Environmental Noise Impact Study

Tullamore Lands

Proposed Industrial Development

0 & 12245 Torbram Road
Town of Caledon

March 29, 2023
Project: 121-0208

Prepared for

Tullamore Industrial GP Limited

Prepared by

DRAFT

Anthony Amarra, M.Sc.

Reviewed by

DRAFT

Gregory Dennis, M.Eng., P.Eng.

Version History

Version #	Date	Comments
1.0	July 15, 2021	Final – Issued to Client
1.1	March 29, 2023	Draft – Based on Revised Block Plan

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12245 & 0 Torbram Road
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1.0 INTRODUCTION

1.1 BACKGROUND AND PURPOSE

Valcoustics Canada Ltd. (VCL) previously prepared an Environmental Noise Impact Study dated July 9, 2021 in support of the Zoning by-law Amendment, Official Plan Amendment, and Draft Plan of Subdivision application for the proposed industrial development located at 12245 & 0 Torbram Road in the Town of Caledon.

Since the preparation of the previous report, additional parcels of land have been purchased by the developer, and the layouts of the different industrial buildings has been revised. In addition, more detailed information regarding the tenant for Building A has been provided, including the mechanical equipment, truck activities, and operational information for the facility. Updated grading information for a few of the buildings and the overall site has also been incorporated in the assessment.

This report updates the previous study to account for the changes described above, as well as comments received from the Town of Caledon dated January 17, 2022. The comments are included as Appendix B and have been marked-up with references to specific sections within the report.

1.2 SITE AND SURROUNDING AREA

The site is located on the north side of Mayfield Road, between Torbram Road and Airport Road in the Town of Caledon. The site is bounded by:

- Torbram Road, with existing residential and agricultural lands and a golf course beyond, to the west;
- Existing residential and agricultural lands to the north;
- Airport Road, with existing industrial uses beyond, to the east; and
- Mayfield Road, with existing agricultural lands beyond, to the south.

There are also existing industrial uses southeast of the subject site, at the northwest corner of Mayfield Road and Airport Road.

The lands to the south of Mayfield Road are part of the City of Brampton's Countryside Villages Secondary Plan and Vales North Secondary Plan areas, which are intended for future mixed-use (including residential) development.

1.3 SITE DESCRIPTION

The overall site will consist of eight employment blocks which will have a total of nine industrial buildings (Buildings A, C, D, E, F, H, I, J, K), as well as stormwater management, greenbelt, and buffer blocks.

Loading docks and parking spaces are provided for each building. There will be an internal road network connecting to Airport Road, Torbram Road, and Mayfield Road. Trucks will access the sites using these internal roads and not directly from the major roadways.

There is an existing heritage dwelling at the south end of the site, along Mayfield Road, that will be relocated to the southwest corner of the property.

The assessment was prepared using the Overall Site Plan prepared by Turner Fleischer Architects Inc. February 2, 2023 ("Issued for Coordination Version 81"). Appendix A contains the Site Plan.

2.0 MECP ENVIRONMENTAL NOISE GUIDELINES

The noise guideline applicable to the facility is MECP Publication NPC-300, "*Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning"*.

Industrial facilities are considered stationary noise sources under NPC-300. The guideline limits for stationary sources are defined using the one-hour equivalent continuous sound level ($L_{eq\ 1hr}$, in dBA) corresponding to a predictable worst-case hour during the daytime (0700 to 1900 hours), evening (1900 to 2300 hours) and nighttime (2300 to 0700 hours) periods.

The site and surrounding area are considered Class 1 (Urban) due to the proximity to busy roadways and existing industrial uses.

For stationary noise sources, the sound level limits are receptor based. This means there are no specific limits to the noise generation on the site of the stationary source. The sound level limits apply at any Point of Reception (POR) on a noise sensitive land use. The PORs are typically the exterior plane of windows (POW) to noise-sensitive spaces (such as the living and sleeping quarters of dwellings) and outdoor points of reception (OPOR) which are outdoor areas that are amenable for use (such as front yards, rear yards, and patios). There are sound level limits that

apply at POWs at all times of the day, evening, and night. For OPORs, the sound level limits only apply during the daytime and evening periods. There are no limits for OPORs at night.

2.1 STEADY NOISE SOURCES

For steady, non-impulsive noise sources, the Class 1 sound level limits are $L_{eq,1hr}$ of 50 dBA for daytime and evening hours (0700-2300) and 45 dBA for nighttime hours (2300 to 0700), or the existing ambient (typically due to road traffic) if it is higher. The above numerical values are referred to as the exclusion limits.

2.2 IMPULSIVE NOISE SOURCES

Impulsive sounds are a category of noise which last for a brief time (typically fractions of one second). Examples are the sounds of banging metal, punch presses or gunshots. The “bang” that occurs when trailers are coupled/uncoupled from cabs and the impact of dock levellers on a trailer when a forklift drives over it are also impulsive sounds.

Impulse sounds are measured and treated separately from non-impulse sounds because of their special time characteristics. The logarithmic mean impulse sound level (L_{LM}, in dBA) is used to assess impulse noise. The L_{LM} descriptor is the energy average of the range of impulse sound levels impinging on a POR. Because of the logarithmic relationship involved, L_{LM} is weighted to the higher values and is unlike an arithmetic average, which would yield a much lower numerical result for a wide range of values.

The sound level limits depend on the number of impulses that occur in the worst-case hour. For frequent impulses (i.e., more than 9 impulses in an hour), the numerical sound level limits are the same as those for non-impulse sources (i.e., the higher of the existing ambient sound level or the exclusion limit).

3.0 NOISE ASSESSMENT

3.1 NOISE SENSITIVE RECEPTORS

The closest noise-sensitive receptors to the site are the existing dwellings to the west and east, as well as the future dwellings to the south.

Nineteen (19) PORs were assessed. The receptors are shown on Figures 2 to 9. Receptors R01 to R16 represent existing dwellings, while R17 and R18 represent future dwellings on the lands to the south. R19 represents an existing heritage building which will be relocated as part of the development.

Receptor heights were taken at 4.5 m above grade to represent the plane-of-window receptors on the existing two-storey dwellings (R01, R05, R07, R09, R13, R15, and R16) and future dwellings (R17 to R18), 2.5 m above grade to represent the plane-of-window receptors on existing bungalows (R03 and R11), and 1.5 m above grade for the outdoor points of reception associated with the existing dwellings (R02, R04, R06, R08, R10, R12, R14).

3.2 APPLICABLE NOISE GUIDELINE LIMITS

The dwellings at the existing receptor locations (as well as the relocated heritage building) have windows which will face the proposed industrial buildings but are on facades that are screened from the major roadways by the dwellings themselves. Thus, the ambient due to road traffic is expected to be low and the minimum exclusion limits were used as the guideline limits at these receptors (i.e., R01 to R16 & R19).

The future dwellings to the south will be on the south side of Mayfield Road and their facades which will face the proposed industrial development will also have direct exposure to Mayfield Road. Thus, the ambient due to Mayfield Road is expected to be higher than the minimum exclusion limits. The ambient sound levels due to Mayfield Road were calculated for these receptors (i.e., R17 and R18) and used as the guideline sound level limits. See Appendix C.

3.3 NOISE SOURCES & OPERATING SCENARIOS

Noise sources at the proposed industrial facility that could impact the noise sensitive receptors include various rooftop air handling units, truck movements, truck idling, and impulses associated with the loading/unloading of trailers at the loading docks and the coupling/uncoupling of trucks to/from their trailers at the docks or in the yards. Aside from Building A, the final tenants/uses for the buildings are currently not known.

3.3.1 Non-Impulsive Noise Sources

3.3.1.1 Building A

For Building A, it is understood that the facility will be a grocery store distribution centre, including office space, non-perishable, perishable and freezer storage areas. The mechanical equipment selections and truck operations were provided by the future tenant. The location of rooftop mechanical equipment was based on the Roof Plan prepared by Stendel & Reich Architecture, dated July 15, 2022. The Roof Plan, sound level data and truck operations are provided as Appendix D.

Noise sources at the facility with the potential to impact the nearby noise sensitive receptors are truck activities, rooftop mechanical units and noise emitted from the overhead doors at the maintenance building.

Truck Movement

- The distribution center will operate 24 hours a day, 7 days a week. Trucks will enter the facility along the east side of the site, proceed through a security checkpoint and continue to their respective docks. Perishable and freezer goods will be shipped/received from the north half of the facility, and non-refrigerated goods will be shipped/received from the south half of the building. Shunt trucks will move the trailers (both refrigerated and non-refrigerated) to and from the parking areas around the yard, as required. Refrigerated trailers will be parked at the lots east and west of the perishable/freezer area, while ambient trailers will be parked at the remaining lots. In departing the facility, the trucks will proceed back through the security checkpoint and exit at the southeast corner of the property. Detailed truck operations are shown in Appendix D.

- The trailer refrigeration units are expected to idle continuously while parked at the refrigerated/perishable storage docks as well as in the parking lots east and west of the building. The analysis was based on sample sound level data provided for Carrier refrigeration units model Vector 8500. These units have two modes of operation; a typical diesel engine mode, as well as in a "plug-in" standby mode (which has lower noise emissions). Product sound level data for the refrigeration units in both modes of operation was provided by the future tenant.

Rooftop Mechanical Equipment

- There will be 23 packaged rooftop units on the roof of the ambient storage. The units will be 25-ton York units (model AV25).

- There will be 3 condensers at the north end of the facility. The condensers will be Evapco units (model ECO-ATC-1001A).

- The roof of the perishable/freezer storage will have 52 mini penthouse units, used for refrigeration evaporation. These units will be completed enclosed, with no louvers or openings to the exterior environment. Thus, significant noise emissions are not expected, and these units have not been considered further in the analysis.

- The rooftop units were modelled as operating continuously (i.e., 60 minutes of the hour) during the daytime and evening and 30 minutes of the hour during the nighttime.

Maintenance Building

- Noise from activities occurring within the maintenance buildings could be emitted through the overhead doors, which would typically be left open during the warmer months. Sound level data for maintenance activities includes the use of air compressor and air tools were based on VCL measurements at similar facilities.

- Sound level data for maintenance activities, which includes the use of air compressors and air tools, were based on VCL measurements at similar facilities.

- The maintenance activities were modelled as operating for 20 minutes of the hour during the daytime and evening. The maintenance building is not operational at night.

3.3.1.2 Buildings C, D, E, F, H, I, J, and K

Truck Movement

Information about the truck activities at Buildings C, D, E, F, H, I, J and K was provided by Crozier, the traffic engineer for the project. Peak AM and PM hourly on site volumes were provided for each building. The higher of the AM and PM peak hour volume to each building was used as the daytime and evening truck volume in our analysis. At night, it was assumed that the highest volume would be 50% of the daytime volume.

Shunt trucks are expected to move trailers from the building's loading docks to the yards. The larger buildings (Building C, D, E, F and H) were assumed to have two shunt trucks operating

continuously, while the smaller buildings (Buildings I, J and K) were assumed to have one shunt truck operating continuously.

Appendix E shows a summary of the number of truck movements used in the assessment for each building. These represent the maximum amount of truck activity expected during the daytime, evening, and nighttime periods.

Rooftop Mechanical Equipment

At the time of preparation of this report, mechanical design information has not been provided for Buildings C, D, E, G, H, I, J, and K. Therefore, the assessment was prepared using information from similar projects done by VCL.

The mechanical equipment expected to be used at the site is air conditioning units for the offices and air handling units for the warehouse areas. It was assumed each building will have four office AC units, modelled as 25-ton Lennox units. To estimate the number of warehouse air handling units, one unit per 65,000 square feet was used. This is consistent with what we have seen used at similar facilities. Sound data for a 10000 CFM air handling unit was used for each AHU. The rooftop units were modelled as operating continuously (i.e., 60 minutes of the hour) during the daytime and evening and 30 minutes of the hour during the nighttime.

The assumed equipment locations are shown on Figures 2 and 8. Equipment sound level data is attached as Appendix E.

3.3.1.3 General

Although trucks will generally not idle for extended periods while on site, 2 minutes of truck idling has been included to account for manoeuvring and warm up at the loading bays.

The sound emission level for truck movements was calculated using information in Reference 2 assuming a truck speed of 20 km/hr.

The truck routes used to complete the assessment are shown on Figures 2 and 8.

3.3.2 Impulsive Noise Sources

Impulsive noise will occur at each dock during the loading/unloading of trailers, as well as when a truck/shunt truck couples/uncouples to a trailer at the loading docks or at the parking areas around the site.

Each trailer is assumed to hold 20 pallets, resulting in 40 impulse events while the goods are loaded/unloaded.

Impulses were modelled as line sources which distributes the impulses evenly along the entire length of the loading docks. For every truck arrival or departure from the site, it was assumed that there would be 40 loading/unloading impulses and 3 coupling/uncoupling impulses (2 at the docks and 1 in the yard) . To ensure that the predictable worst-case scenario was assessed, impulses at each building were assessed independently. It was assumed that the impulses would be frequent (i.e., at least 10 in an hour) and they could occur at any time of the day, evening or night.

The impulse locations are shown on Figures 3 to 6 and 9 to 12.

Sound data for the noise sources was based on VCL measurements completed at similar facilities.

3.4 ASSESSMENT

The noise assessment was done using the CadnaA V2022 MR2 environmental acoustics modelling software. The 3-D model follows the procedures of ISO 9613 Part 2, *"Acoustics – Attenuation of Sound during Propagation Outdoors"*. Appendix G contains calculation details from the CadnaA model.

- Grading for Building A was based on the Site Grading Plans (North West, North East, South East, South West), prepared by Odan Detech Consulting Engineers, dated July 15, 2022.

- Grading for Building D was based on the preliminary grading plan prepared by Crozier Consulting Engineers dated Mar 25, 2022.

- Grading for Building H was based on the preliminary grading plan prepared by Crozier Consulting Engineers dated January 18, 2023.

- Grading for the remainder of the site was based on the Preliminary Grading Plan – North & South, prepared by Crozier Consulting Engineers, dated January 26, 2023.

The grading plans are included as Appendix F.

3.5 RESULTS

Table 1 and Figure 2 show the predicted sound levels at the receptors due to the non-impulse sources.

The highest predicted sound levels of 57 dBA during the daytime/evening and 55 dBA during the nighttime occur at R01, closest to Building E. These sound levels correspond to excesses of 7 dBA over the daytime and evening limits and 10 dBA over the nighttime limits.

Figures 3 to 6 show the results of the impulse noise analysis. There are two (Figures 3 and 6) or four (Figures 4 and 5) panels on the figures with each panel showing the predicted log mean impulse sound levels due to impulses only occurring at each of the individual buildings.

Table 2 summarizes the highest predicted sound level each receptor is predicted to receive due to impulses at the loading docks and within the yards. Note that the impulse sound levels are the same during the daytime, evening, and nighttime periods; only the guideline limits differ between the periods (with the nighttime period representing the worst-case having the lowest guideline limit).

The highest predicted sound level of 64 dBAI (daytime and evening) occurs at R02, which is the rear yard of the dwelling north of Building E. The corresponding façade sound level is 63 dBAI (daytime, evening, and nighttime period), also due from impulses at the loading docks and yard of Building E. This represents an excess of up to 14 dBAI above the guideline limits during the daytime/evening at the rear yard and an excess of up to 13 dBAI during the daytime/evening and 18 dBAI during the nighttime period at the plane of window.

To address the excesses, mitigation is required.

4.0 MITIGATION

The most feasible mitigation measure to implement are sound barriers. Figure 7 shows the minimum sound barrier heights and extents required to meet the guideline limits at the closest noise-sensitive receptors. As shown in the figures, sound barriers ranging in height from 2.4 m to 10.0 m are needed to meet the guideline limits.

Table 3 and Figure 8 show the resulting sound levels due to non-impulse sources accounting for the mitigation measures.

Figures 9 to 12 show the predicted mitigated sound levels due to impulse sources. Table 4 shows the highest mitigated impulse sound level each receptor is predicted to receive.

The results show that the sound barriers mitigate the sound emissions to comply with the applicable guideline limits at the receptor locations.

Sound barriers must have a minimum face density of 20 kg/m^2 and be of solid construction with no holes, gaps, or cracks. Earth berms, wood, concrete, masonry, or composites meeting the above specification, or a combination of materials, such as fence atop a berm, can be used.

Note, as required by the Town of Caledon and Region of Peel, acoustic fences should generally be 2.0 m in height, with a maximum fence height no greater than 2.4 m. The remaining noise barrier heights may be achieved with the use of berms.

The analysis and mitigation requirements should be confirmed once more detailed information (such as grading information, mechanical design, operational activities at the buildings, etc.) for the industrial buildings.

5.0 CONCLUSION

The noise impact assessment of the proposed industrial development onto the neighbouring noise-sensitive receptors has been completed. The assessment shows that, with the appropriate mitigation measures, sound emissions from the proposed development comply with the applicable MECP noise guideline limits.

Compliance will be confirmed through the planning process by way of detailed studies for specific sites/properties as plans become available.

6.0 REFERENCES

1. MECP Publication NPC-300, “Stationary and Transportation Sources - Approval and Planning” Ontario Ministry of the Environment, August 2013.

2. “Federal Highway Administration’s Traffic Noise Model (FHWA TNM), Version 1.0 – Technical Manual”, Federal Highway Administration Report DOT-VNTSC-FHWA-98-2, February 1998.

3. “Environmental Noise Impact Study – Tullamore Lands – Proposed Industrial Development”, Valcoustics Canada Ltd. Project #121-0208, July 15, 2021.

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TABLE 1: UNMITIGATED SOUND LEVELS – NON-IMPULSE SOURCES

Receptor ID	Time Period	Predicted Sound Levels (dBA)	Applicable Guideline Limits (dBA)	Compliance with Guideline Limits? (Y/N)
R01	Daytime	57	50	NO
	Evening	57	50	NO
	Nighttime	55	45	NO
R02	Daytime	57	50	NO
	Evening	57	50	NO
R03	Daytime	55	50	NO
	Evening	55	50	NO
	Nighttime	52	45	NO
R04	Daytime	56	50	NO
	Evening	56	50	NO
R05	Daytime	57	50	NO
	Evening	57	50	NO
	Nighttime	53	45	NO
R06	Daytime	52	50	NO
	Evening	52	50	NO
R07	Daytime	49	50	YES
	Evening	49	50	YES
	Nighttime	46	45	NO
R08	Daytime	46	50	YES
	Evening	46	50	YES
R09	Daytime	52	50	NO
	Evening	52	50	NO
	Nighttime	50	45	NO
R10	Daytime	47	50	YES
	Evening	47	50	YES
R11	Daytime	44	50	YES
	Evening	44	50	YES
	Nighttime	42	45	YES
R12	Daytime	40	50	YES
	Evening	40	50	YES
R13	Daytime	50	50	YES
	Evening	50	50	YES
	Nighttime	47	45	NO
R14	Daytime	47	50	YES
	Evening	47	50	YES
R15	Daytime	50	50	YES
	Evening	50	50	YES
	Nighttime	47	45	NO
R16	Daytime	45	50	YES
	Evening	45	50	YES
	Nighttime	42	45	YES
R17	Daytime	44	62	YES
	Evening	44	59	YES
	Nighttime	42	53	YES
R18	Daytime	42	62	YES
	Evening	42	59	YES
	Nighttime	40	53	YES
R19	Daytime	45	50	YES
	Evening	45	50	YES
	Nighttime	43	45	YES

TABLE 2: WORST-CASE UNMITIGATED SOUND LEVELS – IMPULSE SOURCES

Receptor ID	Impulse Location	Time Period	Predicted Sound Levels (dBA)	Applicable Guideline Limits (dBA)	Compliance with Guideline Limits? (Y/N)
R01	Building E North Docks	Daytime	63	50	NO
		Evening	63	50	NO
		Nighttime	63	45	NO
R02	Building E North Docks	Daytime	64	50	NO
		Evening	64	50	NO
R03	Building F	Daytime	57	50	NO
		Evening	57	50	NO
		Nighttime	57	45	NO
R04	Building F	Daytime	59	50	NO
		Evening	59	50	NO
R05	Building A West Docks	Daytime	55	50	NO
		Evening	55	50	NO
		Nighttime	55	45	NO
R06	Building F	Daytime	52	50	NO
		Evening	52	50	NO
R07	Building F	Daytime	46	50	YES
		Evening	46	50	YES
		Nighttime	46	45	NO
R08	Building A West Docks	Daytime	42	50	YES
		Evening	42	50	YES
R09	Building A South Docks	Daytime	53	50	NO
		Evening	53	50	NO
		Nighttime	53	45	NO
R10	Building A South Docks	Daytime	48	50	YES
		Evening	48	50	YES
R11	Building D	Daytime	46	50	YES
		Evening	46	50	YES
		Nighttime	46	45	NO
R12	Building D	Daytime	43	50	YES
		Evening	43	50	YES
R13	Building D	Daytime	58	50	NO
		Evening	58	50	NO
		Nighttime	58	45	NO
R14	Building D	Daytime	59	50	NO
		Evening	59	50	NO
R15	Building C	Daytime	53	50	NO
		Evening	53	50	NO
		Nighttime	53	45	NO
R16	Building C	Daytime	48	50	YES
		Evening	48	50	YES
		Nighttime	48	45	NO
R17	Building K	Daytime	49	62	YES
		Evening	49	59	YES
		Nighttime	49	53	YES
R18	Building I	Daytime	46	62	YES
		Evening	46	59	YES
		Nighttime	46	53	YES
R19	Building I	Daytime	49	50	YES
		Evening	49	50	YES
		Nighttime	49	45	NO

TABLE 3: MITIGATED SOUND LEVELS – NON-IMPULSE SOURCES

Receptor ID	Time Period	Predicted Sound Levels (dBA)	Applicable Guideline Limits (dBA)	Compliance with Guideline Limits? (Y/N)
R01	Daytime	39	50	YES
	Evening	39	50	YES
	Nighttime	37	45	YES
R02	Daytime	38	50	YES
	Evening	38	50	YES
R03	Daytime	46	50	YES
	Evening	46	50	YES
	Nighttime	43	45	YES
R04	Daytime	44	50	YES
	Evening	44	50	YES
R05	Daytime	46	50	YES
	Evening	46	50	YES
	Nighttime	43	45	YES
R06	Daytime	43	50	YES
	Evening	43	50	YES
R07	Daytime	48	50	YES
	Evening	48	50	YES
	Nighttime	45	45	YES
R08	Daytime	46	50	YES
	Evening	46	50	YES
R09	Daytime	47	50	YES
	Evening	47	50	YES
	Nighttime	45	45	YES
R10	Daytime	42	50	YES
	Evening	42	50	YES
R11	Daytime	43	50	YES
	Evening	43	50	YES
	Nighttime	41	45	YES
R12	Daytime	40	50	YES
	Evening	40	50	YES
R13	Daytime	46	50	YES
	Evening	46	50	YES
	Nighttime	44	45	YES
R14	Daytime	45	50	YES
	Evening	45	50	YES
R15	Daytime	47	50	YES
	Evening	47	50	YES
	Nighttime	44	45	YES
R16	Daytime	44	50	YES
	Evening	44	50	YES
	Nighttime	41	45	YES
R17	Daytime	44	62	YES
	Evening	44	59	YES
	Nighttime	42	53	YES
R18	Daytime	41	62	YES
	Evening	41	59	YES
	Nighttime	38	53	YES
R19	Daytime	43	50	YES
	Evening	43	50	YES
	Nighttime	41	45	YES

TABLE 4: WORST-CASE MITIGATED SOUND LEVELS – IMPULSE SOURCES

Receptor ID	Impulse Location	Time Period	Predicted Sound Levels (dBA)	Applicable Guideline Limits (dBA)	Compliance with Guideline Limits? (Y/N)
R01	Building E North Docks	Daytime	45	50	YES
		Evening	45	50	YES
		Nighttime	45	45	YES
R02	Building E North Docks	Daytime	44	50	YES
		Evening	44	50	YES
R03	Building F	Daytime	43	50	YES
		Evening	43	50	YES
		Nighttime	43	45	YES
R04	Building F	Daytime	42	50	YES
		Evening	42	50	YES
R05	Building F	Daytime	45	50	YES
		Evening	45	50	YES
		Nighttime	45	45	YES
R06	Building A West Docks	Daytime	40	50	YES
		Evening	40	50	YES
R07	Building A West Docks	Daytime	42	50	YES
		Evening	42	50	YES
		Nighttime	42	45	YES
R08	Building A West Docks	Daytime	42	50	YES
		Evening	42	50	YES
R09	Building A South Docks	Daytime	45	50	YES
		Evening	45	50	YES
		Nighttime	45	45	YES
R10	Building A South Docks	Daytime	41	50	YES
		Evening	41	50	YES
R11	Building D/ Building H north docks	Daytime	41	50	YES
		Evening	41	50	YES
		Nighttime	41	45	YES
R12	Building D	Daytime	37	50	YES
		Evening	37	50	YES
R13	Building D	Daytime	45	50	YES
		Evening	45	50	YES
		Nighttime	45	45	YES
R14	Building D	Daytime	43	50	YES
		Evening	43	50	YES
R15	Building C	Daytime	45	50	YES
		Evening	45	50	YES
		Nighttime	45	45	YES
R16	Building C	Daytime	45	50	YES
		Evening	45	50	YES
		Nighttime	45	45	YES
R17	Building K	Daytime	49	62	YES
		Evening	49	59	YES
		Nighttime	49	53	YES
R18	Building I	Daytime	42	62	YES
		Evening	42	59	YES
		Nighttime	42	53	YES
R19	Building I	Daytime	45	50	YES
		Evening	45	50	YES
		Nighttime	45	45	YES

VALCOUSTICS
Canada Ltd.
consulting acoustical engineers

Title	Date	Figure
Context Plan	**2023-03-21**	**1**
Project Name	Project No.	
Tullamore Industrial Lands, Caledon	**121-0208**	

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Date Plotted: 21.03.23

Legend:

- Receptor
- Point Source
- Line Source

D: Daytime (0700-1900)
E: Evening (1900-2300)
N: Nighttime (2300-0700)
*Values in parentheses represent guideline limits

Project North
True North

R01
D: 57 (50)
E: 57 (50)
N: 55 (45)

R02
D: 57 (50)
E: 57 (50)

R03
D: 55 (50)
E: 55 (50)
N: 52 (45)

R04
D: 56 (50)
E: 56 (50)

R05
D: 57 (50)
E: 57 (50)
N: 53 (45)

R06
D: 52 (50)
E: 52 (50)

R07
D: 49 (50)
E: 49 (50)
N: 46 (45)

R08
D: 46 (50)
E: 46 (50)

R09
D: 52 (50)
E: 52 (50)
N: 50 (45)

R10
D: 47 (50)
E: 47 (50)

R11
D: 44 (50)
E: 44 (50)
N: 42 (45)

R12
D: 40 (50)
E: 40 (50)

R13
D: 50 (50)
E: 50 (50)
N: 47 (45)

R14
D: 47 (50)
E: 47 (50)

R15
D: 50 (50)
E: 50 (50)
N: 47 (45)

R16
D: 45 (50)
E: 45 (50)
N: 42 (45)

R17
D: 44 (62)
E: 44 (59)
N: 42 (53)

R18
D: 42 (62)
E: 42 (59)
N: 40 (53)

R19
D: 45 (50)
E: 45 (50)
N: 43 (45)

Building A
Building C
Building D
Building E
Building F
Building H
Building I
Bldg J
Building K

TORBRAM RD
AIRPORT RD
MAYFIELD RD

597000 597200 597400 597600 597800 598000 598200 598400 598600 598800 599000 599200 599400 599600 599800 600000 600200 600400

4850400 4850200 4850000 4849800 4849600 4849400 4849200 4849000 4848800

596800 597000 597200 597400 597600 597800 598000 598200 598400 598600 598800 599000 599200 599400 599600 599800 600000 600200 600400

VALCOUSTICS
Canada Ltd.
consulting acoustical engineers

Title
Predicted Sound Level (dBA) - Non-Impulse Sources

Project Name
Tullamore Industrial Lands, Caledon

Date
2023-03-28

Project No.
121-0208

Figure
2

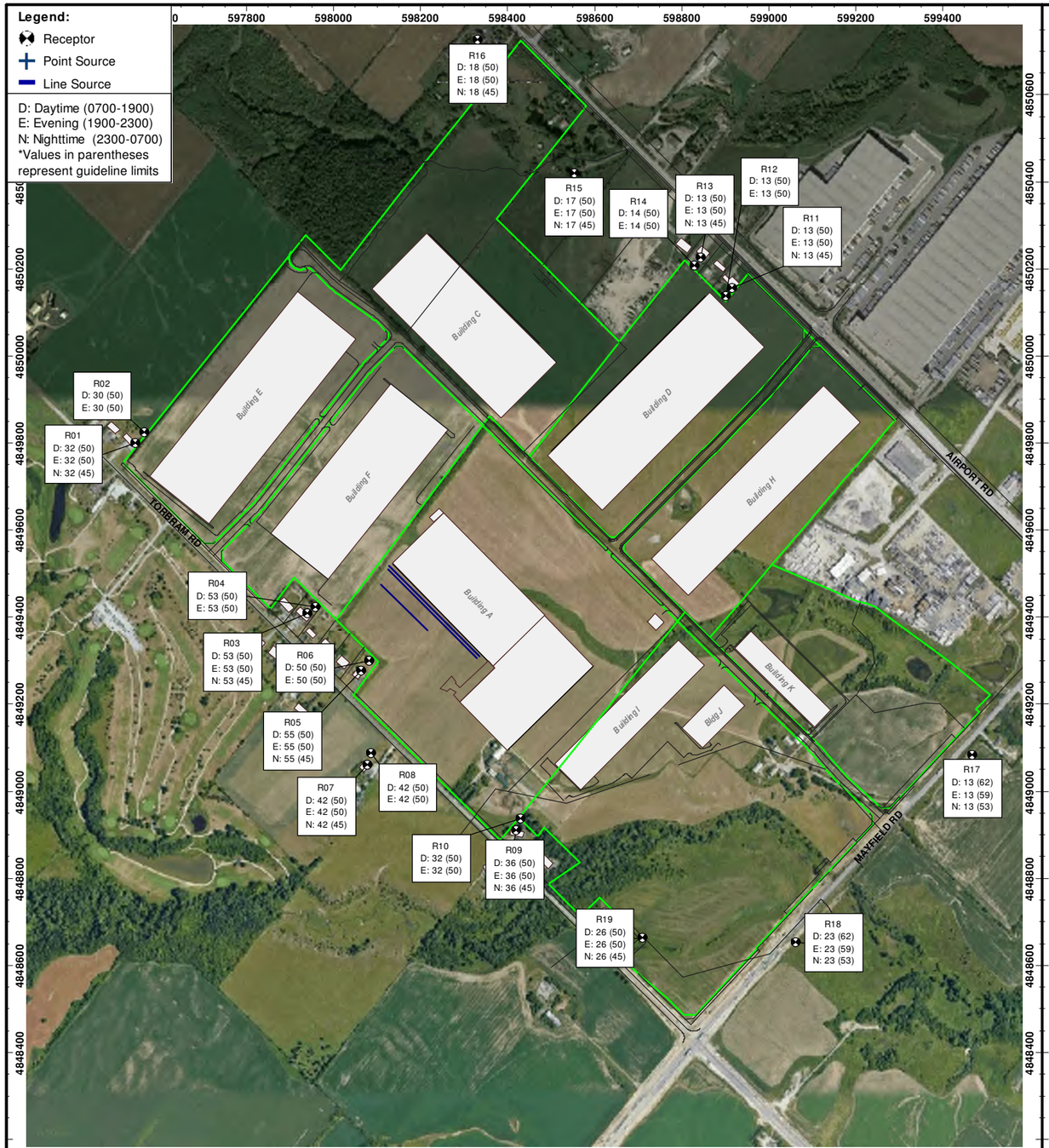
J:\2021\1210208\000\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - NonImp + A_Imp.cna

Date Plotted: 28.03.23

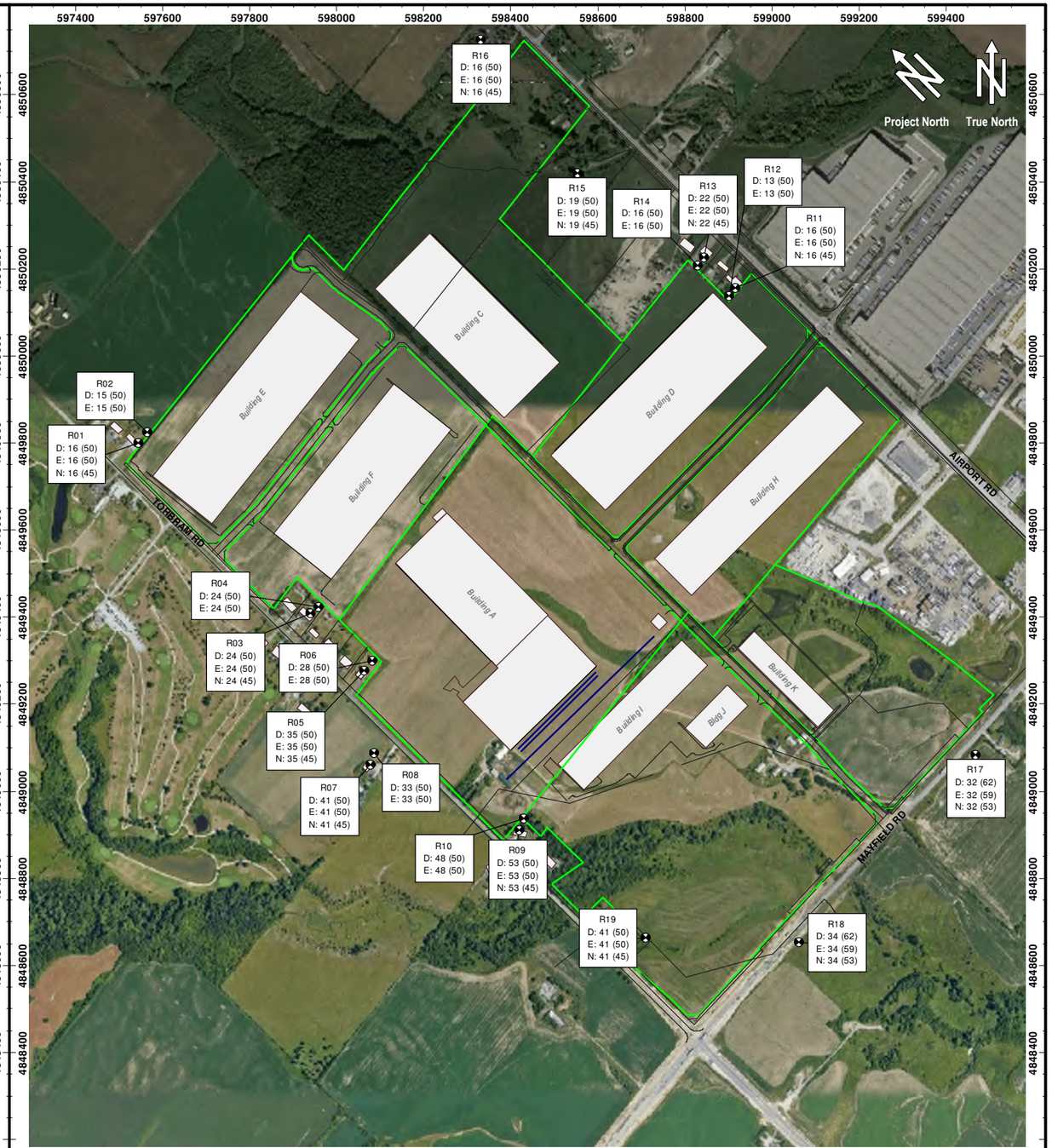
Legend:

- Receptor
- Point Source
- Line Source

D: Daytime (0700-1900)
E: Evening (1900-2300)
N: Nighttime (2300-0700)
*Values in parentheses represent guideline limits



West Loading Dock Impulses



South Loading Dock Impulses

VALCOUSTICS Canada Ltd.
consulting acoustical engineers

Title
Predicted Sound Levels (dBAI) - Building A Impulses

Date
2023-03-28

Figure
3

Project Name
Tullamore Industrial Lands, Caledon

Project No.
121-0208

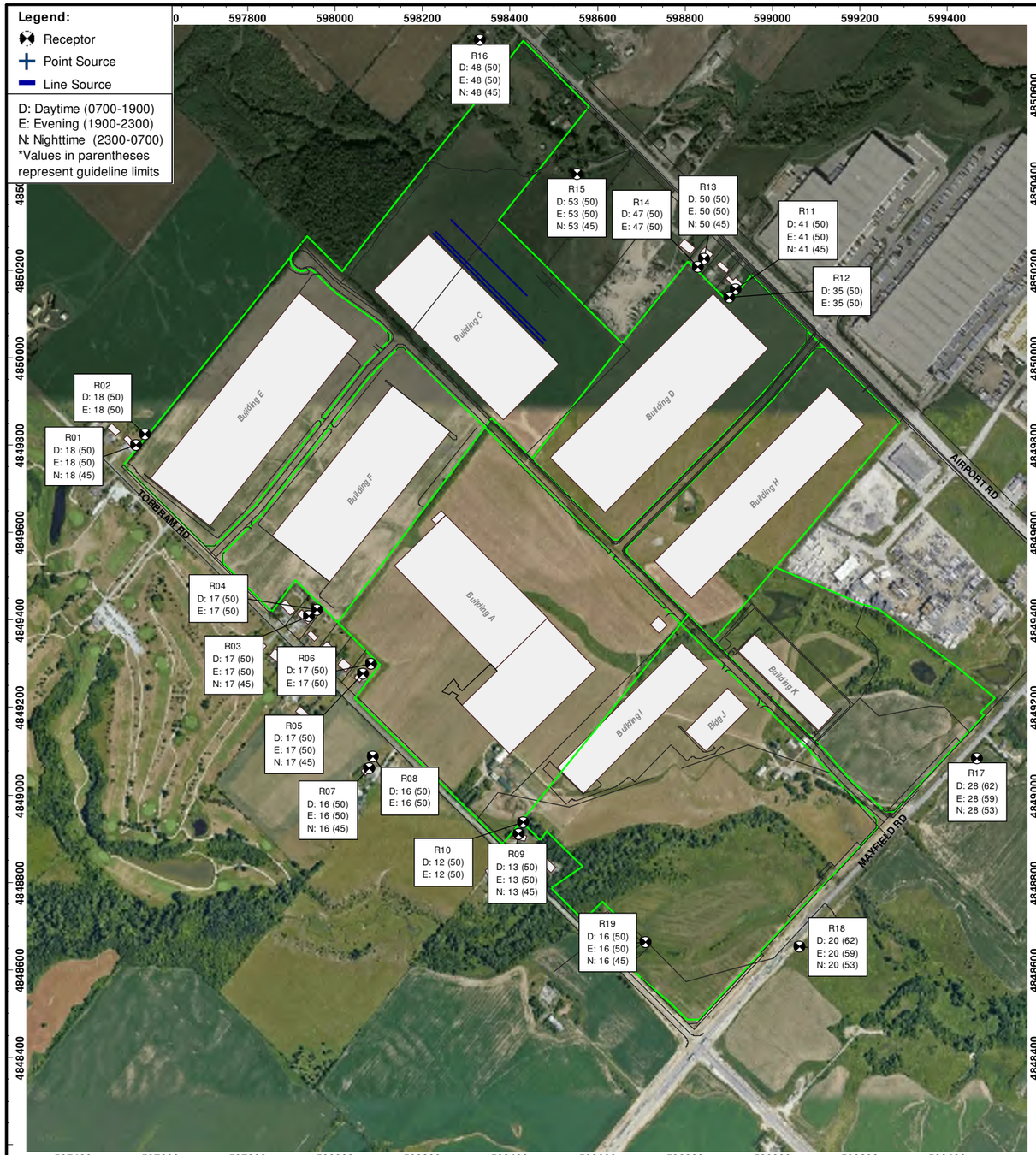
J:\2021\1210208\000\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - NonImp + A_Imp.cna

Date Plotted: 28.03.23

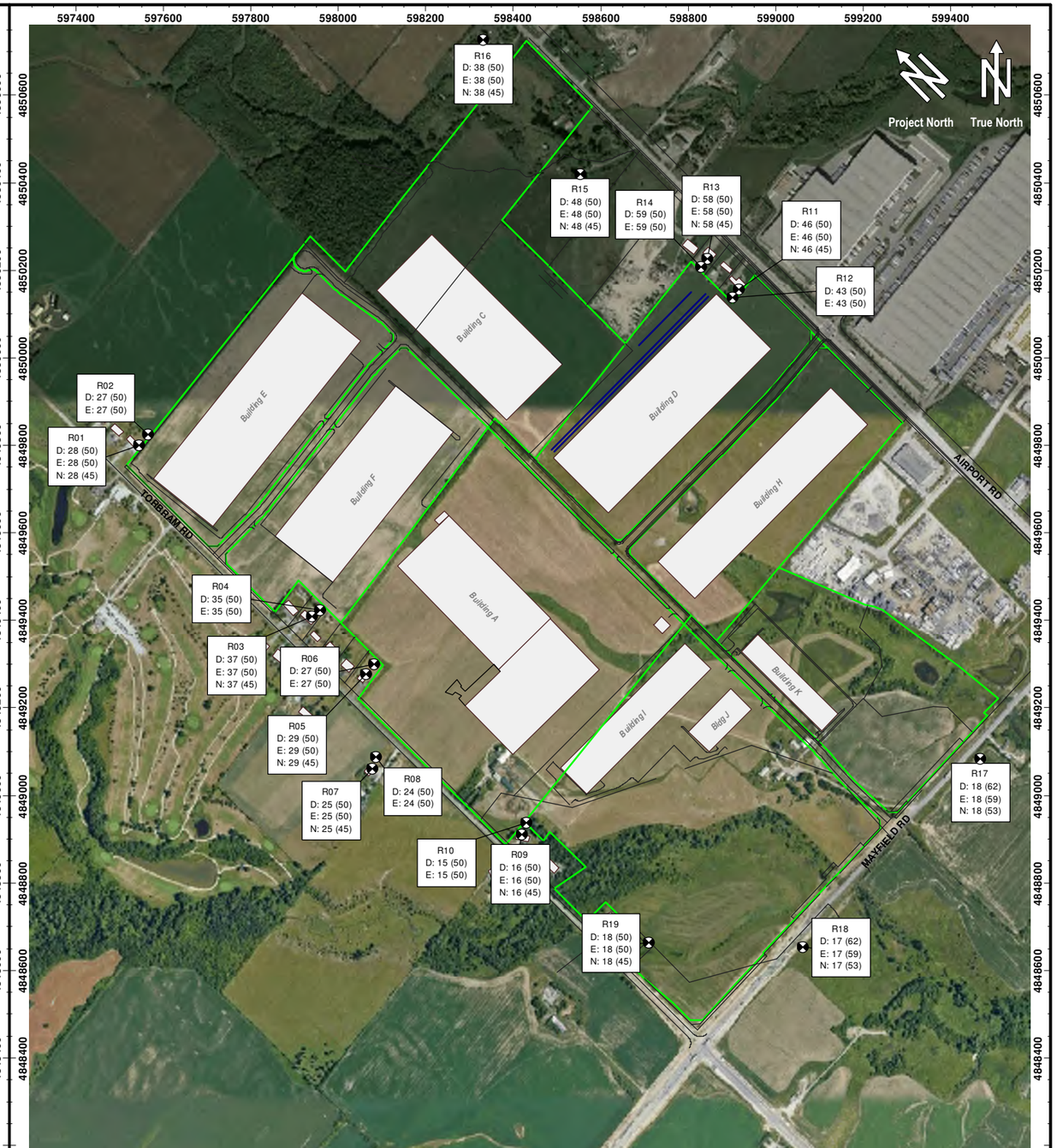
Legend:

- Receptor
- Point Source
- Line Source

D: Daytime (0700-1900)
E: Evening (1900-2300)
N: Nighttime (2300-0700)
*Values in parentheses represent guideline limits



Building C Loading Docks



Building D Loading Docks

VALCOUSTICS
Canada Ltd.
consulting acoustical engineers

Title
Predicted Sound Levels (dBAI) - Buildings C & D Loading Dock Impulses

Project Name
Tullamore Industrial Lands, Caledon

Date
2023-03-21

Project No.
121-0208

Figure
4

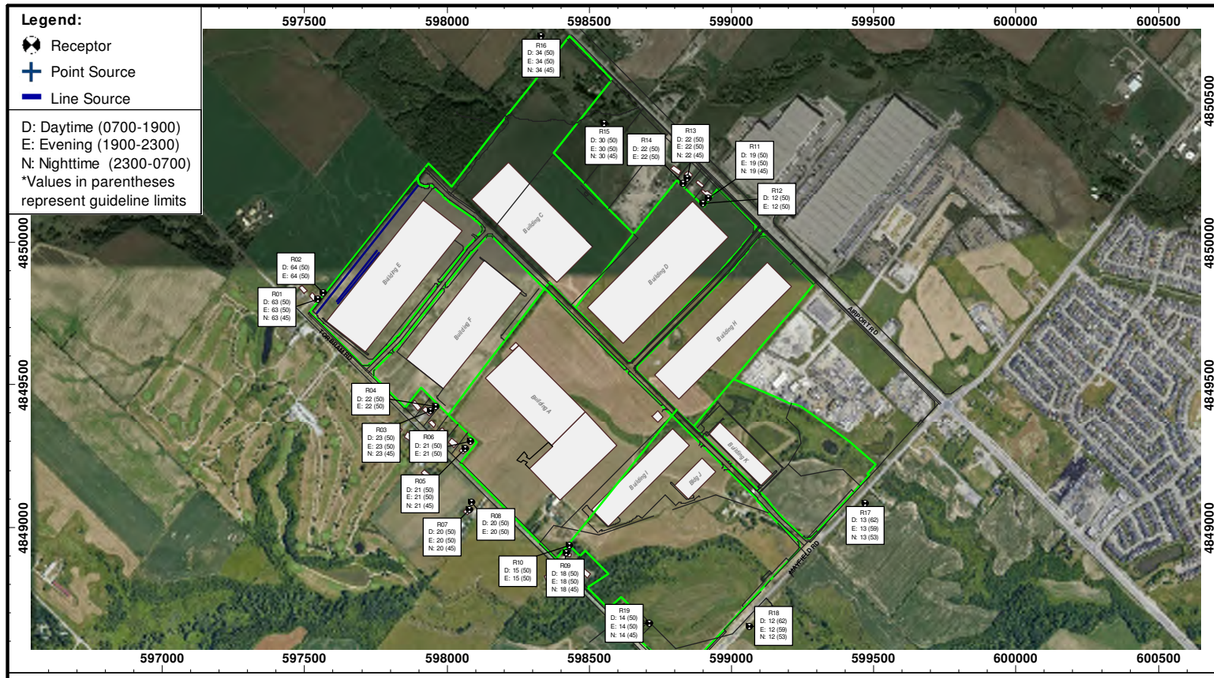
J:\2021\121020B\000\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - C to K_Imp.cna

Date Plotted: 28.03.23

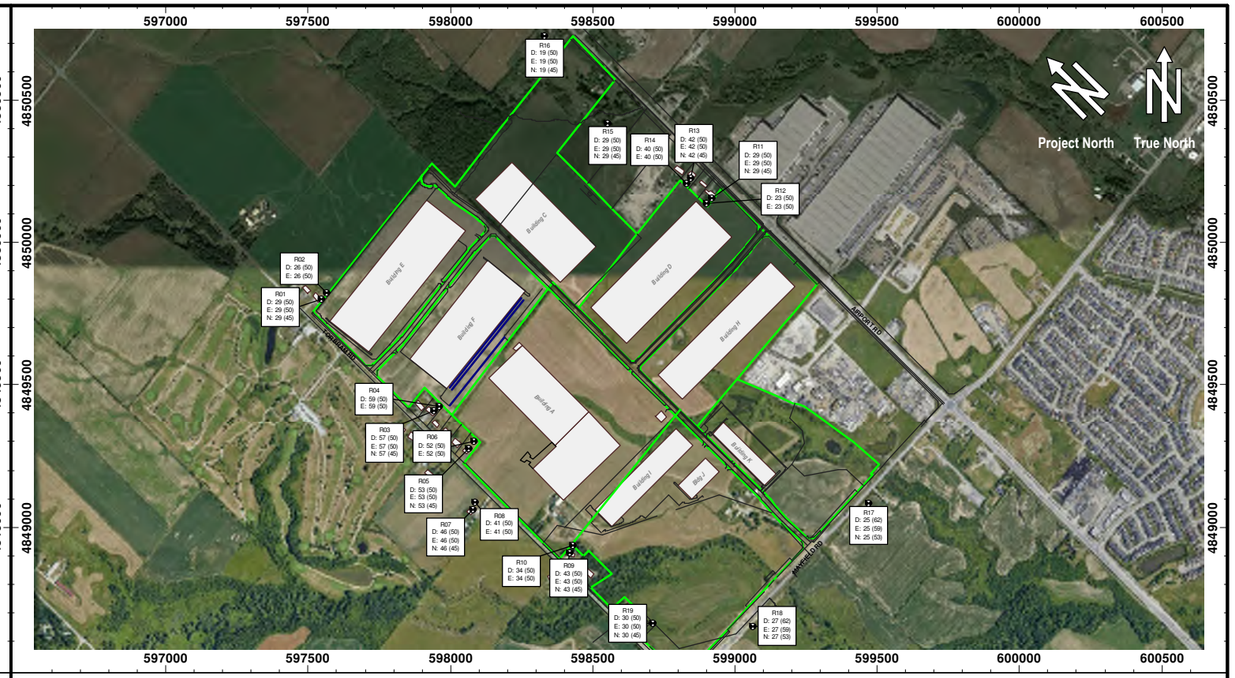
Legend:

- Receptor
- Point Source
- Line Source

D: Daytime (0700-1900)
E: Evening (1900-2300)
N: Nighttime (2300-0700)
*Values in parentheses represent guideline limits



Building E North Loading Docks



Building F Loading Docks

Building E South Loading Docks

Building I Loading Docks

VALCOUSTICS Canada Ltd.
consulting acoustical engineers

Title
Predicted Sound Levels (dBAI) - Buildings E, F, and I Loading Dock Impulses

Project Name
Tullamore Industrial Lands, Caledon

Date
2023-03-21

Project No.
121-0208

Figure
5

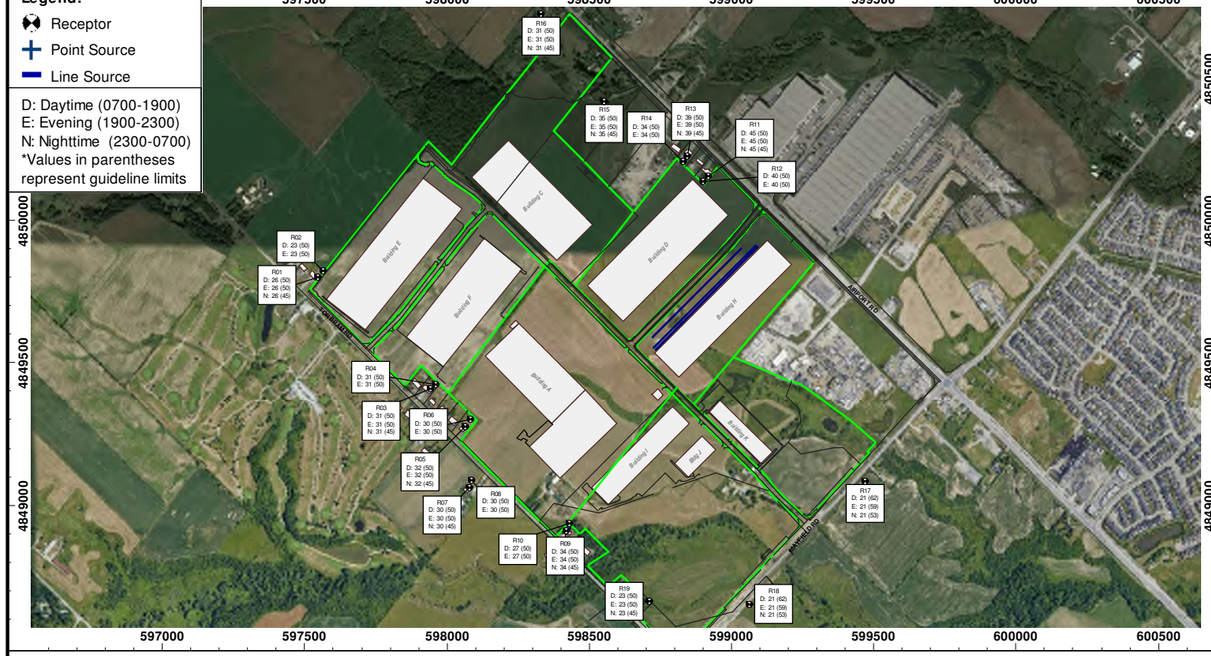
J:\2021\121020B\000\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - C to K_Imp.cna

Date Plotted: 28.03.23

Legend:

- Receptor
- Point Source
- Line Source

D: Daytime (0700-1900)
E: Evening (1900-2300)
N: Nighttime (2300-0700)
*Values in parentheses represent guideline limits



Building H North Loading Docks

Building J Loading Docks

Building H South Loading Docks

Building K Loading Docks

VALCOUSTICS Canada Ltd.
consulting acoustical engineers

Title
Predicted Sound Levels (dBAI) - Buildings H, J, and K Loading Dock Impulses

Project Name
Tullamore Industrial Lands, Caledon

Date
2023-03-21

Project No.
121-0208

Figure
6

J:\2021\1210208\000\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - C to K_Imp.cna

Date Plotted: 28.03.23

VALCOUSTICS Canada Ltd.
consulting acoustical engineers

Title
Mitigation Requirements

Project Name
Tullamore Industrial Lands, Caledon

Date
2023-03-28

Project No.
121-0208

Figure
7

J:\2021\121020800\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - NonImp + A_Imp.cna

Date Plotted: 28.03.23

Legend:

- Receptor
- Point Source
- Line Source

D: Daytime (0700-1900)
E: Evening (1900-2300)
N: Nighttime (2300-0700)
*Values in parentheses represent guideline limits

R16
D: 44 (50)
E: 44 (50)
N: 41 (45)

R15
D: 47 (50)
E: 47 (50)
N: 44 (45)

R14
D: 45 (50)
E: 45 (50)

R13
D: 46 (50)
E: 46 (50)
N: 44 (45)

R12
D: 40 (50)
E: 40 (50)

R11
D: 43 (50)
E: 43 (50)
N: 41 (45)

R02
D: 38 (50)
E: 38 (50)

R01
D: 39 (50)
E: 39 (50)
N: 37 (45)

R04
D: 44 (50)
E: 44 (50)

R03
D: 46 (50)
E: 46 (50)
N: 43 (45)

R06
D: 43 (50)
E: 43 (50)

R05
D: 46 (50)
E: 46 (50)
N: 43 (45)

R07
D: 48 (50)
E: 48 (50)
N: 45 (45)

R08
D: 46 (50)
E: 46 (50)

R10
D: 42 (50)
E: 42 (50)

R09
D: 47 (50)
E: 47 (50)
N: 45 (45)

R19
D: 43 (50)
E: 43 (50)
N: 41 (45)

R18
D: 41 (62)
E: 41 (59)
N: 38 (53)

R17
D: 44 (62)
E: 44 (59)
N: 42 (53)

Building A
Building C
Building D
Building E
Building F
Building H
Building I
Bldg J
Building K

TORBRAM RD
AIRPORT RD
MAYFIELD RD

Project North
True North

596800 597000 597200 597400 597600 597800 598000 598200 598400 598600 598800 599000 599200 599400 599600 599800 600000 600200 600400

4850400 4850200 4850000 4849800 4849600 4849400 4849200 4849000 4848800

VALCOUSTICS Canada Ltd.
consulting acoustical engineers

Title
Predicted Sound Level (dBA) with Mitigation - Non-Impulse Sources

Project Name
Tullamore Industrial Lands, Caledon

Date
2023-03-28

Project No.
121-0208

Figure
8

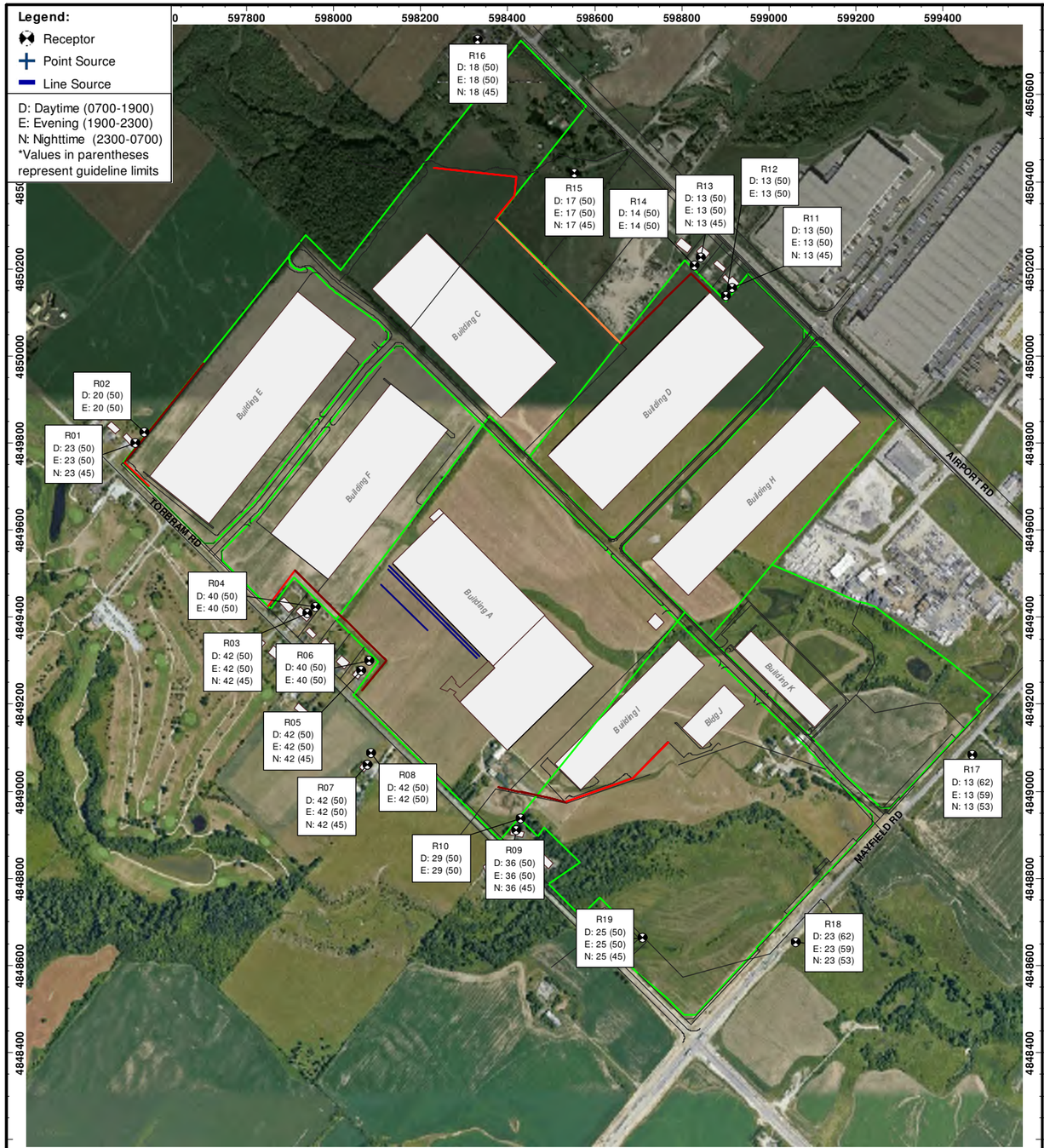
J:\2021\1210208\000\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - NonImp + A_Imp.cna

Date Plotted: 28.03.23

Legend:

- Receptor
- Point Source
- Line Source

D: Daytime (0700-1900)
E: Evening (1900-2300)
N: Nighttime (2300-0700)
*Values in parentheses represent guideline limits



West Loading Dock Impulses

South Loading Dock Impulses

VALCOUSTICS
Canada Ltd.
consulting acoustical engineers

Title
Predicted Sound Levels (dBAI) with Mitigation - Building A Impulses

Project Name
Tullamore Industrial Lands, Caledon

Date
2023-03-28

Project No.
121-0208

Figure
9

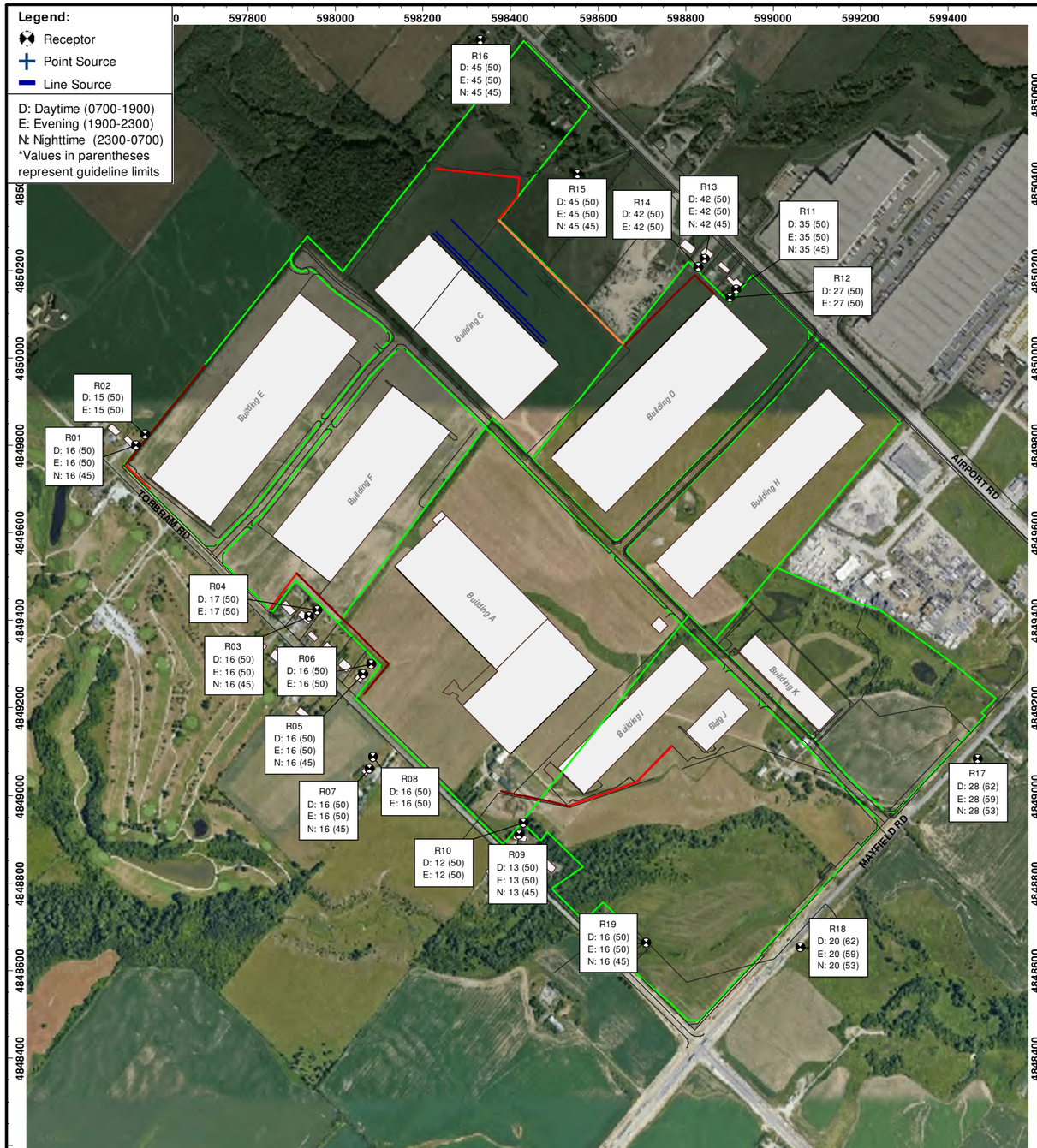
J:\2021\1210208\000\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - NonImp + A_Imp.cna

Date Plotted: 28.03.23

Legend:

- Receptor
- Point Source
- Line Source

D: Daytime (0700-1900)
E: Evening (1900-2300)
N: Nighttime (2300-0700)
*Values in parentheses represent guideline limits



Building C Loading Docks

Building D Loading Docks

VALCOUSTICS
Canada Ltd.
consulting acoustical engineers

Title
Predicted Sound Levels (dBAI) with Mitigation - Buildings C & D Loading Dock Impulses

Project Name
Tullamore Industrial Lands, Caledon

Date
2023-03-28

Project No.
121-0208

Figure
10

J:\2021\1210208\000\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - C to K_Imp (Mit).cna

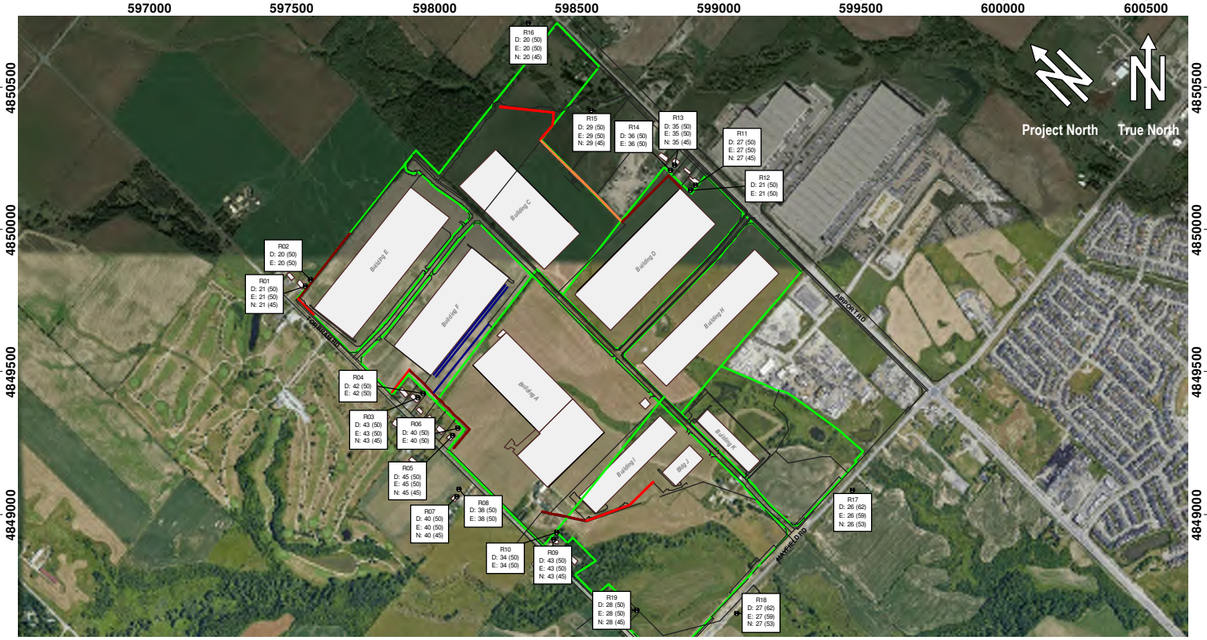
Date Plotted: 28.03.23

Legend:

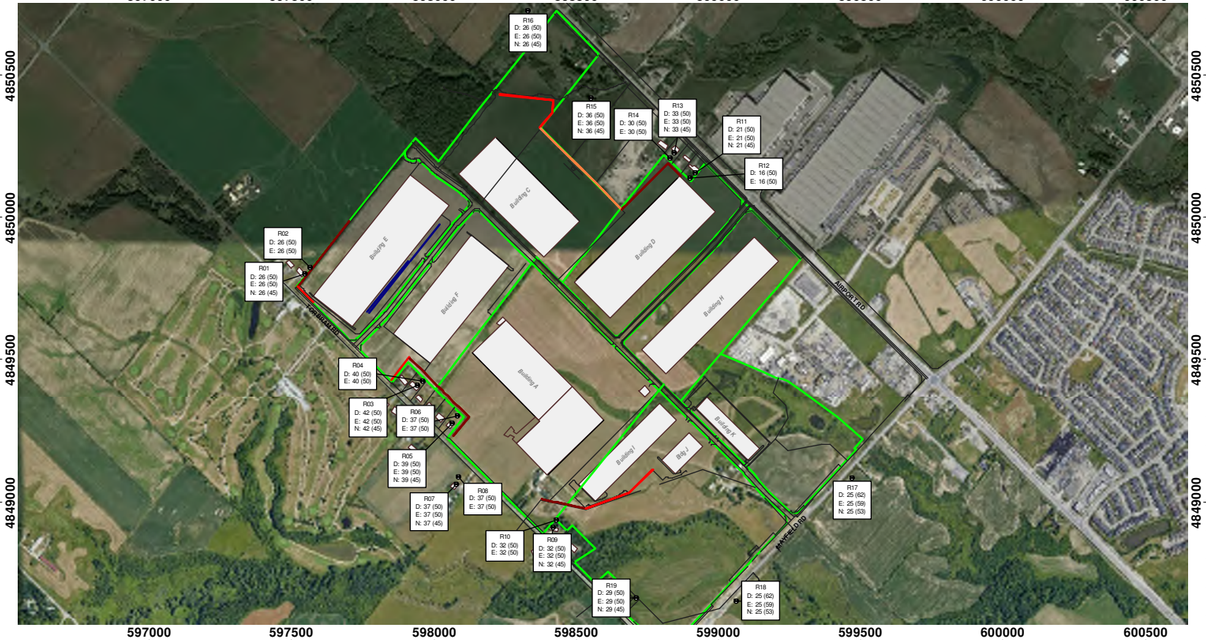
- Receptor
- Point Source
- Line Source

D: Daytime (0700-1900)
E: Evening (1900-2300)
N: Nighttime (2300-0700)
*Values in parentheses represent guideline limits

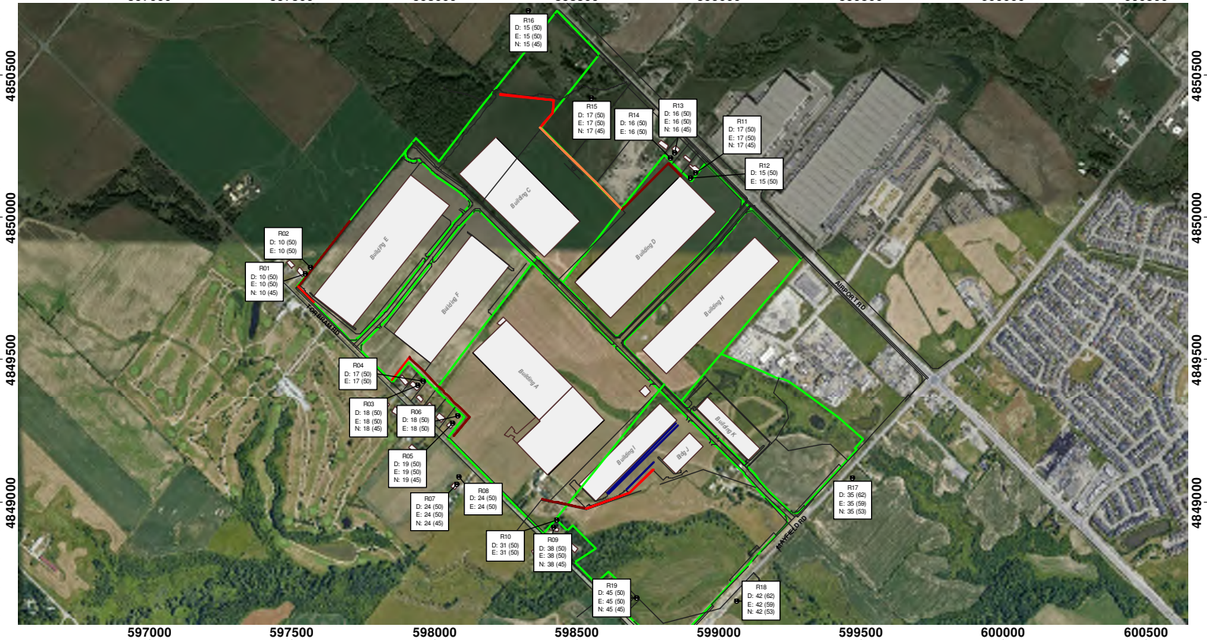
Building E North Loading Docks



Building F Loading Docks



Building E South Loading Docks



Building I Loading Docks

VALCOUSTICS Canada Ltd.
consulting acoustical engineers

Title
Predicted Sound Levels (dBAI) with Mitigation - Buildings E, F, and I Loading Dock Impulses

Project Name
Tullamore Industrial Lands, Caledon

Date
2023-03-28

Project No.
121-0208

Figure
11

J:\2021\1210208\000\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - C to K_Imp (Mit).cna

Date Plotted: 28.03.23

Building H North Loading Docks

Building J Loading Docks

Building H South Loading Docks

Building K Loading Docks

VALCOUSTICS
Canada Ltd.
consulting acoustical engineers

Title
Predicted Sound Levels (dBAI) with Mitigation - Buildings H, J, and K Loading Dock Impulses

Project Name
Tullamore Industrial Lands, Caledon

Date
2023-03-28

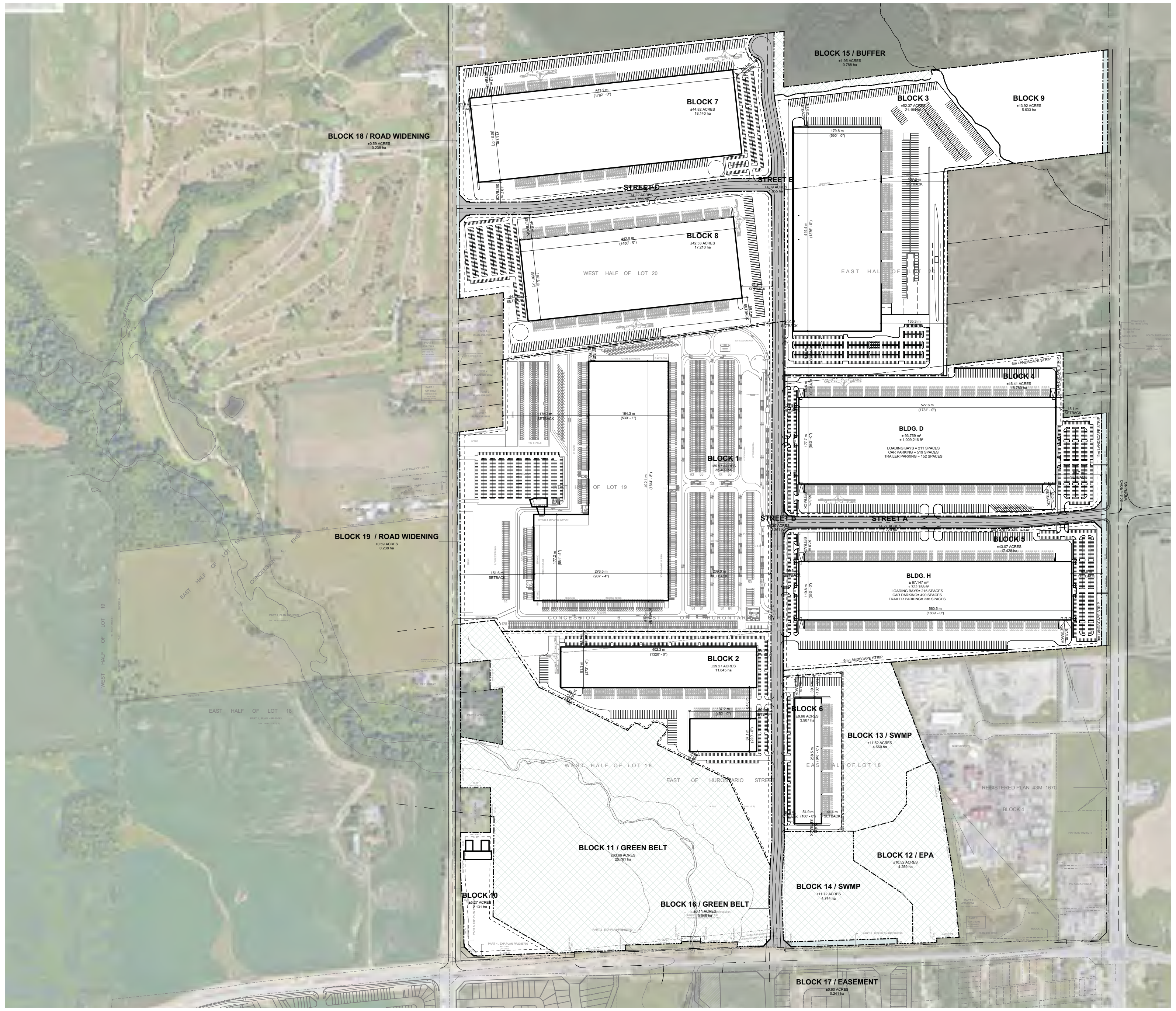
Project No.
121-0208

Figure
12

J:\2021\1210208\000\Analysis\Cadna\2023-03-28 Models for Report\2023-03-28 Tullamore Lands - C to K_Imp (Mit).cna

Date Plotted: 28.03.23

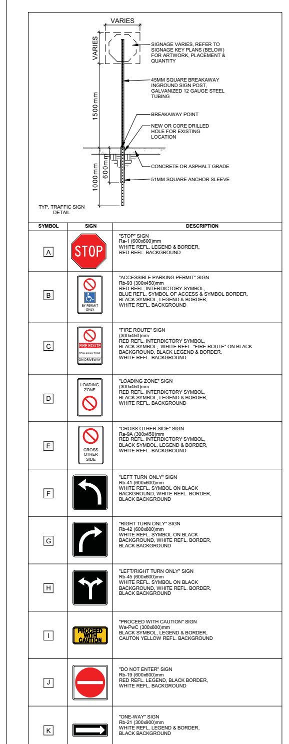
APPENDIX A
DRAWINGS



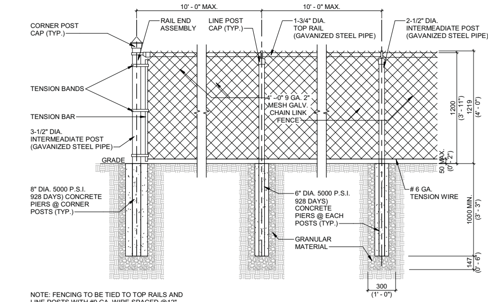
1 OVERALL CONCEPT SITE PLAN
A100 1 : 3500

ZONING

	REQUIRED	PROPOSED
A1 ZONE / AGRICULTURAL		
MP RE-ZONED / PRESTIGE INDUSTRIAL		
MINIMUM LOT AREA	925 S.M.	REFER TO STATS
MINIMUM LOT FRONTAGE	30 M.	
MINIMUM BUILDING SETBACK		
FRONT YARD (ABUTTING A RESIDENTIAL ZONE)	20 M.	MIN. 45 M.
FRONT YARD (ABUTTING A PROVINCIAL HIGHWAY)	14 M.	MIN. 15 M.
FRONT YARD (ANY OTHER)	9 M.	N/A
REAR YARD (ABUTTING A RESIDENTIAL ZONE)	15 M.	MIN. 15 M.
REAR YARD (ABUTTING A PROVINCIAL HIGHWAY)	14 M.	MIN. 15 M.
REAR YARD (ANY OTHER)	7.5 M.	MIN. 19 M.
INT. YARD (ABUTTING A RESIDENTIAL ZONE)	15 M.	MIN. 19 M.
INT. YARD (ANY OTHER)	3 M. ONE SIDE AND 6 M. OTHER SIDE	MIN. 17 M.
EXT. YARD (ABUTTING A RESIDENTIAL ZONE)	15 M.	N/A
EXT. YARD (ABUTTING A PROVINCIAL HIGHWAY)	14 M.	MIN. 44 M.
EXT. YARD (ANY OTHER)	7.5 M.	MIN. 44 M.
DRIVEWAY SETBACKS (MIN.)		
ABUTTING A RESIDENTIAL ZONE	4.5 M.	MIN. 6 M.
ANY OTHER	1.5 M.	MIN. 3 M.
PARKING SPACE SETBACKS (MIN.)		
FROM ANY FRONT LOT LINE	6 M.	6 M.
FROM ANY OTHER LOT LINE	3 M.	3 M.
MAX. BUILDING HEIGHT	18 M.	TBD
COVERAGE	50%	29%
LANDSCAPE AREA (MIN.) - INTERIOR LOT	10.0%	TBD
LANDSCAPE AREA (MIN.) - CORNER LOT	12.5%	TBD
PLANTING STRIP WIDTH (MIN.)	6 M.	MIN. 6 M.
LANDSCAPE BUFFER		
ADJACENT TO RESIDENTIAL	6 M.	MIN. 6 M.
ABUTTING A STREET LINE	4.5 M	MIN. 4.5 M.



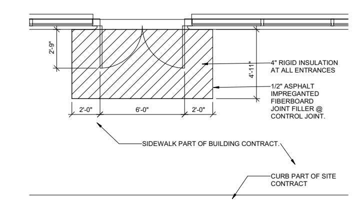
7 SIGN LEGEND
A100 1 : 40



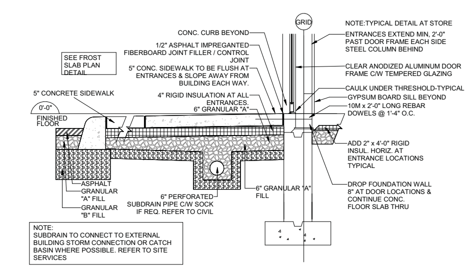
NOTE: FENCING TO BE TIED TO TOP RAILS AND LINE POSTS WITH #9 GA. WIRE SPACED @12"

BRACE ALL CORNERS & TERMINAL POSTS WITH 1-3/4" DIAMETER GALVANIZED STEEL PIPE & APPROPRIATE FASTENERS.

8 CHAIN LINK PRIVACY FENCE
A100 1 : 25

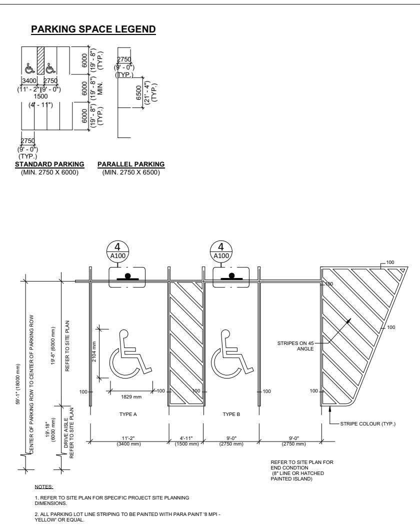


9 FROST SLAB PLAN
A100 1 : 50



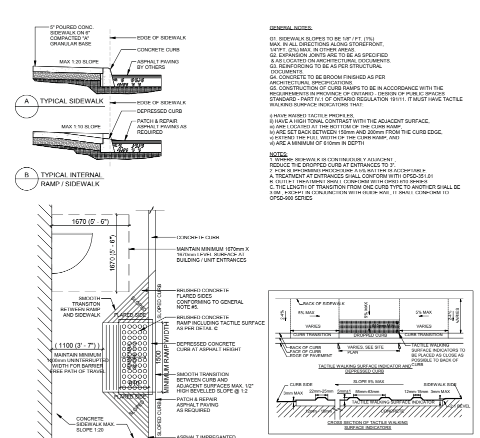
NOTE: SUBDRAIN TO CONNECT TO EXTERNAL BUILDING STORM CONNECTION OR CATCH BASIN WHERE POSSIBLE. REFER TO SITE SERVICES

10 FROST SLAB SECTION
A100 1 : 25

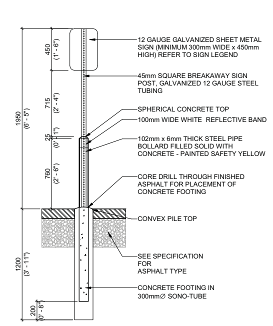


NOTES:
1. REFER TO SITE PLAN FOR SPECIFIC PROJECT SITE PLANNING DIMENSIONS.
2. ALL PARKING LOT LINE STRIPING TO BE PAINTED WITH PAVEMENT MARKING PAINT (YELLOW OR EQUAL).
3. ALL PARKING DIMENSIONS SHOWN ARE MINIMUM. CONFIRM REQUIRED SIZES WITH LOCAL AUTHORITY HAVING JURISDICTION.

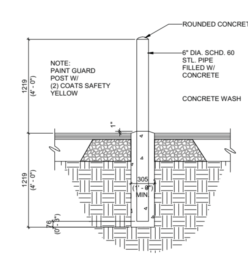
2 STANDARD PARKING DETAIL (AODA)
A100 1 : 100



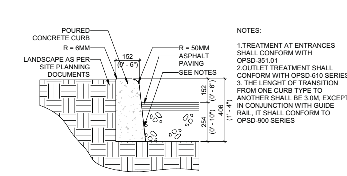
3 CURB RAMP WITH TACTILE PLATES
A100 1 : 50



4 ACCESSIBLE SIGN W/ BOLLARD DETAIL
A100 1 : 25

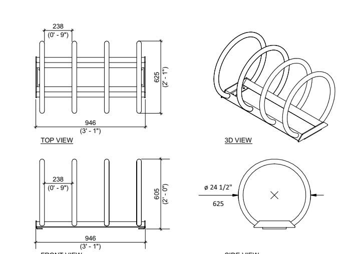


5 BOLLARD DETAIL 2
A100 1 : 30



NOTES:
1.TREATMENT AT ENTRANCES SHALL CONFORM WITH OPSD-351.01
2.OUTLET TREATMENT SHALL CONFORM WITH OPSD-610 SERIES
3. THE LENGHT OF TRANSITION FROM ONE CURB TYPE TO ANOTHER SHALL BE 3.0M, EXCEPT IN CONJUNCTION WITH GUIDE RAIL, IT SHALL CONFORM TO OPSD-900 SERIES

6 CONCRETE CURB SECTION
A100 1 : 15



MAGLIN SITE FURNITURE INC.
350 SERIES

MBR350-4-S
MATERIALS:
FINISH: Bike Rack is constructed using H.S. steel tube, formed steel and solid steel angle. All steel components are protected with E-Coat rust proofing. The Maglin Powdercoat System provides a durable finish on all metal surfaces.
INSTALLATION: The bike rack is delivered pre-assembled. It is available with a surface mount installation.

DIMENSIONS:
Height: 23.81" (60.48cm)
Length: 37.25" (94.62 cm)
Diameter: 24.63" (62.56 cm)
Weight: 79.4 lbs (36.0 kg)

11 BICYCLE RACK DETAIL - 5 SPACES
A100 1 : 20

TURNER FLEISCHER

Turner Fleischer Architects Inc.

67 Lesmill Road
Toronto, ON, M3B 2T8
T 416 425 2222
turnerfleischer.com

SITE STATS

	REQUIRED	PROVIDED	
BLOCK 1		±89.87 ACRES	±363,692 S.M.
NET FLOOR AREA			28%
BUILDING A AREA		±1,083,946 S.F.	±100,702 S.M.
LOADING SPACE	14 SPACES	157 SPACES	
TRAILER PARKING		505 SPACES	
CAR PARKING	438 SPACES	540 SPACES	
* 1/230 S.M. OF GFA		.5/1,000 S.F.	.54/100 S.M.
BLOCK 2		±29.27 ACRES	±118,452 S.M.
NET FLOOR AREA			36%
BUILDING I AREA		±360,760 S.F.	±33,516 S.M.
LOADING SPACE	6 SPACES	74 SPACES	
TRAILER PARKING		55 SPACES	
CAR PARKING	146 SPACES	341 SPACES	
* 1/230 S.M. OF GFA		.95/1,000 S.F.	1.02/100 S.M.
BUILDING J AREA		±99,000 S.F.	±9,197 S.M.
LOADING SPACE	4 SPACES	26 SPACES	
TRAILER PARKING		15 SPACES	
CAR PARKING	40 SPACES	140 SPACES	
* 1/230 S.M. OF GFA		1.41/1,000 S.F.	1.52/100 S.M.
BLOCK 3		±52.37 ACRES	±211,935 S.M.
NET FLOOR AREA			36%
BUILDING C AREA		±811,849 S.F.	±75,423 S.M.
LOADING SPACE	11 SPACES	81 SPACES	
TRAILER PARKING		488 SPACES	
CAB PARKING		25 SPACES	
CAR PARKING	328 SPACES	505 SPACES	
* 1/230 S.M. OF GFA		.62/1,000 S.F.	.67/100 S.M.
BLOCK 4		±46.41 ACRES	±187,815 S.M.
NET FLOOR AREA			50%
BUILDING D AREA		±1,009,216 S.F.	±93,759 S.M.
LOADING SPACE	13 SPACES	211 SPACES	
TRAILER PARKING		152 SPACES	
CAR PARKING	408 SPACES	519 SPACES	
* 1/230 S.M. OF GFA		.51/1,000 S.F.	.55/100 S.M.
BLOCK 5		±43.07 ACRES	±174,299 S.M.
NET FLOOR AREA			39%
BUILDING H AREA		±722,768 S.F.	±67,147 S.M.
LOADING SPACE	10 SPACES	216 SPACES	
TRAILER PARKING		236 SPACES	
CAR PARKING	292 SPACES	490 SPACES	
* 1/230 S.M. OF GFA		.68/1,000 S.F.	.73/100 S.M.
BLOCK 6		±9.66 ACRES	±39,093 S.M.
NET FLOOR AREA			36%
BUILDING K AREA		±152,640 S.F.	±14,181 S.M.
LOADING SPACE	4 SPACES	50 SPACES	
TRAILER PARKING		27 SPACES	
CAR PARKING	62 SPACES	83 SPACES	
* 1/230 S.M. OF GFA		.54/1,000 S.F.	.59/100 S.M.
BLOCK 7		±44.82 ACRES	±181,381 S.M.
NET FLOOR AREA			52%
BUILDING E AREA		±1,015,740 S.F.	±94,365 S.M.
LOADING SPACE	13 SPACES	100 SPACES	
TRAILER PARKING		300 SPACES	
CAR PARKING	410 SPACES	300 SPACES	
* 1/230 S.M. OF GFA		.3/1,000 S.F.	.32/100 S.M.
BLOCK 8		±42.53 ACRES	±172,113 S.M.
NET FLOOR AREA			43%
BUILDING F AREA		±797,500 S.F.	±74,090 S.M.
LOADING SPACE	11 SPACES	178 SPACES	
TRAILER PARKING		159 SPACES	
CAR PARKING	322 SPACES	528 SPACES	
* 1/230 S.M. OF GFA		.66/1,000 S.F.	.71/100 S.M.
BLOCK 9		±13.92 ACRES	±56,332 S.M.
BLOCK 10		±5.27 ACRES	±21,327 S.M.
BLOCK 11 / GREEN BELT		±63.66 ACRES	±257,624 S.M.
BLOCK 12 / EPA		±10.52 ACRES	±42,573 S.M.
BLOCK 13 / SWMP		±11.52 ACRES	±46,620 S.M.
BLOCK 14 / SWMP		±11.72 ACRES	±47,429 S.M.
BLOCK 15 / BUFFER		±1.95 ACRES	±7,891 S.M.
BLOCK 16 / GREEN BELT		±0.11 ACRES	445.1559871
BLOCK 17 / EASEMENT		±0.60 ACRES	±2,428 S.M.
BLOCK 18-19-20-21 / ROAD...		±2.87 ACRES	±11,615 S.M.
STREET A		±4.27 ACRES	±17,280 S.M.
STREET B		±8.30 ACRES	±33,589 S.M.
STREET B - PHASE 2		±4.09 ACRES	±16,552 S.M.
STREET C		±4.22 ACRES	±17,078 S.M.
RESERVE		±0.30 ACRES	±1,198 S.M.
TOTAL SITE AREA		**±480.14 ACRES**	**±1,943,065 S.M.**
TOTAL BUILDING AREA		**±6,053,419 S.F.**	**±562,381 S.M.**
TOTAL LOADING SPACE		**1093 SPACES**	
TOTAL CAR PARKING		**3446 SPACES**	
TOTAL TRAILER PARKING		**1937 SPACES**	

DRIVE AISLE	MIN 6 M.
SIZE OF PARKING SPACE	2.75 M. X 6.00 M.
SIZE OF LOADING SPACE (MIN)	3.50 M. X 14.00 M.

#	DATE	DESCRIPTION	BY
2	2023-02-02	ISSUED FOR COORDINATION (VERSION 81)	RLA
1	2023-01-03	ISSUED FOR COORDINATION (VERSION 79)	RLA

RICE GROUP

PROJECT
TULLAMORE LANDS
CALEDON, ON

DRAWING
OVERALL SITE PLAN & DETAILS

PROJECT NO. 20.302
PROJECT DATE 2022-12-05
DRAWN BY RLA
CHECKED BY JJJ
SCALE As indicated

DRAWING NO. A100

2023-02-02 11:51:14 AM

APPENDIX B

COMMENTS

TOWN OF CALEDON: SUMMARY OF COMMENTS			
Department/Agency	**Comment**	**Assigned to**	**Status/Response**
General Advisory Comments			
Town of Caledon, Planning Department, Development and Design	1. Various letters, emails and telephone calls have been received from members of the public raising their concerns with the proposed applications. Attached to this letter are comments that have been received, please prepare a document with your resubmission that addresses these comments. There may be additional comments received in the future at a Public Meeting or otherwise which will also require a response. Those future comments will be provided under separate cover and will require responses prior to a staff report being brought forward for consideration by the Planning and Development Committee and Council. (Town of Caledon, Planning Department, Development and Design)	WESTON CONSULTING	Acknowledged. Weston will prepare a document that responds to all comments received from members of the public and include it in the next submission.
Bell Canada	2. The Owner is advised to contact Bell Canada at planninganddevelopment@bell.ca during the detailed utility design stage to confirm the provision of communication/telecommunication infrastructure needed to service the development. Please refer to the attached comments from Bell Canada for further details. (Bell Canada)	CROZIERS	Acknowledged; owner will contact Bell Canada during the detailed utility design stage to confirm the provision of communication/telecommunication infrastructure needed to service the development.
	3. It shall be noted that it is the responsibility of the Owner to provide entrance/service duct(s) from Bell Canada's existing network infrastructure to service this development. In the event that no such network infrastructure exists, in accordance with the Bell Canada Act, the Owner may be required to pay for the extension of such network infrastructure. a. If the Owner elects not to pay for the above noted connection, Bell Canada may decide not to provide service to this development. (Bell Canada)	CROZIERS	Acknowledged that it is the responsibility of the Owner to provide entrance/service duct(s) from Bell Canada's existing network infrastructure to service this development.
City of Brampton, Development Services	4. All provincial noise guidelines must be satisfied in conjunction with the industrial development proposed, considering the residential development that is being	VALCOUSTICS	Acknowledged; all provincial noise guidelines will be satisfied in conjunction with the industrial development proposed.

TOWN OF CALEDON: SUMMARY OF COMMENTS			
Department/Agency	**Comment**	**Assigned to**	**Status/Response**
	developed on the south side of Mayfield Road in Brampton. (City of Brampton, Development Services)		
Dufferin Peel Catholic District School Board	5. The Dufferin-Peel Catholic District School Board has reviewed the above-noted application and since the proposed development is for industrial uses, no students are anticipated from this development. The Board has no comments or objection to the further processing of this application. (Dufferin Peel Catholic District School Board)	WESTON CONSULTING	Acknowledged that the board has no comments or objection to the further processing of this application.
Peel District School Board	6. Based on the Board's School Accommodation Criteria, the Board has no comment as this application is for non-residential development, and no students are anticipated. Please note that if the development proposal changes to non-retirement residential units, further comments from the Board will be forthcoming. (Peel District School Board)	WESTON CONSULTING	Acknowledged that the board has no comments or objection to the further processing of this application.
Town of Caledon, Finance Department, Finance	7. The property at 12245 Torbram Road is currently assessed as mostly Farmland ($3.46 million CVA). The Town's share of taxes levied, based on current value assessment is approximately $4,000. As at January 5, 2022, the property tax account is determined to be current. (Town of Caledon, Finance Department, Finance).	RICE GROUP	Acknowledged.
	8. If the proposed development (to include twelve industrial, warehouse and distribution buildings) were to proceed as planned, the property's taxable assessment value would change to reflect the developments that would have taken place. (Town of Caledon, Finance Department, Finance)	RICE GROUP	Acknowledged.
	9. Development Charges will be levied at the rates that were in effect on the date when the Rezoning application was deemed complete i.e., September 15, 2021. Those rates were: a. Town of Caledon: $71.15 per m² of new or added industrial floor space. b. Region of Peel: $179.49 per m² of added industrial floor space. c. Education: $9.69 per m² of new or added industrial floor space. (Town of Caledon, Finance Department, Finance)	RICE GROUP	Acknowledged.

TOWN OF CALEDON: SUMMARY OF COMMENTS			
Department/Agency	**Comment**	**Assigned to**	**Status/Response**
	f) Please correct Page 19 to properly identify that the existing A1 and EPA2 zoning does NOT permit industrial and warehouse uses.	WESTON CONSULTING	Page 19 has been revised to properly identify that the existing A1 and EPA2 zoning does NOT permit industrial, and warehouse uses.
	g) Page 20 identifies an Environmental and Engineering Summary Report, and a Vegetation Assessment but no such reports were submitted. Please revise page 20 accordingly or provide referenced documents.	WESTON CONSULTING	Page 20 will be revised to remove the mentioned references.
	h) Page 22 provides an overview of the Cultural Heritage Impact Assessment but does not speak to the Assessment's recommendation that the heritage resource be moved to the west-half of Lot 18 which forms part of the Greenbelt Plan area of the property. Please provide further analysis of this relocation and identify on the Site Plan and Draft Plan of Subdivision where the retained heritage resource will be relocated to. i. Please note, moving the heritage dwelling to the Greenbelt lands, would constitute development and development is not permitted on the Greenbelt lands. ii. Until such time as the proposed location for the relocated dwelling is identified, Town staff cannot confirm if the proposed location is appropriate.	WESTON CONSULTING GBCA	i. Heritage dwelling will not be moved into the Greenbelt lands as advised. ii. Proposed relocation of dwelling is the north-east corner of Torbram Rd and Mayfield Rd. PJR will be revised accordingly to reflect proposed location.
	i) Page 26 should be revised to accurately reflect the findings of the Valcoustics report, specifically relating to sensitive receptors and the need to provide sound barriers. i. Please include analysis of the noise impacts on the relocated heritage dwelling's new location. ii. Please note the locations of the noise barriers in effected supporting studies and plans including the urban design brief and site plan	WESTON CONSULTING	i.PJR will be revised to reflect the findings of the Valcoustics report with the relocated heritage dwelling's new location. See Section 3.1 ii.Supporting studies and plans including the Urban Design Brief and Site Plan will be updated with the locations of the noise barriers.

TOWN OF CALEDON: SUMMARY OF COMMENTS			
Department/Agency	**Comment**	**Assigned to**	**Status/Response**
	a building permit in accordance with the Ontario Building Code may be required to construct the proposed retaining walls.		
	d) Due to the size of the site and the potential impact noise may have on the existing residential properties on Torbram Road and Airport Road, the Environmental Noise Impact Study prepared by Valcoustics Canada Ltd. dated July 15, 2021 will require a peer review by a qualified noise consultant, at the sole cost of the Owner. It should be noted that the maximum barrier wall height shall be no greater than 2.4m. Should a greater height be required the difference in height may be achieved with the use of a berm. In this regard, the applicant will be required to provide cross-sections for all proposed noise wall/ berms.	RICE GROUP	Owner will retain a peer review for the Noise Impact Study prepared by Valcoustics. See Section 4.0. The barrier requirements will be met with acoustic fences atop berms.
	e) The proposed 10m conveyance channel and the 1500mm storm sewer and overland flow route outletting into the storm water management pond are to be located within a municipal servicing block conveyed to the Town. Also, a 5m maintenance access road is to be provided from the north/south road to the proposed stormwater management pond.	CROZIER-ENG	The proposed conveyance channel and the stormwater management pond inlet sewer will be located within municipal servicing blocks and conveyed to the Town. A 5m wide maintenance access road will be provided from the north/south road to the proposed stormwater management pond.
	f) The stormwater management block is to include an adequately sized sediment drying area.	CROZIER-ENG	TBD based on coordination with Town.
Region of Peel	41. Please refer to the attached comment letter from the Region of Peel		
M. Behar Planning & Design Limited, Urban Design	42. Please refer to the attached Urban Design comments letter from M. Behar Planning & Design Limited		
Town of Caledon, Engineering Services Department, Transportation Engineering	43. Barrier-free accessible spaces should be designed according to the requirements contained within Schedule K of the Town's Traffic By-Law 2015-058.	CROZIER - TRAFFIC	Barrier-free accessible spaces will be designed according to the requirements contained within Schedule K of the Town's Traffic By-Law 2015-058.
	44. An AutoTURN assessment should be provided for all new intersections, access driveways and on-site circulation.	CROZIER - TRAFFIC	Noted. AutoTURN assessments will be conducted as part of site plan

Department/Agency	Comment	Assigned to	Status/Response
	will be subject to the Region's determination that it has or will have sufficient funds to justify entering into the Front-Ending Agreement and Regional Council approval.		
	Public Health		
	• Consideration should be given to including sidewalks on both sides of the street which are a minimum of 1.8m in width. If it is not possible to meet this width, we encourage widths to be a minimum 1.5m. • Public outdoor areas such as pedestrian walkways should include pedestrian-scaled lighting, shading and benches. • Please consider a variety of street trees that are hardy, resilient and low maintenance, planted at equal intervals adjacent to the streets.	CROZIER-TRAFFIC TFAI	Consideration to public health regarding sidewalks, pubic outdoors areas and street trees will be reviewed at the site plan approval technical review stage.
	Noise Study		
	The Environmental Noise Impact Study identifies mitigation measures in the form of sound barriers ranging in height from 3.5m to 8.5m as shown on Figure 6 to 9 of the study. Please note that acoustical walls shall generally not exceed 2.0 metres unless approved by the area municipality.	VALCOUSTICS	Acknowledged; acoustical walls shall generally not exceed 2.0 metres unless approved. See Section 4.0. The barrier requirements will be met with acoustic fences atop berms
	Waste Development		
	This site is not within the vicinity of a landfill. As the proposal is to only development industrial uses, waste collection will be required through a private waste hauler.	RICE GROUP	Ack…on will be completed through a private waste hauler.

Department/Agency	Comment	Assigned to	Status/Response
M. Behar Planning & Design Limited – December 20, 2021	**Urban Design Brief**		
	1. Exterior facing blocks are proposed to be re-designated as Prestige Industrial. The applicant should explain/clarify why the same approach is not applicable for the new buildings and their frontages located on the proposed new subdivision roads.	WESTON CONSULTING	Revised UDB will be included in the resubmission.
	2. The new road network provides an intersection which should be treated with specific and major emphasis on open space, landscaping and building corner treatment at the centre of the new subdivision.	WESTON CONSULTING TFAI	Where accommodatable, emphasis will be placed on open space, landscaping and building corner treatment.

APPENDIX C

AMBIENT SOUND LEVEL CALCULATIONS

APPENDIX C

AMBIENT SOUND LEVEL ASSESSMENT

The ambient sound levels at the future dwellings to the south of Mayfield Road (Receptors R15 and R16) will be dominated by road traffic on Mayfield Road. Existing traffic volumes for Mayfield Road were obtained from the Region of Peel (for the year 2016)

The minimum hourly ambient sound levels were determined using the MECP ORNAMENT/STAMSON model. The 24-hour equivalent sound level (L_{24}) was calculated using the STAMSON software, and the minimum daytime, evening and nighttime hourly sound levels were computed using:

- Daytime = L_{24} – 1 dB;
- Evening = L_{24} – 4 dB;
- Nighttime = L_{24} – 10 dB;

Note that to calculate the L_{24}, the lower of the daytime and nighttime truck percentages (1.6% medium and 1.6% heavy trucks) were used.

The calculated L_{24} was 63 dBA. The resulting minimum hourly sound levels are summarized below.

Time Period	$L_{eq,1hr}$ (dBA)	
	Ambient due to Road Traffic	**Applicable Guideline Limit**
Daytime	62	62
Evening	59	59
Nighttime	53	53

Since the ambient sound levels are higher than the minimum exclusion limits for the three time periods, these values were used as the applicable guideline limits for these receptors.

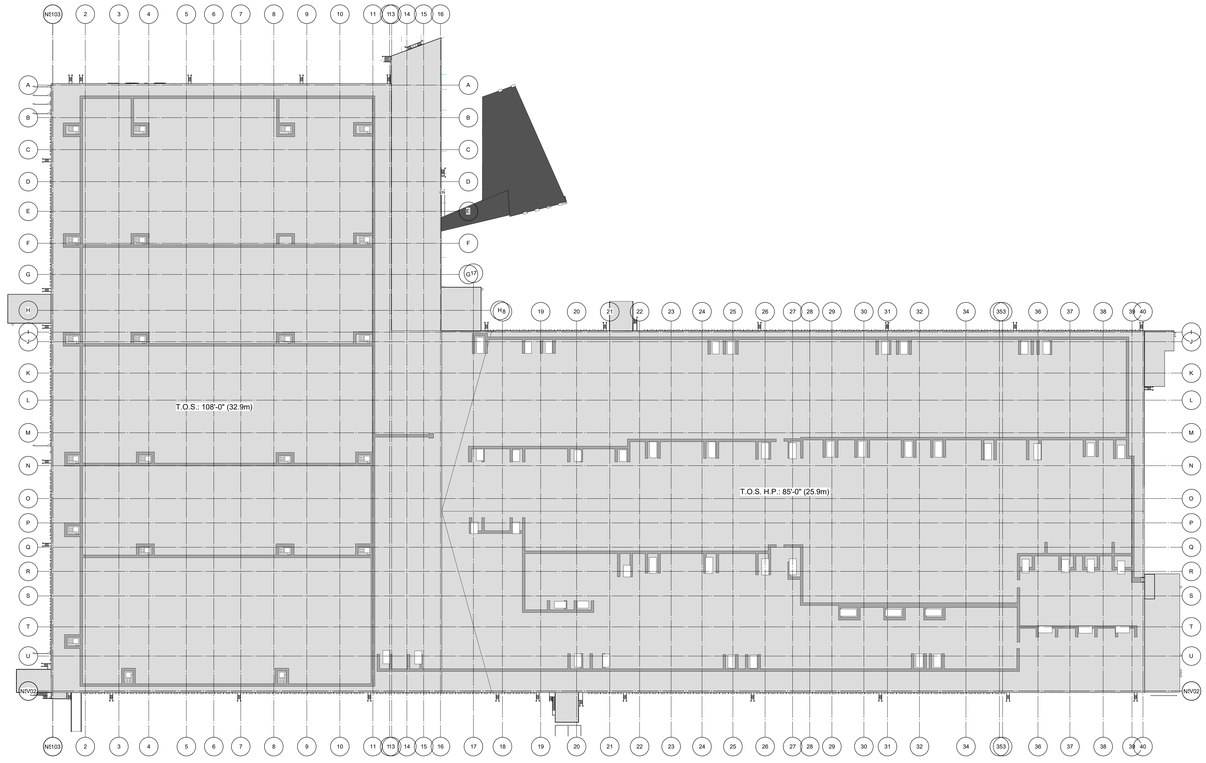
Note, the future dwellings (R8 and R9) may require sound barriers to protect their rear yards from road traffic. This will result in lower ambient sound levels in their rear yards; however, the barriers will also reduce the sound levels from the proposed industrial buildings. Therefore, the worst-case receptors are considered to be the unscreened plane-of-windows.

```
STAMSON 5.04       NORMAL REPORT        Date: 15-07-2021 14:00:52
MINISTRY OF ENVIRONMENT, CONSERVATION AND PARKS / NOISE ASSESSMENT

Filename: l24_r9.te            Time Period: 24 hours
Description: Leq,24 - R8 and R9

Road data, segment # 1: Mayfield
--------------------------------
Car traffic volume  : 17288 veh/TimePeriod  *
Medium truck volume :   286 veh/TimePeriod  *
Heavy truck volume  :   286 veh/TimePeriod  *
Posted speed limit  :    80 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1: Mayfield
------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  30.00 m
Receiver height           :   4.50 m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Results segment # 1: Mayfield
-----------------------------

Source height = 1.12 m

ROAD (0.00 + 62.76 + 0.00) = 62.76 dBA
Angle1 Angle2  Alpha RefLeq  P.Adj  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------------
   -90     90   0.58  68.84   0.00  -4.76  -1.32   0.00   0.00   0.00  62.76
-------------------------------------------------------------------------------

Segment Leq : 62.76 dBA

Total Leq All Segments: 62.76 dBA

TOTAL Leq FROM ALL SOURCES:       62.76
```

APPENDIX D

BUILDING A

DETAILED TENANT INFORMATION



1 A-102 OVERALL ROOF PLAN - SPA
1/64" = 1'-0"

LEGEND

MPH-1 — MAN PENTHOUSE REFRIGERATION UNITS

RTU-1 — ROOF TOP MECHANICAL UNITS

TRAFFIC CAP WALKWAY

TULLAMORE LANDS

Highway 404 and Green Lane E.

LANDSCAPE :
FOTENN CONSULTANTS INC. PLANNERS URBAN DESIGNERS LANDSCAPE ARCHITECTS
368 Oxford Street East
London, ON
N6A 1V7
T:519-657-3322
F:519-645-2474
www.rka.ca

ARCHITECTURAL :
STENDEL + REICH architecture
3435 Rue Stanley
Montréal, QC.
H3A 1S2
T: 514-499-0909
F: 514-499-9111
www.stendelreich.com

STRUCTURAL :
402-1290 Van Horne
Outremont, QC.
H2V 4S2
T:514-279-4821

MECHANICAL :
236 Lesmill Road
North York, ON
M3B 2V1
T: 416-445-8255
www.smclavalin.com

ELECTRICAL :
HAMMERSCHLAG & JOFFE INC. Consulting Engineers
43 Lesmill Road
Toronto, ON
M3B 2T5
T: 416-444-9263
www.hamjof.com

FIRE PROTECTION :
3900, Côte-Vertu
Saint-Laurent, QC
H4R 1V4
T: 514-337-2600
F: 514-337-2610
www.cvselec.com

CIVIL :
ODAN-DETECH GROUP INC. Engineering Excellence
5230 South Service Road
Burlington, ON
L7L 5K2
T: 905-632-3811
F: 905-632-3363
www.odandetech.com

REVISIONS

No	Date	Description	By

1	2022.07.15	ISSUED FOR SPA	

DISTRIBUTION

GENERAL NOTE

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING DIMENSIONS, MEASUREMENTS, LEVELS, DETAILS, SPECIFICATIONS, AND SITE CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR REPORTING ANY DISCREPANCIES, ERRORS, OR OMISSIONS. ALL ERRORS, OMISSIONS, AND ANOMALIES MUST BE REPORTED TO THE ARCHITECT IMMEDIATELY.

DRAWN BY : DM
VERIFIED BY : JM
APPROVED BY : CS
SEAL

DRAWING TITLE :

OVERALL ROOF PLAN - SPA

SCALE : **AS PER DRAWING**
DATE : **2022.01.24**
PROJECT NUMBER: **21084**
DRAWING # : **A-102**
REV.:

21084 - TULLAMORE LANDS

Equipment Sound Data
DC Kentucky, East Gwillimbury
121-0376.200
July 13, 2022

Carrier Sound Emissions (in decibels)

X4 units (X7300 & X7500):
High Speed – 71 dB
Low Speed – 69 dB

Vector 8500:

Diesel Engine:
High Speed – 69 dB
Low Speed – 66 dB

Standby Operation
Diesel Engine:
High & Low Speed – 66 dB
Heat – 48 dB

dB Comparison:

dBA	Example	Home & Yard Appliances
0	healthy hearing threshold	
10	a pin dropping	
20	rustling leaves	
30	whisper	
40	babbling brook	computer
50	light traffic	refrigerator
60	conversational speech	air conditioner
70	shower	dishwasher
75	toilet flushing	vacuum cleaner
80	alarm clock	garbage disposal
85	passing diesel truck	snow blower
90	squeeze toy	lawn mower
95	inside subway car	food processor

I received word back from the product manager regarding your question, see answer below:

For the Vector units in standby, 66db(A) measured at 7 meters.

The above values are taken from representative production samples and understood to be representative of typical production units.

Kurtis Elvey | Executive Account Manager | Carrier Transicold
Cell: 419-270-9092
Kurtis.Elvey@Carrier.com

Carrier TRANSICOLD

Full Speed Complete Sound Data

Larry Lubyonne
6817 Southponit Parkway, Suite 2301

Jacksonville, Florida 32216
484.219.8851
larryl@republicrefrigeration.com

Sound Pressure Levels (SPL) in dB RE 0.0002 Microbar
Sound Power Levels (PWL) in dB RE 10-12 Watt

Model	eco-ATC-1001A
Motor	60.00 HP
# Motors	1
Speed	Full Speed

1 Cell Data

	Sound Pressure Level (dB)										
	End		Motor Side		Opp End		Opp Mtr. Side		Top		Sound
	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	Power
Band	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	Level (db)
63 HZ	77	70	77	70	77	70	77	70	78	61	101
125 HZ	73	65	73	65	73	65	73	65	79	65	97
250 HZ	68	57	68	56	68	57	68	56	72	62	90
500 HZ	72	56	72	56	72	56	72	56	69	57	87
1 KHZ	73	58	73	59	73	58	73	59	67	57	90
2 KHZ	71	54	72	56	71	54	72	56	66	54	86
4 KHZ	71	54	71	55	71	54	71	55	63	53	86
8 KHZ	72	54	73	57	72	54	73	57	65	53	87
Calc dBA	79	62	79	64	79	62	79	64	74	62	95

Sound option(s) selected: Super Low Sound Fan

Remarks:

1. Sound Pressure Levels are according to CTI Standard ATC-128 and verified by an independent CTI-licensed sound test agency
2. Sound Power Levels are calculated according to the Small Units Section 8
3. Sound from free-field conditions over a reflecting plane with +/-2 db(A) tolerance
4. Noise levels can increase with variable frequency drives depending on the drive manufacturer and the drive configuration
5. Complete unit sound data with all fans operating

Sound performance

Table 35: Indoor sound performance

Size (tons)	CFM	Type	Sound power, dB (10^{-12}) watts							
			Octave band centerline frequency (Hz)							
			63	125	250	500	1000	2000	4000	8000
AV15 (15)	6000	Ducted discharge	84	80	78	75	72	71	68	63
		Ducted inlet	85	77	75	73	72	69	64	60
AV18 (17.5)	7000	Ducted discharge	86	82	80	78	76	75	72	64
		Ducted inlet	86	76	73	70	69	66	62	59
AV20 (20)	8000	Ducted discharge	90	85	81	81	80	79	76	68
		Ducted inlet	89	75	71	63	64	59	56	48
AV25 (25)	10000	Ducted discharge	95	88	85	83	83	82	79	72
		Ducted inlet	93	80	73	68	68	63	58	47
AV28 (27.5)	11000	Ducted discharge	98	90	87	84	84	82	79	72
		Ducted inlet	96	82	72	69	68	62	57	46

Note:

- Tested in accordance with AHRI 260-2017.
- Ratings include duct end correction E1.
- Ratings include compressor noise.

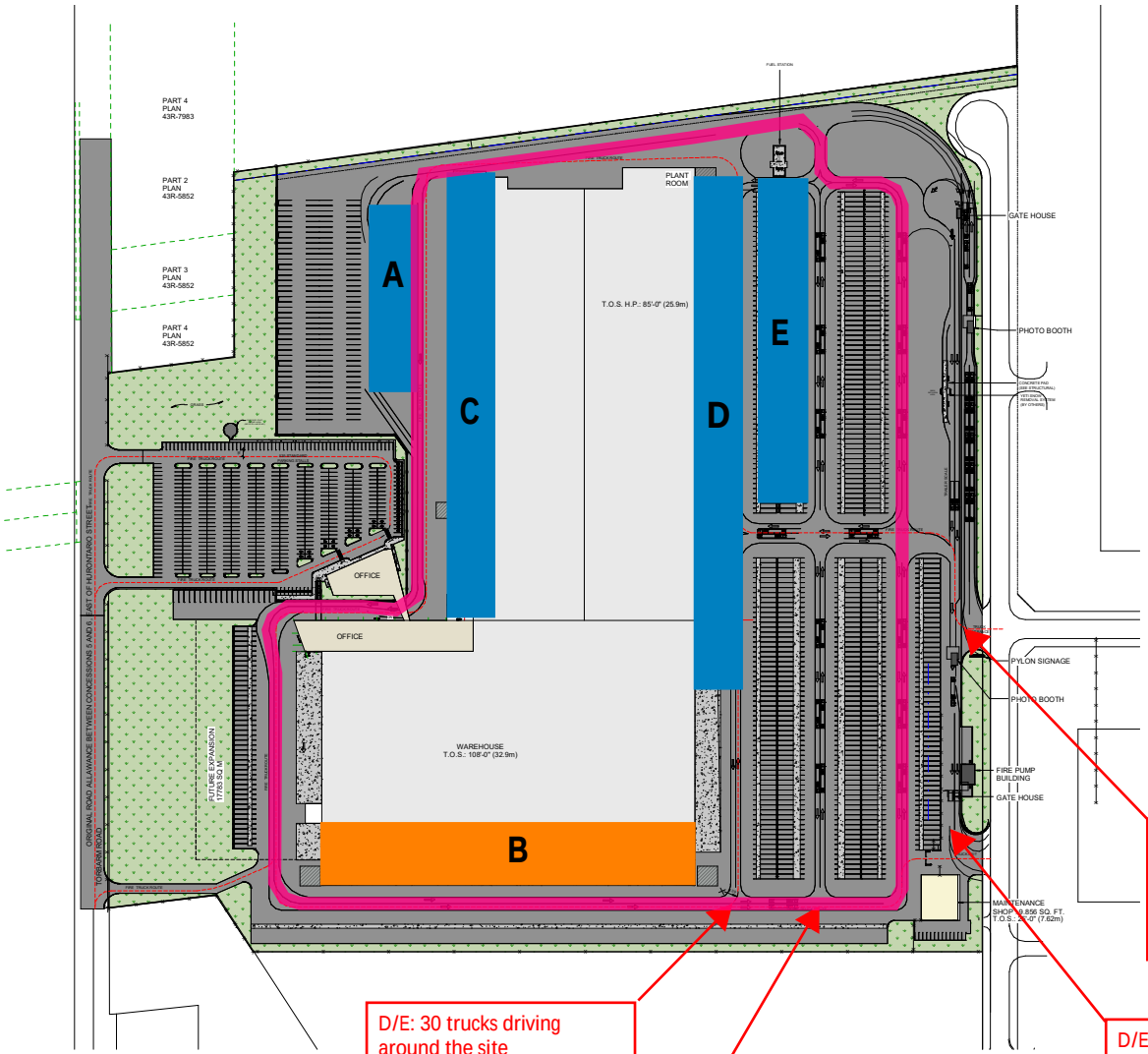
Table 36: Outdoor sound performance

Size (tons)	Sound power, dB (10^{-12}) watts								
	Sound rating dB (A)	Octave band centerline frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
AV15 (15)	85	89	85.5	83	83.5	80.5	76	72.5	67.5
AV18 (17.5)	85	92.5	86.5	83	83	80	76.5	73	68.5
AV20 (20)	82	95	88	80	77.5	76.5	74	71.5	67.5
AV25 (25)	84	94	87	80	79.5	78.5	76.5	73	70.5
AV28 (27.5)	86	92.5	87.5	84.5	84	81	78	74	71

Note:

- Tested in accordance with AHRI 370-2015.
- Ratings include compressor noise.

Kentucky South Caledon - Hourly Operations (2036 Design Year)



A

D/E: 13 refer trailers idling at yard in standby mode

N: 4 refer trailers idling at yard in standby mode

B

D/E/N: 59 ambient tractor / trailers idling at dock for 2 minutes (out of 59 dock doors)

C

D/E: 68 reefer trailers idling at dock (out of 85 dock doors)
- 17 in diesel mode
- 51 in standby mode

N: 30 reefer trailers idling at the dock
- 7 in diesel mode
- 23 in standby mode

D

D/E: 87 reefer trailers idling at dock (out of 85 dock doors)
- 22 in diesel mode
- 65 in standby mode

N: 40 reefer trailers idling at the dock
- 10 in diesel mode
- 30 in standby mode

E

D/E: 175 reefer trailers idling in the yard
- 44 diesel mode
- 131 standby mode

N: 40 reefer trailers idling in the yard
- 10 in diesel mode
- 30 in standby mode

D/E: 15 trailers enter the site, idle at entrance for 20 minutes

N: 10 trailers enter the site, idle at entrance for 20 minutes

D/E: 30 trucks driving around the site

N: 10 trucks driving around the site

D/E: 8 shunt trucks driving around the site

N: 6 shunt truck driving around the site

D/E: 30 trailers depart the site, idle at exit for 20 minutes

N: 10 trailers depart the site, idle at exit for 20 minutes

VCL File: 121-0208
September 22, 2022

D: Daytime (0700-1900 hours)
E: Evening (1900-2300 hours)
N: Nighttime (2300-0700 hours)

APPENDIX E

BUILDINGS C, D, E, F, H, I, J & K

TRUCK MOVEMENTS & EQUIPMENT DATA

TABLE 5: TABLE D-1 TRUCK MOVEMENTS SUMMARY

Building	Number of Movements per Hour		
	Daytime	Evening	Nighttime
Building C	25	25	13
Building D	15	15	8
Building E	30	30	15
Building F	24	24	12
Building H	12	12	6
Building I	14	14	7
Building J	8	8	4
Building K	10	10	5

Note:

(1) The buildings have loading bays on both sides. Half of the truck volume assumed to travel to the loading docks on one side of the building and the other half to the other side.

(2) Buildings C, D, E, H and H also have two shunt trucks operating continuously around the buildings. Buildings I, J and H have one shunt truck operating continuously around the buildings.

Sound data for Warehouse Air Handling Unit

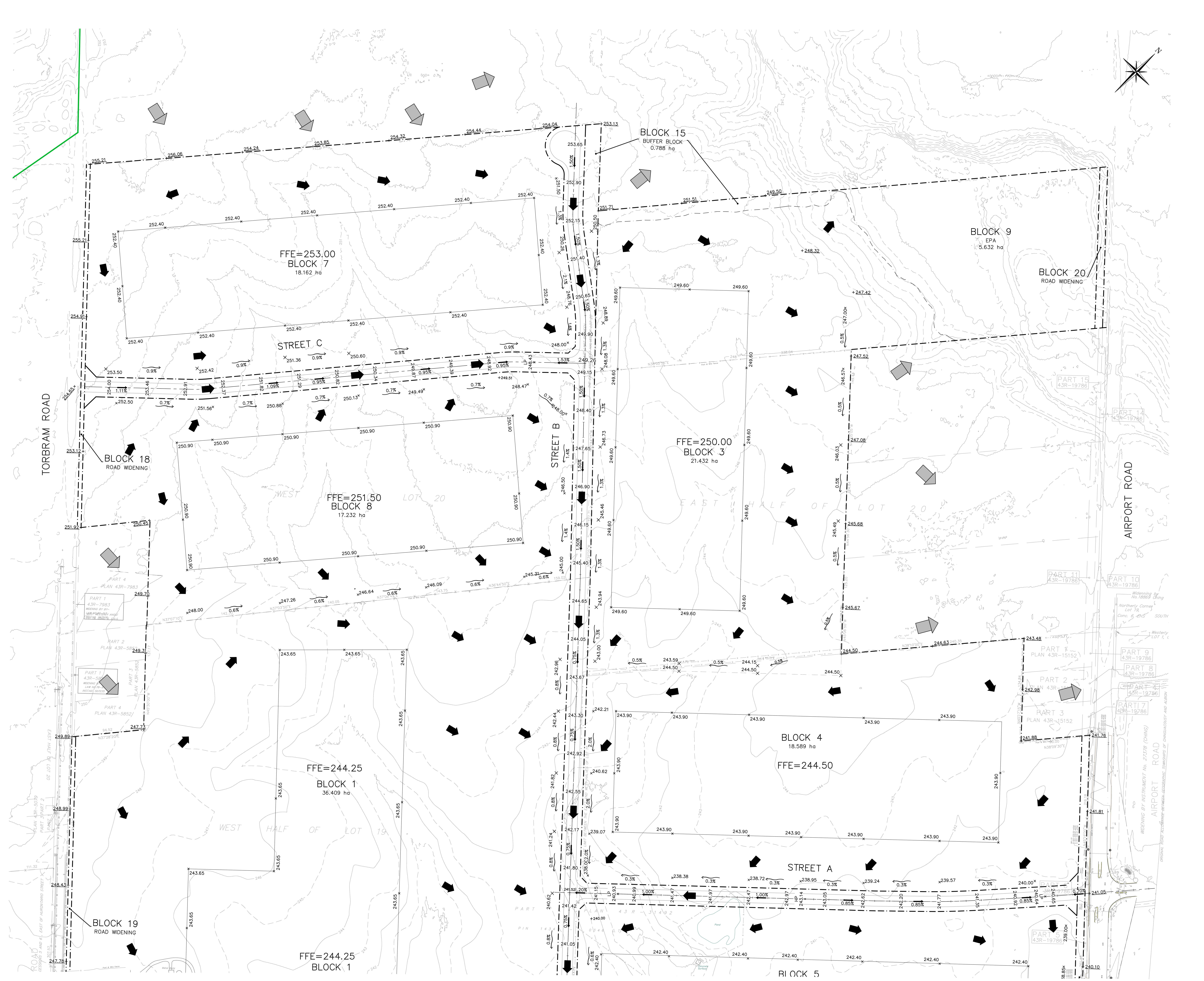
CSAA021

Acoustics

	63 Hz	125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz
Supply bottom	**90 dB**	**95 dB**	**94 dB**	**93 dB**	**95 dB**	**92 dB**	**90 dB**	**86 dB**
Return	**80 dB**	**80 dB**	**84 dB**	**73 dB**	**74 dB**	**77 dB**	**74 dB**	**65 dB**
Outdoor	**81 dB**	**87 dB**	**84 dB**	**74 dB**	**76 dB**	**80 dB**	**78 dB**	**70 dB**
Casing	**83 dB**	**84 dB**	**81 dB**	**72 dB**	**75 dB**	**63 dB**	**56 dB**	**49 dB**

Note, sound power level is the logarithmic sum of the Outdoor and Casing sound levels.

APPENDIX F
GRADING PLANS



LEGEND

Symbol	Description
	PROPERTY LINE
	GREENBELT BOUNDARY
	EXISTING CONTOUR (1.0m)
	EXISTING CONTOUR (2.0m)
×245.00	PROPOSED GRADE
×245.00LP	PROPOSED LOW-POINT GRADE
×245.00HP	PROPOSED HIGH-POINT GRADE
×245.00	PROPOSED GRADE (TO MATCH EXISTING)
2.0%	PROPOSED MINOR FLOW DIRECTION
2.0%	PROPOSED SWALE FLOW DIRECTION
	EXISTING OVERLAND FLOW DIRECTION
	PROPOSED EMERGENCY OVERLAND FLOW DIRECTION

50 0m 50 100
SCALE: 1:1500

No.	ISSUE / REVISION	YYYY/MMM/DD
1	RE-ISSUED FOR DPOS	2023/JAN/26
0	ISSUED FOR DPOS, OPA & ZBA	2021/JUN/29

Stamp: LICENSED PROFESSIONAL ENGINEER — A. D. FARINA 100523860 — 23-01-26 — PROVINCE OF ONTARIO

Stamp: LICENSED PROFESSIONAL ENGINEER — D. LOZENKO 100213318 — 23-01-26 — PROVINCE OF ONTARIO

BEARING NOTE:

BEARINGS ARE UTM GRID, DERIVED FROM GPS OBSERVATION USING THE "TOPNET" GPS NETWORK OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010.0) & (1997.0).

SURVEY COMPLETED BY YOUNG & YOUNG SURVEYING INC. (2021/OCT/14), & (2021/OCT/07) PROJECT NO. 21-B7601.

EXISTING GROUND CONTOURS OUTSIDE OF SITE LIMITS AND INSIDE EXISTING FLOOD PLAIN BASED ON LIDAR SURVEY FROM EQUATORSTUDIOS.

ELEVATION NOTE:

ELEVATIONS HERON ARE GEODETIC IN ORIGIN AND WERE DERIVED FROM GPS OBSERVATIONS USING THE "TOPNET" GPS NETWORK AND ARE REFERRED TO THE CGVD-1928: 1978 DATUM.

ELEVATION HEREON ARE GEODETIC IN ORIGIN AND WERE DERIVED FROM CITY OF BRAMPTON MONUMENT No. 042200365 (NAD ADJUSTMENT) HAVING A PUBLISHED ELEVATION OF 242.135m.

SITE BENCHMARK:

A NAIL HAVING ELEVATION 241.24m WAS SET 12.12m EAST OF THE SOUTHEAST CORNER OF THE PROPERTY ALONG AIRPORT ROAD.

A CUT CROSS HAVING ELEVATION 242.51m WAS SET ON THE NORTHEAST CORNER OF THE INTERSECTION BETWEEN MAYFIELD ROAD AND TORBRAM ROAD

DRAFT PLAN NOTES:

DESIGN ELEMENTS ARE BASED ON DRAFT PLAN BY WESTON CONSULTING INC.
DRAWING No.: D3
FILE No.: 10208

DRAWING NOTES:

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO THIS OFFICE PRIOR TO CONSTRUCTION.

THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT. DO NOT SCALE THIS DRAWING.

ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

Project

TULLAMORE LANDS
TOWN OF CALEDON

Drawing

PRELIMINARY GRADING PLAN – NORTH

CROZIER
CONSULTING ENGINEERS
2800 High Point Drive
Suite 100
Milton, ON L9T 6P4
905-875-0026 T
905-875-4915 F
www.cfcrozier.ca

Drawn V.M./L.E.	Design A.S./A.D.F.	Project No.	2022-5842
Check D.L./J.S.	Check D.L./J.S.	Scale 1:1500	Dwg. C102

LEGEND

- PROPERTY LINE
- GREENBELT BOUNDARY
- REGIONAL ENGINEERED FLOODPLAIN (TRCA, 2021)
- EXISTING CONTOUR (1.0m)
- EXISTING CONTOUR (2.0m)
- x245.00 PROPOSED GRADE
- x245.00LP PROPOSED LOW-POINT GRADE
- x245.00HP PROPOSED HIGH-POINT GRADE
- x245.00 PROPOSED GRADE (TO MATCH EXISTING)
- 2.0% PROPOSED MINOR FLOW DIRECTION
- 2.0% PROPOSED SWALE FLOW DIRECTION
- EXISTING OVERLAND FLOW DIRECTION
- PROPOSED EMERGENCY OVERLAND FLOW DIRECTION

BLOCK 19
ROAD WIDENING

FFE=244.25
BLOCK 1
36.409 ha

BLOCK 5
17.437 ha
FFE=243.00

BLOCK 21
ROAD WIDENING

FFE=242.50
BLOCK 2
11.844 ha

BLOCK 13
SWMP
4.661 ha

FFE=241.00
BLOCK 6
3.907 ha

BLOCK 11
GREENBELT
25.766 ha

BLOCK 12
EPA
4.259 ha

BLOCK 14
SWMP
9.745 ha

BLOCK 16

BLOCK 17
SANITARY EASEMENT
0.246 ha

BLOCK 10
HERITAGE HOUSE
2.153 ha

TORBRAM ROAD

AIRPORT ROAD

STREET 'B'

WEST TRIBUTARY

MAYFIELD ROAD

STREET '2'

STREET '10'

STREET '11'

COUNTRY SIDE VILLAGES
BLOCK 48-2 SECONDARY PLAN AREA
OZS-2019-0013/21T-1902
SANDRINGHAM EAST

SCALE: 1:1500

No.	ISSUE / REVISION	YYYY/MMM/DD
1	RE-ISSUED FOR DPOS	2023/JAN/26
0	ISSUED FOR DPOS, OPA & ZBA	2021/JUN/29

Stamp: LICENSED PROFESSIONAL ENGINEER — A. D. FARINA — 100523560 — 23-01-26 — PROVINCE OF ONTARIO

Stamp: LICENSED PROFESSIONAL ENGINEER — D. LOZENKO — 100213318 — 23-01-26 — PROVINCE OF ONTARIO

BEARING NOTE:

BEARINGS ARE UTM GRID, DERIVED FROM GPS OBSERVATION USING THE "TOPNET" GPS NETWORK OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010.0) & (1997.0).

SURVEY COMPLETED BY YOUNG & YOUNG SURVEYING INC. (2021/OCT/14), & (2021/OCT/07) PROJECT NO. 21-87601.

EXISTING GROUND CONTOURS OUTSIDE OF SITE LIMITS AND INSIDE EXISTING FLOOD PLAIN BASED ON LIDAR SURVEY FROM EQUATORSTUDIOS.

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A CUT CROSS HAVING ELEVATION 242.51m WAS SET ON THE NORTHEAST CORNER OF THE INTERSECTION BETWEEN MAYFIELD ROAD AND TORBRAM ROAD

DRAFT PLAN NOTES:

DESIGN ELEMENTS ARE BASED ON DRAFT PLAN BY WESTON CONSULTING INC.
DRAWING No.: D3
FILE No.: 10208

DRAWING NOTES:

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE REPRODUCTION OF ANY PART OF IT WITHOUT PRIOR WRITTEN CONSENT OF THIS OFFICE IS STRICTLY PROHIBITED.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO THIS OFFICE PRIOR TO CONSTRUCTION.

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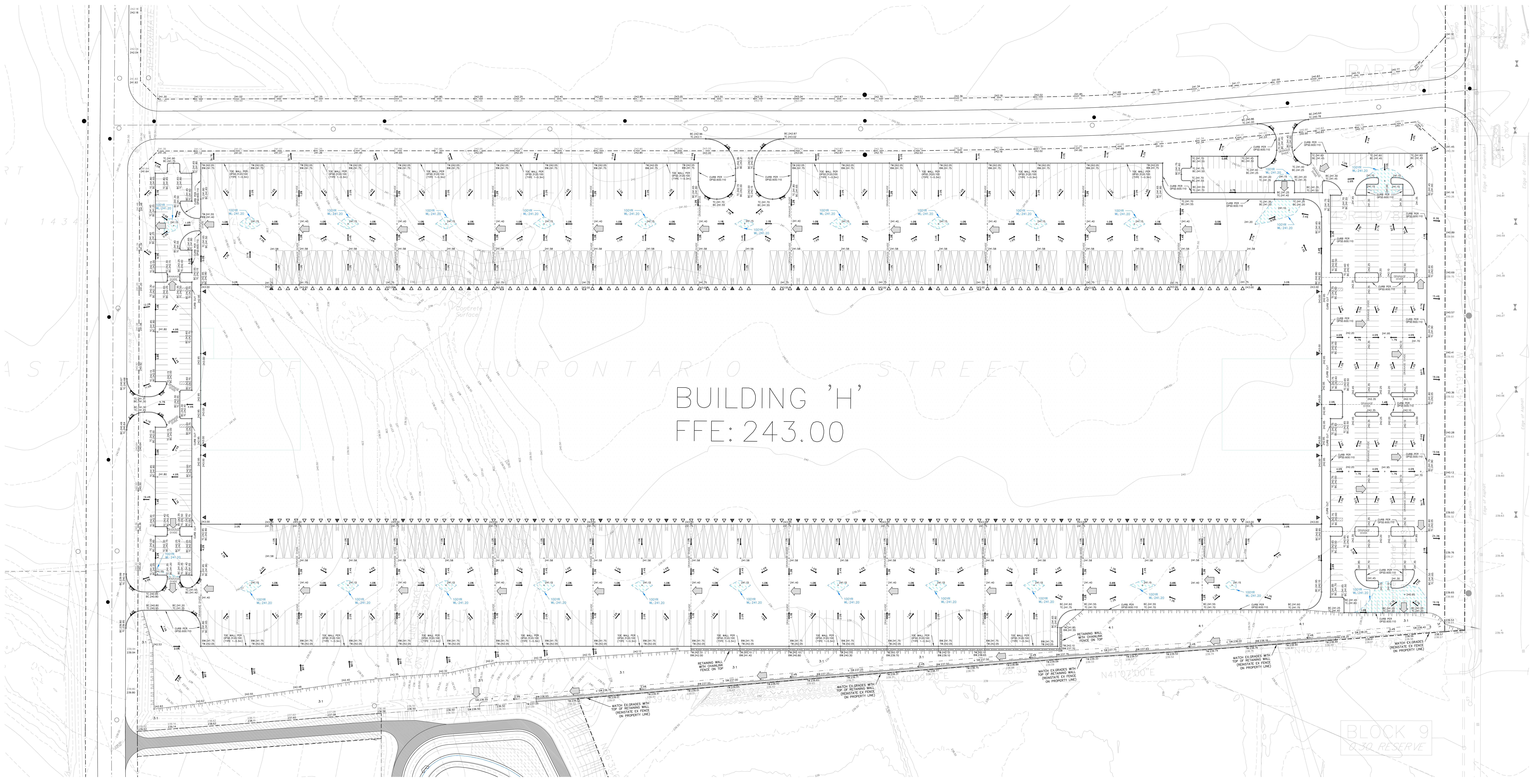
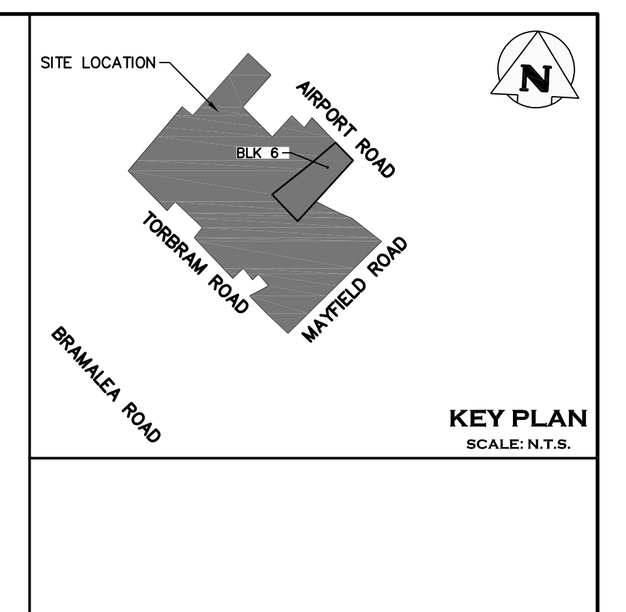
Project: TULLAMORE LANDS
TOWN OF CALEDON

Drawing: PRELIMINARY GRADING PLAN – SOUTH

CROZIER CONSULTING ENGINEERS
2800 High Point Drive
Suite 100
Milton, ON L9T 6P4
905.875.0026 T
905.875.4915 F
www.cfcrozier.ca

Drawn	V.M./L.E.	Design	A.S./A.D.F.	Project No.	2022-5842
Check	D.L./J.S.	Check	D.L./J.S.	Scale	1:1500
				Dwg.	C102A





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BENCHMARKS

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A SITE BENCHMARK WAS CUT CROSS HAVING ELEVATION 242.51m WAS SET ON THE NORTHEAST CORNER OF THE INTERSECTION BETWEEN MAYFIELD ROAD AND TORBRAM RD.

SURVEY COMPLETED BY YOUNG & YOUNG SURVEYING INC. (2021/OCT/07)
REFERENCE NO. 21-B7601-4

SITE PLAN NOTES

DESIGN ELEMENTS ARE BASED ON SITE PLAN PROVIDED BY TURNER FLEISCHER PROJECT NO: 20.3025D, DRAWING NO: A100

Town

No.	ISSUE	DATE: MMM/DD/YYYY
0A	ISSUED FOR COORDIANTION	JAN/18/2023

Engineer

Engineer

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

Project
TULLAMORE INDUSTRIAL GP LTD. – TULLAMORE LANDS
MAYFIELD ROAD & AIRPORT ROAD & TORBRAM ROAD
TOWN OF CALEDON

Drawing
PRELIMINARY GRADING

CROZIER CONSULTING ENGINEERS
2800 HIGH POINT DRIVE
SUITE 100
MILTON, ON L9T 6P4
905-875-0026 T
905-875-4915 F
WWW.CFCROZIER.CA

Drawn By	L.E./V.M.	Design By	P.F.	Scale	1:500	Project	2022–5842
Check By	P.F./A.D.F.	Check By	P.F.	Sheet		Drawing	

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SURVEY COMPLETED BY YOUNG & YOUNG SURVEYING INC. (2021/OCT/07)
REFERENCE NO. 21-B7601-4

SITE PLAN NOTES

DESIGN ELEMENTS ARE BASED ON SITE PLAN PROVIDED BY TURNER FLEISCHER
PROJECT NO: 20.302SD, DRAWING NO: A100

Town

No.	ISSUE	DATE: MMM/DD/YYYY
1	SITE PLAN APPLICATION	MAR/25/2022

Engineer

Engineer

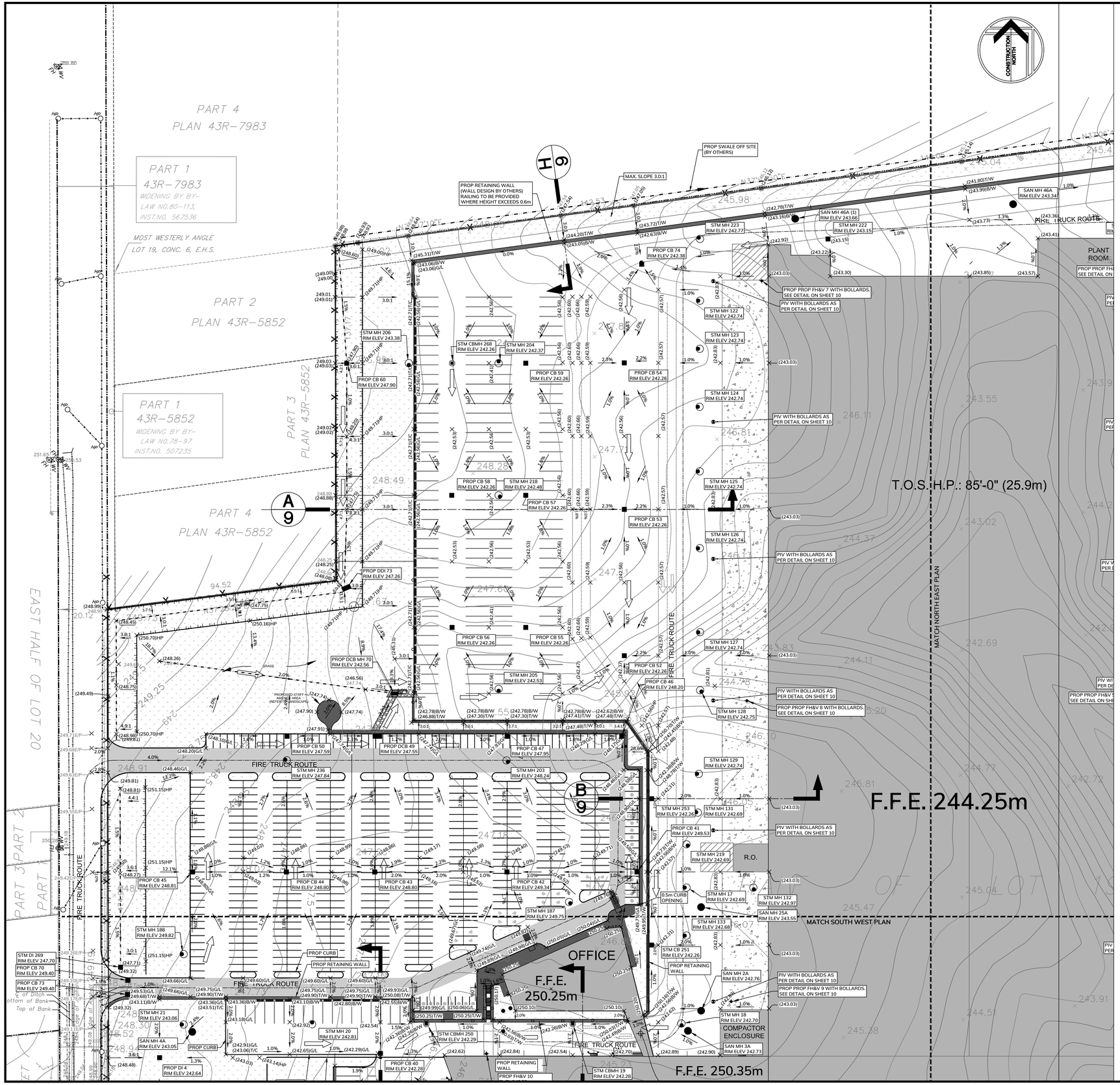
PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

Project
TULLAMORE INDUSTRIAL GP LTD. – TULLAMORE LANDS
MAYFIELD ROAD & AIRPORT ROAD & TORBRAM ROAD
TOWN OF CALEDON

Drawing

CROZIER CONSULTING ENGINEERS
2800 High Point Drive
Suite 100
Milton, ON L9T 6P4
905.875.0026 T
905.875.4915 F
WWW.CFCROZIER.CA

Drawn By	L.E./V.M.	Design By	P.F.	Scale		Project	2022-5842
Check By	P.F./A.D.F.	Check By	P.F.	Sheet		Drawing	



KEY PLAN
Scale : N.T.S.

SUBJECT LANDS

GRADING LEGEND:

- DENOTES EXISTING STORM MANHOLE
- DENOTES PROPOSED STORM MANHOLE
- DENOTES PROPOSED CATCHBASIN MANHOLE
- DENOTES EXISTING CATCHBASIN
- DENOTES PROPOSED CATCHBASIN
- DENOTES PROPOSED STORMCEPTOR
- DENOTES EXISTING SANITARY MANHOLE
- DENOTES PROPOSED SANITARY MANHOLE
- DENOTES PROPOSED HYDRANT
- DENOTES EXISTING HYDRANT
- DENOTES PROPOSED WATER VALVE & BOX
- PIV DENOTES POST INDICATOR VALVE
- DENOTES EXISTING WATER VALVE & BOX
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED SIAMESE CONNECTION
- DENOTES EXISTING SPOT ELEVATION
- DENOTES EXISTING EDGE OF PAVEMENT ELEVATION
- DENOTES PROPOSED ELEVATION
- DENOTES PROPOSED GUTTER LINE ELEVATION
- DENOTES PROPOSED TOP OF CURB ELEVATION
- DENOTES PROPOSED TOP OF WALL ELEVATION
- DENOTES PROPOSED BOTTOM OF WALL ELEVATION
- DENOTES PROPOSED HIGH POINT
- DENOTES PROPOSED SWALE INVERT ELEVATION
- DENOTES PROPOSED ELEVATION BY OTHERS
- DENOTES PROPOSED FLOW ARROW AND SLOPE
- DENOTES PROPOSED FLOW ARROW
- DENOTES EMERGENCY OVERLAND FLOW
- DENOTES PROPOSED SLOPE (3:1 OR HIGHER)
- DENOTES EXISTING CONTOUR
- DENOTES PROPOSED ENTRANCE LOCATION
- DENOTES EXTENT OF MAX. PONDING 100 YEAR STORM.
- DENOTES PROPOSED BOTTOM OF SWALE
- DENOTES PROPOSED LIMIT OF CONSTRUCTION
- DENOTES PROPOSED HEAVY DUTY ASPHALT AREA

NOTES:

THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND UNDERGROUND AND ABOVE GROUND UTILITIES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.BEFORE STARTING THE WORK THE CONTRACTOR SHALL CONFIRM OF THE EXACT LOCATION OF ALL UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

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THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE OWNER'S CONTRACTOR FROM OBTAINING, BUT NOT LIMITED TO THE FOLLOWING PERMITS: ROAD CUT, SEWER PERMITS, RELOCATION OF SERVICES, ENCROACHMENT AGREEMENTS, APPROACH APPROVAL PERMITS, ETC..

EXISTING TOPOGRAPHICAL INFORMATION SUPPLIED BY YOUNG & YOUNG SURVEYING INC..

BENCH MARK:

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2) ELEVATIONS HEREON ARE GEODETIC IN ORIGIN AND WERE DERIVED FROM CITY OF BRAMPTON MONUMENT NO. 042200365 (NAD83 ADJUSTMENT) HAVING A PUBLISHED ELEVATION OF 242.135 m.

LOCATED 72.80M SOUTH OF CENTRELINE OF MAYFIELD ROAD AND 19.81M EAST OF CENTRELINE OF TORBRAM ROAD.

SITE BENCHMARK:
A CUT CROSS HAVING ELEVATION 242.51 m WAS SET ON THE NORTHEAST CORNER OF THE INTERCETION BETWEEN MAYFILED ROAD AND TORBRAM ROAD.

BEARING NOTE:

BEARINGS ARE UTM GRID, DERIVED FROM GPS OBSERVATION USING THE "TOPNET" GPS NETWORK OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (1997.0).

METRIC NOTE:

DISTANCES AND ELEVATIONS ON THIS PLAN ARE TYPICALLY SHOWN IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

NO.	REVISIONS	DATE	BY
2.	ISSUED FOR SPA	JULY 15/22	M.E.H.
1.	ISSUED FOR REVIEW & COORDINATION	JUNE 22/22	M.E.H.

SCALE(S):
0 15 30 45 60 75
1:750

DRAWING TITLE:
SITE GRADING PLAN
(NORTH WEST)

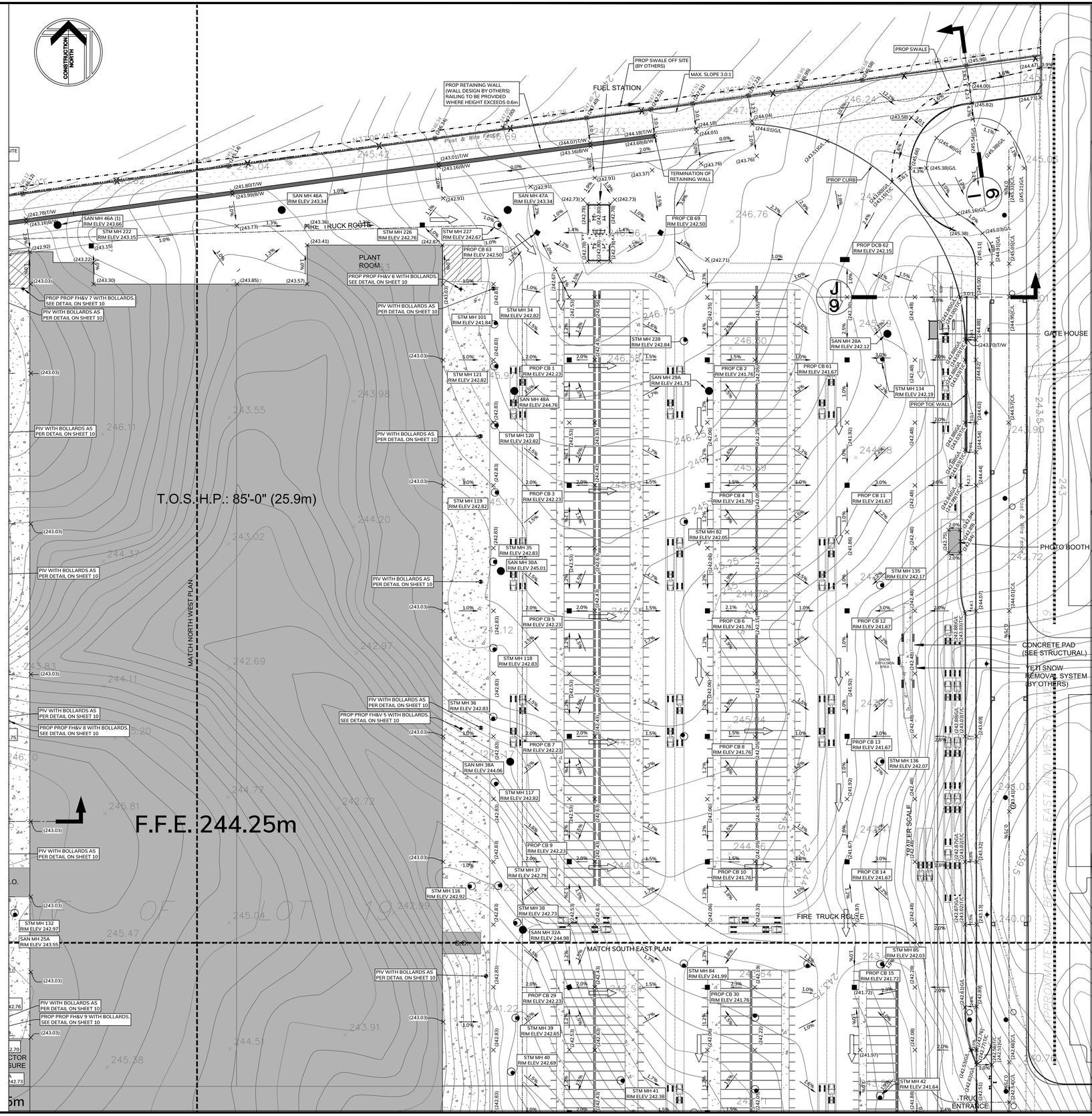
PROJECT:
PROPOSED INDUSTRIAL DEVELOPMENT
TULLAMORE LANDS
CALEDON, ONTARIO

CLIENT:
TULLAMORE LANDS

ODAN·DETECH CONSULTING ENGINEERS
The Odan/Detech Group Inc. P: (905) 632-3811 F: (905) 632-3363
5230 SOUTH SERVICE ROAD, BURLINGTON, ONTARIO, L7L 5K2

REGISTERED PROFESSIONAL ENGINEER
JULY 15/22
I. KRPAN
PROVINCE OF ONTARIO
ENGINEER

DESIGNED BY:	PROJECT No:
M.H.H.	21264
DRAWN BY:	DATE:
Z.Z.	SEP 2021
CHECKED BY:	DRAWING No.:
J.K.	5 of 13
APPROVED BY:	
J.K.	



GRADING LEGEND:

◔	DENOTES EXISTING STORM MANHOLE
◑	DENOTES PROPOSED STORM MANHOLE
▣	DENOTES PROPOSED CATCHBASIN MANHOLE
□	DENOTES EXISTING CATCHBASIN
■	DENOTES PROPOSED CATCHBASIN
◉	DENOTES PROPOSED STORMCEPTOR
○	DENOTES EXISTING SANITARY MANHOLE
●	DENOTES PROPOSED SANITARY MANHOLE
⊕	DENOTES PROPOSED HYDRANT
⌖	DENOTES EXISTING HYDRANT
⋈	DENOTES PROPOSED WATER VALVE & BOX
⋈ PIV	DENOTES POST INDICATOR VALVE
⊠	DENOTES EXISTING WATER VALVE & BOX
▚	DENOTES PROPOSED WATER METER
≺	DENOTES PROPOSED SIAMESE CONNECTION
∘113.62 × 100.00	DENOTES EXISTING SPOT ELEVATION
× 100.00E/P	DENOTES EXISTING EDGE OF PAVEMENT ELEVATION
× (100.00)	DENOTES PROPOSED ELEVATION
× (100.00)G/L	DENOTES PROPOSED GUTTER LINE ELEVATION
× (100.00)T/C	DENOTES PROPOSED TOP OF CURB ELEVATION
× (100.00)T/W	DENOTES PROPOSED TOP OF WALL ELEVATION
× (100.00)B/W	DENOTES PROPOSED BOTTOM OF WALL ELEVATION
× (100.00) HP	DENOTES PROPOSED HIGH POINT
× (100.00)	DENOTES PROPOSED SWALE INVERT ELEVATION
× [100.00]	DENOTES PROPOSED ELEVATION BY OTHERS
1.0% →	DENOTES PROPOSED FLOW ARROW AND SLOPE
→	DENOTES PROPOSED FLOW ARROW
⇨	DENOTES EMERGENCY OVERLAND FLOW
┬┬┬	DENOTES PROPOSED SLOPE (3:1 OR HIGHER)
195.50	DENOTES EXISTING CONTOUR
⇩	DENOTES PROPOSED ENTRANCE LOCATION
⌒	DENOTES EXTENT OF MAX. PONDING 100 YEAR STORM.
‒ · ‒ · ‒	DENOTES PROPOSED BOTTOM OF SWALE
‒ ‒ ‒ ‒	DENOTES PROPOSED LIMIT OF CONSTRUCTION
▒	DENOTES PROPOSED HEAVY DUTY ASPHALT AREA

KEY PLAN
Scale : N.T.S.

SUBJECT LANDS ▨

NOTES:

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ETC..

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METRIC NOTE:

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NO.	REVISIONS	DATE	BY
2.	ISSUED FOR SPA	JULY 15/22	M.E.H.
1.	ISSUED FOR REVIEW & COORDINATION	JUNE 22/22	M.E.H.

SCALE(S):
1:750 — 0 15 30 45 60 75

DRAWING TITLE:

SITE GRADING PLAN
(NORTH EAST)

PROJECT:

PROPOSED INDUSTRIAL DEVELOPMENT
TULLAMORE LANDS
CALEDON, ONTARIO

CLIENT:

TULLAMORE LANDS

ODAN·DETECH
CONSULTING ENGINEERS

The Odan/Detech Group Inc. P: (905) 632-3811 F: (905) 632-3363
5230 SOUTH SERVICE ROAD, BURLINGTON, ONTARIO, L7L 5K2

JULY 15/22
I. KRPAN

ENGINEER

DESIGNED BY:	M.H.H.
DRAWN BY:	Z.Z.
CHECKED BY:	J.K.
APPROVED BY:	J.K.
PROJECT No:	21264
DATE:	SEP 2021
DRAWING No.:	6 of 13

TORBARM ROAD
FIRE TRUCK ROUTE
ORIGINAL ROAD ALLOWANCE BETWEEN CONCESSIONS 5 AND 6 , EAST OF HURONTARIO STREET
FUTURE EXPANSION 17763 m²
COMPACTOR ENCLOSURE
Metal Clad Building
Frame Building
Metal Build
Post & Wire Fence
Driveway
Gate
Top of Bank
Bottom of Bank
Edge of Asphalt
1-Storey Brick Build
FICE

GRADING LEGEND:

- DENOTES EXISTING STORM MANHOLE
- DENOTES PROPOSED STORM MANHOLE
- DENOTES PROPOSED CATCHBASIN MANHOLE
- DENOTES EXISTING CATCHBASIN
- DENOTES PROPOSED CATCHBASIN
- DENOTES PROPOSED STORMCEPTOR
- DENOTES EXISTING SANITARY MANHOLE
- DENOTES PROPOSED SANITARY MANHOLE
- DENOTES PROPOSED HYDRANT
- DENOTES EXISTING HYDRANT
- DENOTES PROPOSED WATER VALVE & BOX
- PIV DENOTES POST INDICATOR VALVE
- DENOTES EXISTING WATER VALVE & BOX
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED SIAMESE CONNECTION
- 113.62 × 100.00 DENOTES EXISTING SPOT ELEVATION
- × 100.00E/P DENOTES EXISTING EDGE OF PAVEMENT ELEVATION
- × (100.00) DENOTES PROPOSED ELEVATION
- × (100.00)G/L DENOTES PROPOSED GUTTER LINE ELEVATION
- × (100.00)T/C DENOTES PROPOSED TOP OF CURB ELEVATION
- × (100.00)T/W DENOTES PROPOSED TOP OF WALL ELEVATION
- × (100.00)B/W DENOTES PROPOSED BOTTOM OF WALL ELEVATION
- × (100.00) HP DENOTES PROPOSED HIGH POINT
- × (100.00) DENOTES PROPOSED SWALE INVERT ELEVATION
- × [100.00] DENOTES PROPOSED ELEVATION BY OTHERS
- 1.0% DENOTES PROPOSED FLOW ARROW AND SLOPE
- DENOTES PROPOSED FLOW ARROW
- DENOTES EMERGENCY OVERLAND FLOW
- DENOTES PROPOSED SLOPE (3:1 OR HIGHER)
- 195.50 DENOTES EXISTING CONTOUR
- DENOTES PROPOSED ENTRANCE LOCATION
- DENOTES EXTENT OF MAX. PONDING 100 YEAR STORM.
- DENOTES PROPOSED BOTTOM OF SWALE
- DENOTES PROPOSED LIMIT OF CONSTRUCTION
- DENOTES PROPOSED HEAVY DUTY ASPHALT AREA

CONSTRUCTION NORTH

F.F.E. 244.25m

F.F.E. 244.25m
WAREHOUSE
T.O.S.: 108'-0" (32.9m)

MATCH NORTH EAST PLAN

MATCH SOUTH WEST PLAN

FIRE TRUCK ROUTE

FIRE TRUCK ROUTE

FIRE TRUCK ROUTE

MATCH EX. GRADES BY SLOPE 3.0:1

F.F.E. 241.15m

TRUCK ENTRANCE

TRUCK EXIT

PYLON SIGNAGE

PHOTO BOOTH

FIRE PUMP BUILDING

GATE HOUSE

PROP PROP FH&V 2 WITH BOLLARDS SEE DETAIL ON SHEET 10

PROP PROP FH&V 3 WITH BOLLARDS SEE DETAIL ON SHEET 10

PROP PROP FH&V 4 WITH BOLLARDS SEE DETAIL ON SHEET 10

PROP PROP FH&V 9 WITH BOLLARDS SEE DETAIL ON SHEET 10

PIV WITH BOLLARDS AS PER DETAIL ON SHEET 10

R.O.

S.O.

KEY PLAN
Scale : N.T.S.

SUBJECT LANDS

NOTES:

THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND UNDERGROUND AND ABOVE GROUND UTILITIES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS. AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.BEFORE STARTING THE WORK THE CONTRACTOR SHALL CONFIRM OF THE EXACT LOCATION OF ALL UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

THE CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS ON THE JOB AND REPORT ANY DISCREPANCY TO THE ARCHITECTS/ENGINEERS BEFORE PROCEEDING WITH THE WORKS.

ALL DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF SERVICE AND THE PROPERTY OF THE ENGINEER WHICH MUST BE RETURNED AT THE COMPLETION OF WORK.

THIS DRAWING IS NOT TO BE SCALED. CONTRACTOR TO USE DIGITAL FILES FOR LAYOUT PROVIDED BY ENGINEER. THIS PLAN MUST NOT BE USED TO SITE THE PROPOSED BUILDINGS.

THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE OWNER'S CONTRACTOR FROM OBTAINING, BUT NOT LIMITED TO THE FOLLOWING PERMITS: ROAD CUT, SEWER PERMITS, RELOCATION OF SERVICES, ENCROACHMENT AGREEMENTS, APPROACH APPROVAL PERMITS, ETC..

EXISTING TOPOGRAPHICAL INFORMATION SUPPLIED BY YOUNG & YOUNG SURVEYING INC..

BENCH MARK:

1) ELEVATIONS HEREON ARE GEODETIC IN ORIGIN AND WERE DERIVED FROM GPS OBSERVATIONS USING THE "TOPNET" GPS NETWORK AND ARE REFERRED TO THE CGVD- 1928: 1978 DATUM.
2) ELEVATIONS HEREON ARE GEODETIC IN ORIGIN AND WERE DERIVED FROM CITY OF BRAMPTON MONUMENT NO. 042200365 (NAD83 ADJUSTMENT) HAVING A PUBLISHED ELEVATION OF 242.135 m.

LOCATED 72.80M SOUTH OF CENTRELINE OF MAYFIELD ROAD AND 19.81M EAST OF CENTRELINE OF TORBRAM ROAD.

SITE BENCHMARK:
A CUT CROSS HAVING ELEVATION 242.51 m WAS SET ON THE NORTHEAST CORNER OF THE INTERCETION BETWEEN MAYFILED ROAD AND TORBRAM ROAD.

BEARING NOTE:

BEARINGS ARE UTM GRID, DERIVED FROM GPS OBSERVATION USING THE "TOPNET" GPS NETWORK OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (1997.0).

METRIC NOTE:

DISTANCES AND ELEVATIONS ON THIS PLAN ARE TYPICALLY SHOWN IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

NO.	REVISIONS	DATE	BY
2.	ISSUED FOR SPA	JULY 15/22	M.E.H.
1.	ISSUED FOR REVIEW & COORDINATION	JUNE 22/22	M.E.H.

SCALE(S):
1:750 0 15 30 45 60 75

DRAWING TITLE:
SITE GRADING PLAN
(SOUTH EAST)

PROJECT:
PROPOSED INDUSTRIAL DEVELOPMENT
TULLAMORE LANDS
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CLIENT:
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REGISTERED PROFESSIONAL ENGINEER
JULY 15/22
I. KRPAN
PROVINCE OF ONTARIO
ENGINEER

DESIGNED BY:	M.H.H.
DRAWN BY:	Z.Z.
CHECKED BY:	J.K.
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APPENDIX G

STATIONARY NOISE CALCULATION DETAILS