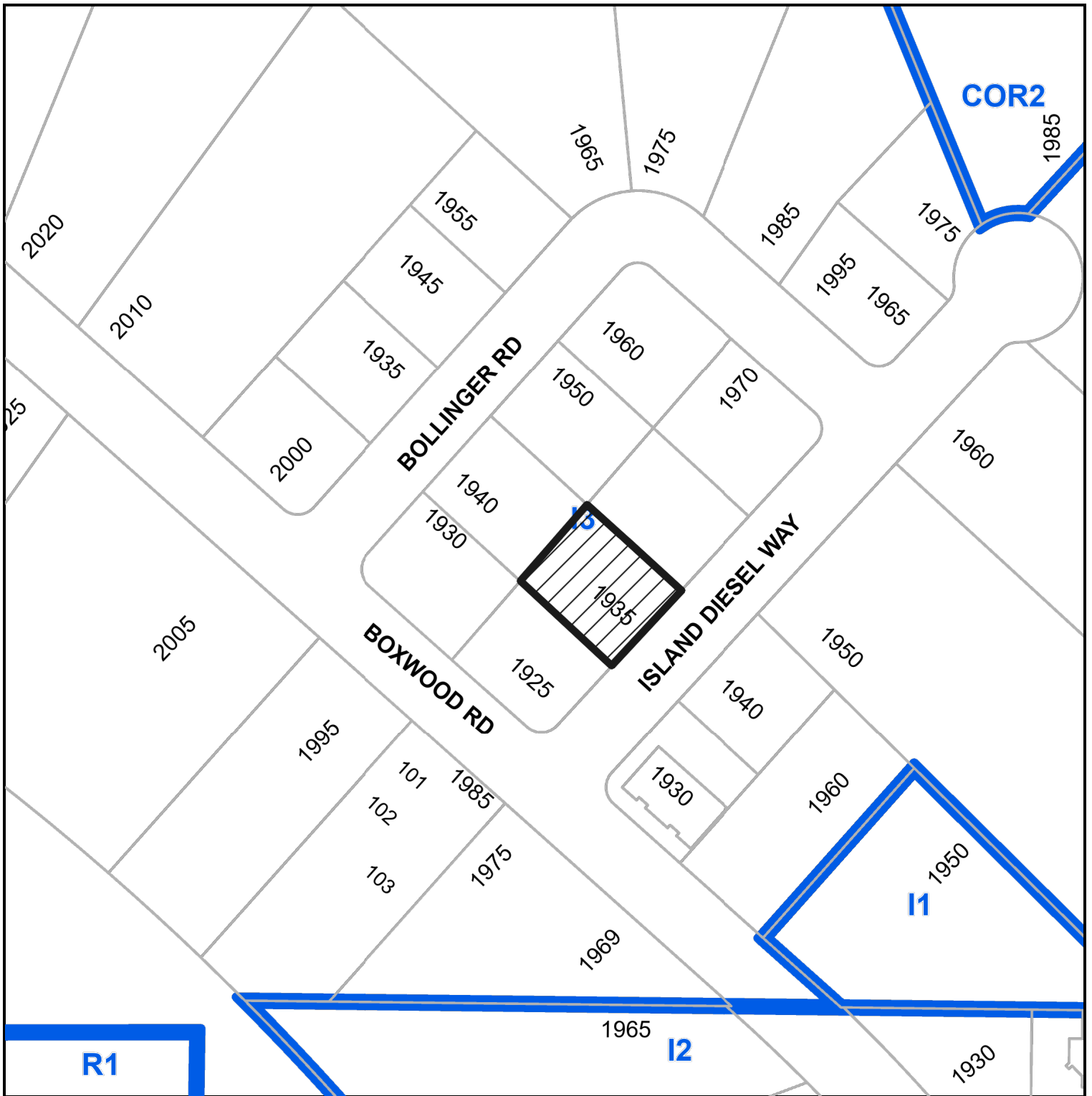


SUBJECT PROPERTY MAP



 1935 ISLAND DIESEL WAY

AERIAL PHOTO



 1935 ISLAND DIESEL WAY



1935 Island Diesel Way

Design and Variance Rationales

Karim Kadri, Architect AIBC



May 27, 2024
2K # 2305

Design Rationale

Project Description

Proposed development of 3 warehouse bays, an office and a residential suite within one building on an I3–High Tech Industrial. The office space fronts on Island Diesel way, with a possible connection to the adjacent warehouse bay. 3 Warehouse bays that can be divided as needed front on an onsite driveway and the required surface parking. A residential suite sits on top of the office space with a private access through the side of the building.

- 992.70 m² lot area.
- 3 Warehouse bays, average 100m² each, plus a mezzanine space of an average 40m² each.
- 74m² Office space.
- One 2 Bedroom residential suite.

Design Principles

Efficiency and Flexibility: The design maximizes the use of available space, ensuring that each area is optimized for its intended purpose, whether it's the warehouse, office, or residential suite. Spaces are designed to be adaptable, allowing for changes in use or expansion as the needs of the business or residents change over time.

Aesthetics: The building's appearance is modern and sleek, with an emphasis on straight lines and a minimalist aesthetic that reflects current design trends.

Economic Viability: The design balances upfront construction costs with long-term operational savings, while keeping the design attractive to potential tenants or buyers.

Form and Character

The design of this modern industrial building is driven by the need for efficiency, versatility, and sustainability. The structure aims to serve multiple functions while maintaining a compact footprint, catering to the diverse needs of industrial operations, administrative work, and personal living.

The building is oriented perpendicular to the street to allow for an efficient driveway that enhances deliveries, parking access, garbage pickup, loading and access to the warehouse bays. The building's long side faces Boxwood Rd to provide maximum exposure for the warehouse signage.

The building adopts a contemporary architectural style with clean lines and a minimalist approach. The form is characterized by a simple rectangular geometric silhouette, which allows for efficient use of space and materials.

Building Finish Materials

The facade combines industrial materials like aluminum and glass with softer elements such as fiber cement panels and wood at the residential suite. Grey brick veneer around the office space provides durability and allows for a sleek and professional appearance. Large windows are incorporated into the office and residential areas to invite natural light and maximize views of the surroundings.

Black vinyl windows and doors, black powder coated guardrails for the decks on L2 and L3 with clear or frosted glass, and grey overhead doors to match the grey aluminum panels on the warehouses. The color scheme is kept neutral with accents of wood or wood-like material at the residential suite. This ensures the building remains timeless and adaptable to future tenant changes.

Landscaping

Landscaping around the building is designed to be low-maintenance yet visually appealing, using native plants and the existing oak tree (service connections permitting) to soften the industrial look and enhance the building's connection to its environment.

The small common sitting area serves as a relaxation zone for employees, residents, or visitors. It offers a tranquil escape from the bustling industrial environment.

Site/ Building Lighting

Soffit/ canopy mounted LED lights provide essential illumination for safety and visibility around the perimeter of the building, especially in areas like walkways, entrances, and parking lots. All lights are directed down and positioned carefully to help minimize light pollution, preserve the night sky and reduce the impact on the surrounding area.

Variance Rationale

Loading Spaces

Requirement:

- Industrial use: 1 Loading space for a total gross floor area of less than 465 m²
 - Industrial warehouse area proposed = 419 m², requires 1 Loading space.
- Office use: 1 Loading space for a total gross floor area of less than 2,800 m²
 - Office area proposed = 76 m², requires 1 Loading space.
- Combined industrial and office areas combined = 495 m²
- Loading Space Dimensions: not less than 10m in length, 3m in width.

Variance Proposed:

- **1 Loading space** for the both the Industrial warehouse and office areas, a **variance of 1 space**.
- Loading Space Dimensions: **5.8m in length**, 3m in width, a **variance of 4.2m in length**.

We propose a reduction in both the size and quantity of loading spaces for the following reasons:

- Operational Efficiency: The building's operations involve goods that are smaller in volume and do not require full-sized loading docks.
- Space Constraints: The site has limited space, and dedicating large areas to loading stalls would reduce the building area and the availability of customer and employee parking.

Building Setbacks

Requirement:

- Rear Yard Setback: 6 m

Variance Proposed:

- Rear Yard Setback: **3.90m**, a **variance of 2.10m**.

We propose a reduction in the Rear Yard Setback for the following reasons:

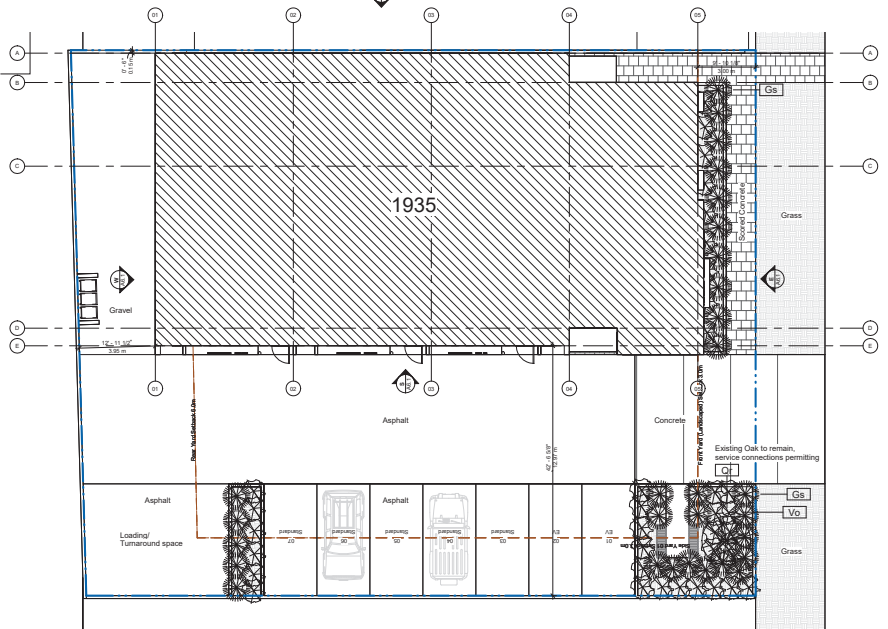
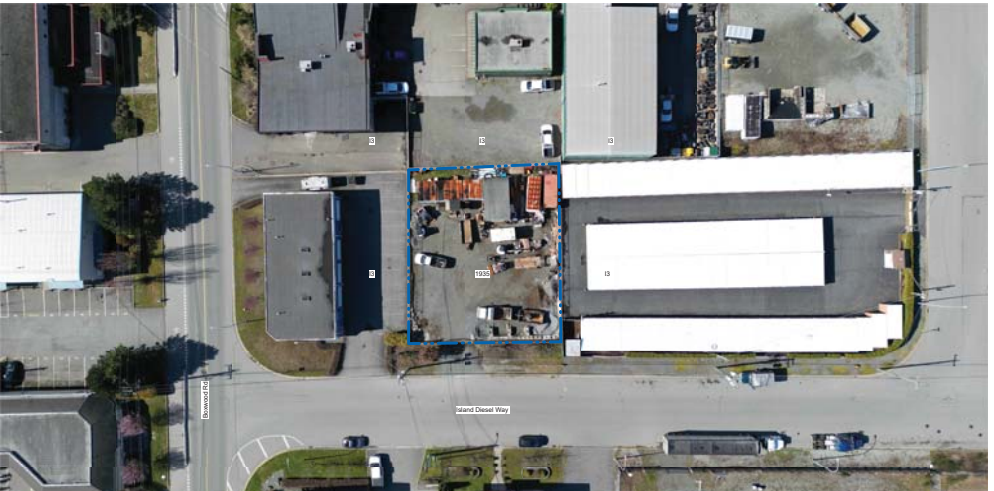
- Site Constraints: the site is relatively small.
- Adjacent Land Uses: All surrounding land uses are identical I3 – High Tech Industrial.

- **Functional Efficiency:** The proposed building is designed to maximize usable floor area. A reduced rear yard setback would allow for better utilization of the available land, enabling the project to meet operational needs.

Project Description									
Site Address:	1935 Island Diesel								
Legal Address:	LOT 30, SECTION 16, RANGE 7, MOUNTAIN DISTRICT, PLAN VP81143								
Zoning:	D2 (High Tech/Industrial) - DP47								
Property (Lot) Area:	sq'	sq'	sq'	sq'	sq'	sq'	sq'	sq'	sq'
	19,455	893.7							9,328
Building Area									
	L1 Floor	L2 Floor	L3 Floor	GA	GA	GA	GA	GA	GA
Warehouse (Primary Use)	3,271	1,023.2	1,286	0	0	0	0	6,252	423
Utility Room	75	4.5	0	0	0	0	0	0	0
Office (Accessory Use)	752	73.0	0	0	0	0	0	752	74
Storage Unit (Accessory Use)	28	1	824	79	442	42	2,264	127	
Total Area	4,150	359	2,110	109	452	42	9,712	624	
Covering Ratios									
Lot Coverage (%)	50%								
Lot Coverage (Area sqft)	9,733								
Lot Coverage (Area m2)	495								
FAR	0.6								
Building Setbacks & Height Requirements									
Front Yard Setback - If Not Used for Parking	3.0m								
Side Yard #1 Setback	3.0m								
Side Yard #2 Setback	3.0m								
Rear Yard Setback	3.0m								
Maximum Building Height	12.0m								
Building Height	14.0m								
Parking Ratios									
Use	Parking Requirement (Per Area/Unit)	Area GFA (sq')	Parking Required	Provided	Variance	Totals Provided			
Warehouse (Primary Use)	1:200	423	2	2	0	2			
Office (Accessory Use)	1:22	74	3	3	0	3			
Storage Unit (Accessory Use)	1:100	127	1	1	0	1			
Total			6	6	0	6			
Car Parking									
Use	Parking Requirement (Per Area/Unit)	Area GFA (sq')	Parking Required	Provided	Variance	Totals Provided			
Warehouse (Primary Use)	1:1000	423	1	1	0	1			
Office (Accessory Use)	1:1000	74	1	1	0	1			
Storage Unit (Accessory Use)	2:1000	127	2	2	0	2			
Total			4	4	0	4			
Planting Schedule									
Use	Dimensions (m)	Ratio	Required	Provided	Variance	Totals Provided			
Regular Car (Standard)	2.75 x 5.80	60%	6	7	1	7			
Small Car (Standard)	2.30 x 4.80	40%	2	0	-2	0			
Accommodate Parking (1:150)	3.75 x 5.80	0	0	0	0	0			
Utility Parking	-	N/A	0	0	0	0			
ICV Parking (Standard/Small)	-	N/A	0	2	2	2			
ICV Parking (Standard/Small)	-	N/A	0	0	0	0			
Total			8	7	-1	7			
Single Parking Requirements									
Use	Dimensions (m)	Ratio	Area (sqm) Required	Proposed	Variance	Totals Provided			
Industrial									
Short Term	0.30 x 1.80	N/A	N/A	1x6	1x6	N/A			
Long Term	0.60 x 1.80	0.5 Per/100sq'	423	0.4	0	N/A			
Office									
Short Term	0.30 x 1.80	0.5 Per/100sq'	74	0.1	1	N/A			
Long Term	0.60 x 1.80	0.38 Per/100sq'	127	0.4	1	N/A			
Multi-use									
Short Term	0.30 x 1.80	0.5 Per/100sq'	1	0.1	1	N/A			
Long Term	0.60 x 1.80	0.5 Per/100sq'	1	0.8	1	N/A			

01 PROJECT DATA
May 08, 2024

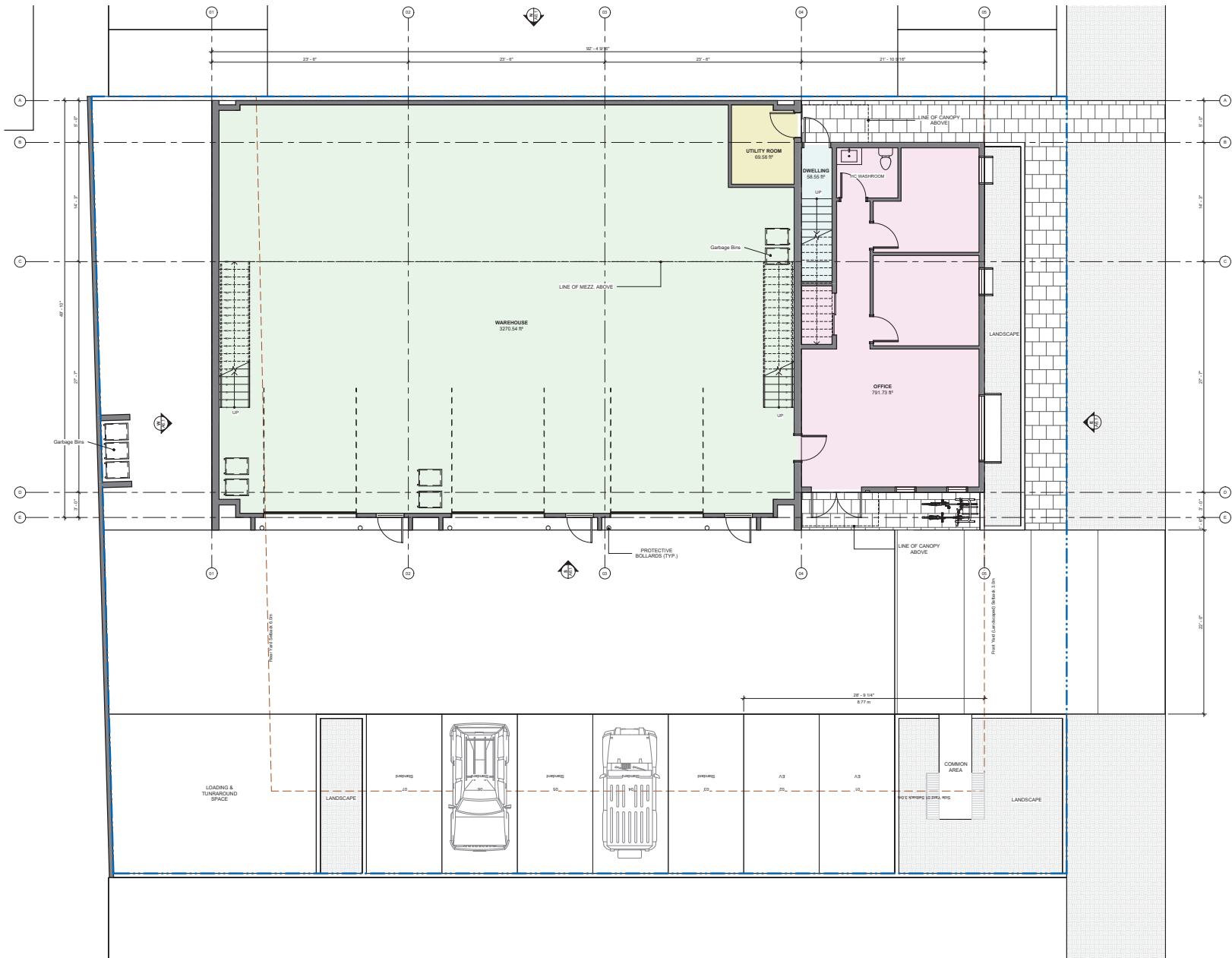
Planting Schedule			
Key	Botanical Name	Common Name	Count
Gs	Gualtheria shallon	Salal	29
Or	Quercus robur	Common Oak	1
Vo	Vaccinium ovatum	Evergreen Huckleberry	35



Island Diesel Way

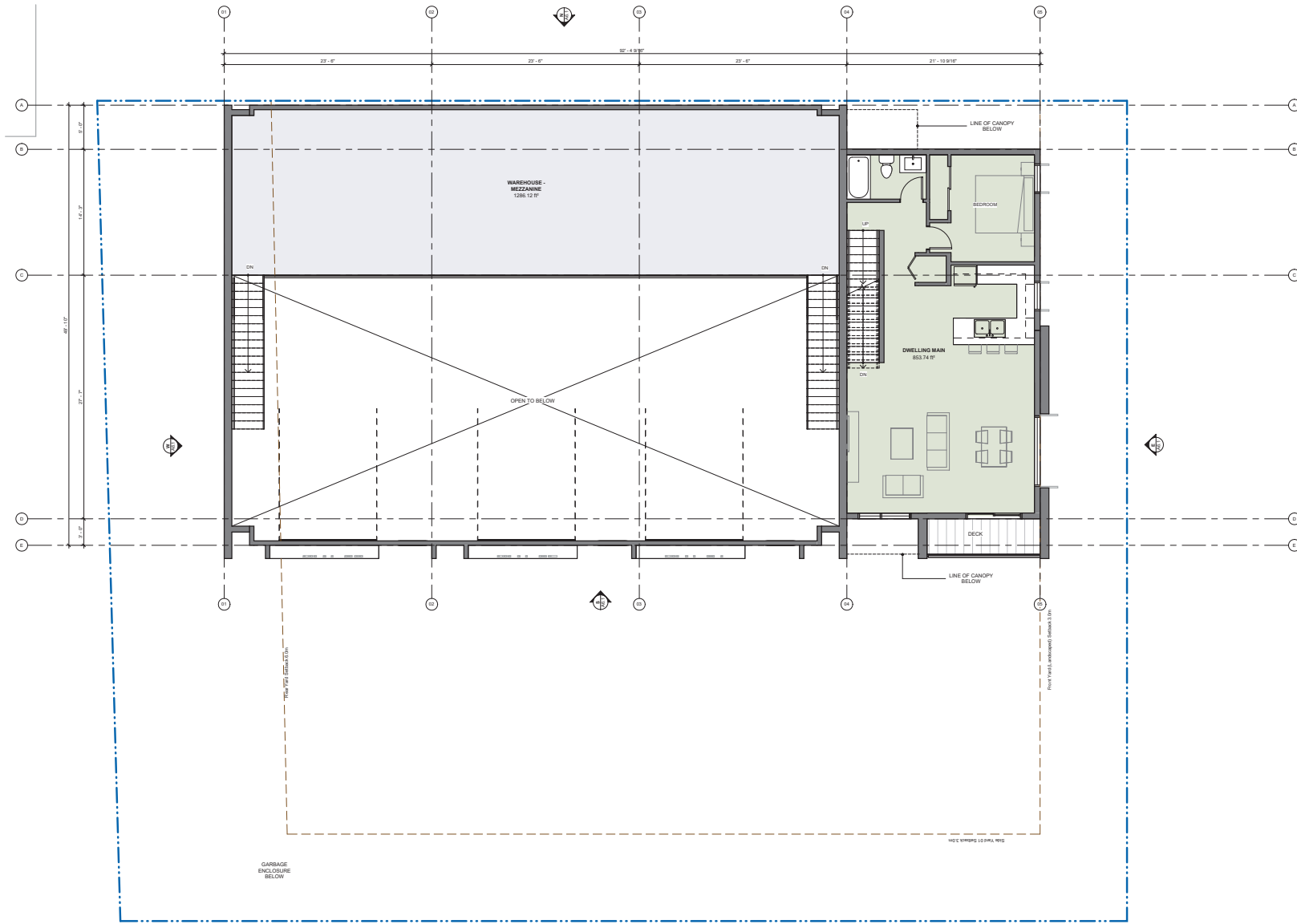


Project Description										
Civic Address:	1935 Island Diesel									
Legal Address:	LOT 30, SECTION 16, RANGE 7, MOUNTAIN DISTRICT, PLAN VIP61143									
Zoning:	I3 (High Tech Industrial) - DPA7									
Property (Lot) Area:	ft ²		m ²		acre					
	10,685		992.7		0.25					
Building Area										
	L1 Floor		L2 Floor		L3 Floor		GFA			
	ft ²	m ²	ft ²	m ²	ft ²	m ²	ft ²	m ²		
Warehouse (Primary Use)	3,271	303.8	1,286	119	0	0	4,557	423		
Utility Room	70	6.5	0	0	0	0	0	0		
Office (Accessory Use)	792	73.6	0	0	0	0	792	74		
Dwelling Unit (Accessory Use)	59	5	854	79	452	42	1,364	127		
Total Areas	4,190	389	2,140	199	452	42	6,712	624		
Zoning Bylaws										
Lot Coverage (%)	50%				39.9%					
Lot Coverage (Area sqft)	5,343				4,263					
Lot Coverage (Area m2)	496				396					
FAR	N/A				N/A					
Building Setbacks & Height Requirements										
Front Yard Setback - Buildings	6.0m				Not Used					
Front Yard Setback - If Not Used for Parking	3.0m				3.0m					
Side Yard #1 Setback	3.0m				3.0m					
Side Yard #2 Setback	0.0m				1.5m					
Flanking Side Yard Setback	4.5m				N/A					
Rear Yard Setback	6.0m				3.90m					
All Setback (if Abuts Residential or Corridor)	7.5m				N/A					
Setback (if Abuts Major Road)	7.5m				N/A					
Building Height	14.0m				9.0m					
Parking Bylaws										
Standard Parking	Parking Requirement (Per Area/Unit)		Area GFA (m ²)			Parking Required				
Warehouse (Primary Use)	1	200	423			2		Provided		
Office (Accessory Use)	1	22	74			3				
Dwelling Unit (Accessory Use)	1	Unit	127			1				
Totals						6		7		
Loading Space	Parking Requirement (Per Area/Unit)		Area GFA (m ²)			Parking Required				
Warehouse (Primary Use)	1	if less than 465m ²	423			1		Provided		
Office (Accessory Use)	1	if less than 2800m ²	74			1				
Dwelling Unit (Accessory Use)	0	N/A	127			0				
Totals						2		1		
Car Parking										
Parking Types	Dimensions (m)		Bylaws Requirements		Proposed Parking	Variance	Totals			
	W	L	Ratio	Required Parking						
Regular Car Required (min.) Total Required	2.75	5.80	60%	6	7	-	Parking Provided			
Small Car Allowed (max.)	2.50	4.60	40%	2	0	-				
Accessible Parking Required (1-10)	3.70	5.60	0	0	0	-				
Visitors Parking	-	-	N/A	0	0	-				
EV Parking Required (Standard/Small)	-	-	N/A	0	2	-				
R.I. EV Parking Required (Standard/Small)	-	-	N/A	0	0	-				
Totals				6	7	-	7			
Bicycle Parking Requirements										
Use	Dimensions (m)		Bylaws Requirements			Proposed Parking	Variance	Totals Provided		
			Ratio	Area/ Unit	Required					
Industrial										
Short Term	0.30	-	N/A			N/A	N/A	N/A		
Long Term	0.60	1.80	0.1 Per/100m ²	423	0.4	0	N/A	0		
Office										
Short Term	0.30	-	0.1 Per/100m ²	74	0.1	1	N/A	1		
Long Term	0.60	1.80	0.35 Per/100m ²	127	0.4		N/A			
Multi-family										
Short Term	0.30	-	0.1 Per/Unit	1	0.1	1	N/A	1		
Long Term	0.60	1.80	0.5 Per/Unit	1	0.5		N/A			



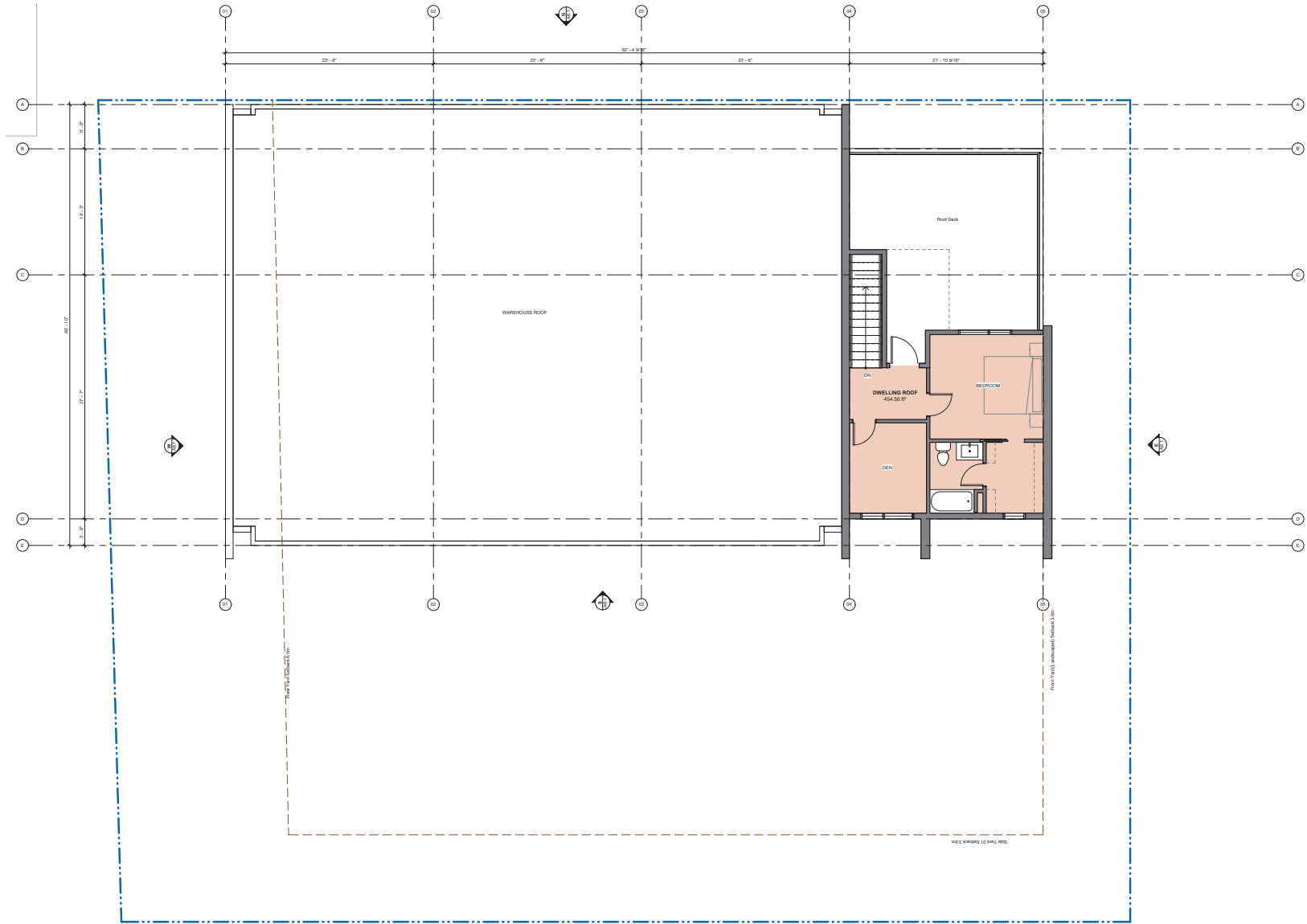
- ROOM LEGEND**
- DWELLING
 - OFFICE
 - UTILITY ROOM
 - WAREHOUSE





- ROOM LEGEND
- DWELLING MAIN
 - WAREHOUSE - MEZZANINE



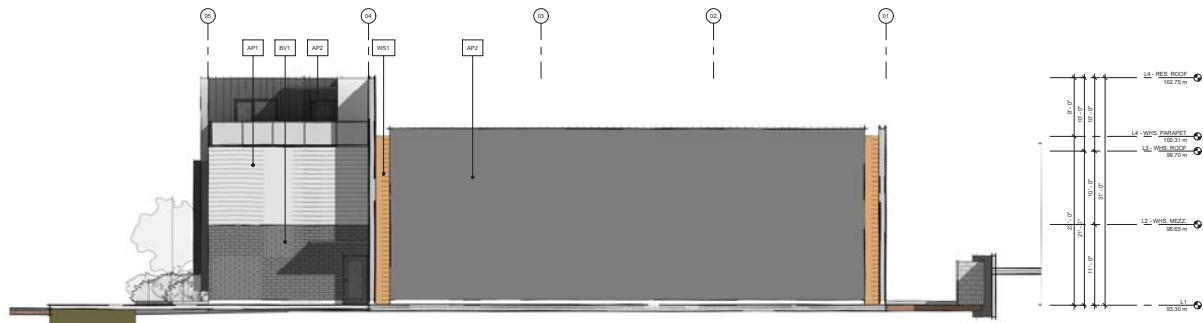


ROOM LEGEND
 ■ DWELLING ROOF

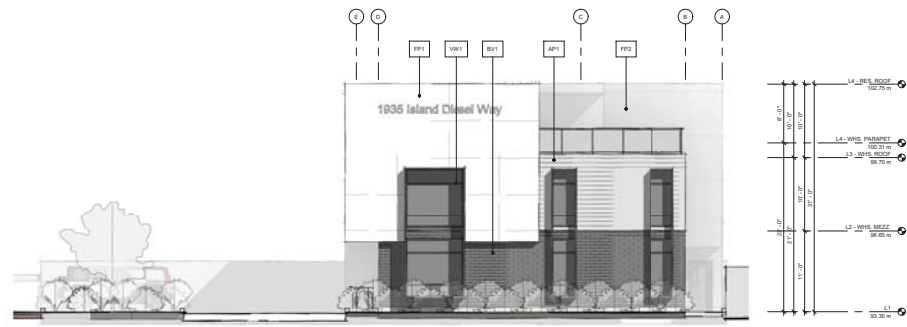




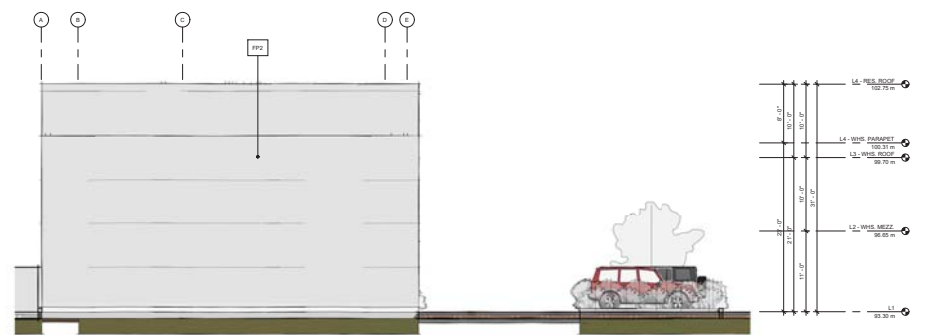
04 South West Elevation
A1.1 1/8" = 1'-0"



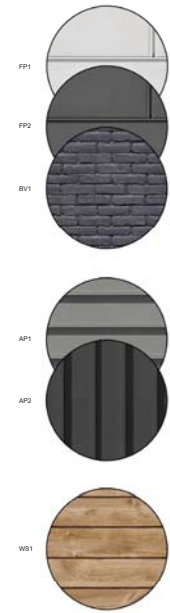
03 North East Elevation
A1.1 1/8" = 1'-0"



01 South East Elevation
A1.1 1/8" = 1'-0"



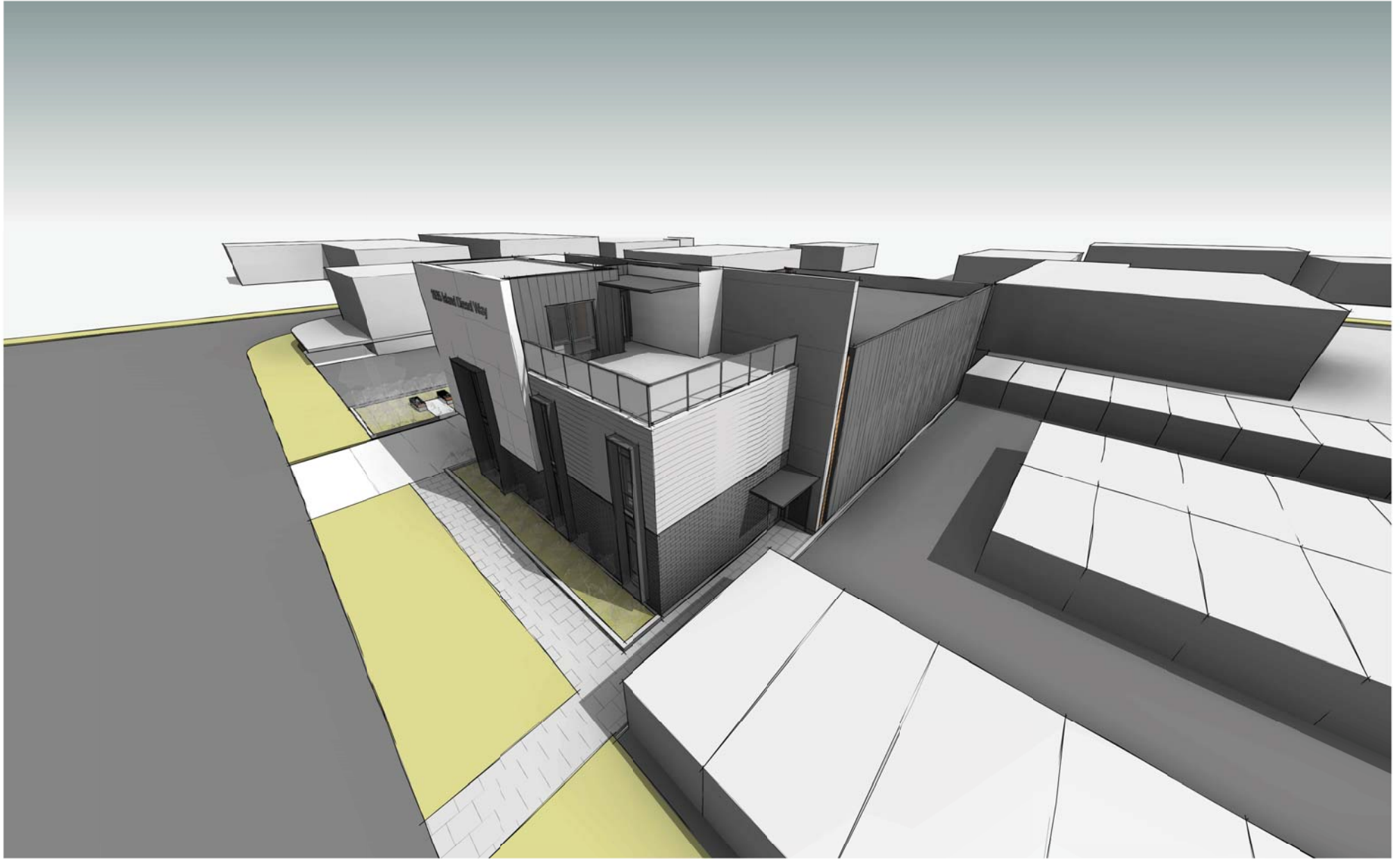
02 North West Elevations
A1.1 1/8" = 1'-0"



Material Legend
 FP1 Fibre Cement Panel or Aluminum Composite Panels - White smooth w/ matching trim
 FP2 Fibre Cement Panel or Aluminum Composite Panels - Light Grey smooth w/ matching trim
 BV1 Brick Veneer - Grey
 AP1 Standing Seam or Interlocking Aluminum Panels - Light Grey - Horizontal
 AP2 Standing Seam or Interlocking Aluminum Panels - Dark Grey - Vertical
 WS1 T&G Wood or Wood-like Siding - Clear
 VW1 Vinyl Windows and Doors - Black







2K Architecture

PROJECT
1935 Island Diesel

CLIENT
KSG CONSULTING LTD.
ADDRESS
1935 Island Diesel Way, Nanaimo, BC

PROJECT NO.
2305



SCALE
ISSUE
May 27, 2024

East Birds eye

A0.2

RECEIVED
DP1349
2024-JUL-19
Current Planning