
Date: 2020-03-23	



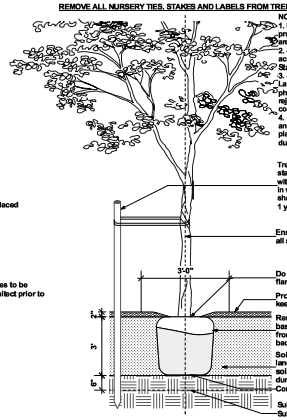
Plan view of typical planting layout: Unless otherwise noted, plants are to be spaced equally, in triangular layout pattern, to specified on-centre distance. Refer to planting plan and schedule.



NOTES:
1. Min. container size and root spread to comply with BC Landscape Standard for Nursery Stock - current edition.
2. Prune all damaged, diseased, and dead limbs.
3. Keep roots moist during installation: water container stock well prior to planting and following planting.

1 Shrub and Perennial Planting
Scale: 1/2" = 1'-0"

REMOVE ALL NURSERY TIES, STAKES AND LABELS FROM TREES PRIOR TO PLANTING



NOTES:
1. Do not cut tree leader. Any corrective pruning shall be reviewed with landscape architect.
2. caliper size and root ball size shall be in accordance with Canadian Landscape Standard.
3. Selected trees shall be approved by Landscape Architect at the nursery or via photographs with scale reference. Trees rejected on site will be replaced at the contractor's expense.
4. Keep rootballs well watered on site, before and after planting. Ensure a watering plan is in place to sustain new tree plantings for the duration of warranty period

Trees shall only be staked (both sides) if stability issues are present. Review in field with Lanscape Architect or submit rationale in writing to L.A. for approval. Tree stakes shall be removed at the end of contractor's 1 year warrantee period.

Ensure tree is plumb. Visually inspect from all sides during planting

Do not bury root flare. Ensure top of root flare is flush with surrounding grades.

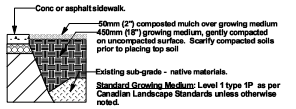
Provide mulched tree well of min. 3'-0" Ø, keeping min. 8" around trunk clear

Remove any string or ties from rootball and base of tree. Cut back top 1/3rd of burlap from rootball. If wire basket remains, cut back wire loops.

Soil blend as reviewed and approved by landscape architect. Provide 3'-0" depth of soil for an area of 10m2. Compact lightly during backfilling to stabilize rootball
Compact soil beneath rootball

Subgrade scarified to depth of 6".
Subgrades to be reviewed with lanscape architect prior to soil placement

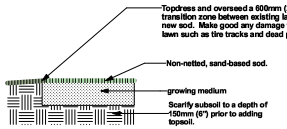
2 Tree Planting
Scale: 1/2" = 1'-0"



Standard Growing Medium: Level 1 type 1P as per Canadian Landscape Standards unless otherwise noted.

-Supply sample to landscape architect for approval
Tree planting areas requires 3'-0" soil depth.
-Soil depths to meet or exceed Canadian Landscape Standard for growing medium:
On-Grade: 6" for irrigated turf, 9" non irrigated, 18" for small shrubs & 24" for large shrubs and 3'-0" for trees.

3 Soil Installation
Scale: 1/2" = 1'-0"



Standard Growing Medium for Lawn offsite: Level 2 type 2L as per Canadian Landscape Standards unless otherwise noted.
Standard Growing Medium for Lawn onsite: Level 1 type 1H as per Canadian Landscape Standards unless otherwise noted.

-Supply sample to landscape architect for approval
-Soil depths to meet or exceed Canadian Landscape Standard for growing medium:
On-Slab: 6" for irrigated turf, 9" for non-irrigated,

4 Lawn Installation
Scale: 1/2" = 1'-0"

NOTES:

This tree planting detail is for a linear planting channel of structural soil parallel to street tree for use under hard surface in parking lot.

Provide growing medium, aggregate, soil stabilizer cut sheets for review prior to delivery to site for review by landscape architect and civil engineer.

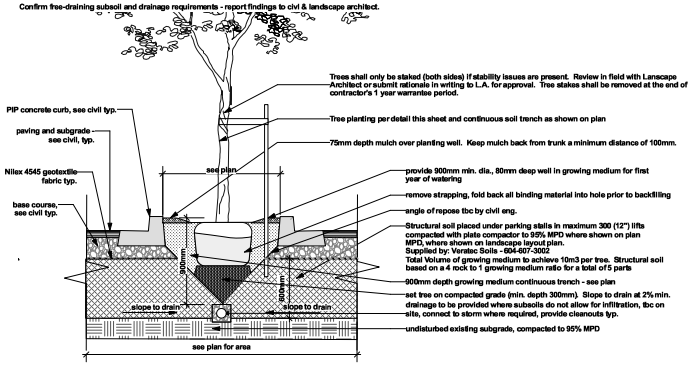
Excavate trenches in accordance with MMCD Section 31 23 01 Excavating, Trenching and Backfilling allowing for width and depth of design. Subgrades to be approved by landscape architect/civil eng. prior to backfilling.

Install as soon as practical after mixing or upon delivery. Any soils stored overnight, whether on site of at source shall be covered with tarpaulin of material approved by contract administrator until installation.

Structural soil shall be moist but not saturated with water when placed. Do not handle or place structural soil mix in rain or freezing conditions. Protect structural soil from weather and accessibility until base layers are installed over top.

Confirm tree location against all required offsets.

Confirm free-draining subsoil and drainage requirements - report findings to civil & landscape architect.



Trees shall only be staked (both sides) if stability issues are present. Review in field with Lanscape Architect or submit rationale in writing to L.A. for approval. Tree stakes shall be removed at the end of contractor's 1 year warrantee period.

Tree planting per detail this sheet and continuous soil trench as shown on plan

75mm depth mulch over planting well. Keep mulch back from trunk a minimum distance of 100mm.

provide 900mm min. dia., 80mm deep well in growing medium for first year of watering

remove strapping, fold back all binding material into hole prior to backfilling

angle of repose tbc by civil eng.

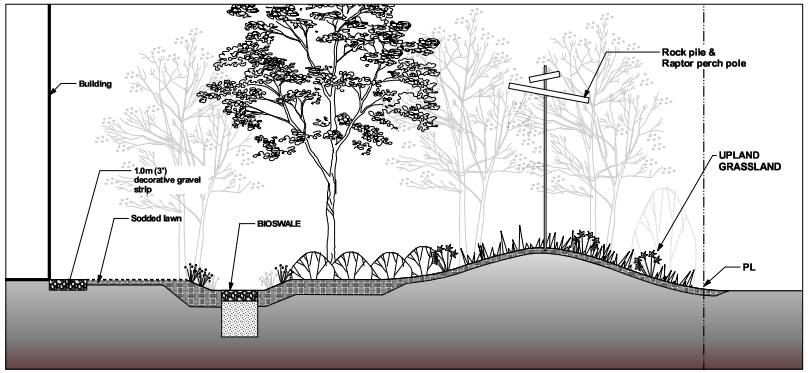
Structural soil placed under parking stalls in maximum 300 (12") lifts compacted with plate compactor to 95% MPD where shown on plan
MPD, where shown on landscape layout plan.
Supplied by: Veratec Soils - 604-607-3002
Total Volume of growing medium to achieve 10m3 per tree. Structural soil based on a 4 rock to 1 growing medium ratio for a total of 5 parts

900mm depth growing medium continuous trench - see plan

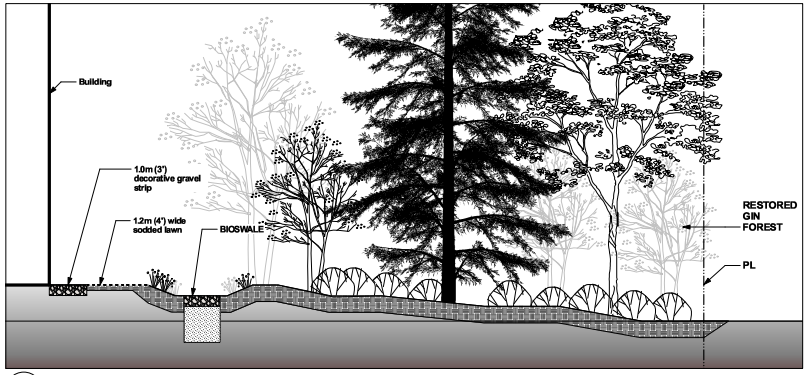
set tree on compacted grade (min. depth 300mm). Slope to drain at 2% min.
drainage to be provided where subsoils do not allow for infiltration, tbc on site, connect to storm where required, provide cleanouts typ.

undisturbed existing subgrade, compacted to 95% MPD

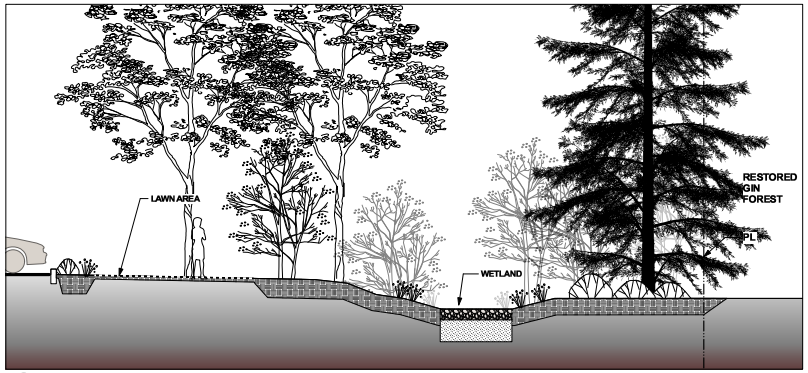
5 Structural Soil Installation
Scale: 1/2" = 1'-0"



1 GIN Planting
Scale: 3/16" = 1'-0"



2 GIN Planting
Scale: 3/16" = 1'-0"



3 GIN Planting
Scale: 3/16" = 1'-0"

DRAWING LEGEND

L1	MATERIALS & LAYOUT PLAN
L2A	PLANTING PLAN
L2B	GIN REVEGETATION PLAN
L3	DETAILS
L4	DETAILS

	Date	Issue Notes
P	2022-06-30	Issue for DP Prior To Revisions
O	2022-06-20	Issue for DP Prior To Revisions
N	2022-06-09	GIN coordination
M	2022-05-24	GIN Coordination
L	2022-05-20	Consultant Coordination
K	2022-05-10	30% DD
J	2022-05-05	Revised for City Comments
I	2022-04-29	For prelim. Planning review (L2A)
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E	2022-01-24	For coordination
D	2021-10-14	Issue for DP
C	2021-10-12	For coordination
B	2021-10-05	For coordination
A	2021-09-24	For client review

Seal

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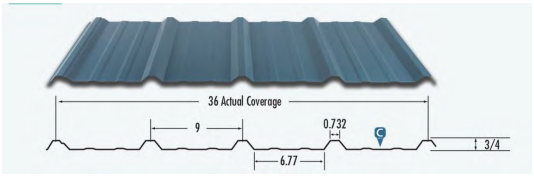
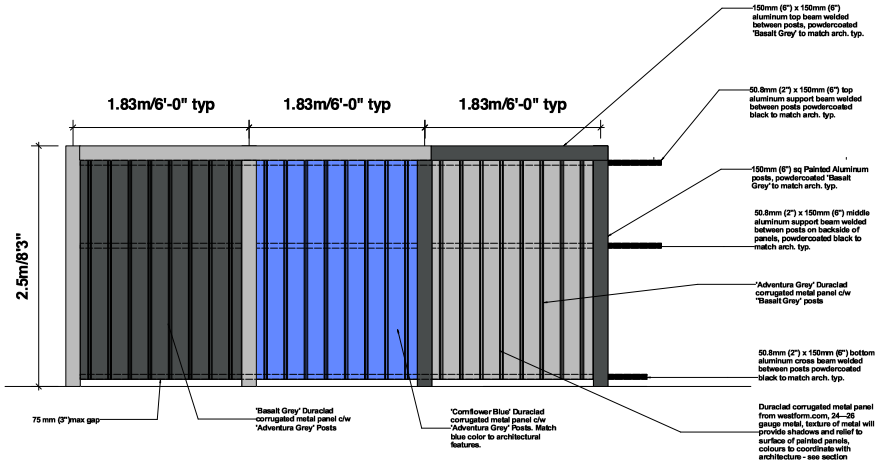
COLDBOX STORAGE WAREHOUSE
18745 24th Avenue, Surrey BC

Sheet Title
Landscape Details

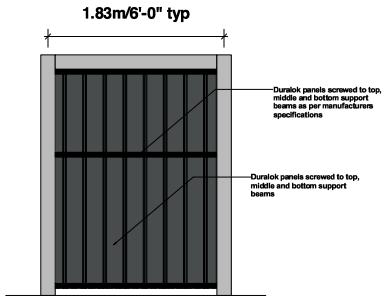
Project Manager: KZ	Project No.: 2021-35
Drawn By: KZ	Scale:
Reviewed By: AS	Sheet No.: L3
Date: 2020-03-23	

Fence Panel Concept





Front Elevation



Back Elevation

1 Decorative Screen Fence
Scale: 1/2" = 1'-0"

DRAWING LEGEND

L1	MATERIALS & LAYOUT PLAN
L2A	PLANTING PLAN
L2B	GIN REVEGETATION PLAN
L3	DETAILS
L4	DETAILS

	Date	Issue Notes
P	2022-06-30	Issue for DP Prior To Revisions
O	2022-06-20	Issue for DP Prior To Revisions
N	2022-06-06	GIN coordination
M	2022-05-24	GIN Coordination
L	2022-05-20	Consultant Coordination
K	2022-05-10	30% DD
J	2022-05-05	Revised for City Comments
I	2022-04-29	For prelim. Planning review (L2A)
H	2022-04-29	Reissue for DP
G	2022-04-09	For coordination
F	2022-02-14	Reissue for DP
E	2022-01-24	For coordination
D	2021-10-14	Issue for DP
C	2021-10-12	For coordination
B	2021-10-05	For coordination
A	2021-09-24	For client review

Seal

Prospect & Refuge
LANDSCAPE ARCHITECTS
#102-1681 W 2nd Ave Vancouver, BC V6J 1H3
604-669-1003 info@prospectrefuge.ca
Building on over 25 years of history as Jonathan Losee, Ltd.

Project Title and Address
COLDBOX STORAGE WAREHOUSE
18745 24th Avenue, Surrey BC

Sheet Title
Landscape Details

Project Manager: KZ	Project No.: 2021-35
Drawn By: KZ	Scale:
Reviewed By: AS	Sheet No.: L4
Date: 2020-03-23	

APPENDIX II

INTER-OFFICE MEMO

TO:	**Manager, Area Planning & Development - South Surrey Division Planning and Development Department**		
FROM:	**Development Services Manager, Engineering Department**		
DATE:	**July 18, 2022**	PROJECT FILE:	**7821-0354-00**
RE:	**Engineering Requirements (Commercial/Industrial) Location: 18745 24 Ave**		

DEVELOPMENT PERMIT

Engineering has no servicing requirements on the proposed Development Permit for a cold storage warehouse other than those listed below.

DEVELOPMENT VARIANCE PERMIT

The following issues are to be addressed as a condition of issuance of the Development Variance Permit for parking:

- Construct 1.8 m sidewalk, at the applicant's cost, along 24 Avenue to existing bus stop as a condition for parking DVP support.
- Restrictive Covenant (RC) to limit on-site uses.
- RC to prohibit access onto 24 Avenue.

A Servicing Agreement is required.

Jeff Pang, P.Eng.
Development Services Manager

APPENDIX III

CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7921-0354-00

Issued To:

(the "Owner")

Address of Owner:

1. This development variance permit is issued subject to compliance by the Owner with all statutes, by-laws, orders, regulations, or agreements, except as specifically varied by this development variance permit.

2. This development variance permit applies to that real property including land with or without improvements located within the City of Surrey, with the legal description and civic address as follows:

Parcel Identifier: 028-975-774
Lot 14 Section 21 Township 7 New Westminster District Plan EPP24887

18745 - 24 Avenue

(the "Land")

(a) If the civic address(es) change(s), the City Clerk is directed to insert the new civic address(es) for the Land, as follows:

_____

3. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:

(a) In Section F Yards and Setbacks of Comprehensive Development (CD) Bylaw No. 17536, the minimum north rear yard setback is reduced from 7.5 meters to 3.6 metres.

(b) In Section G Height of Buildings of Comprehensive Development (CD) Bylaw No. 17536, the maximum principal building height is increased from 14 metres to 20.2 metres.

(c) In Part 5 Off-Street Parking and Loading/Unloading, the parking rate for "Industry – Light Impact" in Table D.1 is reduced from 1.0 parking spaces per 100 square metres to 0.26 parking spaces per 100 square metres.

4. This development variance permit applies to only the portion of the Land shown on Schedule A which is attached hereto and forms part of this development variance permit. This development variance permit does not apply to additions to, or replacement of, any of the existing buildings shown on attached Schedule A, which is attached hereto and forms part of this development variance permit.

5. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.

6. This development variance permit shall lapse if the Owner does not substantially start any construction with respect to which this development variance permit is issued, within two (2) years after the date this development variance permit is issued.

7. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.

8. This development variance permit is not a building permit.

AUTHORIZING RESOLUTION PASSED BY THE COUNCIL, THE DAY OF , 20 .
ISSUED THIS DAY OF , 20 .

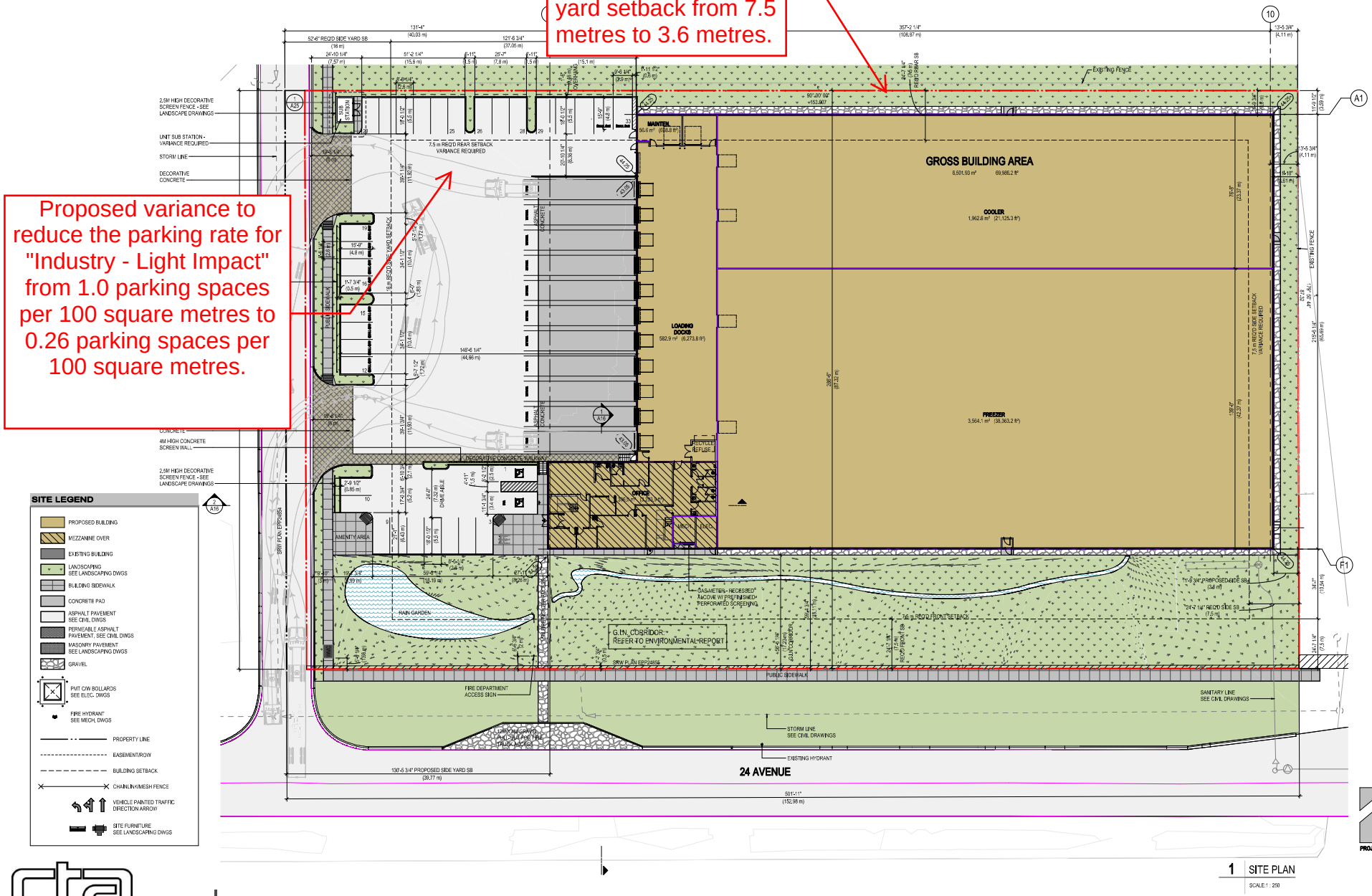
_____
Mayor – Doug McCallum

_____
City Clerk – Jennifer Ficocelli

SCHEDULE A

Proposed variance to reduce the north rear yard setback from 7.5 metres to 3.6 metres.

Proposed variance to reduce the parking rate for "Industry - Light Impact" from 1.0 parking spaces per 100 square metres to 0.26 parking spaces per 100 square metres.



1 SITE PLAN
SCALE: 1 : 250

cta architecture + design ltd.
EMAIL: mail.ctadesign.net
TEL: 604.736.2554
www.ctadesign.net
#110 - 2920 VIRTUAL WAY,
VANCOUVER, BC, V5M 0C4

CLIENT:
coldbox
BRADNER COLD STORAGE

COLDBOX STORAGE WAREHOUSE
18745 24TH AVENUE
SURREY, BC V3S 9V2

4	22.06.29	UPDATES PER DP COMMENTS
3	22.06.20	RE-ISSUED FOR DP
2	22.04.29	RE-ISSUED FOR DP

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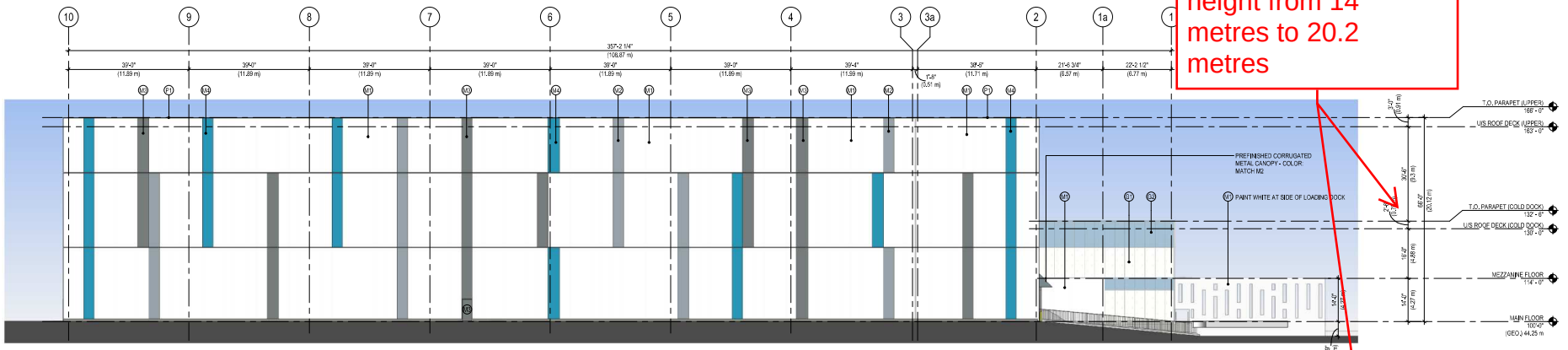
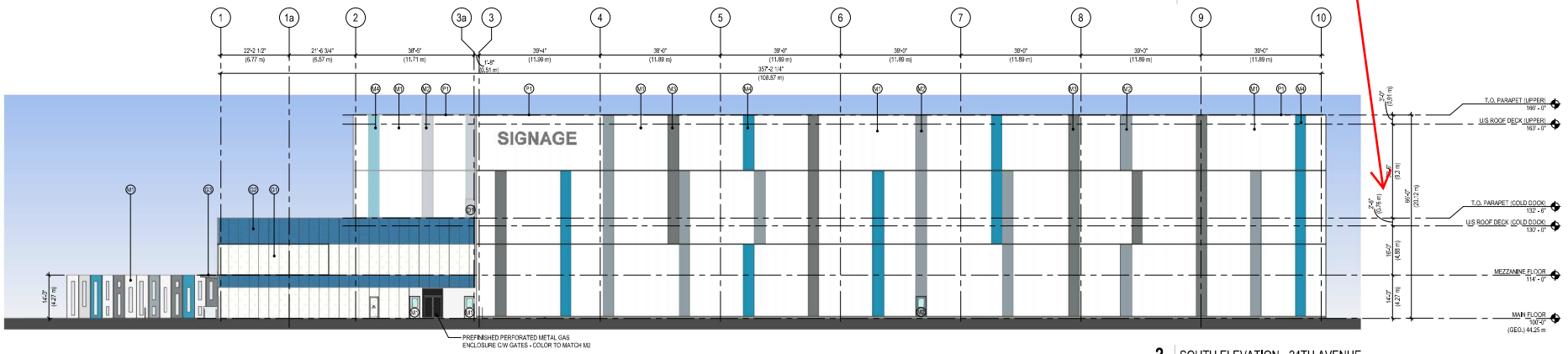
Proposed variance to increase the building height from 14 metres to 20.2 metres



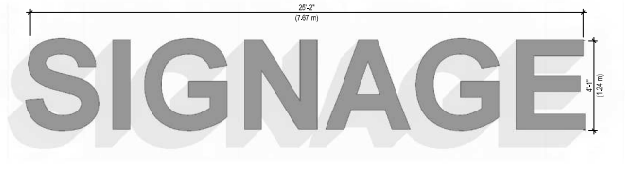
1 NORTH ELEVATION

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



2 SOUTH ELEVATION - 24TH AVENUE

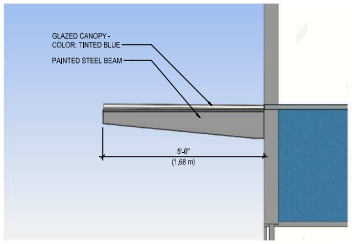
SCALE: 1/16" = 1'-0"



NOTE:
- SIGNAGE FOR REFERENCE ONLY, SEPARATE PERMIT APPLICATION
- SIGNAGE CONTRACTOR TO SUBMIT SIGNAGE SHOP DRAWINGS PRIOR TO INSTALLATION.
- SIGNAGE TO CONFORM TO CORPORATE BRANDING

4 SOUTH ELEVATION

SCALE: 3/8" = 1'-0"



5 GLAZED CANOPY DETAIL

SCALE: 1/2" = 1'-0"

MATERIAL LEGEND

TYPE	DESCRIPTION
D1	STEEL DOOR - PAINTED - DOOR / FRAME COLOR TO MATCH M2
D2	OVERHEAD DOOR - COLOR TO MATCH M2
G1	CURTAIN WALL GLAZING - COLOR: BLUE TINT
G2	SPANDREL GLAZING - COLOR: "RDT" BLUEBERRY
G3	GLAZED CANOPY - COLOR: BLUE TINT
M1	<varies>
M2	<varies>
M3	<varies>
M4	IMP - COLOR: CORNFLOWER BLUE
P1	PREFINISHED METAL CAP FLASHING - COLOR: WHITE

IMP M1 - WHITE
IMP M2 - ADVENTURA GREY
IMP M3 - BASALT GREY
IMP M4 - CORNFLOWER BLUE
GLAZING - BLUE TINT
SPANDREL - BLUEBERRY BLUE

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TR:\Cta-Data\Projects\21 to 25 Jobs\21-212116 Bay_1\Arc\15 Copyright © 2019