

September 18, 2025

Mr. Jack Gulas
Stratford Foxrun
6286 Prince of Wales Drive
North Gower, Ontario
K0A 2T0

Re: 5923 Ottawa Street – Richmond, Ontario - Rail Safety / Proximity Review R2
Rail Safety Consulting & Engineering Services
Our Project No. EN024-01926

Stratford Foxrun (the 'Landowner' or 'Applicant') is looking to complete the development application on the lands at 5923 Ottawa Street, Richmond, Ontario (the 'Property' or 'Site').

Entuitive has been retained to review the development plans against the most recent industry guidelines for new development in proximity to rail infrastructure and determine the appropriate measures, if required, to mitigate the safety risks associated with nearby rail operations.

This review considers the site-specific conditions of the property in the context of the local area, the rail corridor operating environment, and ongoing changes to the VIA Rail-owned Smith's Falls Subdivision rail corridor. This review has also been updated in response to comments received from the Municipality and changes to the site plan.

Attached is a memo that outlines our evaluation of the updated site. We trust that the information provided is helpful, but should you have any questions or comments please reach out to our team.

Sincerely,
Entuitive


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INTRODUCTION

As part of a development application submission, the City of Ottawa has requested the Landowner (or “the Applicant”) retain a rail safety consultant to conduct a rail safety study as it relates to the single main line rail track adjacent to the property at 5923 Ottawa Street (the “Project” or “Site”).

The Site is an irregularly shaped lot which, in its current condition, is an undeveloped natural area with significant tree coverage. The site is 110m wide along Ottawa Street and varies in depth between 180-230m.

The Site is bound by Ottawa Street to the southeast, the VIA Rail Smith’s Falls Subdivision rail corridor to the northwest, an existing commercial building to the southwest and a light-industrial agricultural operation to the northeast. An aerial photograph of the site and surrounding land uses is illustrated in Figure 1 below.



Figure 1: Site Context

The Smiths Falls Subdivision rail corridor immediately northwest of the site is currently comprised of a single track which is classified as a Principal Main Line.

Currently, dense vegetation and forest with over 50% tree coverage are present along the northern extent of the property, extending to the rail corridor property line. Along the rail corridor property line, a ditch and swamp run parallel to the track.

The top of the embankment closest to the tracks is observed at an elevation of approximately 93m. The bottom of the embankment, where the swamp is located, is at an approximate elevation of 91m, with the lowest point being 90.88m difference of more than 2m from the top of the embankment.

The grade then elevates to the south, to an approximately elevation of 93.75m, a difference of more than 2.75m from the lowest point along the property line. The highest point on the property is towards the southern property line at Ottawa Street, where elevations of 94m+ are observed. These details and elevations are substantiated on the topographic survey, included as part of the development application, and pictured in Figure 2 on the following page. The full survey is also included in Appendix B and can be referred to for detailed contours and elevation data points, which confirm the conditions summarized above.

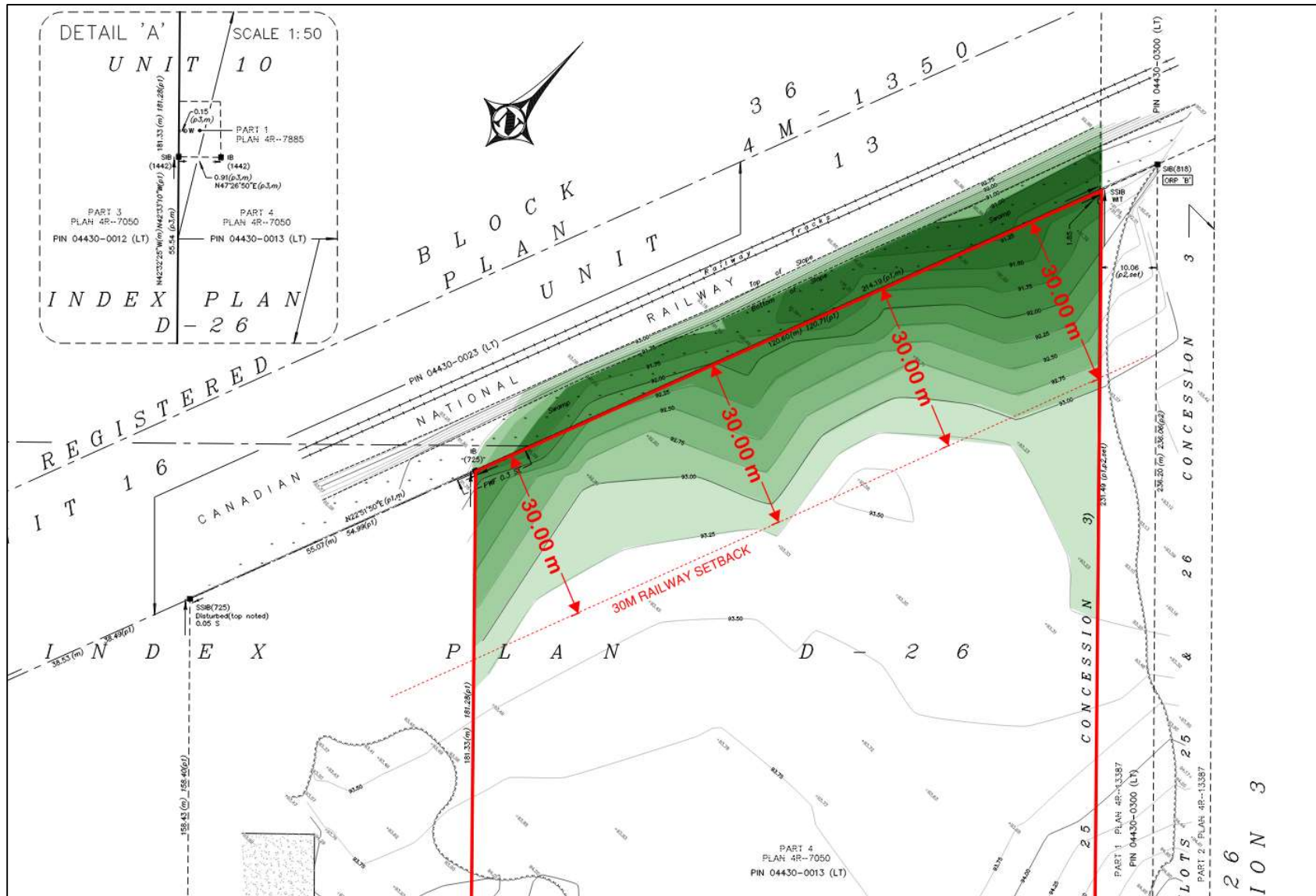


Figure 2: Topographic Survey of 5923 Ottawa Street

The ditch is approximately 30m wide, and as mentioned above, is within the area of the site that is covered by vegetation and forest. It is our understanding that the majority of the existing vegetation will remain as part of the proposed development, which will act as a physical buffer to the rail corridor.

RAIL CORRIDOR DETAILS:

The Smiths Falls Subdivision is owned by VIA Rail and is classified as a principal main line. The rail corridor is comprised of a single track between Mile 0.0 at Federal (Ottawa) and Mile 34.5 at Smiths Falls East. The Railway Atlas of Canada¹ indicates the Site is located immediately south of Mile Post 12 and both passenger and freight traffic can be accommodated on the main line track.

The Railway Atlas main track classification and track use is identified in Figure 3 below.

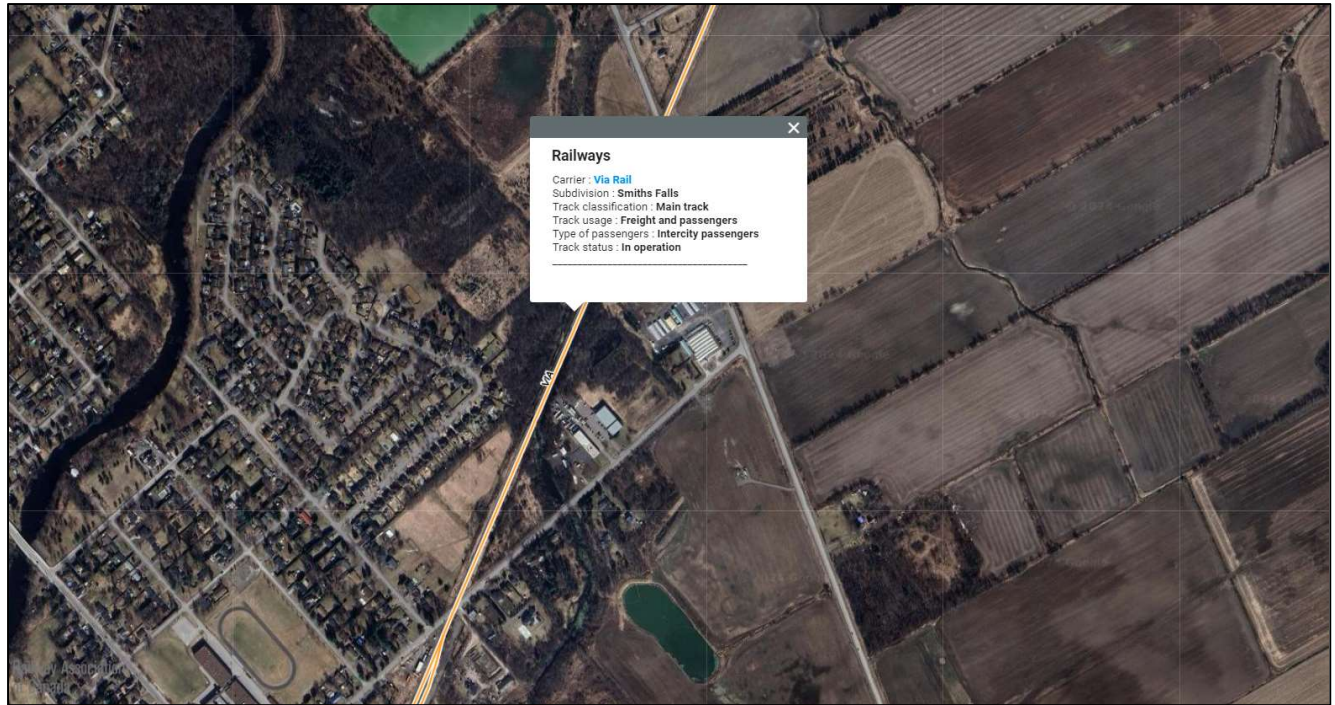


Figure 3: Railway Atlas of Canada Track Classification

The Transportation Safety Board investigation report R09H0010² provides the following information about the Smith's Falls Subdivision rail corridor operations:

- The authorized timetable speed is 95 mph for passenger trains.
- Approximately 8 to 10 passenger trains traverse the subdivision on a daily basis; and
- Train movements are governed by the Occupancy Control System (OCS) method of train control, as authorized by the Canadian Rail Operating Rules (CROR).

A review of VIA Rail's passenger train schedules confirms that there are between 8 to 10 passenger trains per day. The VIA Rail schedule is included in Appendix C – Rail Corridor Details.

¹ Railway Association of Canada. Canadian Rail Atlas. Aug. 2024 online: <https://rac.jmaponline.net/canadianrailatlas/>

² Transportation Safety Board of Canada. 2009. Railway Investigation Report R09H0010. June 10, 2021 online: <https://bst.gc.ca/eng/rapports-reports/rail/2009/r09h0010/r09h0010.html?wbdisable=true>

RAIL ADJACENT DEVELOPMENT GUIDELINES:

New developments along the rail corridor should be designed and built to provide reasonable protection to the development against rail activities and accidents. A variety of guidelines are used to inform decision making and may vary by Rail Authority and Municipality.

This report has been prepared in accordance with the following guidelines and reference material:

- FCM/RAC Guidelines for New Development in Proximity to Rail Operations, and
- AECOM Crash Wall Design Guidelines

FCM/RAC GUIDELINES

The FCM (Federation of Canadian Municipalities)/RAC (Railway Association of Canada) Guidelines set out requirements for:

- Life Safety: Impact from a derailed train, fire, projectile elements
- Comfort/Quality of Life: Noise, vibration, air quality

Importantly, the FCM/RAC Guidelines do not address new commercial / light-industrial development in proximity to rail corridors. The FCM/RAC Guidelines are intended to be used for new residential and sensitive use development, where land use compatibility risks are greater.

Considering this, the standard mitigation measures described below may be overly onerous for the proposed development. However, the guidelines serve as a useful reference for best practices across Canadian railways and municipalities.

Standard Mitigation

The FCM/RAC Guidelines suggest that mitigation measures are most effective when implemented together. The standard safety mitigation measures recommended by the FCM/RAC Guidelines vary depending on the classification and use of the track adjacent to the property. Table 1 below outlines the standard setback measures as they apply to various track classifications.

Table 1: FCM/RAC Standard Setback Distance.

Classification of Line	Setback
Freight Rail Yard	300m
Principal Main Line	30m
Secondary Main Line	30m
Principal Branch Line	15m
Secondary Branch Line	15m
Spur Line	15m

As stated in the FCM/RAC Guidelines:

“Setback distances must be measured from the mutual property line to the building face. This will ensure that the entire railway right-of-way is protected for potential rail expansion in the future.” (3.3)

Further, the FCM/RAC Guidelines assert:

“Where larger building setbacks are proposed (or are more practicable, such as in rural situations), reduced berm heights should be considered.” (3.3.1).

In the case of 5923 Ottawa Street, the proposed building setback of approximately 113 metres significantly exceeds the recommended 30-metre setback.

Additionally, the FCM/RAC Guidelines also state:

"If applicable to the site conditions, in lieu of the recommended berm, a ditch or valley between the railway and subject new development property that is generally equivalent to or greater than the inverse of the berm could be considered." (3.6.1.2)

This concept is illustrated in Figure 4 below.

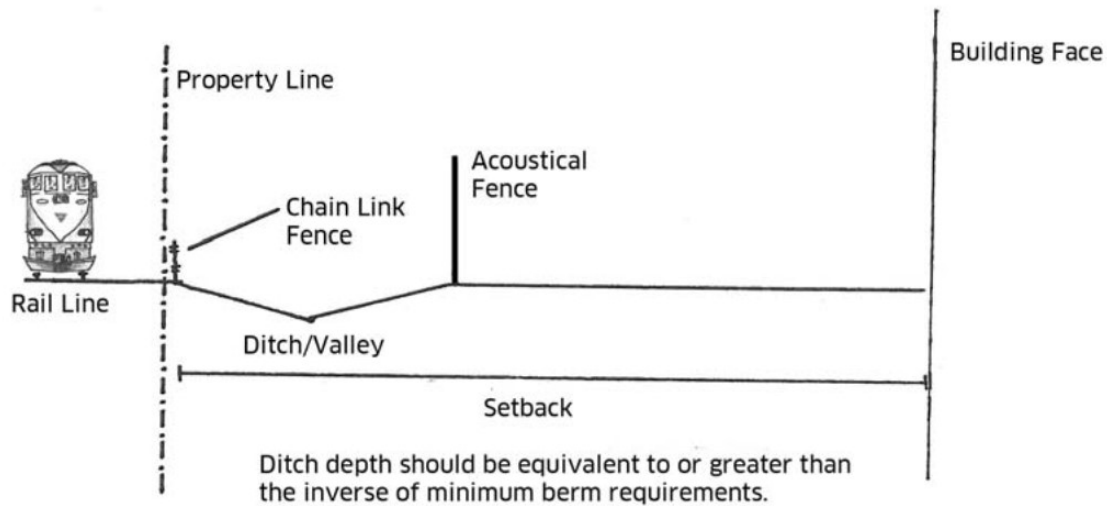


Figure 4: Application of a Ditch or Valley of Equivalent Depth to a Standard Berm

The existing ditch / swamp along the rail corridor property line is considered to meet the condition of the inverse berm as described above.

The FCM/RAC Guidelines (Section 3.3) also indicate that, "appropriate uses within the setback area include public and private roads; parkland and other outdoor recreational space including backyards, swimming pools, and tennis courts; unenclosed gazebos; garages and other parking structures; and storage sheds."

The FCM/RAC Guidelines also discuss a variety of additional risks related to new development including but not limited to stormwater management, air quality, noise, vibration, construction, and trespassing risks. These considerations are typically addressed through additional studies and controls, carried out by qualified professionals, and reviewed as part of a development application.

PROPOSED DEVELOPMENT

The development is proposed as two individual buildings, an 'East' and 'West' building, which will both be used for alcohol storage and production. The two new buildings are pictured in Figure 5 below.

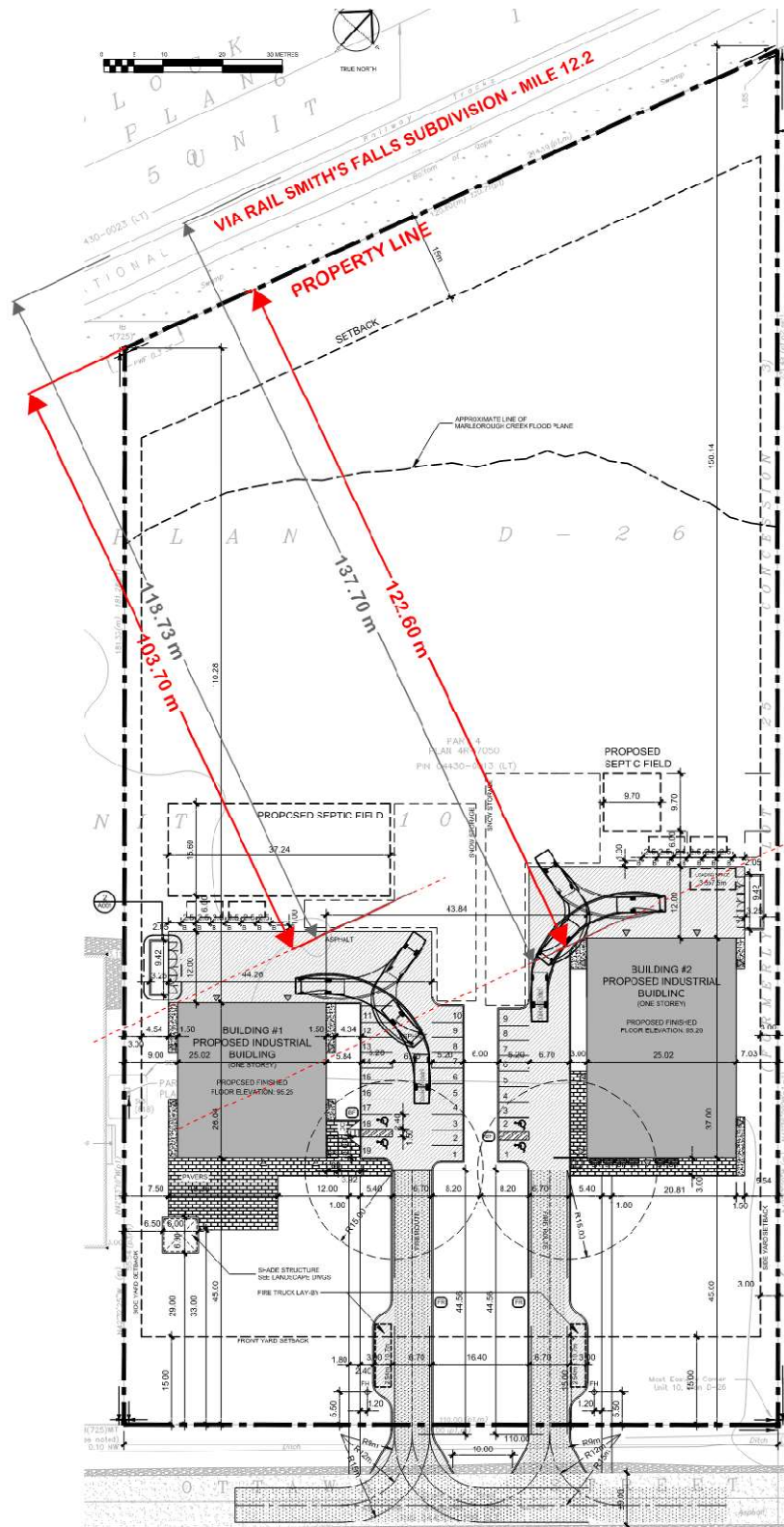


Figure 5: Proposed Location of New Development

The East Building will be setback approximately 123m from the rail corridor property line while the West Building will be setback approximately 104m from the rail corridor property line. These setbacks are illustrated in Figure 5 above. Both buildings will be setback approximately 45m from Ottawa Street, with surface parking provided between the new buildings.

The 'West' building is proposed as a single-storey building, primarily serving as a storage facility with ancillary retail space. The rear portion of the building will function as a warehouse for spirits (e.g., whiskey, gin), while the front section will be dedicated to retail sales and a small on-site bar for consumption. The mezzanine level will feature four small offices and two lounge areas, supporting the property's primary functions.

The Ground Floor and Mezzanine Floor plans of the west building are illustrated in Figure 6 and Figure 7 below.



Figure 6: Ground Floor Plan (West Building)

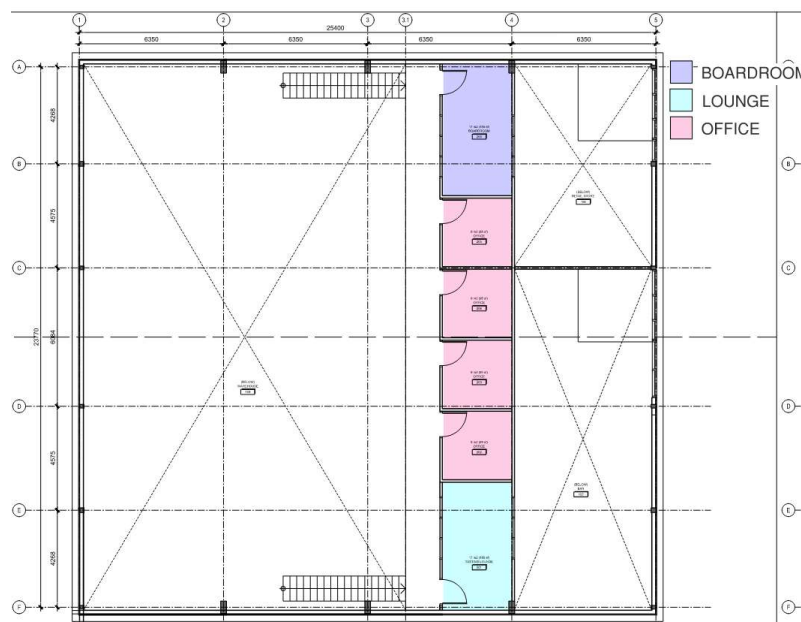


Figure 7: Mezzanine Floor Plan (West Building)

The 'East' building is also proposed as a single-storey building, primarily serving as a storage and brewing facility with ancillary office space. The majority of the building will function as a warehouse for brewing and distilling spirits, while a small area at the southwest corner of the building will be dedicated to offices, a staff room, a washroom, and vestibule. The mezzanine level will feature four small offices and two lounge areas, supporting the property's primary functions.

The Ground Floor and Mezzanine Floor plans of the east building are illustrated in Figure 8 and Figure 9 below.



Figure 8: Ground Floor Plan (East Building)

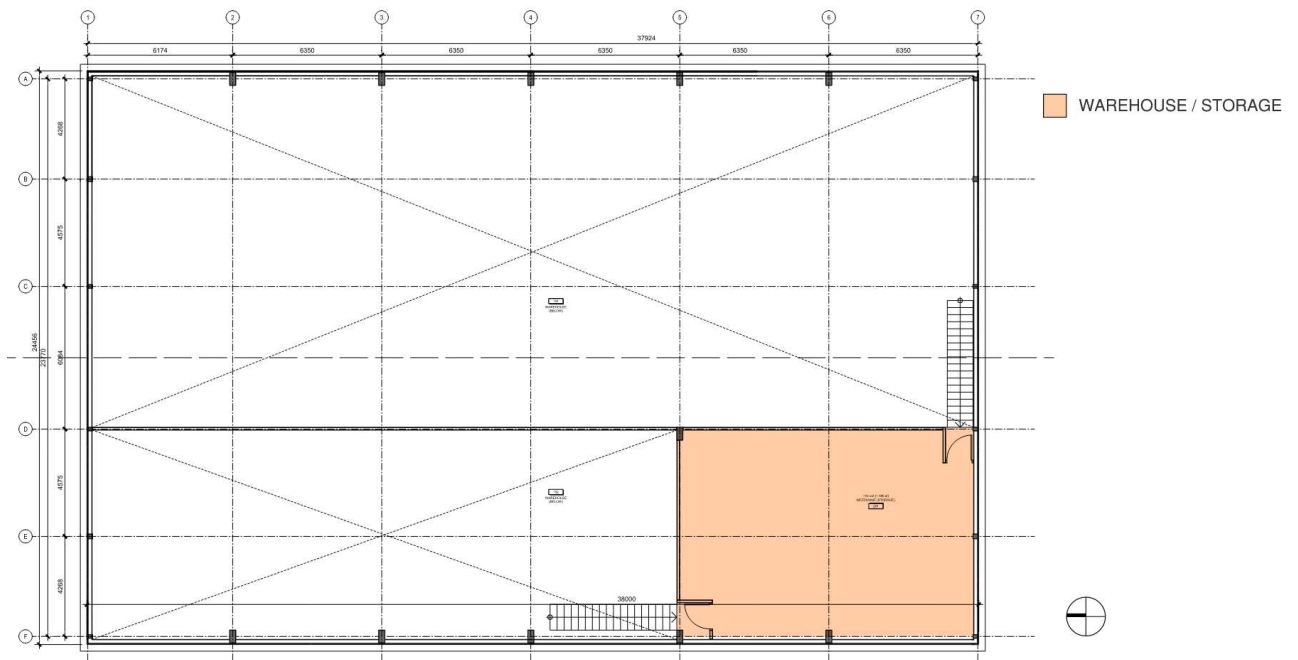


Figure 9: Mezzanine Floor Plan (West Building)

The proposed uses are all considered to be non-sensitive, low occupancy uses. Importantly, given the proposed use, the occupants of these spaces would not be expected to experience adverse impacts from the nearby rail operations.

The property is currently zoned *Rural General Industrial (RG3)*, which typically allows for a range of industrial and commercial activities, with the intent to accommodate light and general industrial uses in rural areas. Permitted uses within the RG3 zones include light industrial and warehouse. The permitted uses generally include:

- **Manufacturing and Processing:** Activities related to the manufacturing or processing of goods, excluding those that are highly noxious or dangerous.
- **Warehousing and Storage:** Facilities for the storage of goods and materials.
- **Service Industries:** Businesses providing services to industrial or commercial operations, such as repair and maintenance services.
- **Transport and Logistics:** Uses related to the transportation and logistics sector, including truck depots and distribution centers.
- **Office Uses:** Offices related to industrial or service operations.
- **Retail Sales:** Limited retail sales, usually related to the products manufactured or processed on-site.
- **Agricultural Uses:** Some agricultural activities might be permitted, depending on the specific regulations of the RG3 zone.
- **Accessory Uses:** Includes uses that are complementary to the primary industrial activities, such as employee amenities or facilities.

Our review takes into consideration the approved uses for the property.

Further, according to the zoning by-law, the conditional permitted uses also include a bar, subject to the use being located on the same lot as the permissible uses listed above. The bar must be “ancillary to a permitted brewery, winery, or distillery and, may not have a gross floor area exceeding the lesser of 300 sq. m. or 25% of the floor area of the brewery.”

Considering the allowable uses under the current zoning by-law, the setbacks that are proposed for the new buildings, and the uses proposed within the future buildings, the development plans are consistent with the applicable guidelines for new development in proximity to active rail corridors.

TRAIN DERAILMENT ANALYSIS

As part of this review, the possibility of a train derailment was considered using the methodology outlined in the AECOM Development of Crash Wall Design Loads from Theoretical Train Impact (or 'AECOM Guidelines'), to understand the theoretical outcome of a train derailment under specific scenarios (or 'Load Cases').

The analysis completed includes passenger trains operating at a maximum speed of 95mph and freight trains operating at a maximum speed of 60mph. For this analysis, a derailment angle of 3.5° and 10° was used. These calculations were completed based on the assumption that the track is running straight and parallel to the site, as is the case with this development.

Table 2: Train derailment distances based on AECOM Guidelines

Load Case	Scenario	Max. distance perpendicular to track where the train comes to rest under the derailment scenarios	
		(3.5°)	(10°)
Load Case 1	Freight Train Multi-Car Glancing Blow	<10.6m	<27.1m
Load Case 2	Freight Train Single Car Direct Impact	<8.6m	<8.6m
Load Case 3	Passenger Train Multi-Car Glancing Blow	<24.1m	<65.5m
Load Case 4	Passenger Train Single Car Direct Impact	<13.1m	<13.1m

Based on the analysis above, the Train Derailment Analysis indicates that a passenger train travelling at the maximum allowable speed of 95mph and/or a freight train travelling the maximum allowable speed of 60mph would not travel more than 66m into the property.

As an additional factor of safety, we considered a far more extreme derailment scenario that applies a 10° departure angle, consistent with the FCM/RAC Guidelines. Under this scenario, a derailed train was shown to lose all momentum prior to reaching the location of the proposed buildings

Importantly, this does not account for the existing topographic features along the rail corridor property line that a derailed train would be expected to encounter in a derailment, which would further act to slow and completely contain the derailed train cars.

Theoretically, a train would have to be travelling more than 167mph (more than 1.5x the allowable speed) to reach the face of the building in any of the derailment scenarios outlined in the AECOM Guidelines. Based on our understanding of rail operations and VIA Rail's track specification, a train would be expected to derail before achieving this critical speed, making the likelihood of impact exceptionally low.

The Train Derailment Analysis indicates that the risk of derailment at the site is acceptably low, as a derailed train would be expected to lose all momentum prior to reaching the additional buildings proposed on the site. The supporting calculations are included in Appendix A– Train Derailment Analysis.

ADDITIONAL CONSIDERATIONS:

Under typical development conditions, VIA Rail requires a 1.83m high security fence between the rail corridor property line and a new development to minimize the risk of trespassing. At 5923 Ottawa Street, a chain-link fence is located along the property line, presumed to have been previously installed by the rail authority. Considering the dense forest along the rear property line and the existing swamp, additional trespassing measures are not considered for the development.

EVALUATION AND CONCLUSION:

The proposed development at 5923 Ottawa Street meets the standard recommended mitigation measures as identified by the FCM/RAC Guidelines for New Development in Proximity to Railway Operations.

Natural derailment protection is provided in the form of an approximately 2-metre-deep ditch extends along the rail corridor property line - similar to an inverse berm - which would corral a train in the event of a derailment. These topographic details are confirmed through the survey, which has been undertaken by a qualified professional. The existing stock of mature trees on the property is also thought to contribute to a lower risk profile as it relates to rail corridor proximity, limiting the severity of a derailment and reducing trespassing risks.

A setback of 104 metres, measured from the rail corridor property line to the face of the west building and a setback of 123 metres to the face of the east building is proposed. These setbacks significantly exceeds the recommended 30 metre setback and on their own are considered sufficient in mitigating the impact of a train derailment.

The ditch condition along the property line only enhances the overall level of protection and safety provided to the buildings. If the grading were to change of the ditch were to be filled in, the conclusions of this report would remain the same.

No changes are proposed to the existing lands within 30 metres of the rail corridor property line, which provide a physical and visual buffer to the railway for future occupants at the site.

Considering the non-sensitive, low occupancy nature of the development, the local conditions which includes adjacent commercial and light-industrial uses, the existing ditch along the rail corridor property line, and the railway operating environment, the risks to the development are acceptably low.

The results of the rail safety study indicate the new development plans proposed at 5923 Ottawa Street align with the most recent guidelines and requirements for new development in proximity to active railways.

As the proposed buildings exceed the required setback from the VIA Rail Smith's Falls Subdivision rail corridor, and the existing grading (inverse berm) and surrounding mature tree-growth/canopy will remain in the future developed condition, no additional rail safety mitigation measures are required.

APPENDICES

Appendix A - Train Derailment Analysis

Appendix B – Topographic Survey & Architectural Plans

Appendix C – Rail Corridor Details.

Appendix D – Comments Received

APPENDIX A – TRAIN DERAILMENT ANALYSIS

The train derailment distances for glancing blow load cases were calculated by applying the following equation and rearranging to solve for d_{CL} . The resulting values are summarized in the section below for a derailment at 3.5° and 10°.

$$v_G = \sqrt{v_o^2 + 2a \left(\frac{d_{CL} - 1.625}{\sin \theta_G} \right)} \text{ [m/s]}$$

LOAD CASE 1 - GLANCING BLOW - MULTI-CAR FREIGHT		
Description	Variable	Value
Resistance	R	0.25
Grade	G	0
Groundline at wall		0
Base of rail		0
Angle of impact (degrees)	θ_G	3.5
Distance from the centreline of the track for train to come to rest (m)	d_{CL}	10.6
Track speed (mph)	v_o	60
Track speed (km/hr)	v_o	96.56064
Track speed (m/s)	v_o	26.82
Velocity of train at impact (m/s)	v_G	0
Velocity of train at impact (km/hr)		0
Velocity of train at impact (mph)		0
Impact force (kN)	F_G	0
Length to stop (m)	L	146.83
Length of the wall along which the impact force should act (m)	l_G	3.05

LOAD CASE 3: GLANCING BLOW - MULTI-CAR PASSENGER		
Description	Variable	Value
Resistance	R	0.25
Grade	G	0
Groundline at wall		0
Base of rail		0
Angle of impact (degrees)	θ_G	3.5
Distance from the centreline of the track for train to come to rest (m)	d_{CL}	24.1
Track speed (mph)	v_o	95
Track speed (km/hr)	v_o	152.88768
Track speed (m/s)	v_o	42.47
Velocity of train at impact (m/s)	v_G	0
Velocity of train at impact (km/hr)		0
Velocity of train at impact (mph)		0
Impact force (kN)	F_G	0
Length to stop (m)	L	368.10
Length of the wall along which the impact force should act (m)	l_G	3.05

LOAD CASE 1 – GLANCING BLOW – MULTI-CAR FREIGHT		
Description	Variable	Value
Resistance	R	0.25
Grade	G	0
Groundline at wall		0
Base of rail		0
Angle of impact (degrees)	θ_G	10
Distance from the centreline of the track for train to come to rest (m)	d_{CL}	27.1
Track speed (mph)	v_o	60
Track speed (km/hr)	v_o	96.56064
Track speed (m/s)	v_o	26.82
Velocity of train at impact (m/s)	v_G	0
Velocity of train at impact (km/hr)		0
Velocity of train at impact (mph)		0
Impact force (kN)	F_G	0
Length to stop (m)	L	146.83
Length of the wall along which the impact force should act (m)	l_G	3.10

LOAD CASE 3: GLANCING BLOW – MULTI-CAR PASSENGER		
Description	Variable	Value
Resistance	R	0.25
Grade	G	0
Groundline at wall		0
Base of rail		0
Angle of impact (degrees)	θ_G	10
Distance from the centreline of the track for train to come to rest (m)	d_{CL}	65.5
Track speed (mph)	v_o	95
Track speed (km/hr)	v_o	152.88768
Track speed (m/s)	v_o	42.47
Velocity of train at impact (m/s)	v_G	0
Velocity of train at impact (km/hr)		0
Velocity of train at impact (mph)		0
Impact force (kN)	F_G	0
Length to stop (m)	L	368.10
Length of the wall along which the impact force should act (m)	l_G	3.10

The design forces for glancing blow load cases were calculated using the equation below.

$$F_G = \frac{\frac{1}{2}m(v_G \sin \theta_G)^2}{d_G}$$

(metric)

[14M]

The design forces for the single car load cases were calculated using the equation below.

$$F_A = \frac{\frac{1}{2}m(v_A \cos \theta_f)^2}{32.17d_A}$$

[15]

All calculations were performed with a distance between the centreline of the closest track. The resulting values are summarized in the sections below.

LOAD CASE 1: GLANCING BLOW – MULTI-CAR FREIGHT

Description	Variable	Value
Resistance	R	0.25
Grade	G	0
Groundline at wall		0
Base of rail		0
Angle of impact (degrees)	θ_G	3.5
Distance from the centreline of the track (dCL)	d_{CL}	104
Track speed (mph)	v_o	60
Track speed (km/hr)	v_o	96.56064
Track speed (m/s)	v_o	26.82
Velocity of train at impact (m/s)	v_G	0
Velocity of train at impact (km/hr)		0
Velocity of train at impact (mph)		0
Impact force (kN)	F_G	0
Length to stop (m)	L	146.83
Length of the wall along which the impact force should act (m)	l_G	3.05

LOAD CASE 2: DIRECT IMPACT – SINGLE-CAR FREIGHT

Description	Variable	Value
Resistance	R	0.25
Distance from the centreline of the track (dCL)	d_{CL}	104
Track speed (mph)		60
Track speed (km/hr)		96.56064
Angle of rotation at impact (radians)	θ_f	0
Impact speed (m/s)	v_A	0
Impact speed (km/hr)		0
Impact speed (mph)		0
Impact force (kN)	F_A	0
Length of the wall along which the impact force should act	l	0

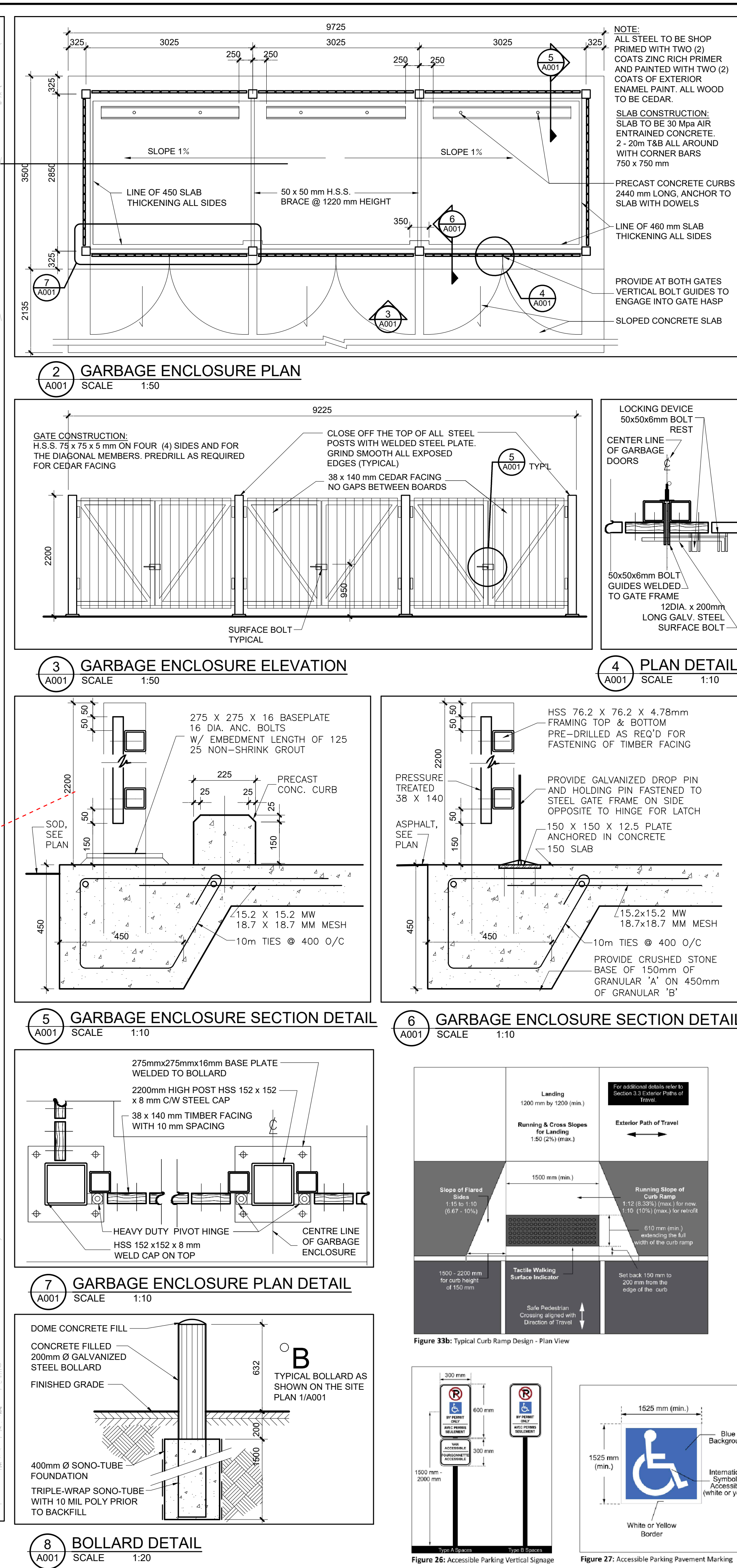
LOAD CASE 3: GLANCING BLOW – MULTI-CAR PASSENGER

Description	Variable	Value
Resistance	R	0.25
Grade	G	0
Groundline at wall		0
Base of rail		0
Angle of impact (degrees)	θ_G	3.5
Distance from the centreline of the track (dCL)	d_{CL}	104
Track speed (mph)	v_o	95
Track speed (km/hr)	v_o	152.88768
Track speed (m/s)	v_o	42.47
Velocity of train at impact (m/s)	v_G	0
Velocity of train at impact (km/hr)		0
Velocity of train at impact (mph)		0
Impact force (kN)	F_G	0
Length to stop (m)	L	368.10
Length of the wall along which the impact force should act (m)	l_G	3.05

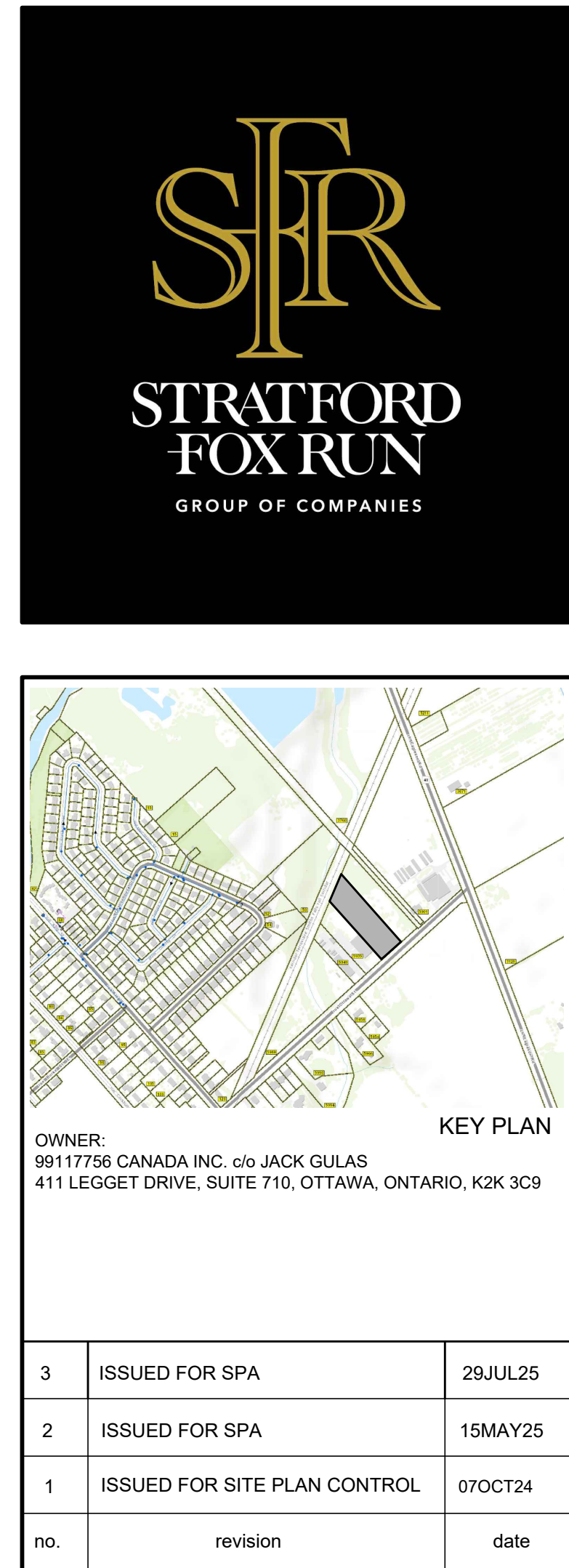
LOAD CASE 4: DIRECT IMPACT – SINGLE-CAR PASSENGER

Description	Variable	Value
Resistance	R	0.25
Distance from the centreline of the track (dCL)	d_{CL}	104
Track speed (mph)		95
Track speed (km/hr)		152.88768
Angle of rotation at impact (radians)	θ_f	0
Impact speed (m/s)	v_A	0
Impact speed (km/hr)		0
Impact speed (mph)		0
Impact force (kN)	F_A	0
Length of the wall along which the impact force should act	l	0

APPENDIX B – TOPOGRAPHIC SURVEY AND ARCHITECTURAL PLANS




ZONING INFORMATION		
NOTE: ALL ZONING DEFINITIONS AND REQUIREMENTS AS PER CITY OF OTTAWA ZONING BY-LAW 2008-250		
ZONING MECHANISM	REQUIRED	PROVIDED
DEFINITION	RG3 (385r) RURAL GENERAL INDUSTRIAL ZONE	BUILDING #1: WAREHOUSE RETAIL STORE, BAR (25%) BUILDING #2: WAREHOUSE
MIN. LOT WIDTH	30.0 m	110.0 m
MIN. LOT AREA	2,000 m²	22,680 m² (± 5.6 Acres)
MIN. FRONT YARD SETBACK	15.0 m	45.0 m
MIN. REAR YARD SETBACK	15.0 m	110.0 m
MIN. INTERIOR SIDE YARD SETBACK	3.0 m	9.0 m
MAX. LOT COVERAGE	35%	2.85%
PARKING LANDSCAPE BUFFER	FOR A PARKING LOT CONTAINING 10-100 SPACES: ABUTTING A STREET = 3 m NOT ABUTTING A STREET = 1.5 m	ABUTTING A STREET 3 m NOT ABUTTING A STREET 3 m
STANDARD PARKING SPACE	2.6m WIDTH x 5.2m LENGTH	2.6m WIDTH x 5.2m LENGTH
PARALLEL PARKING SPACE	2.6m WIDTH x 6.7m LENGTH	2.6m WIDTH x 6.7m LENGTH
ACCESSIBLE PARKING SPACE	3.4x5.2m (A); 2.4x5.2m(B)	3.4x5.2m (A); 2.4x5.2m(B)
PARKING REQUIREMENTS	BUILDING#1: LIGHT INDUSTRIAL USE (N49): 0.8 PER 100 m² FOR THE FIRST 5,000 m² OF GFA (3.495 REQUIRED) RETAIL STORE (N79): 3.4 PER 100m² OF GFA (2.73 REQUIRED) BAR (N15): 6 PER 100m² OF GFA (6.48 REQUIRED) <u>TOTAL REQUIRED: 12.725</u> BUILDING#2: LIGHT INDUSTRIAL USE (O49): 0.8 PER 100 m² FOR THE FIRST 5,000 m² OF GFA (8.336 REQUIRED)	BUILDING#1: 19 PARKING SPACES BUILDING#2: 9 PARKING SPACES
BARRIER FREE ACCESSIBLE	AS PER CITY OF OTTAWA ACCESSIBILITY DESIGN STANDARDS, PARAGRAPH 3.1.2, TABLE 3 1 TYPE 'A', 1 TYPE 'B'	BUILDING#1: 2 ACCESSIBLE PARKING SPACES (1xTYPE 'A' + 1xTYPE 'B') BUILDING#2: 2 ACCESSIBLE PARKING SPACES (1xTYPE 'A' + 1xTYPE 'B')
LOADING SPACES	GFA 350-999m² - 0 required	0 PROVIDED
BICYCLE PARKING RATE	BUILDING#1: LIGHT INDUSTRIAL USE: 1 PER 1,000 m² OF GFA (0.4365 REQUIRED) RETAIL STORE: 1 PER 250 m² OF GFA (0.32 REQUIRED) BAR: 1 PER 1,500 m² OF GFA (0.072) <u>TOTAL REQUIRED: 0.8285</u> BUILDING#2: LIGHT INDUSTRIAL USE: 1 PER 1,000 m² OF GFA (1.042 REQUIRED)	BUILDING#1: 6 BICYCLE SPACES BUILDING#2: 6 BICYCLE SPACES

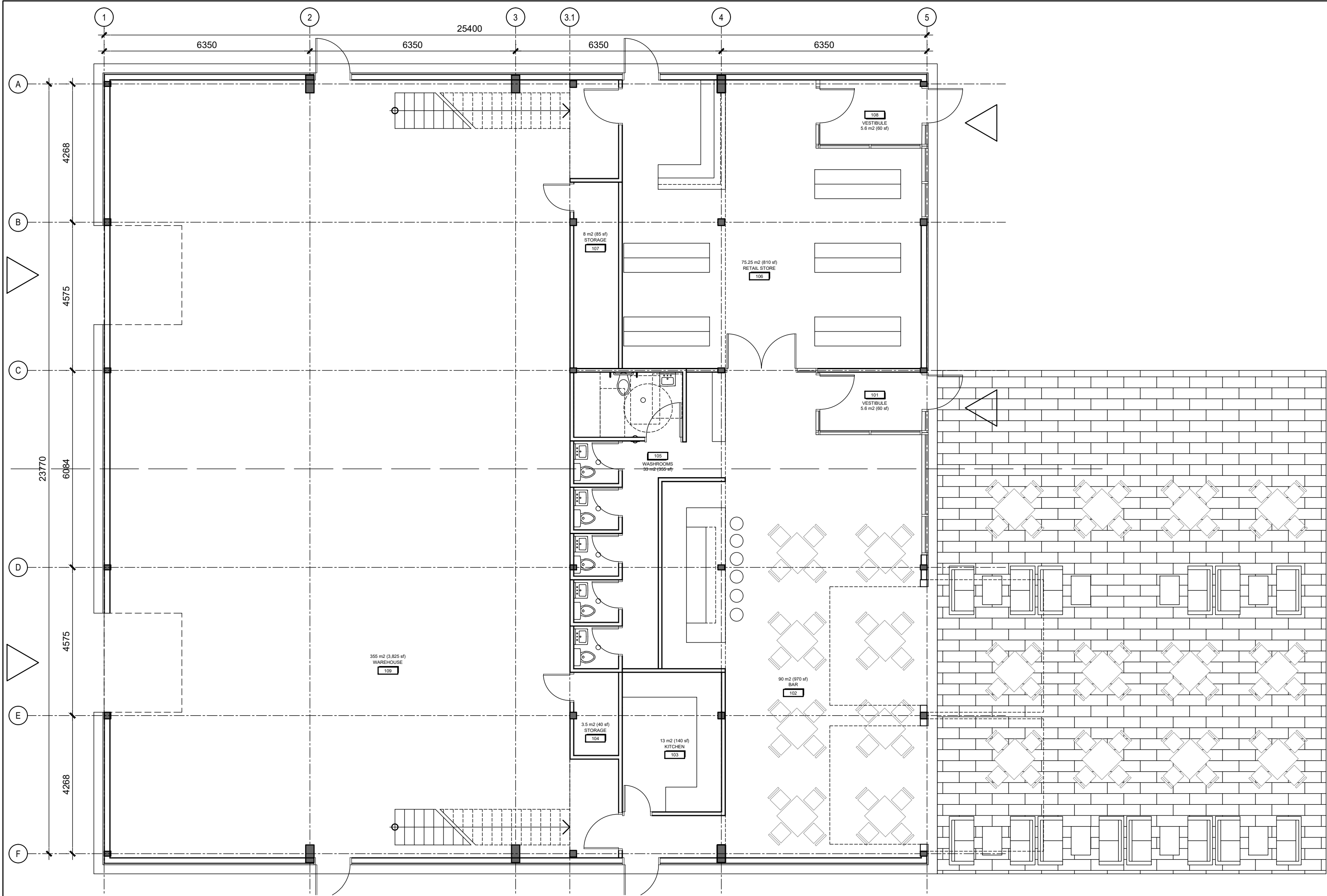


N45 ARCHITECTURE INC.

71 Bank Street, 7th floor - Ottawa, Ontario, K1P 5N2
tel. 613.224.0095 fax 613.224.9811

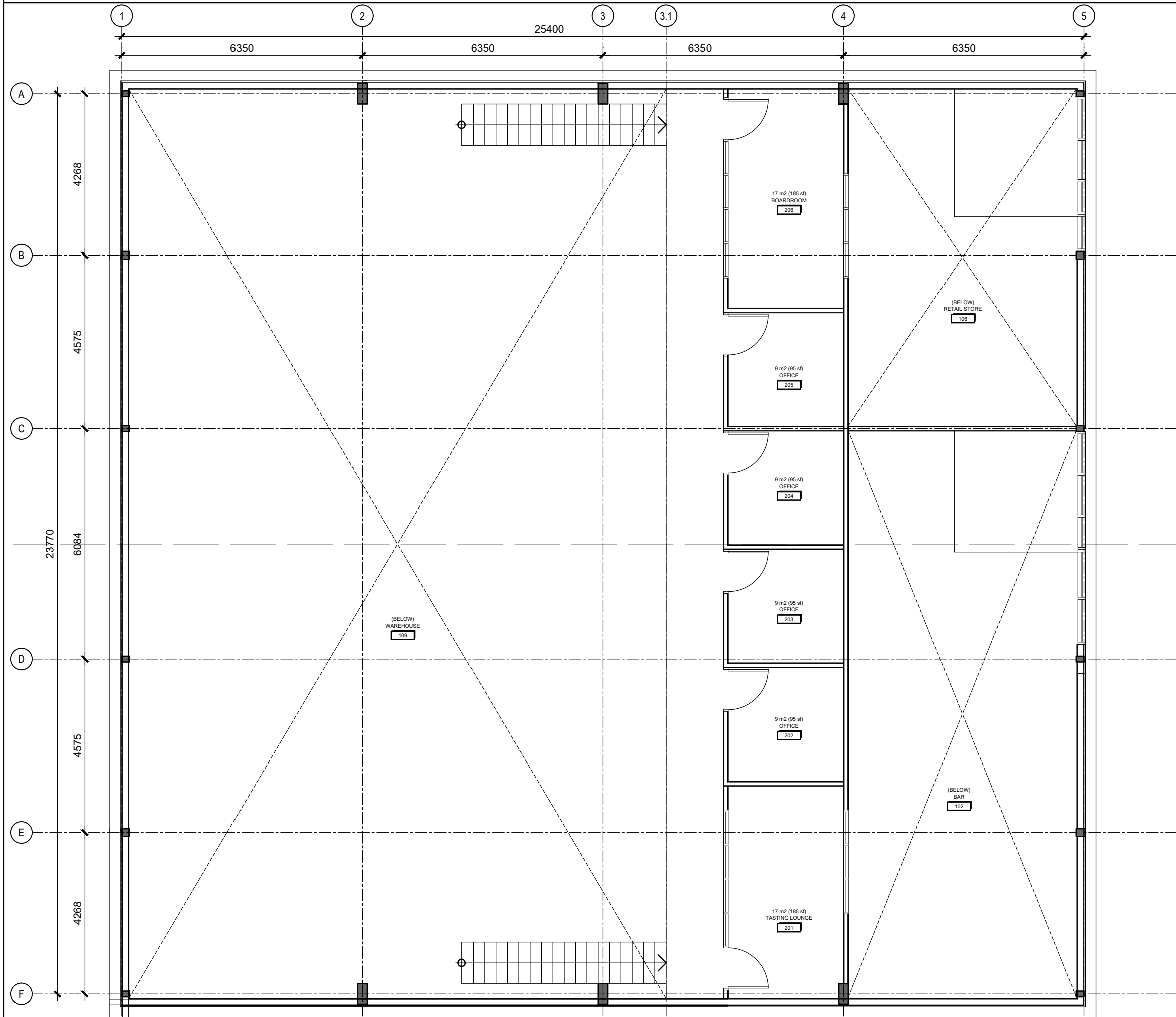
<p>project</p> <p>FOXRUN RICHMOND</p> <p>5923 OTTAWA STREET OTTAWA, ON</p>	<p>seal</p> 
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drawing title	
SITE PLAN	
scale AS NOTED	drawn by NF
date JUNE 2022	checked by VP
project number 24-826	drawing number A-001
CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.	
revision -	

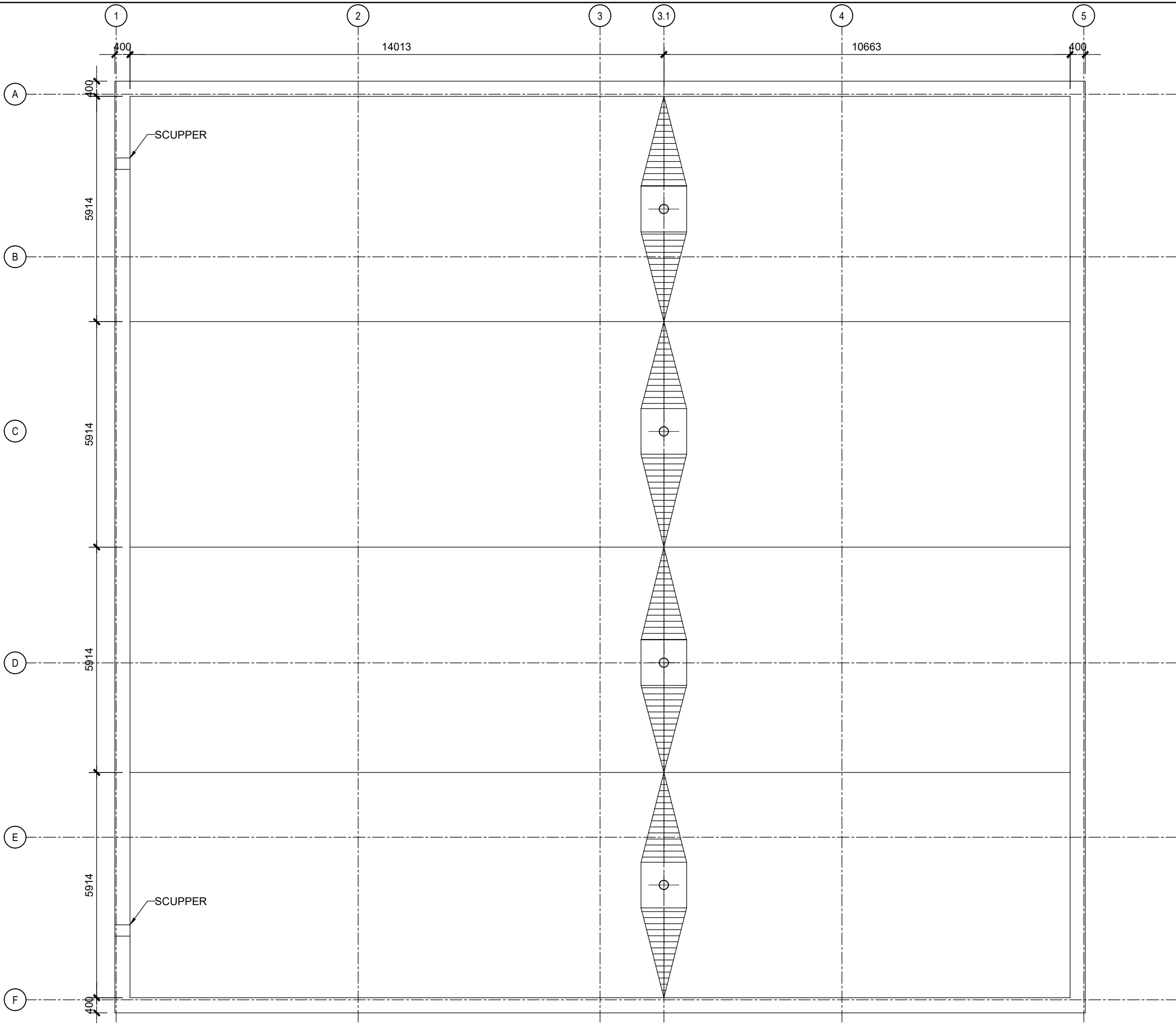


ROOM NO	ROOM	AREA(m2)
101	VESTIBULE	5.60
102	BAR	90.00
103	KITCHEN	13.00
104	STORAGE	3.50
105	WASHROOMS	33.00
106	RETAIL STORE	75.25
107	STORAGE	8.00
108	VESTIBULE	5.60
109	WAREHOUSE	355.00
201	TASTING LOUNGE	17.00
202	OFFICE	9.00
203	OFFICE	9.00
204	OFFICE	9.00
205	OFFICE	9.00
206	BOARDROOM	17.00

1 GROUND FLOOR PLAN
A-002 SCALE 1:100



2 MEZANINNE FLOOR PLAN
A-002 SCALE 1:100



2 ROOFPLAN
A-002 SCALE 1:100



STRATFORD
FOX RUN
GROUP OF COMPANIES

OWNER:
99117756 CANADA INC. c/o JACK GULAS
411 LEGGET DRIVE, SUITE 710, OTTAWA, ONTARIO, K2K 3C9

3	ISSUED FOR SPA	31JUL25
2	ISSUED FOR SITE PLAN CONTROL	19NOV24
1	ISSUED FOR SITE PLAN CONTROL	07OCT24
no.	revision	date

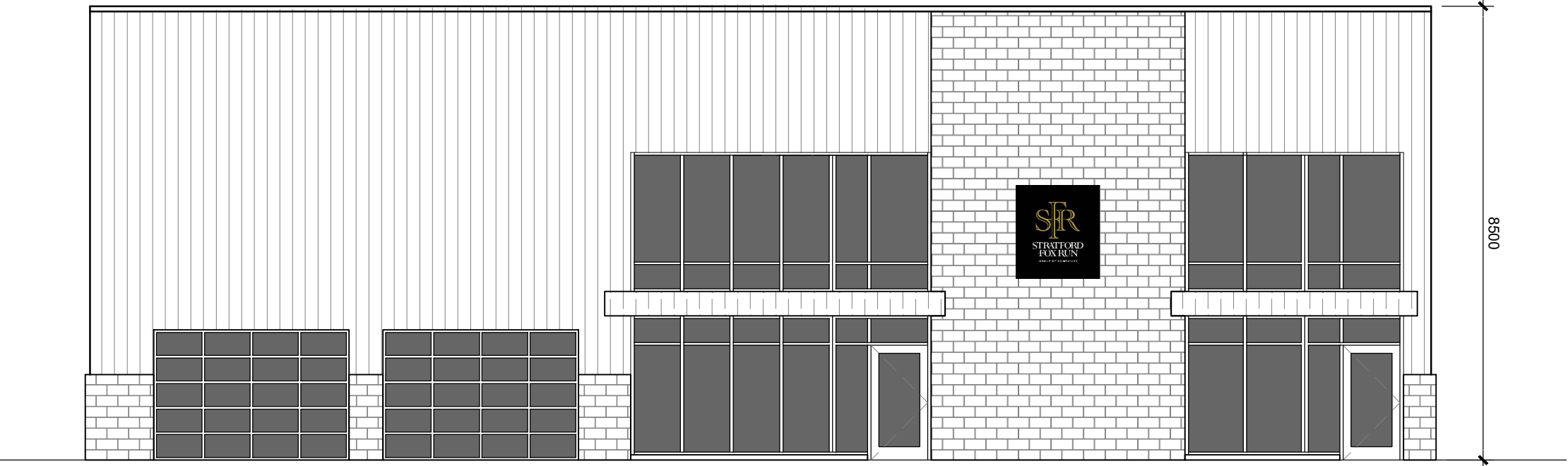


N45 ARCHITECTURE INC.

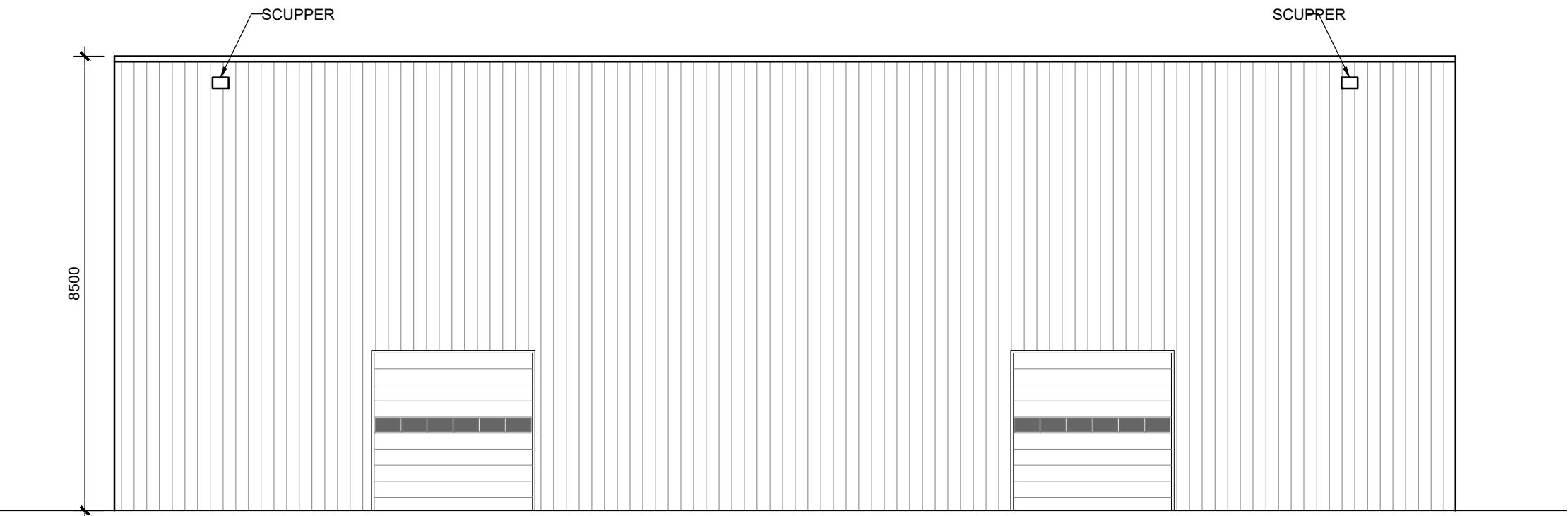
71 Bank Street, 7th floor - Ottawa, Ontario, K1P 5N2
tel. 613.224.0095 fax 613.224.9811

project	FOXRUN RICHMOND
5923 OTTAWA STREET OTTAWA, ON	
project north	seal

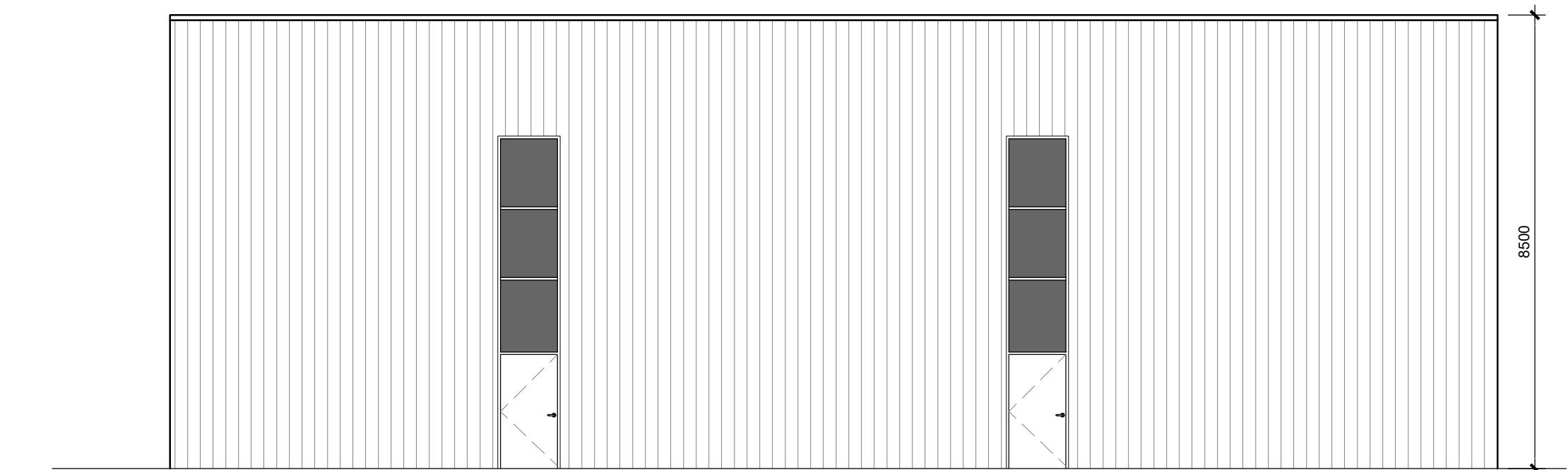
drawing title	FLOOR PLANS
scale AS NOTED	drawn by NF
date OCT 2022	checked by VP
project number 24-826	drawing number A-002
CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.	revision -



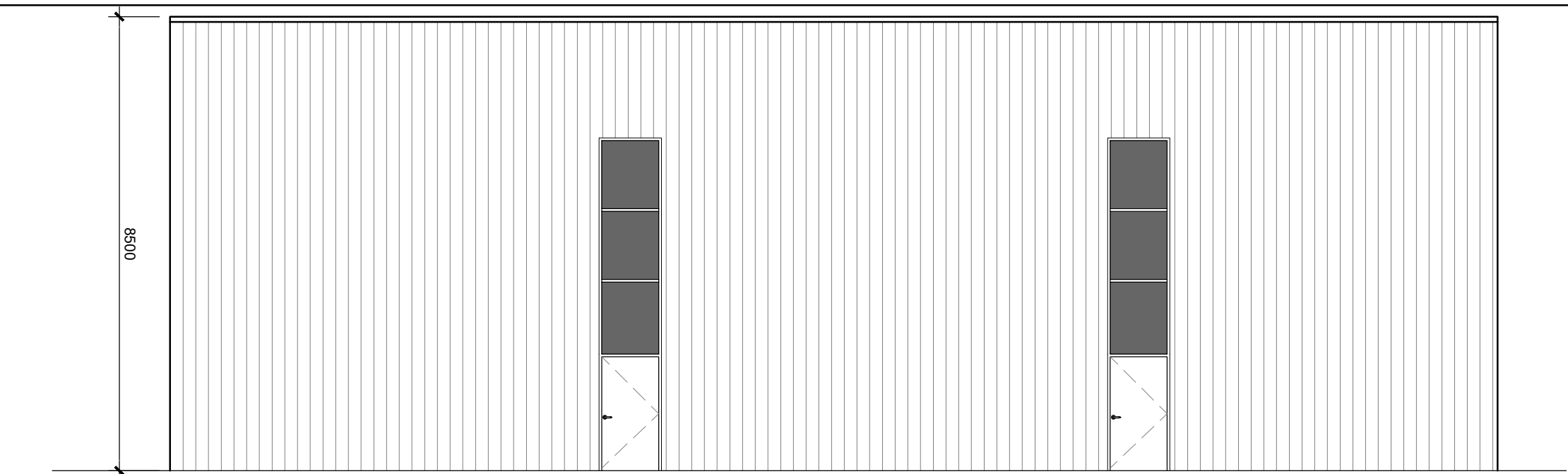
1 SOUTH ELEVATION
A-003 SCALE 1:100



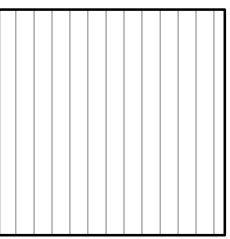
2 NORTH ELEVATION
A-003 SCALE 1:100



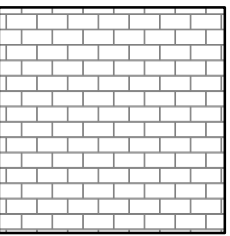
3 EAST ELEVATION
A-003 SCALE 1:100



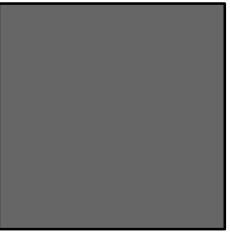
4 WEST ELEVATION
A-003 SCALE 1:100



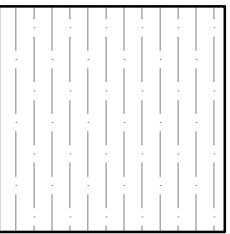
METAL SIDING



STONE VENEER
(ARTIFICIAL)



GLAZING



ALUMINUM



STRATFORD
FOX RUN
GROUP OF COMPANIES

OWNER:
99117756 CANADA INC. c/o JACK GULAS
411 LEGGET DRIVE, SUITE 710, OTTAWA, ONTARIO, K2K 3C9

3	ISSUED FOR SPA	31JUL25
2	ISSUED FOR SITE PLAN CONTROL	19NOV24
1	ISSUED FOR SITE PLAN CONTROL	07OCT24
no.	revision	date



N45 ARCHITECTURE INC.

71 Bank Street, 7th floor - Ottawa, Ontario, K1P 5N2
tel. 613.224.0095 fax 613.224.9811

project
FOXRUN RICHMOND

5923 OTTAWA STREET
OTTAWA, ON

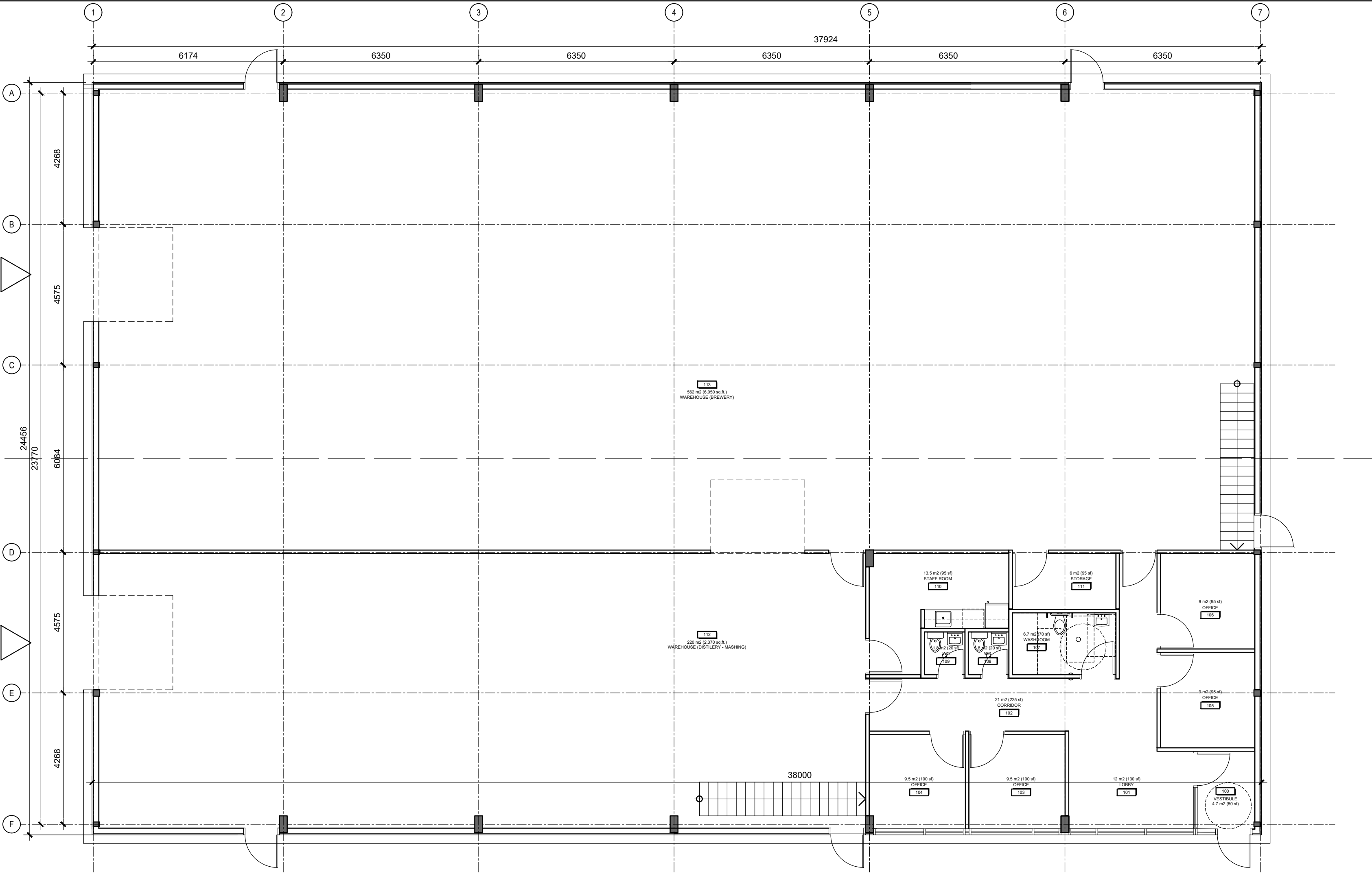
project north	seal
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drawing title
BUILDING ELEVATIONS

scale AS NOTED	drawn by NF
date OCT 2022	checked by VP
project number 24-826	drawing number A-003

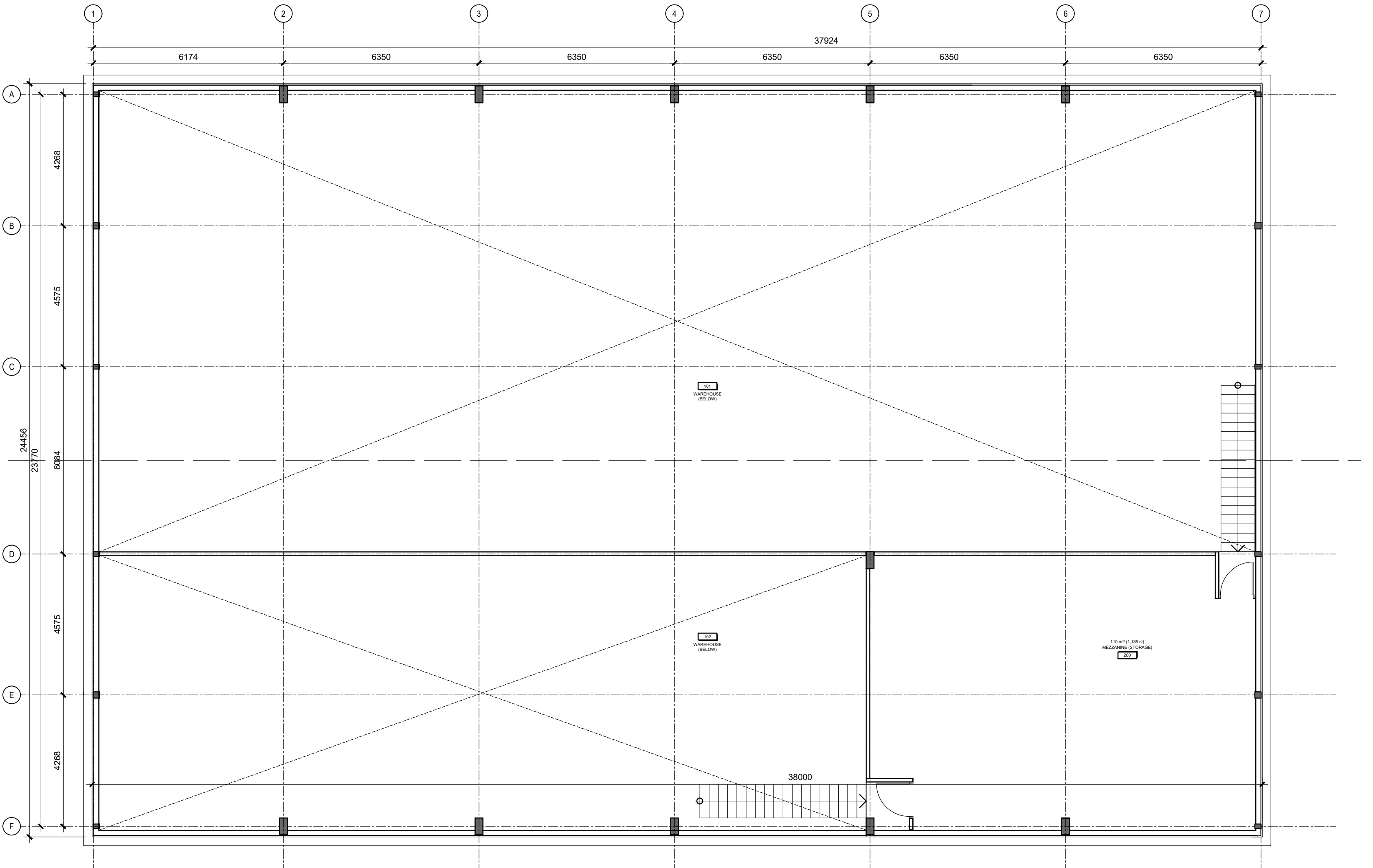
CONTRACTOR TO VERIFY ALL DIMENSIONS
AND NOTIFY THE ARCHITECT OF ANY
DISCREPANCIES BEFORE WORK COMMENCES.
DO NOT SCALE DRAWINGS.

revision
-



ROOM NO	ROOM	AREA(m2)
100	VEHICLE	4.70
101	LOBBY	12.00
102	CORRIDOR	21.00
103	OFFICE	9.50
104	OFFICE	9.50
105	OFFICE	9.50
106	OFFICE	9.50
107	UNIVERSAL WASHROOM	6.70
108	VC	1.80
109	VC	1.80
110	STAFF ROOM	13.50
111	STORAGE	6.00
112	WAREHOUSE (DESTILERY)	220.00
113	WAREHOUSE (BREWERY)	562.00
200	MEZZANINE STORAGE	110.00

1 GROUND FLOOR PLAN
A-004 SCALE 1:100



2 MEZZANINE FLOOR PLAN
A-004 SCALE 1:100



STRATFORD
FOX RUN
GROUP OF COMPANIES

OWNER:
99117756 CANADA INC. c/o JACK GULAS
411 LEGGET DRIVE, SUITE 710, OTTAWA, ONTARIO, K2K 3C9

-		
1	ISSUED FOR SPA	31 JUL 25
no.	revision	date



N45 ARCHITECTURE INC.

71 Bank Street, 7th floor - Ottawa, Ontario, K1P 5N2
tel. 613.224.0095 fax 613.224.9811

project	FOX RUN RICHMOND
5923 OTTAWA STREET OTTAWA, ON	
project north	seal

drawing title	
BREWERY BUILDING FLOOR PLANS	
scale AS NOTED	drawn by NF
date MARCH 2025	checked by VP
project number 24-826	drawing number A-004
CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.	
revision	-

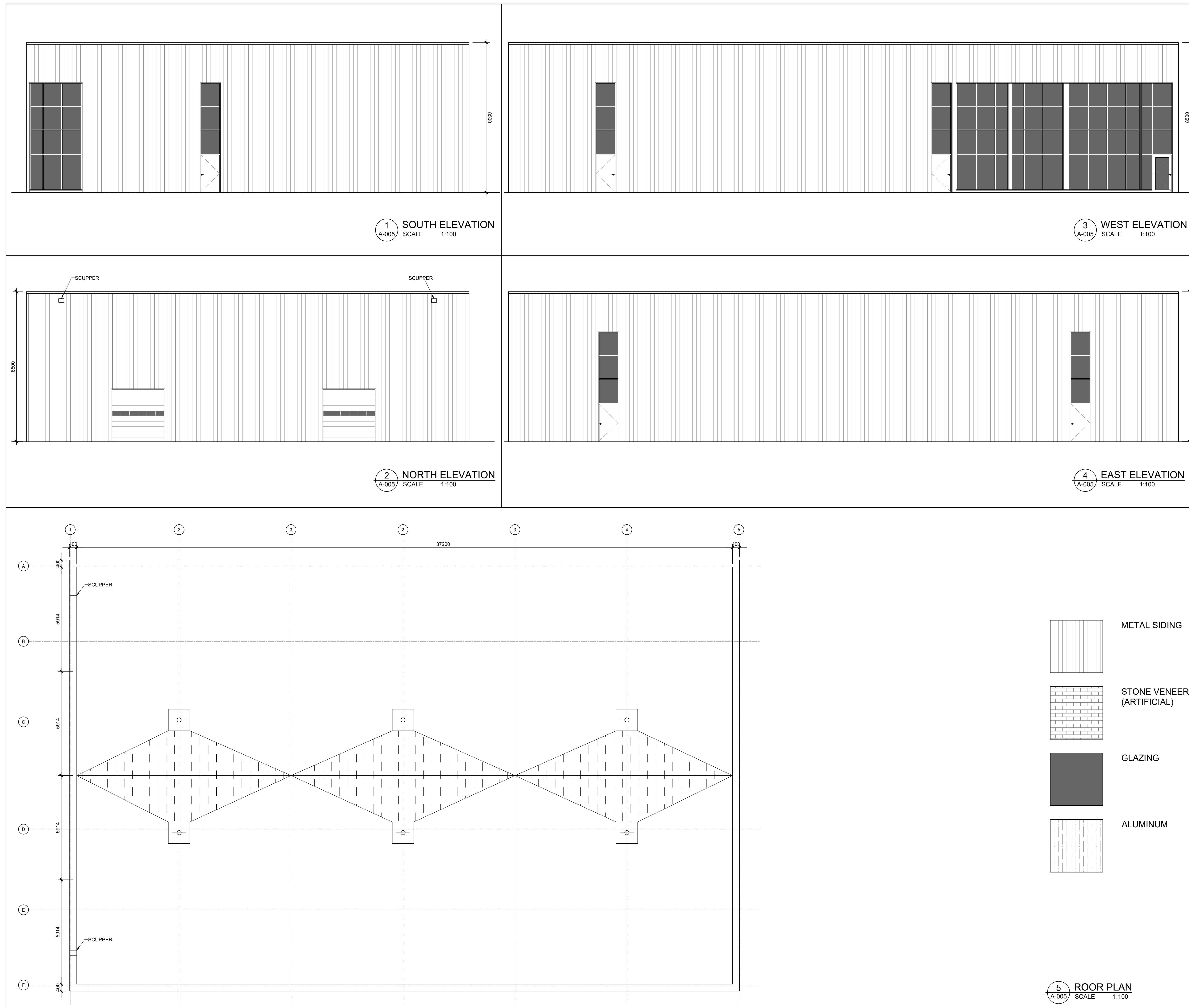


-		
1	ISSUED FOR SPA	31JUL25
no.	revision	date



<p>project north</p> <p>FOXRUN RICHMOND</p> <p>5923 OTTAWA STREET OTTAWA, ON</p>	
<p>project north</p>	<p>seal</p> 

drawing title	
BREWERY BUILDING ELEVATIONS, ROOF PLAN	
scale AS NOTED	drawn by NF
date MARCH 2025	checked by VP
project number 24-826	drawing number A-005
CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.	
revision -	



APPENDIX C – RAIL CORRIDOR DETAILS.

OTTAWA → KINGSTON → TORONTO

TRAIN		41	641	43	51	643	45	53	47	645	55	647	59
DAYS / JOURS		1234567	1234567	1234567	1234567	1234567	1234567	1234567	1234567	1234567	1234567	1234567	1234567
BUSINESS AFFAIRES		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ottawa, ON	DP	05:30	06:40	07:20	08:35	08:40	10:27	11:40	12:28	14:30	15:30	17:20	18:26
Fallowfield		05:55	06:59	07:40	08:55	09:01	10:46	12:00	12:49	14:55	15:49	17:39	18:52
Smiths Falls		06:22	07:26		09:24	09:29							19:25
Brockville		06:51	07:55		09:53	09:58			13:56		16:54		19:58
Gananoque									14:22				
Kingston	AR	07:31	08:35	09:10	10:33	10:38	12:24	13:35	14:41	16:32	17:34	19:18	20:38
	DP	07:34	08:38	09:13	10:36	10:41	12:26	13:39	14:45	16:35	17:38	19:20	20:41
Napanee						11:02							
Belleville		08:16	09:19			11:25		14:21	15:28	17:16	18:18		21:22
Trenton Jct.						11:37							21:32
Cobourg		08:51	09:54		11:46	12:03					18:52		22:00
Port Hope						12:11							
Oshawa		09:27	10:29			12:43		15:29	16:38	18:23	19:25	21:12	22:33
Guildwood			10:46		12:36	13:01			16:58				22:50
Toronto	AR	10:02	11:02	11:25	12:52	13:16	14:48	16:03	17:15	19:05	19:57	21:45	23:07

OTTAWA
TORONTO

No local service between Ottawa and Fallowfield, or Guildwood and Toronto. / Pas de service local entre Ottawa et Fallowfield, ainsi qu'entre Guildwood et Toronto.

✈ Travel between Union Station and Pearson Airport on UP Express trains in 25 minutes, with departures every 15 minutes. / Voyagez entre la gare Union et l'aéroport Pearson à bord des trains UP Express. Trajet de 25 minutes et départs toutes les 15 minutes.

TORONTO → KINGSTON → OTTAWA

TRAIN	50	52	40	42	644	44	46	646	54	48	
DAYS / JOURS	1234567	1234567	1234567	1234567	1234567	1234567	123457	123457	1234567	1234567	
BUSINESS AFFAIRES	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Toronto, ON DP	06:40	08:35	10:40	12:20	13:20	14:20	15:40	16:35	17:40	18:40	
Guildwood	07:00								17:58	18:58	
Oshawa	07:19	09:08		12:52	13:53	14:54	16:17	17:06	18:14	19:16	
Port Hope									18:40	19:43	
Cobourg	07:54	09:40			14:26		16:50		18:48	19:53	
Trenton Jct.									19:15	20:19	
Belleville	08:29				15:03			18:11	19:30	20:36	
Napanee									19:50	20:54	
Kingston AR	09:07	10:49	12:49	14:32	15:39	16:32	17:59		20:09	21:13	
DP	09:11	10:53	12:51	14:34	15:42	16:36	18:02		20:12	21:16	
Gananoque										21:38	
Brockville	10:08	11:48				17:20	18:47			22:03	
Smiths Falls	10:39					17:50				22:33	
Fallowfield	11:12	12:47	14:35	16:17	17:41	18:24	19:47	20:24	21:49	23:00	
Ottawa, ON AR	11:29	13:09	14:57	16:34	17:58	18:46	20:09	20:42	22:07	23:16	

TORONTO
OTTAWA

No local service between Toronto and Guildwood, or Fallowfield and Ottawa. / Pas de service local entre Toronto et Guildwood, ainsi qu'entre Fallowfield et Ottawa.

Travel between Union Station and Pearson Airport on UP Express trains in 25 minutes, with departures every 15 minutes. / Voyagez entre la gare Union et l'aéroport Pearson à bord des trains UP Express. Trajet de 25 minutes et départs toutes les 15 minutes.

APPENDIX D – COMMENTS RECEIVED

July 3, 2025

Bridgette Alchawa
Keeper Co.
Via email: bridgette@keeperco.ca

**Subject: Feedback Form – Completeness Review #1
Site Plan Control
5923 Ottawa Street**

Please find below information regarding next steps as well as consolidated comments from the review of the studies and plans submitted in support of the above-noted Site Plan Control application.

Next Steps

1. A review of the materials submitted for the above-noted Site Plan Control Application has been undertaken and staff have identified deficiencies needing to be resolved before the application(s) can be formally “deemed complete”. Please proceed to provide another submission for review and submit this together with the necessary revised studies and/or plans to planningcirculations@ottawa.ca.
2. In your subsequent submission, please ensure that all deficiencies detailed herein are addressed. A detailed cover letter stating how each deficiency has been addressed should be included with the submission materials. Please coordinate the numbering of your responses within the cover letter with the number(s) herein.
3. Please note that the text below is divided under two headings: “Deficiencies” and “Supportability Comments”. Please note that any text under “Deficiencies” must be addressed before we deem the application complete. Text under “Supportability Comments” will need to be addressed; however, it is not required to be addressed prior to deeming the application complete. If the “Supportability Comments” are not addressed in the next submission, they will be raised again through the formal review of the application(s), if applicable.

DEFICIENCIES

Planning

List of Studies and Plans Reviewed:

- **Site Plan**, A-001, prepared by N45 Architecture Inc., dated 07/10/24, revision 2, dated 15/05/25.
- **Landscape Plan**, L1.01, prepared by Levstek Consultants Inc., dated October 2024, revision 2, dated 05/05/25.

Deficiencies:

- D1. Please ensure the Site Plan meets the requirements of the Terms of Reference ([Site Plan TOR](#)). Some items currently missing from the Site Plan include:
- a) The floorspace breakdown by use for each building;
 - b) A legend identifying the symbols used. This includes the dashed rectangles within the lay-by located in the accesses, the solid rectangles near the buildings, the 6x6 structure;
 - c) Name and address of property owner;
 - d) The width of Ottawa Street;
 - e) Please include signage for the accessible parking spaces, along with design details;
 - f) Please include location and design details for any fire route signage;
 - g) Please include the dimensions of the bicycle parking and design details; and
 - h) Location of all existing natural features. See environmental comments below.
- D2. Please show an accessible curb ramp for Building #2 as provided for Building #1.
- D3. A Zoning Confirmation Report will need to be prepared and submitted. It appears that this was not identified in the original feedback form list of requirements however one will need to be provided as it is required for all applications.

Please contact Stephan Kukkonen, Planner I, for follow-up questions.

Building Code Services

Deficiencies:

- D4. None.



Please contact Todd O'Rourke, Zoning Plans Examiner, for follow-up questions.

Urban Design

Deficiencies:

- D5. Please confirm that the Elevations and Site Plan are coordinated – is the South Elevation Ottawa Street? The door placement and floor plans do not appear to match the Site Plan for Building 2.
- D6. Please note materials and projections on the Elevations as per the [City's Terms of Reference](#).

Please contact Lisa Stern, Planner III, Urban Design, for follow-up questions.

Engineering

List of Studies and Plans Reviewed:

- **Geotechnical Investigation**, report no. PG7183-2, prepared by Paterson Group Ltd., revision n/a, dated May 6, 2025
- **Phase One Environmental Site Assessment**, report no. PE6526-1R, prepared by Paterson Group, revision no. 1, dated November 14, 2024
- **Phase Two Environmental Site Assessment**, report no. PE6526-2R, prepared by Paterson Group, revision no. 1, dated November 14, 2024
- **Rail Safety/Proximity Review**, project no.: EN024-01926, prepared by Entuitive Corporation, dated October 17, 2024, revision 2, dated April 7, 2025
- **Servicing & Stormwater Management Report**, project no. CCO-25-0415, prepared by Egis Canada, revision no. 1, dated June 6, 2025
- **Ditch Hydrologic and Hydraulic Analysis**, project no. P2710(e01), prepared by JFSA Canada Inc., revision no. e01, dated June 5, 2025
- **Lot Grading and Drainage Plan**, drawing number C101, prepared by Egis Canada, dated October, 2024, revision 3, dated June, 2025
- **Site Servicing Plan**, drawing number C102, prepared by Egis Canada, dated June, 2025, revision 3, dated June 6, 2025
- **Erosion & Sediment Control Plan**, drawing number C103, prepared by Egis Canada dated October, 2024, revision 3, dated June 6, 2025

Deficiencies:

- D7. For section 4.2, of the Geotechnical Investigation, please provide a seasonal high groundwater table elevation that will/is not influenced by surface water infiltrating the backfilled boreholes- or assume groundwater is at surface.

- D8. The Rail Safety/Proximity Review is not stamped nor sealed and so is inadmissible.
- D9. The Servicing & Stormwater Management Report states that the fire design is incomplete.
- D10. The Servicing & Stormwater Management Report states that buoyancy of the fire tanks has not been reviewed.
- D11. The septic system requires buoyancy to be reviewed.
- D12. The Servicing & Stormwater Management Report claims, in the section titled Proposed Sanitary Servicing and below Table 3, that the Hydrogeological Assessment and Terrain Analysis report shows that the sanitary demand is 9667 L/day, when balanced over 7 days, but the Hydrogeological Assessment and Terrain Analysis report does not provide such calculations.
- D13. It is suggested that, for Appendix C, of the Servicing & Stormwater Management Report, that both buildings are classified as F-1.
- D14. The fire-fighting calculations, in the Servicing & Stormwater Management Report, do not reach the conclusion of defining what the actual volume provided will be.
- D15. Sprinkler calculations were not found in the reporting.
- D16. The durations of the storms, of Tables 1 and 2, in the section titled Onsite Control Summary, within the Ditch Hydrologic and Hydraulic Analysis, appear out of scale of the project.
- D17. Please show that the durations of the storms, of Tables 1 and 2, in the section titled Onsite Control Summary, within the Ditch Hydrologic and Hydraulic Analysis, are the most conservative.
- D18. Historical storms were not found in the Ditch Hydrologic and Hydraulic Analysis.
- D19. The FAA method, found under the heading time to Peak, is not encouraged to be used for time to peak calculations in the Ditch Hydrologic and Hydraulic Analysis for this project nor for any project. Appendix 5-D, of the Sewer Design Guidelines, though not named as the Uplands method, is of the Uplands

method. If the consultant insists on staying with the FAA method please provide rationale for its use including similitude.

D20. The groundwater conditions investigation needs to be performed in such a manner and at such a time to capture the highest groundwater.

D21. The pipes entering and exiting their oil/grit separators does not have all of their inverts printed.

D22. The "side-yard" subdrain pipes do not have all of their inverts printed.

D23. The northeast lot-line swale requires a subdrain.

Please contact Damien Whittaker, Engineering Reviewer, Rural Unit, for follow-up questions.

Hydrogeology

List of Studies and Plans Reviewed:

- **Hydrogeological Assessment and Terrain Analysis**, report no. PH4924-LET.01, prepared by Paterson Group, revision no. 1, dated June 6, 2025

Deficiencies:

D24. MECP Guideline D-5-5 requires, for Total Dissolved Solids, written rationale that corrosion, encrustation or taste problems will not occur. While corrosion and encrustation have been addressed, taste has not. The chloride level recorded, 248 mg/L, a sliver under the maximum concentration considered reasonably treatable (MCCRT) limit of 250 mg/L, suggests that taste is a problem that will occur.

D25. A seasonal high groundwater estimate, from a conservative time of year, to the satisfaction of the City, and to the satisfaction of the consultant with respect to not being influenced by surface water infiltrating the backfilled boreholes, is required.

D26. The Hydrogeological Assessment and Terrain Analysis report shows that the sanitary demand is 9667 L/day, when balanced over 7 days, but the Hydrogeological Assessment and Terrain Analysis report does not provide such calculations.

D27. In the Conclusions section, bullet 2, please clarify the treatment technologies proposed or available to treat hardness, TDS, and iron. From the body of the report: TDS and taste issues via point of use reverse osmosis unit, Iron treated via iron filter, and hardness via conventional technologies such as water softening or reverse osmosis.

D28. In the Conclusions section, please provide the level of nitrogen reduction required to meet total nitrogen reduction and the recommended make/model provided earlier in the body of the report.

Please contact Damien Whittaker, Engineering Reviewer, Rural Unit, for follow-up questions.

Transportation

Deficiencies:

D29. No deficiencies noted.

Please contact Josiane Gervais, for follow-up questions.

Traffic Management

Preliminary Construction Management Plan Submission Requirements

Required for Site Plan and Subdivision Applications

Diagram:

- Labelled graphic showing proposed construction area within ROW
- Meant to be preliminary
- Should show construction vehicles' anticipated ingress/egress

Checklist:

- Will construction require the temporary detour of a bus route?
- Will this work block a bike lane?
- Will this work block a sidewalk?
- Will this work require a lane of traffic to be closed?
- Will this work require a road closure?

Send Diagram and Checklist for Review by Traffic Services to clara.jaiou@ottawa.ca

Forester**Deficiencies:**

- D30. The Tree Conservation Report (TCR) provided addresses the impacts of the previous site plan but does not provide tree protection measures relevant to the updated & expanded site plan. The TCR should be amended to provide tree protection and mitigation measures related to the expanded development footprint.
- D31. The Erosion & Sediment Control, and Grading and Drainage Plans show a proposed swale along the eastern property line, which would impact the adjacent, City-owned trees. The swale should be designed to limit excavation within the critical root zones of those trees (see below Figure for approximate outline of impacted area).

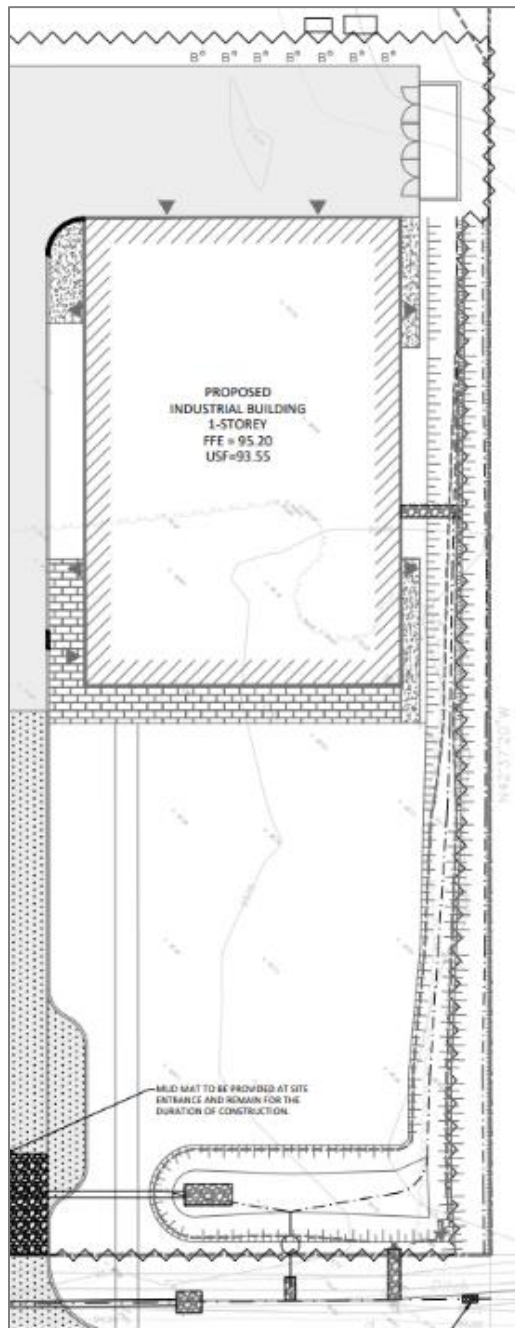


Figure 1: Snippets of the grading plan and aerial imagery showing approximate impact area of the proposed swale.

Please contact Julian Alvarez-Barkham, Planning Forester for follow-up questions.

Environmental Planning

Deficiencies:

- D32. The floodplain of Marlborough Creek should be indicated on the site plan in addition to its indication on the site plan.

D33. The Tree Conservation Report (TCR) does not present the same development as is proposed in the site plan. The TCR appears to be missing the second building and may also not indicate the proposed extent of development for building #1.

Please contact Matthew Hayley, Environmental Planner, for follow-up questions.

Parks and Facility Planning Services

Deficiencies:

D34. No deficiencies noted.

Please contact Anissa McAlpine, Parks Planner, for follow-up questions.

SUPPORTABILITY COMMENTS

Planning

Supportability Comments:

- C1. After completeness, if the Zoning Confirmation Report is deemed complete for this Site Plan Control, the expectation for applicants is that once the building permit application is submitted to the City, there will be a final zoning compliance review undertaken to ensure continued compliance with the Zoning By-law.
- C2. Please ensure all plans are oriented in the same direction. Landscape Plan and Site Plan are oriented differently.
- C3. The size of the labelled shade structure on the Landscape Plan does not match with the structure on the Site Plan.
- C4. Consider providing painted lines for the crosswalk for the accessible parking spaces for Building #2. The placement of the parking spaces on the opposite side of the drive aisle from the building is not ideal.
- C5. An overhang over the main entrances for people to shelter from the elements would be appreciated. It is unclear from the Elevations if this is provided.

Please contact Stephan Kukkonen, Planner I, for follow-up questions.

Building Code Services

Supportability Comments:

C6. No concerns noted.

Please contact Todd O'Rourke, Zoning Plans Examiner, for follow-up questions.

Urban Design

Supportability Comments:

- C7. Can the accesses and parking lots be shared between Buildings 1 and 2 to reduce hardscaping?
- C8. The ample landscaping is appreciated.
- C9. Please ensure that the Ottawa Street facades are pleasant and engage with the street. The South elevations effectively do this, please confirm that these are the Ottawa Street facades.

Please contact Lisa Stern, Planner III, Urban Design for follow-up questions.

Engineering

Supportability Comments:

- C10. The file number to be labelled on the drawings is D07-12-25-0078.
- C11. The plan number should be rotated minus 90 degrees and placed outside the frame next to the file number.
- C12. General Note 7, on the Lot Grading and Drainage Plan, does not concur with the non-specific sediment and erosion control notes.
- C13. The reference of the geotechnical report, on the Lot Grading and Drainage Plan, is not the same as the document submitted.
- C14. The heavy gauge dash-dot linetype, on the Lot Grading and Drainage Plan, was not located in the legend of the drawing.
- C15. Section 2.0, of the Geotechnical Investigation, refers to a single building, while the civil drawings show two buildings. Drawing PG7183-2 shows three buildings.
- C16. It is suggested that the last paragraph of section 5.2, of the Geotechnical Investigation, should be restricted to not use the silty clays of the site.
- C17. Please discuss liquefaction-like behaviour for section 5.4, in the Geotechnical Investigation.

- C18. Please provide rational for liquefaction and liquefaction-like behaviour for section 5.4, in the Geotechnical Investigation.
- C19. Please provide all documents as “flattened” documents.
- C20. The contours on Figure 2, of the Rail Safety/Proximity Review, are not legible.
Refer to survey in Appendix.
- C21. Figure 2, of the Rail Safety/Proximity Review does not show/state/educate on the ditch. The green suggests some sort of grade change, but not enumerate it nor convey that there is a ditch there (as opposed to a single-sided grade change). *Text clearly summarizes ditch conditions and includes summary of elevations. Also indicates that it is not one-sided.*
- C22. The word “subdivision” used in the Rail Safety/Proximity Review, is suggested to be replaced with another word.
'Subdivision' is a long-established naming convention within the rail industry and has been used for over 100 years for the naming of rail corridors. We strongly object to changing the name of the railway lands.
- C23. For section 1.5, of the Servicing & Stormwater Management Report, with the industrial use of the site an ECA will be required.
- C24. Please show how the sanitary calculations, referred at the end of page 8 of the Servicing & Stormwater Management Report, are conservative.
- C25. Please show how the sanitary calculations, referred at the end of page 8 of the Servicing & Stormwater Management Report, provide a more reasonable infiltration allowance estimate.
- C26. The suggestion of a maximum C value of 0.5, under the heading of Quantity Control, within section 7.1 does not apply here; that part of section 8.3.7.3 of the Sewer Design Guidelines only applies to re-development.
- C27. Table 6, of the Servicing & Stormwater Management Report, uses storm durations far longer than the site should have; please show a range of more appropriate durations.
- C28. While section the large paragraph of 7.4, below Table 5, of the Servicing & Stormwater Management Report, suggests 85 mm diameter orifices, the section continues to say, below Table 7, that the orifices are at the minimum size. Section 8.3.8, of the Sewer Design Guidelines allows 75 mm diameter orifices, and smaller flow vortex type orifice are also available.

- C29. Contrary to section 7.7.3, of the Servicing & Stormwater Management Report, it is suggested that there are some locations of till that may allow some infiltration.
- C30. Section 8.1, of the Servicing & Stormwater Management Report, requires precise discussion of actual on-site, development-specific concerns and on-site, development-specific mitigations.
- C31. Appendix D, of the Servicing & Stormwater Management Report, needs to show some concurrence with the flow figure of the Hydrogeological Assessment and Terrain Analysis report.
- C32. Figure PH4924-1 (rev. 3) provided in Appendix D, of the Servicing & Stormwater Management Report, requests that “snow storage shall not be located over or upgradient of the proposed sewage system”, however no implemented actions were found.
- C33. Figure PH4924-1 (rev. 3) provided in Appendix D, of the Servicing & Stormwater Management Report, requests that “snow storage shall not be located over or upgradient of the proposed sewage system”, though the typical grading resulting from heaping snow is that of a rough pyramid shape and likely to not concur with the intention.
- C34. The accumulated quality control is not calculated nor rationalised in section 7.6 of the Servicing & Stormwater Management Report.
- C35. Section 7.7.4, of the Servicing & Stormwater Management Report states that the design uses the minimum permissible orifice size, but a smaller size is possible, and lower flow rates are also possible.
- C36. The discussion of not reducing the orifice, in the end of the second paragraph of the section titled Peak Flows at Key Locations, within the Ditch Hydrologic and Hydraulic Analysis is not agreed to and as the depressions also have a weir the concern is considered less than portrayed.
- C37. Please discuss the confidence of the interval spacing, of the section titled Model Development & Parameters, within the Ditch Hydrologic and Hydraulic Analysis. Considering the length of the investigation a more frequent interval was anticipated and/or additional sections to capture elements of concern.
- C38. The comment that “these two critical events can never coincide” is disagreed to, in section titled Model Development & Parameters, within the Ditch

Hydrologic and Hydraulic Analysis. Instead, it is suggested to provide a statistical determination.

- C39. It is suggested that, for Figure C1: HEC-RAS Cross Sections, in the Ditch Hydrologic and Hydraulic Analysis, that the HEC-RAS cross sections, in the plan, and the HEC-RAS cross sections, in the legend, should match.
- C40. For the Ditch Hydrologic and Hydraulic Analysis, the following questions remain:
- a. Do flows move north along the lot line between 5923 Ottawa Street and 5901 Ottawa Street?
 - b. Do flows sent to Ottawa Street move east or west?
- C41. Several watermain notes on the drawing Site Servicing Plan could be misinterpreted with a design that does not include a municipal watermain.
- C42. General Note 19 on the drawing Site Servicing Plan requires updating.
- C43. The culvert, for the rail line, referenced by multiple documents submitted is not recorded on the submitted Plan of Survey- this calls in to question its existence.
- C44. The Erosion and Sediment Control Plan does not include parameters for the mud mats.
- C45. Several comments state that the survey data shown implies no guarantee of accuracy – it is suggested that a survey is to be relied upon.
- C46. The Erosion and Sediment Control Plan shows works beyond the silt fence line.
- C47. The site plan shows that the rear paved area is too small for vehicle movements.
- C48. Bollards are required to protect the septic areas.
- C49. The Site Servicing Plan shows no water connection between the buildings.
- C50. The arrangement of the two subdrains between the buildings outletting under another curb discharge point is anticipated to have an erosion risk.
- C51. The arrangement above has different outlets for the two buildings: Building #1 outlets at the top of the rip rap, while Building #2 outlets within the rip rap.

C52. The loading space, as shown on the site plan, adjacent Building #2 will partially block the garbage collection area for Building #2.

C53. It is exceedingly rare for a 200 mm diameter pipe to be proposed as concrete.

C54. Drawings do not show, nor state, how an orifice will be affixed to a concrete pipe.

C55. The drawings do not specify the strength/class of the fire-fighting watermains.

C56. Placing grades on top of rip rap hatching makes the plan difficult to read.

C57. The pavers/interlock are missing a patch south of the south door on the east side of Building #1 on the site servicing plan.

C58. Building #2 is provided a depressed curb, but not a ramp.

C59. Curbs should not extend past the property line.

C60. The ponds do not have the 0.3 m freeboard required by Sewer Design Guidelines, section 8.3.11.5.

C61. The Ditch Hydrologic and Hydraulic Analysis should inform the grading plan as to what the local spill elevation is.

C62. Ponds with 0.5 % longitudinal grade should have a subdrain.

C63. With the marginal relief in the ditch, it is suggested that a straw bale check dam is also required at the south-west ROW ditch extent.

C64. The lot-line hugging swale, adjacent Building #1 is suggested to induce concerns between owners being on the lot line.

C65. Oil/grit separators require documentation showing that the unit proposed has passed the ETV protocol.

C66. Please note that the oil/grit separators will require annual maintenance.

Please contact Damien Whittaker, Senior Engineer, for follow-up questions.

Hydrogeology

Supportability Comments:

- C67. The end of the first paragraph of the section titled Hardness, in the Hydrogeological Assessment and Terrain Analysis report, states that the reasonable treatable limit of 500 mg/L is in D-5-5, but table 3, of D-5-5 actually states 500 mg/L as an objective.
- C68. The paragraph starting “reference should be made” within the section headed Surficial Geology, in the Hydrogeological Assessment and Terrain Analysis report, suggests that a closer borehole spread is required and more boreholes.
- C69. The last paragraph of the section titled Conceptual Lot Development Plan states that “wastewater used as part of the manufacturing process will not be directed to the sewage systems”. Please provide an exhaustive discussion of where “wastewater used as part of the manufacturing process” will go.
- C70. OSSO approval was not included/sourced and will be required prior to site plan approval.
- C71. Please state what controls are proposed to keep development within the area proposed, to maintain the imperviousness calculations, and to maintain long-term accord with the Hydrogeological Assessment and Terrain Analysis report, to not exceed the design flows for the septic systems.

Please contact Damien Whittaker, Senior Engineer, for follow-up questions about Hydrogeology comments.

Transportation

Supportability Comments:

- C72. Show the clear throat length on the site plan. Ensure the 8m minimum distance is met.
- C73. Ensure site access meets the City’s [Private Approach Bylaw](#)
- Although two accesses are permitted, consider consolidating to a single access to the site.
 - If two accesses are pursued, Section 25, 1., g. must be met. “*The distance between the nearest limits of a private approach intended for two-way vehicular traffic and any other private approach to the same property shall*

be a minimum of 9 metres measured at the street line, and at the curb line or roadway edge.”

- c. Reduce curb radii at site accesses to further reduce access width to ensure compliance with Private Approach Bylaw.

C74. Review bike rack location for Building #2. As per Zoning Bylaw, Section 111 (9) “A bicycle parking space must have access from an aisle having a minimum width of 1.5 metres.” This space, highlighted in yellow below, is also required to ensure accessible pedestrian access around the bike rack as per AODA standards.

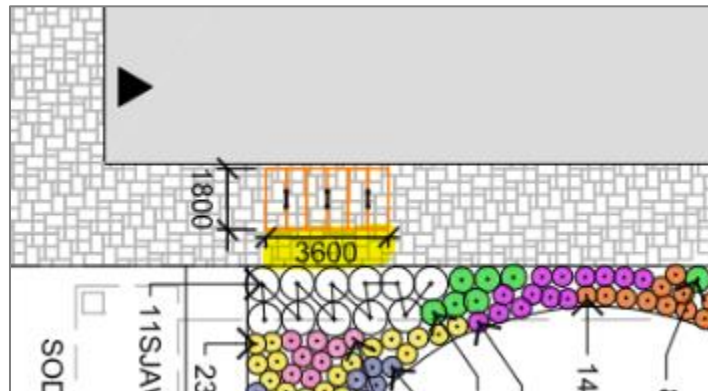


Figure 2: Snippet from Landscape Plan showing possible conflict between bicycle parking and other users.

Please contact Josiane Gervais, Transportation Project Manager, for follow-up questions.

Right-of-Way Utilities and Approvals

Supportability Comments:

C75. Work in the municipal right-of-way must comply with City of Ottawa By-laws, including but not limited to, the [Road Activity By-law](#), as amended.

C76. The proponent shall obtain such permits/approvals as may be required from government and regulatory authorities.

C77. City of Ottawa standards and specifications must be followed. For proposed cross-sections not conforming to the standard sections, a deviation must be sought. This process is managed by Standards and Quality Management. The City of Ottawa’s *Standard Tender Documents for Unit Price Contracts*, as well as other standards and guidelines, are available free of charge by contacting standardssection@ottawa.ca. Questions and comments may also be directed to that mailbox.

C78. Unless otherwise agreed upon by the affected asset/utility owner(s), maintain the minimum standard clearances between utilities and municipal assets. The

UCC Clearance Matrix can be found here: [utilities clearance matrix en.pdf](#). For proposed clearances that do not satisfy the Matrix, the proponent should coordinate an alternate solution directly with the utility/asset owner.

- C79. The Central Registry shall be used for all base plans where available. As-built information may also be available. The Central Registry can be reached at GeoInformation@ottawa.ca. It remains the responsibility of the proponent to verify the accuracy of site conditions. This may include, but is not limited to, design locates, surveys, as-builts, etc.
- C80. A ROW utility circulation is required for proposed road modifications within an existing right-of-way.
- C81. Excluding service laterals/connections and works described as Category A in the *Guidelines for Utility Circulation Exemption*, third-party utility owners shall request Municipal Consent prior to applying for a Road Cut permit to install their infrastructure within an existing ROW. [Utilities must apply directly to our office to obtain Municipal Consent](#).
- C82. The proponent shall be responsible for requesting and coordinating any utility/infrastructure relocations/removals, as necessary.
- C83. For site development, any excavations or shoring systems encroaching into the ROW must be reviewed by ROW Utilities and Approvals prior to construction as these works may be subject to Municipal Consent, Road Cut Permit(s), and other permits/agreements. Please be advised that applications related to shoring system encroachments typically require more time to complete. Proponents are advised to apply for Municipal Consent as soon as the shoring design is finalized. Finalized shoring drawing should be marked "Issued for Construction" or "Issued for Building Permit". Additional Info: [Municipal consent and utility circulations | City of Ottawa](#)
- C84. Coordinate accordingly with any planned and/or ongoing utility projects and Capital projects affected by the proposed development. For more details, please visit the City of Ottawa website: [Planned Construction and Infrastructure Projects](#).

Please contact Tyler McQuillen, Officer, Right-of-way Approvals, for follow-up questions.

Forester

Supportability Comments:

C85. The swale along the eastern portion of the property should be designed to minimize impacts to the adjacent trees, and an update to the Tree Conservation Report should be provided, outlining tree protection and mitigation measures for that area.

C86. The tree plantings proposed on the landscape plan are excellent and will enhance the site following construction in keeping with section 4.8.2 of the OP.

Please contact [Julian Alvarez-Barkham, Planning Forester](#), for follow-up questions.

Environmental Planning

Supportability Comments:

C87. Although the Tree Conservation Report (TCR) does not indicate the current proposal, it is acknowledged that the proper site development description in the TCR would not change the outcome of the findings. The site development description should still be updated for consistency and quality.

C88. The TCR does indicate that based on the NHIC observation data, there is Category 2 and Category 3. It is reasonable to assume that most of the category 2 habitat is within the floodplain and that the Category 3 habitat would extend across the site but would not function as intended under the Endangered Species Act (ESA). With the category 2 habitat within the area of the property that is not being developed, there is no impact, should the extent of development and/or site alteration change or a Blanding's turtle be observed, then the proponent should contact the MECP for direction / approval under the ESA.

C89. The site plan should indicate the presence of floodplain.

C90. Staff appreciate that the plantings proposed in the landscape plan are supportive of Official Plan policies in Section 4.8.

Please contact Matthew Hayley, Environmental Planner, for follow-up questions.

Parks and Facility Planning Services

Supportability Comments:

C91. Parkland Dedication is required in accordance with [By-law No. 2022-280](#).

C92. The applicable parkland dedication rate for Industrial and commercial uses is 2% of the gross land area. The gross land area does not include lands impacted by the flood plain. For the purposes of calculating the parkland dedication requirement, the applicant is advised that they must identify on the survey, site plan or supporting plan the portion of the property that is not impacted by the flood plain, to the satisfaction of the Parks Planner.

C93. Parks & Facilities Planning is requesting payment of Cash-in-lieu-of-Parkland for this development. The value of the land, equivalent to the Parkland Dedication requirement, will be determined as of the day before planning approval is given for the development. The Applicant shall bear the cost of any appraisal costs incurred by the City.

Please contact Anissa McAlpine, Planner 2, Parks and Facilities Planning, for follow-up questions.

Other

Supportability Comments:

C94. The High Performance Development Standard (HPDS) is a collection of voluntary and required standards that raise the performance of new building projects to achieve sustainable and resilient design and will be applicable to Site Plan Control and Plan of Subdivision applications.

- a. The HPDS was passed by Council on April 13, 2022, but is not in effect at this time, as Council has referred the 2023 HPDS Update Report back to staff with the direction to bring forward an updated report to Committee at a later date. The timing of an updated report to Committee is unknown at this time, and updates will be shared when they are available.
- b. Please refer to the HPDS information at ottawa.ca/HPDS for more information.

Concluding Remarks

Should there be any questions on the above, please do not hesitate to contact myself or the contact identified for the above areas / disciplines.

Regards,

Stephan Kukkonen
Planner, Development Review Rural

Prepared by	Reviewed by
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Encl. Application Not Deemed Complete Letter

C.c. Jerrica Gilbert, Planner II Rural
Sarah McCormick, Planner III Rural
Damien Whittaker, Engineering Reviewer
Josiane Gervais, Transportation Project Manager
Tyler McQuillen, Officer
Lisa Stern, Planner III Urban Design
Matthew Hayley, Environmental Planner
Anissa McAlpine, Parks Planner
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