

TOWN OF CALEDON
PLANNING
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May 1, 2023

Noise Impact Study

Proposed Mixed-Use Development

12148 Albion Vaughan Road

Caledon, ON

Prepared for:


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27 Fenton Way
Brampton, ON
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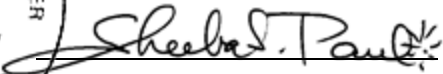
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HGC Project No: 01601506

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1 Introduction and Summary

HGC Engineering was retained by 12148 Ontario Inc, to conduct a noise impact study for a proposed mixed-use development located at 12148 Albion Vaughan Road in Bolton, in the Town of Caledon, Region of Peel, Ontario. The residential development will consist of a 6-storey building and a 7-storey building connected by a 3-storey podium. The study is required by the Town of Caledon as part of the planning and approvals process.

This report is an updated of our previous study, titled “Noise Impact Study, Proposed Mixed-Use Development, 12148 Albion Vaughan Road, Caledon, ON” dated December 9, 2022, to address comments from the Region of Peel, which are attached as Appendix D with HGC responses.

The primary sources of noise are road traffic on Albion Vaughan Road and Highway 50. Road traffic data was obtained from the Region of Peel and the City of Vaughan, and were used to predict future traffic sound levels at the proposed building façades and outdoor living areas. The predicted sound levels were compared to the guidelines of the Ministry of Environment, Conservation and Parks (MECP), Region of Peel and Town of Caledon to develop noise control recommendations.

The results of the study indicate that the proposed development is feasible with the noise control measures described in this report. Central air conditioning and upgraded glazing units are required for all dwelling units. Noise warning clauses are also required for all units to inform future occupants of traffic noise impacts, to address sound level excesses, and to inform of the proximity to nearby commercial uses.

A computational model was created using acoustical modelling software to assess the potential impact of sound emissions from nearby stationary sources on the proposed development. The modelling results show that the predicted sound levels from nearby stationary sources are expected to be within the MECP guideline levels and mitigation is not required

2 Site Description and Noise Sources

Figure 1 is a key plan indicating the location of the proposed site. The site is located east of Highway 50 and west of Albion Vaughan Road in Caledon, Ontario. Figure 2 shows the site plan prepared by

Fausto Cortese Architects, dated December 8, 2022, along with the prediction locations. The proposed development will consist of a 6-storey building (Tower A) and a 7-storey building (Tower B) connected by a 3-storey podium.

HGC Engineering personnel visited the site on October 29, 2020 and November 2, 2022 to make observations of the acoustical environment. During the site visit, it was noted that the primary sources of noise impacting the site were road traffic on Albion Vaughan Road and Highway 50. The site is currently occupied by single storey residential dwellings, which will be demolished for the construction of the proposed buildings.

Description of Surrounding Area

The area around the site is fairly flat. There are existing single detached residential dwellings immediately north and northeast of the site area. Further north of the site area is a truck repair shop (A.Z. Repairing Centre), located approximately 200 m away and across intervening residential dwellings. Areas to the west, south, and east are mostly industrial and commercial. There is an agricultural products office/warehouse (Agrocrop Exports Ltd.) and a gas station (Shell) west of the site area on the west side of Highway 50, along with other commercial offices further west. Immediately south of the site area is a self-storage facility (Access Storage), and further south are a car wash and auto dealers (Bolton Kia and Bolton Toyota). The storage facility intervenes the auto dealers/car wash/repair facilities and the site area, and the car wash and repair bay doors face west and east, respectively, away from the site area. To the southeast is a helicopter training facility (National Helicopters Inc.) on the east side of Albion Vaughan Road. No helicopter activities were observed at the times of the site visits. The facility operates during the daytime hours from 8 am to 5 pm. The helicopters are used for scenic tours, flight training, and on a contract basis for charters. We note that there are existing residential dwellings closer to the helicopter training facility grounds.

An assessment of sound emission from nearby industrial and commercial uses is conducted in Section 6. Although sound emissions from the nearby industrial and commercial uses were observed to be negligible at the site area, due to close proximity to both Albion Vaughan Road and Highway 50 and the significant road traffic volumes on both roadways contributing to elevated background sound levels, it is recommended that a noise warning clause to identify that such uses may be audible at times be included in the property and tenancy agreements of the proposed dwellings units.



ACOUSTICS



NOISE



VIBRATION

3 Noise Level Criteria

3.1 Road Traffic Noise Criteria

Guidelines for acceptable levels of road traffic noise impacting residential developments are given in the MECP publication NPC-300, “Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning”, release date October 21, 2013, and are listed in Table I below. The values in Table I are energy equivalent (average) sound levels [L_{EQ}] in units of A-weighted decibels [dBA].

Table I: MECP Road Traffic Noise Criteria (dBA)

| Area | Daytime L_{EQ} (16 hour) Road | Nighttime L_{EQ} (8 hour) Road |
|----------------------------|------------------------------------|-------------------------------------|
| Outdoor Living Area | 55 dBA | -- |
| Inside Living/Dining Rooms | 45 dBA | 45 dBA |
| Inside Bedrooms | 45 dBA | 40 dBA |

Daytime refers to the period between 07:00 and 23:00. Nighttime refers to the time period between 23:00 and 07:00. The term “Outdoor Living Area” (OLA) is used in reference to an outdoor patio, a backyard, or other area where passive recreation is expected to occur. Small balconies are not considered OLAs for the purposes of assessment.

The guidelines in the MECP publication allow the daytime sound levels in an Outdoor Living Area to be exceeded by up to 5 dBA, without mitigation, if warning clauses are placed in the purchase and rental agreements to the property. Where OLA sound levels exceed 60 dBA, physical mitigation is required to reduce the OLA sound level to below 60 dBA and as close to 55 dBA as technically, economically, and administratively practical.

A central air conditioning system as an alternative means of ventilation to open windows is required for dwellings where nighttime sound levels outside bedroom or living/dining room windows exceed 60 dBA (60 dBA or greater for the Region of Peel) or daytime sound levels outside bedroom or living/dining room windows exceed 65 dBA. Forced-air ventilation with ducts sized to accommodate the future installation of air conditioning is required when nighttime sound levels at bedroom or

living/dining room windows are in the range of 51 to 60 dBA or when daytime sound levels at bedroom or living/dining room windows are in the range of 56 to 65 dBA.

Building components such as walls, windows and doors must be designed to achieve indoor sound level criteria when the plane of window nighttime sound level is greater than 60 dBA (60 dBA or greater in the Region of Peel) or the daytime sound level is greater than 65 dBA due to road traffic noise.

3.2 Stationary Noise Criteria

An industrial or commercial facility is classified in MECP guidelines as a stationary source of sound (as opposed to sources such as traffic or construction, for example) for noise assessment purposes. The proposed development is located in an urban acoustical environment classified as Class I according to MECP guidelines, which can be characterized by the background sound level being dominated by traffic and human activity.

The façade of a residence, or any associated usable outdoor area, is considered a sensitive point of reception. NPC-300 stipulates that the exclusionary minimum sound level limit for a stationary noise source in an urban Class 1 area is 50 dBA during daytime (07:00 to 19:00) and evening (19:00 to 23:00) hours, and 45 dBA during nighttime hours (23:00 to 07:00). If the background sound levels due to road traffic exceed the exclusionary minimum limits, then the background sound level becomes the criterion. The background sound level is defined as the sound level that is present when the stationary source under consideration is not operating, and may include traffic noise and natural sounds. To ensure a conservative analysis, the exclusionary minimum criteria at all receptors will be adopted.

Commercial activities such as the occasional movement of customer vehicles, occasional deliveries, and garbage collection are not of themselves considered to be significant noise sources in the MECP guidelines. Accordingly, these sources have not been considered in this study. Noise from safety equipment (e.g. back-up beepers) are also exempt from consideration. Frequent truck movements at a warehouse or busy shipping/receiving docks at an industry must generally be assessed. As such, trucking activities at the nearby agricultural office/warehouse and trucking at the self-storage facility have been included in this assessment.

The MECP guidelines stipulate that the sound level impact during a “predicable worst case hour” be considered. This is defined to be an hour when a typically busy “planned and predictable mode of operation” occurs at the subject facility, coincident with a period of minimal background sound. Compliance with MECP criteria generally results in acceptable levels of sound at residential receptors, although there may still be residual audibility during periods of low background sound.

4 Traffic Noise Assessment

4.1 Road Traffic Data

Traffic data for Albion Vaughan Road was obtained from the City of Vaughan in the form of hourly traffic values, and is provided in Appendix A. The traffic volumes were projected to the year 2032 at an annual growth rate of 2.5%. A projected volume of 17 648 vehicles per day at an operating speed limit of 60 km/h was applied for the analysis. A calculated commercial vehicle percentage of 3 % for medium trucks and 9 % for heavy trucks was applied, and a calculated day/night split of 85 % / 15 % was used.

Traffic data for Highway 50 was obtained from the Region of Peel in the form of ultimate Average Annual Daily Traffic (AADT) traffic values, and is provided in Appendix A. An ultimate volume of 32 400 vehicles per day at an operating speed limit of 60 km/h was applied for the analysis. Commercial vehicle percentages were provided separately for daytime and nighttime traffic. For a conservative analysis, the higher commercial vehicle percentages out of both daytime and nighttime hours were used. A commercial vehicle percentage of 3 % for medium trucks and 13 % for heavy trucks was applied. A day/night split of 87 % / 13 % was used.

Table II summarizes the traffic volume data used in this study.

Table II: Road Traffic Data

| Road Name | | Cars | Medium Trucks | Heavy Trucks | Total |
|---|--------------|---------------|---------------|--------------|---------------|
| Albion Vaughan Rd <i>Projected to Year 2032</i> | Daytime | 13 201 | 450 | 1 350 | 15 001 |
| | Nighttime | 2 330 | 79 | 238 | 2 647 |
| | Total | 15 530 | 529 | 1 588 | 17 648 |
| Hwy 50 <i>Ultimate Data</i> | Daytime | 23 678 | 846 | 3 664 | 28 188 |
| | Nighttime | 3 538 | 126 | 548 | 4 212 |
| | Total | 27 216 | 972 | 4 212 | 32 400 |

4.2 Road Traffic Noise Predictions

To assess the levels of road traffic noise which will impact the study area in the future, sound level predictions were made using STAMSON version 5.04, a computer algorithm developed by the MECP. Sample STAMSON output is included in Appendix B.

Predictions of the traffic sound levels were chosen around the proposed residential buildings at the top floor to obtain an appropriate representation of future sound levels at various façades. Sound levels were predicted at the plane of the top storey bedroom and/or living/dining room windows during daytime and nighttime hours to investigate ventilation and façade construction requirements. Sound levels were also predicted in the outdoor amenity areas to investigate the need for noise barriers. Figure 2 shows the site plan with prediction locations. The results of these predictions are summarized in Table III.

Table III: Predicted Road Traffic Sound Levels [dBA], Without Mitigation

| Prediction Location | Description | Daytime – in the OLA LEQ-16 hr | Daytime – at the Façade LEQ-16 hr | Nighttime – at the Façade LEQ-8 hr |
|---------------------|---|-----------------------------------|--------------------------------------|---------------------------------------|
| [A] | Tower B, 7 th floor southeast façade flanking Hwy 50 | -- | 67 | 62 |
| [B] | Tower B, 7 th floor southwest façade facing Hwy 50 | -- | 70 | 65 |
| [C] | Tower B, 7 th floor interior northeast façade facing Albion Vaughan Rd | -- | 60 | 56 |
| [D] | Tower B, 7 th floor east façade facing Albion Vaughan Rd | -- | 68 | 64 |
| [E] | Tower A, 6 th floor west façade with exposure to Hwy 50 | -- | 67 | 62 |
| [F] | Tower A, 6 th floor northwest façade flanking Highway 50 | -- | 64 | 60 |
| [G] | Tower A, 6 th floor north façade flanking Albion Vaughan Rd | -- | 65 | 60 |
| [H] | Tower A, 6 th floor southeast façade flanking Albion Vaughan Rd | -- | 62 | 57 |
| [I_OLA] | Tower B, rooftop amenity lunch area | 55* | -- | -- |

Note: * with a minimum 1.07 m high solid parapet

5 Traffic Noise Recommendations

The sound level predictions indicate that the future traffic sound levels will exceed MECP guidelines at the proposed development. The following discussion outlines the recommendations for acoustic barrier requirements, ventilation requirements, upgraded building façade construction, and warning clauses to achieve the noise criteria stated in Table I.

5.1 Outdoor Living Areas

Rooftop Amenity Lunch Areas

The predicted daytime sound levels at the rooftop amenity lunch areas are up to 55 dBA with a minimum 1.07 m high solid rooftop parapet, which is within the MECP’s limit of 55 dBA. No further mitigation is required.

Private Balconies

The dwelling units in the proposed buildings also have private balconies. It is noted that These areas are not considered to be outdoor living areas under the MECP guidelines if they are under 4 m in depth or are not the only outdoor amenity area for the occupant.

5.2 Indoor Living Areas and Ventilation Requirements

Air Conditioning

The predicted future sound levels outside the top storey windows will be greater than 60 dBA during nighttime hours and 65 dBA during daytime hours. To address these excesses, these dwelling units require provision for the future installation of central air conditioning systems so that windows may be kept closed. It is likely that the building or individual suites will include air conditioning. Acceptable units are those that are housed in their own closet with an access door for maintenance. The location, installation and sound ratings of the outdoor air conditioning devices should minimize noise impacts and comply with criteria of MECP publication NPC-300, as applicable.

5.3 Building Façade Constructions

The predicted sound levels at the façades with direct or flanking exposure to Albion Vaughan Road and Highway 50 will exceed 65 dBA during daytime and 60 dBA during nighttime. MECP guidelines stipulate that in such cases, building components including windows, walls, and doors be designed so that the indoor sound levels comply with the noise criteria in Table I.

Calculations were performed to determine the acoustical insulation factors to maintain indoor sound levels within MECP guidelines. The calculation methods were developed by the National Research Council (NRC). They are based on the predicted future sound levels at the building facades, and the anticipated area ratios of the facade components (walls, windows and doors) and the floor area of the adjacent room.

Exterior Doors

There may be glazed exterior doors (sliding or swing) for entry onto the balconies from living/dining rooms and some bedrooms. The glazing areas of the doors should be counted as part of the total

window glazing area. All exterior doors should include good weather seals to reduce air infiltration to the minimum achievable levels.

Acoustical Requirements for Glazing

Sound Transmission Class (STC) requirements were calculated based on the possibility of sound entering the building through windows and doors for dwelling units. The exterior wall is noted to be either brick veneer or masonry. As such, sound transmission through exterior walls is negligible compared to sound transmission through windows and doors. A window to floor ratio of up to 53% for living/dining room and 86% for bedrooms were calculated based on floor plans and elevations by Fausto Cortese Architects dated December 2, 2022, attached as Appendix C, to determine preliminary window STC ratings required to mitigate road traffic noise levels.

The calculated STC requirements for the façades range from STC-30 to STC-32. However, due to the highly urban surrounding area and the significant traffic on nearby roadways, a minimum STC rating of 33 is recommended for all dwelling façade windows.

The glazing requirements can be met using fairly standard sealed units. Operable sections, including doors and operable windows, must be well-fitted and weather-stripped in order to achieve the upper range of target STC values.

Further Analysis

If floor plans and building elevations are changed significantly, an acoustical consultant should provide revised glazing recommendations.

6 Stationary Noise Assessment

Noise sources associated with industrial and commercial facilities are assessed separately from traffic sources under MECP guidelines. These facilities are considered to be Stationary Sources of Sound and criteria for their assessment are contained in the following section.

Stationary noise from Access Storage, the car wash, Agrocrop Exports, commercial offices to the west, and A.Z. Repairing Centre are considered in this assessment.

6.1 Stationary Source Noise Predictions

Predictive noise modelling was used to assess the sound impact of the nearby stationary sources at the most critically impacted façades of the proposed development in accordance with MECP guidelines. A noise prediction model was constructed based on a review of the proposed site plan, site visit observations, satellite aerial photos, and estimates of sound emission levels of stationary sources taken from similar past HGC Engineering project files.

Table IV: Source Sound Power Levels [dB re 10-12 W]

| Source | Octave Band Centre Frequency [Hz] | | | | | | | | Overall [dBA] |
|-----------------------------|-----------------------------------|-----|-----|-----|----|----|----|----|---------------|
| | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
| Tractor Trailer Movement | 101 | 100 | 94 | 96 | 97 | 95 | 91 | 86 | 101 |
| Tractor Trailer Idling | 96 | 91 | 88 | 88 | 91 | 90 | 81 | 70 | 95 |
| Auto Repair Bay – Open Door | 80 | 79 | 82 | 84 | 87 | 85 | 85 | 88 | 93 |
| Car Wash Bay | 85 | 76 | 75 | 77 | 76 | 79 | 81 | 83 | 87 |
| Vacuum | 86 | 74 | 87 | 82 | 84 | 89 | 90 | 88 | 95 |
| 10 Ton HVAC Unit | 88 | 83 | 76 | 74 | 71 | 67 | 64 | 60 | 77 |
| 5 Ton HVAC Unit | 89 | 86 | 83 | 81 | 79 | 74 | 70 | 65 | 83 |

The above data were inputted into a predictive computer model. The software used for this purpose (*Cadna-A version 2022, build: 189.5221*) is a computer implementation of ISO Standard 9613-2.2 “Acoustics - Attenuation of Sound During Propagation Outdoors.” The ISO method accounts for reduction in sound level with distance due to geometrical spreading, air absorption, ground attenuation and acoustical shielding by intervening structures such as buildings and fs.

The following information and assumptions were used in the analysis.

- Tractor trailers visit and idle at the agricultural export office/warehouse to access the loading dock located on the west side of the office/warehouse building.
- Storage facility and car wash facility operates 24/7.
- Auto repair shop to the north operates during daytime/evening hours only (according to business’s hours of operations).
- Rooftop HVAC units of nearby commercial buildings were assumed to be 5-Ton and 10-Ton units based on experience with similar commercial facilities.
- Helicopter-related noise is not included in this assessment. It is noted that there are existing dwellings closer to the helicopter training facility grounds.

- Location of stationary noise sources are shown in Figure 3. Green crosses represent rooftop HVAC equipment, idling vehicles, and car wash vacuums. Green lines represent vehicle movement and car wash/repair bay doors.

In this impact assessment, we have considered typical worst-case (busiest hour) scenarios for each time period to be as follows:

Assumed daytime/evening worst-case scenario:

- Rooftop HVAC equipment operating at 100% capacity.
- Four tractor trailer trucks visiting the agricultural export office/warehouse in an hour, and two tractor trailer trucks idling for 10 minutes out of an hour.
- Four medium trucks visiting the storage facility in an hour.
- All car wash bay doors active for 20 minutes out of an hour.
- All vacuums active for 15 minutes out of an hour.
- Auto repair bay doors active and open for 20 minutes out of an hour.

Assumed nighttime worst-case scenario:

- Rooftop HVAC equipment operating at 50% capacity to account for cooler ambient temperatures.
- Two tractor trailer trucks visiting the agricultural export office/warehouse in an hour, and two tractor trailer trucks idling for 5 minutes out of an hour.
- Two medium trucks visiting the storage facility in an hour.
- All car wash bay doors active for 10 minutes out of an hour.
- All vacuums active for 5 minutes out of an hour.
- Auto repair bay doors not active (outside of business hours).

6.2 Results

The unmitigated sound levels due to nearby stationary noise sources at the proposed development are summarized in Table V, and presented graphically in Figures 4 and 5.

Table V: Predicted Sound Levels from Nearby Stationary Noise Sources on the Proposed Residential Development [dBA]

| | Daytime (07:00 – 23:00) | Nighttime (23:00 – 07:00) | Criteria (Daytime / Nighttime) |
|-----------------------------|--|--|---|
| South façades | 48 | 44 | 50 / 45 |
| West façades | 41 | 38 | |
| North façades | 39 | 31 | |
| East façades | 34 | 31 | |
| Rooftop amenity lunch areas | 37 | -- | 50 / -- |

The results of the calculations indicate that the predicted sound levels due to the operation of the nearby stationary sources of noise combined are within MECP limits at the proposed development during a worst-case operational scenario. Mitigation is not required.

7 Warning Clauses

The MECP guidelines and Region of Peel guidelines recommend that warning clauses be included in the property and tenancy agreements and offers of purchase and sale for all units with anticipated traffic sound level excesses. The following noise warning clauses are required for specific dwellings as indicated in Table VI.

Suggested wording for future dwellings with sound levels exceeding the MECP criteria for which air conditioning has been provided is given below.

A):

Purchasers/tenants are advised that despite the inclusion of noise control features in the development and within the building units, sound levels due to increasing road traffic may occasionally interfere with some activities of the dwelling occupants as the sound levels exceed the Municipality's and the Ministry of the Environment, Conservation and Parks noise criteria.

Suggest wording for future dwellings which will have central air conditioning units to be installed is given below.

B):

This dwelling unit has been fitted with a central air conditioning system in order to permit closing of the windows for noise control (Note: locate air cooled condenser unit in a noise

insensitive area and ensure the unit has a maximum ARI rating of 7.6 Bels for 3.5 tons or less).

Suggested wording for future dwelling units in close proximity to commercial facilities is given below.

C):

Purchasers are advised that due to the proximity of the existing commercial facilities, sound levels from the facilities may be at times be audible.

These sample clauses are provided by the MECP and Municipality as examples, and can be modified by the Municipality as required.

8 Impact of the Development on Itself

Section 5.8.1.1 of the Ontario Building Code (OBC), released on January 1, 2020, specifies the minimum required sound insulation characteristics for demising partitions, in terms of Sound Transmission Class (STC) or Apparent Sound Transmission Class (ASTC) values. In order to maintain adequate acoustical privacy between separate suites in a multi-tenant building, inter-suite walls must meet or exceed STC-50 or ASTC-47. Suite separation from a refuse chute or elevator shaft must meet or exceed STC-55. In addition, it is recommended that the floor/ceiling constructions separating suites from any amenity or commercial spaces also meet or exceed STC-55. Tables 1 and 2 in Section SB-3 of the Supplementary Guideline to the OBC provide a comprehensive list of constructions that will meet the above requirements.

Tarion's Builder Bulletin B19R requires the internal design of condominium projects to integrate suitable acoustic features to insulate the suites from noise from each other and amenities in accordance with the OBC, and limit the potential intrusions of mechanical and electrical services of the buildings on its residents. If B19R certification is needed, an acoustical consultant is required to review the mechanical and electrical drawings and details of demising constructions and mechanical/electrical equipment, when available, to help ensure that the noise impact of the development on itself is maintained within acceptable levels.



9 Impact of the Development on the Environment

It is expected that any increase in local traffic associated with the development will not be substantial enough to affect noise levels significantly.

Sound levels from stationary (non-traffic) sources of noise such as rooftop air-conditioners, cooling towers, exhaust fans, etc. should not exceed the minimum one-hour L_{EQ} ambient (background) sound level from road traffic, at any potentially impacted residential point of reception, to avoid noise complaints. Based on the levels observed during our site visit, the typical minimum ambient sound levels in the area are expected to be upwards of 50 dBA or more during the day and 45 dBA or more at night. Thus any electro-mechanical equipment associated with this development (e.g. emergency generator testing, fresh-air handling equipment, etc.) should be designed with these targets in mind such that they do not result in noise impact beyond these ranges.

10 Summary and Recommendations

The following list and Table VI summarize the recommendations made in this report. The reader is referred to the previous sections of the report where these recommendations are applied and discussed in more detail.

For traffic noise:

1. Central air conditioning will be required for all dwelling units.
2. Upgraded glazing constructions are required as noted in Section 5.3.
3. The use of warning clauses in the property and tenancy agreements is recommended to inform future residents of traffic noise issues.

For stationary noise:

4. The use of warning clauses in the property and tenancy agreements is recommended to inform future residents of proximity to existing industrial uses

Table VI: Summary of Noise Control Requirements and Noise Warning Clauses

| Prediction Location | Description | Acoustic Barrier | Ventilation Requirements* | Types of Warning Clause | Upgraded Glazing Constructions |
|---------------------|-----------------------------|------------------|---------------------------|-------------------------|--------------------------------|
| [A], [B], [C], [D] | Tower B | -- | Central A/C | A, B, C | LR/DR/BR: STC-33 |
| [E], [F], [G], [H] | Tower A | -- | Central A/C | A, B, C | LR/DR/BR: STC-33 |
| [I_OLA] | Rooftop Amenity Lunch Areas | -- ⁺ | -- | -- | -- |

Notes:

* The location, installation and sound rating of the air conditioning condensers must be compliant with MECP Guideline NPC-300, as applicable.

-- No specific requirements

+ with a minimum 1.07m high solid rooftop parapet

LR/DR – Living Room/Dining Room,

BR – Bedroom

10.1 Implementation

To ensure that the noise control recommendations outlined above are properly implemented, it is recommended that:

1. Prior to the issuance of occupancy permits for this development, the Municipality’s building inspector or a Professional Engineer qualified to perform acoustical engineering services in the Province of Ontario should certify that the noise control measures have been properly incorporated, installed, and constructed.

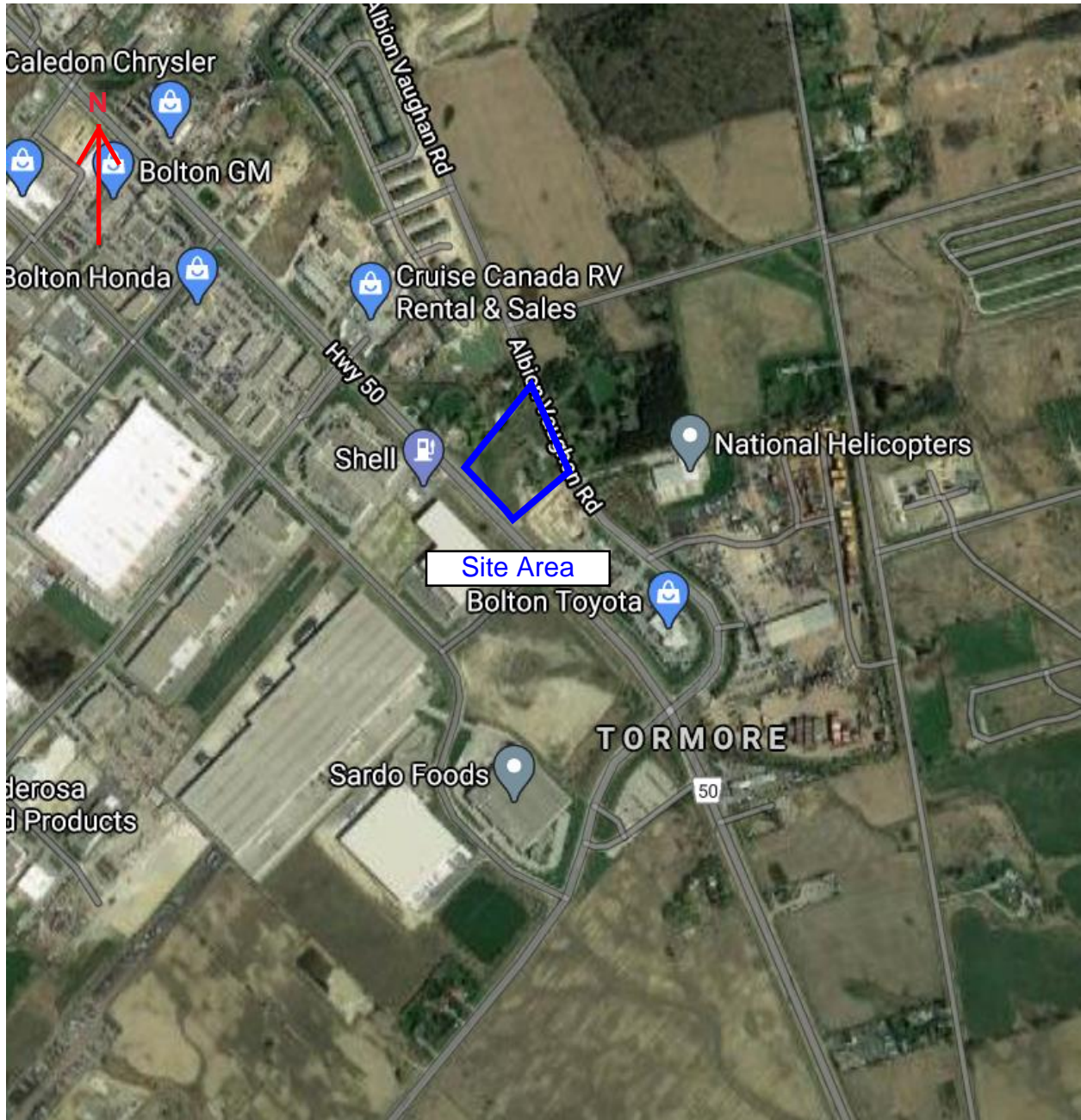
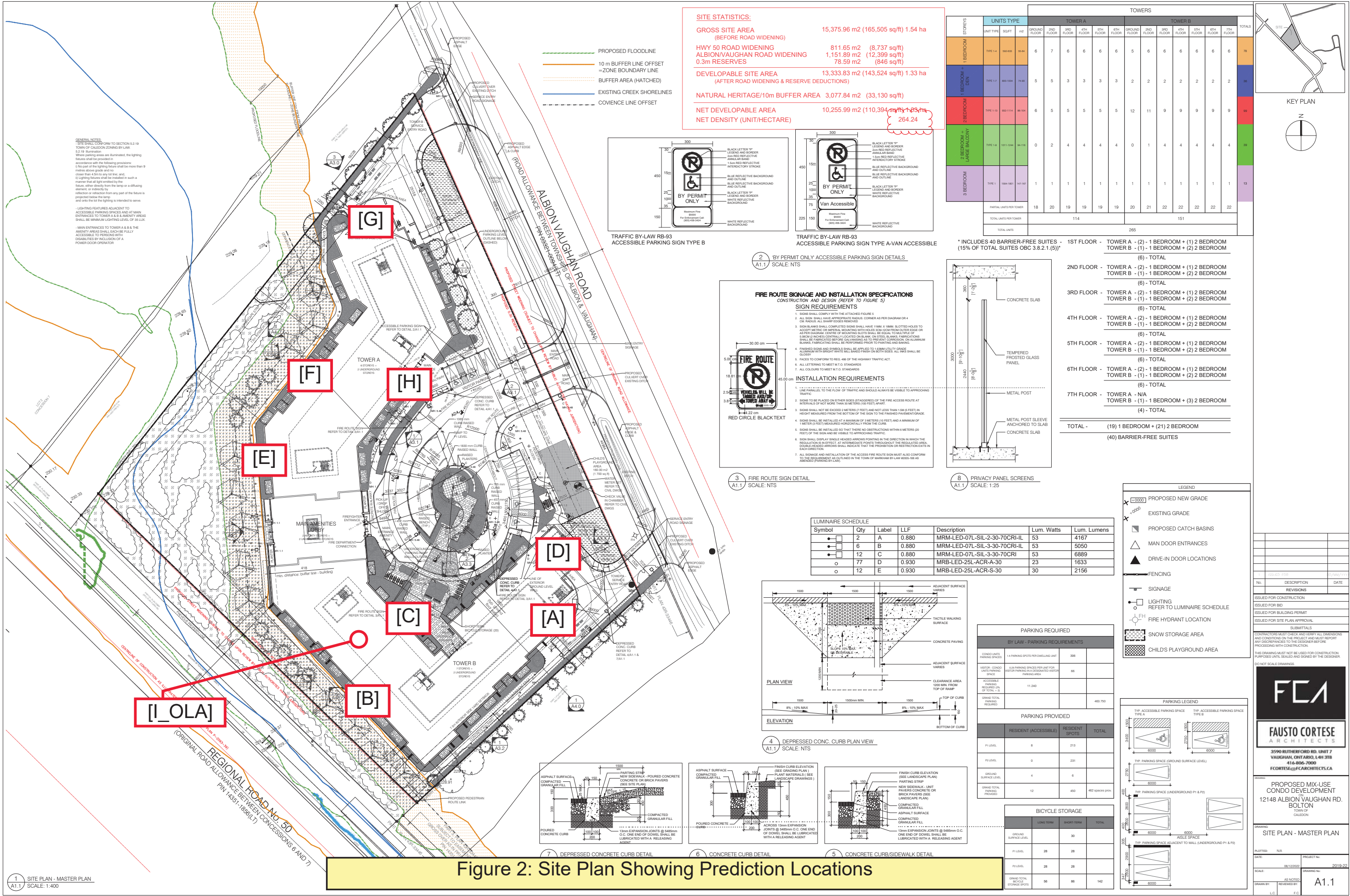


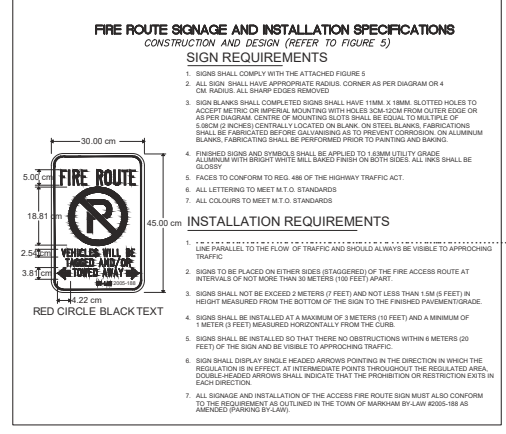
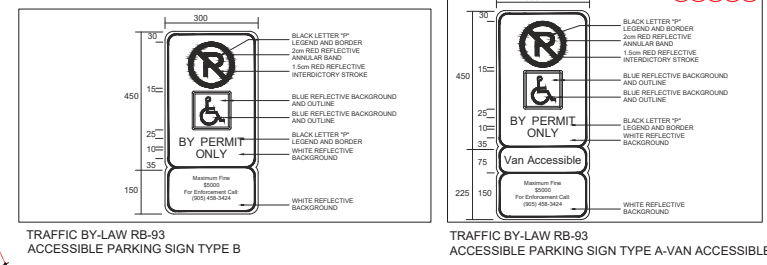
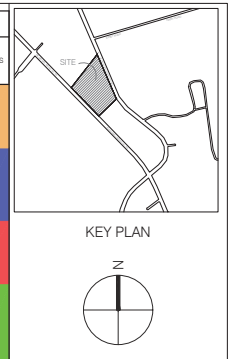
Figure 1: Key Plan



SITE STATISTICS:

| | |
|--|--|
| GROSS SITE AREA (BEFORE ROAD WIDENING) | 15,375.96 m ² (165,505 sq/ft) 1.54 ha |
| HWY 50 ROAD WIDENING | 811.65 m ² (8,737 sq/ft) |
| ALBION/VAUGHAN ROAD WIDENING | 1,151.89 m ² (12,399 sq/ft) |
| 0.3m RESERVES | 78.59 m ² (846 sq/ft) |
| DEVELOPABLE SITE AREA (AFTER ROAD WIDENING & RESERVE DEDUCTIONS) | 13,333.83 m ² (143,524 sq/ft) 1.33 ha |
| NATURAL HERITAGE/10m BUFFER AREA | 3,077.84 m ² (33,130 sq/ft) |
| NET DEVELOPABLE AREA | 10,255.99 m ² (110,394 sq/ft) 1.05 ha |
| NET DENSITY (UNIT/HECTARE) | 264.24 |

| STORES | UNITS TYPE | TOWERS | | | | | | | | | | | | | | TOTALS |
|---------------------------|------------|--------------|-----------|-----------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| | | TOWER A | | | | | | | TOWER B | | | | | | | |
| | | GROUND FLOOR | 2ND FLOOR | 3RD FLOOR | 4TH FLOOR | 5TH FLOOR | 6TH FLOOR | GROUND FLOOR | 2ND FLOOR | 3RD FLOOR | 4TH FLOOR | 5TH FLOOR | 6TH FLOOR | 7TH FLOOR | 8TH FLOOR | |
| 1 BEDROOM | TYPE 1-A | 6 | 7 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 78 |
| 1 BEDROOM - DEN | TYPE 1-B | 5 | 5 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 39 |
| 2 BEDROOM | TYPE 1-C | 6 | 5 | 5 | 5 | 5 | 5 | 12 | 11 | 9 | 9 | 9 | 9 | 9 | 9 | 90 |
| 2 BEDROOM - LARGE BALCONY | TYPE 1-D | 0 | 2 | 4 | 4 | 4 | 4 | 0 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 39 |
| 3 BEDROOM | TYPE 1-E | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 |
| TOTAL UNITS PER TOWER | | 114 | | | | | | | 151 | | | | | | | |
| TOTAL UNITS | | 265 | | | | | | | | | | | | | | |



* INCLUDES 40 BARRIER-FREE SUITES - (15% OF TOTAL SUITES OBC 3.8.2.1.(5))

| FLOOR | TOWER A | TOWER B | TOTAL |
|--------------|--|---------------------------------|---------------------------------|
| 1ST FLOOR | (2) - 1 BEDROOM + (1) 2 BEDROOM | (1) - 1 BEDROOM + (2) 2 BEDROOM | (6) - TOTAL |
| 2ND FLOOR | (2) - 1 BEDROOM + (1) 2 BEDROOM | (1) - 1 BEDROOM + (2) 2 BEDROOM | (6) - TOTAL |
| 3RD FLOOR | (2) - 1 BEDROOM + (1) 2 BEDROOM | (1) - 1 BEDROOM + (2) 2 BEDROOM | (6) - TOTAL |
| 4TH FLOOR | (2) - 1 BEDROOM + (1) 2 BEDROOM | (1) - 1 BEDROOM + (2) 2 BEDROOM | (6) - TOTAL |
| 5TH FLOOR | (2) - 1 BEDROOM + (1) 2 BEDROOM | (1) - 1 BEDROOM + (2) 2 BEDROOM | (6) - TOTAL |
| 6TH FLOOR | (2) - 1 BEDROOM + (1) 2 BEDROOM | (1) - 1 BEDROOM + (2) 2 BEDROOM | (6) - TOTAL |
| 7TH FLOOR | N/A | (1) - 1 BEDROOM + (3) 2 BEDROOM | (4) - TOTAL |
| TOTAL | (19) 1 BEDROOM + (21) 2 BEDROOM | | (40) BARRIER-FREE SUITES |

LUMINAIRE SCHEDULE

| Symbol | Qty | Label | LLF | Description | Lum. Watts | Lum. Lumens |
|--------|-----|-------|-------|-------------------------------|------------|-------------|
| □ | 6 | A | 0.880 | MRM-LED-07L-SIL-2-30-70CRI-IL | 53 | 4167 |
| □ | 6 | B | 0.880 | MRM-LED-07L-SIL-3-30-70CRI-IL | 53 | 5050 |
| □ | 12 | C | 0.880 | MRM-LED-07L-SIL-3-30-70CRI | 53 | 6889 |
| ○ | 77 | D | 0.930 | MRB-LED-25L-ACR-A-30 | 23 | 1633 |
| ○ | 12 | E | 0.930 | MRB-LED-25L-ACR-S-30 | 30 | 2156 |

PARKING REQUIRED

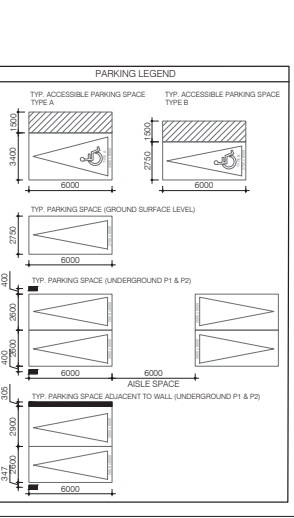
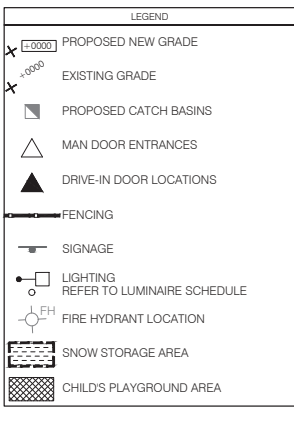
| Category | Requirement | Spots |
|---------------------------------------|-------------------------------------|---------|
| BY LAW - PARKING REQUIREMENTS | CONDO UNITS PARKING SPACES | 398 |
| | VISITOR - CONDO UNITS PARKING SPACE | 66 |
| ACCESSIBLE PARKING REQUIRED (1% - 15) | | 11,340 |
| GRAND TOTAL PARKING REQUIRED | | 403,750 |

PARKING PROVIDED

| Level | Resident (Accessible) | Resident Spots | Total |
|------------------------------|-----------------------|----------------|------------------|
| P1 LEVEL | 8 | 213 | |
| P2 LEVEL | 0 | 231 | |
| GROUND SURFACE LEVEL | 4 | 6 | |
| GRAND TOTAL PARKING PROVIDED | 12 | 450 | 462 spaces prov. |

BICYCLE STORAGE

| Level | Long Term | Short Term | Total |
|-----------------------------------|-----------|------------|-------|
| P1 LEVEL | 28 | 28 | |
| P2 LEVEL | 28 | 28 | |
| GRAND TOTAL BICYCLE STORAGE SPOTS | 56 | 56 | 142 |



FCA

FAUSTO CORTESE ARCHITECTS

3590 RUTHERFORD RD. UNIT 7
VAUGHAN, ONTARIO, L4H 3T8
416-896-7000
FCORTESE@FCAARCHITECTS.CA

PROPOSED MIX-USE CONDO DEVELOPMENT
12148 ALBION VAUGHAN RD.
BOLTON
TOWN OF CALEDON

SITE PLAN - MASTER PLAN

DATE: 08/10/2020 PROJECT NO: 2019-22
SCALE: AS NOTED DRAWING NO: A1.1
DRAWN BY: L.C. AS NOTED REVIEWED BY: F.C.

Figure 2: Site Plan Showing Prediction Locations

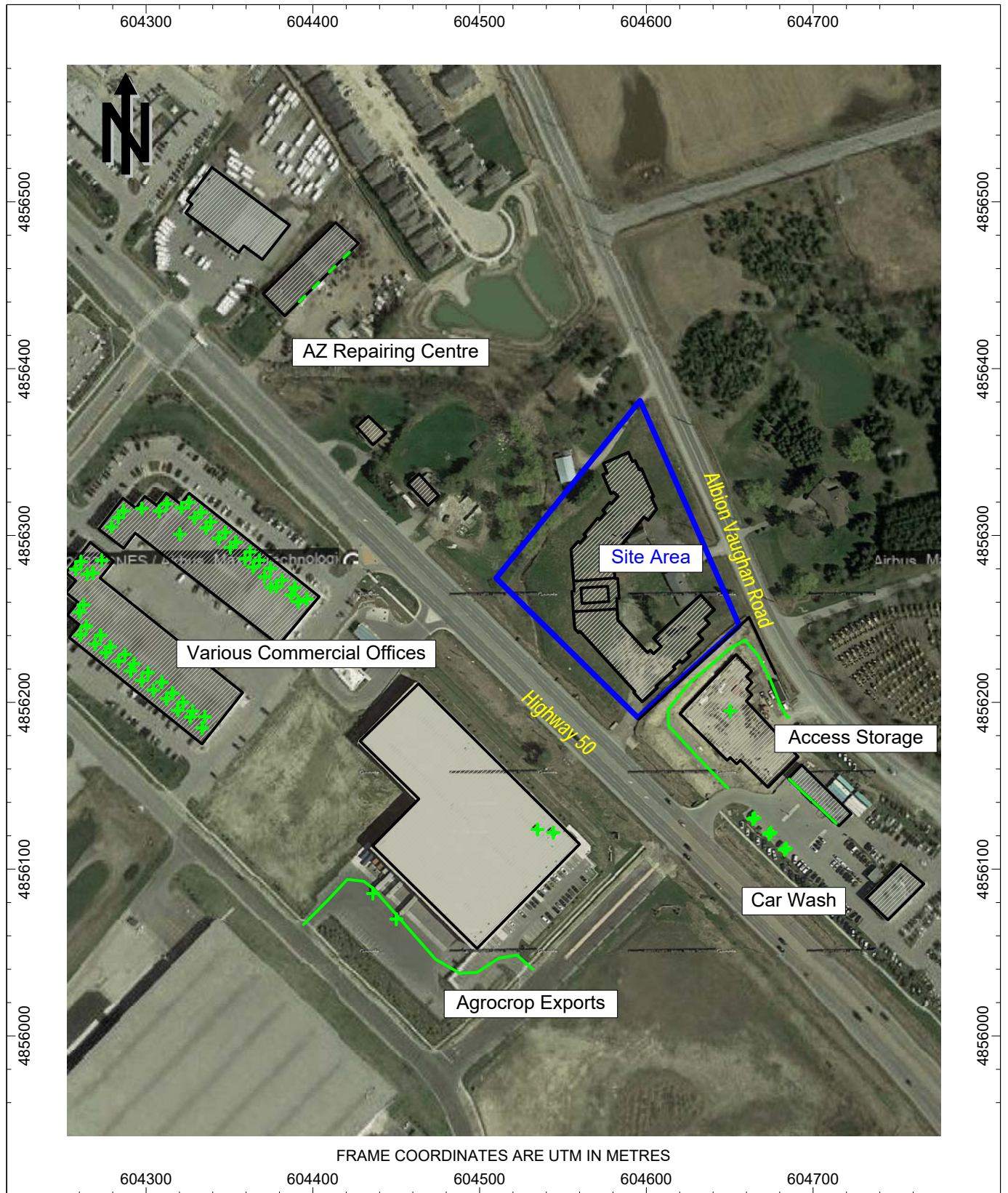


Figure 3: Stationary Noise Source Locations

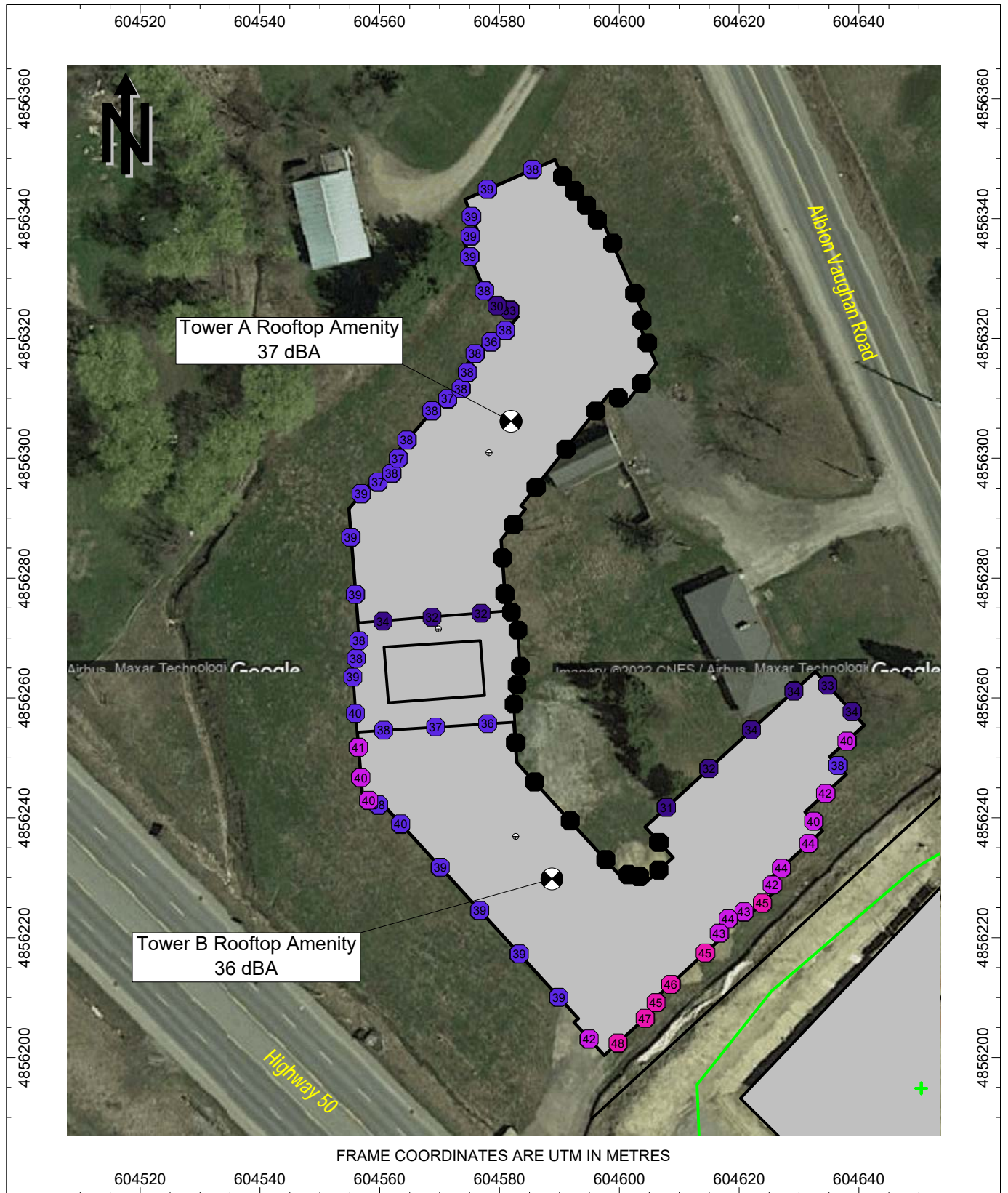


Figure 4: Stationary Noise Impact
Daytime/Evening (07:00-23:00), Leq [dBA]

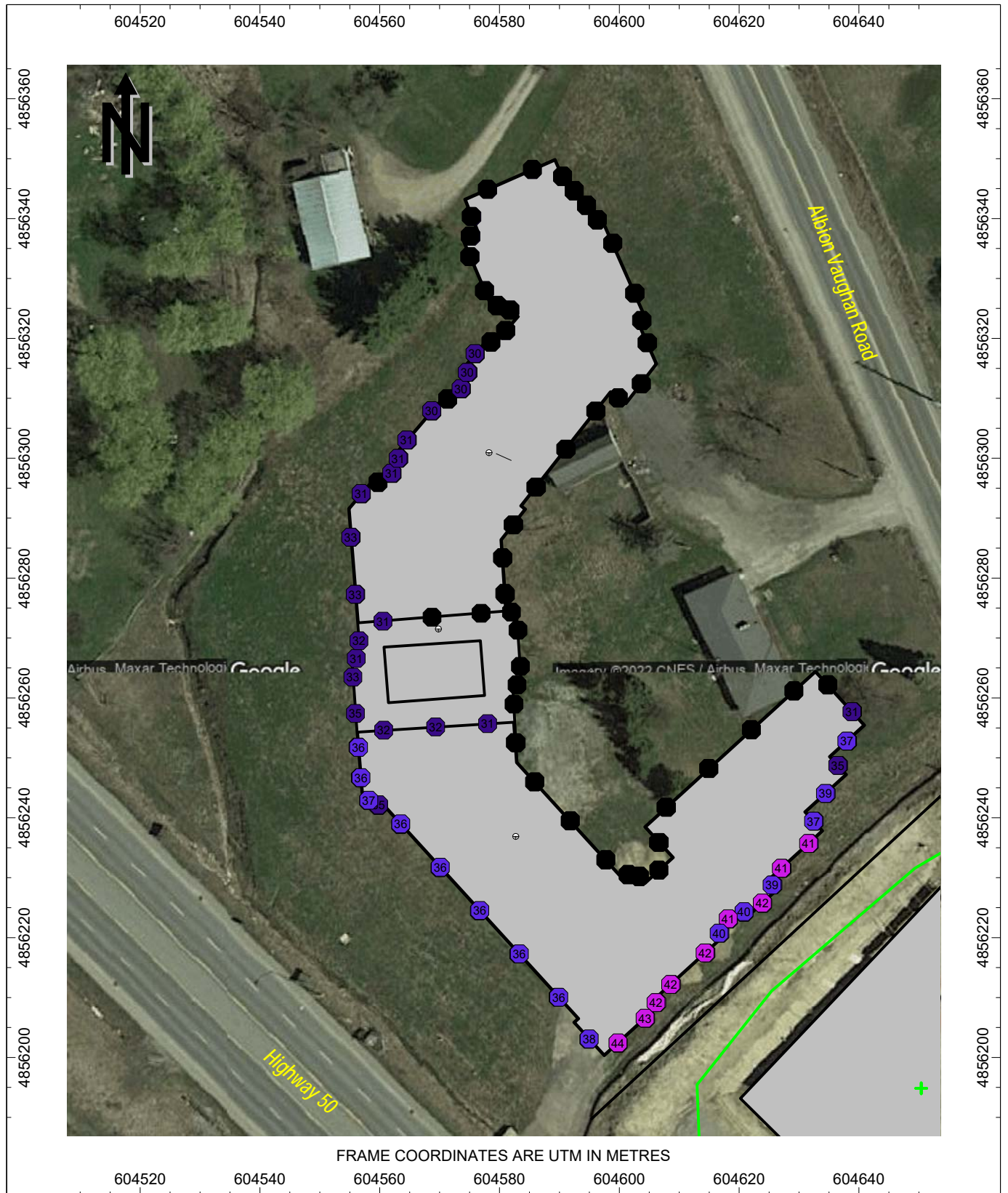


Figure 5: Stationary Noise Impact
Nighttime (23:00-07:00), Leq [dBA]

Appendix A

Road Traffic Information



ACOUSTICS



NOISE



VIBRATION

Date: October 19, 2020
 From: Harry Cai, HGC Engineering
 Re: Traffic data request – Highway 50 (860 m North of Mayfield Road)

Harry,
 As per your request, we are providing the following 2020 traffic data:

| | Existing | Ultimate |
|-------------------------------------|------------------------------|------------------------------|
| 24 Hour Traffic Volume | 25,700 | 32,400 |
| # of Lanes | 4 | 4 |
| Day/Night Split | 87/13 | 87/13 |
| Day Trucks (% of Total Volume) | 3.15 Medium 9.45% Heavy | 3.15 Medium 9.45% Heavy |
| Night Trucks (% of Total Volume) | 2.99% Medium 13.30% Heavy | 2.99% Medium 13.30% Heavy |
| Right-of-Way Width | 45 meters | |
| Posted Speed Limit | 60 km/h | |

Please note:

1. The current volume is not the Annual Average Daily Traffic, but the averaged raw volumes over three data collection days. If you need the Annual Average Traffic Volume, please visit the Peel Open Data website below:
<http://opendata.peelregion.ca/data-categories/transportation/traffic-count-stations.aspx>
2. The ultimate volume is the planned volume during a level of service 'D' where a 2 second vehicle headway and a volume to capacity ratio of 0.9 is assumed. Traffic signals and hourly variations in traffic are also incorporated into the ultimate volume.
3. The posted speed limit at the location of the ATR station is 60 km/h. However, approximately 400 m south of the station, the speed limit changes to 70 km/h.

If you require further assistance, please contact me at (905) 791-7800 ext. 4810.

Regards,

Tiggy Chen
 Co-op Student, Transportation System Planning
 Transportation Division, Public Works Services, Region of Peel
 10 Peel Centre Drive, Suite B, 4th Floor
 Brampton, ON L6T 4B9
 W: (905) 791-7800 x4810 C: (647) 918-2827
 E: tiggy.chen@peelregion.ca

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10
 Station ID: D34
 Albion Vaughan Rd north of Kirby Rd

Date Start: 25-Oct-16
 Date End: 27-Oct-16
 Date Start: 25-Oct-16

| NB, SB | | | | | | | | | | | | | | |
|------------|----------|-----------------|-------------|----------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------------|
| Start Time | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
| 10/25/16 | 2 | 61 | 13 | 1 | 1 | 5 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 86 |
| 01:00 | 0 | 40 | 7 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 51 |
| 02:00 | 0 | 28 | 8 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 41 |
| 03:00 | 0 | 25 | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 35 |
| 04:00 | 1 | 72 | 22 | 0 | 2 | 7 | 0 | 0 | 8 | 4 | 1 | 0 | 0 | 117 |
| 05:00 | 2 | 277 | 148 | 0 | 1 | 7 | 0 | 4 | 1 | 3 | 11 | 0 | 4 | 458 |
| 06:00 | 0 | 503 | 233 | 0 | 9 | 15 | 1 | 13 | 7 | 10 | 18 | 0 | 8 | 817 |
| 07:00 | 3 | 702 | 205 | 3 | 14 | 23 | 1 | 19 | 11 | 11 | 38 | 1 | 21 | 1052 |
| 08:00 | 2 | 624 | 184 | 4 | 15 | 11 | 3 | 22 | 9 | 9 | 31 | 3 | 9 | 926 |
| 09:00 | 3 | 341 | 106 | 4 | 12 | 23 | 0 | 22 | 13 | 15 | 13 | 1 | 7 | 560 |
| 10:00 | 5 | 289 | 101 | 3 | 16 | 19 | 0 | 17 | 13 | 6 | 7 | 0 | 2 | 478 |
| 11:00 | 8 | 283 | 86 | 1 | 10 | 29 | 0 | 15 | 8 | 11 | 9 | 2 | 4 | 466 |
| 12 PM | 6 | 301 | 101 | 2 | 12 | 20 | 0 | 14 | 4 | 7 | 9 | 0 | 7 | 483 |
| 13:00 | 3 | 285 | 87 | 3 | 14 | 14 | 2 | 14 | 7 | 11 | 4 | 0 | 3 | 447 |
| 14:00 | 3 | 320 | 123 | 0 | 11 | 20 | 0 | 10 | 10 | 11 | 10 | 2 | 9 | 529 |
| 15:00 | 3 | 494 | 175 | 2 | 7 | 25 | 2 | 24 | 8 | 13 | 26 | 2 | 10 | 791 |
| 16:00 | 4 | 673 | 161 | 3 | 4 | 23 | 1 | 26 | 5 | 11 | 37 | 2 | 16 | 966 |
| 17:00 | 4 | 743 | 191 | 1 | 4 | 24 | 0 | 24 | 9 | 6 | 51 | 4 | 25 | 1086 |
| 18:00 | 5 | 567 | 160 | 2 | 12 | 11 | 1 | 13 | 7 | 6 | 28 | 0 | 13 | 825 |
| 19:00 | 5 | 397 | 98 | 0 | 4 | 8 | 0 | 9 | 4 | 4 | 6 | 0 | 0 | 535 |
| 20:00 | 3 | 256 | 75 | 0 | 1 | 5 | 0 | 5 | 3 | 3 | 3 | 0 | 1 | 355 |
| 21:00 | 1 | 250 | 37 | 0 | 2 | 4 | 0 | 4 | 4 | 4 | 2 | 0 | 0 | 308 |
| 22:00 | 1 | 190 | 35 | 0 | 1 | 1 | 0 | 0 | 4 | 0 | 2 | 0 | 1 | 235 |
| 23:00 | 5 | 143 | 21 | 0 | 0 | 7 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 178 |
| Day Total | 69 | 7864 | 2385 | 29 | 152 | 305 | 11 | 255 | 143 | 147 | 307 | 17 | 141 | 11825 |
| Percent | 0.6% | 66.5% | 20.2% | 0.2% | 1.3% | 2.6% | 0.1% | 2.2% | 1.2% | 1.2% | 2.6% | 0.1% | 1.2% | |
| AM Peak | 11:00 | 07:00 | 06:00 | 08:00 | 10:00 | 11:00 | 08:00 | 08:00 | 09:00 | 09:00 | 07:00 | 08:00 | 07:00 | 07:00 |
| Vol. | 8 | 702 | 233 | 4 | 16 | 29 | 3 | 22 | 13 | 15 | 38 | 3 | 21 | 1052 |
| PM Peak | 12:00 | 17:00 | 17:00 | 13:00 | 13:00 | 15:00 | 13:00 | 16:00 | 14:00 | 15:00 | 17:00 | 17:00 | 17:00 | 17:00 |
| Vol. | 6 | 743 | 191 | 3 | 14 | 25 | 2 | 26 | 10 | 13 | 51 | 4 | 25 | 1086 |

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10
 Station ID: D34
 Albion Vaughan Rd north of Kirby Rd

Date Start: 25-Oct-16
 Date End: 27-Oct-16
 Date Start: 25-Oct-16

| NB, SB | | | | | | | | | | | | | | |
|------------|----------|-----------------|-------------|----------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|-------------|
| Start Time | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
| 10/26/16 | 1 | 55 | 18 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 78 |
| 01:00 | 1 | 35 | 11 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 52 |
| 02:00 | 1 | 27 | 8 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 38 |
| 03:00 | 0 | 27 | 8 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 04:00 | 3 | 81 | 23 | 0 | 1 | 7 | 0 | 0 | 2 | 5 | 2 | 0 | 1 | 125 |
| 05:00 | 3 | 276 | 151 | 1 | 2 | 9 | 0 | 5 | 13 | 6 | 6 | 0 | 4 | 476 |
| 06:00 | 3 | 472 | 212 | 1 | 7 | 16 | 1 | 20 | 6 | 9 | 30 | 2 | 10 | 789 |
| 07:00 | 2 | 690 | 223 | 3 | 12 | 15 | 3 | 30 | 11 | 9 | 33 | 1 | 17 | 1049 |
| 08:00 | 4 | 634 | 198 | 4 | 6 | 21 | 1 | 18 | 4 | 7 | 41 | 0 | 8 | 946 |
| 09:00 | 5 | 380 | 132 | 1 | 10 | 16 | 3 | 11 | 8 | 11 | 17 | 1 | 4 | 599 |
| 10:00 | 2 | 249 | 94 | 0 | 7 | 15 | 1 | 9 | 8 | 6 | 4 | 0 | 3 | 398 |
| 11:00 | 6 | 291 | 114 | 3 | 9 | 22 | 2 | 10 | 8 | 5 | 8 | 0 | 4 | 482 |
| 12 PM | 3 | 284 | 122 | 2 | 8 | 13 | 0 | 8 | 10 | 7 | 9 | 0 | 5 | 471 |
| 13:00 | 6 | 268 | 95 | 2 | 13 | 14 | 1 | 10 | 7 | 4 | 6 | 0 | 9 | 435 |
| 14:00 | 1 | 358 | 127 | 3 | 5 | 11 | 2 | 9 | 9 | 6 | 11 | 0 | 8 | 550 |
| 15:00 | 2 | 566 | 144 | 3 | 3 | 25 | 2 | 22 | 19 | 8 | 25 | 0 | 3 | 822 |
| 16:00 | 5 | 661 | 172 | 2 | 7 | 16 | 1 | 33 | 10 | 8 | 45 | 2 | 18 | 980 |
| 17:00 | 4 | 773 | 179 | 0 | 5 | 18 | 2 | 31 | 8 | 12 | 55 | 1 | 23 | 1111 |
| 18:00 | 2 | 594 | 155 | 2 | 9 | 13 | 0 | 10 | 7 | 8 | 37 | 0 | 10 | 847 |
| 19:00 | 4 | 396 | 103 | 1 | 3 | 8 | 0 | 7 | 2 | 1 | 6 | 0 | 2 | 533 |
| 20:00 | 4 | 303 | 50 | 0 | 6 | 7 | 1 | 3 | 2 | 1 | 3 | 0 | 4 | 384 |
| 21:00 | 2 | 242 | 46 | 0 | 0 | 6 | 0 | 2 | 1 | 1 | 5 | 1 | 0 | 306 |
| 22:00 | 3 | 240 | 36 | 0 | 1 | 6 | 0 | 0 | 2 | 0 | 4 | 0 | 0 | 292 |
| 23:00 | 1 | 128 | 22 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 157 |
| Day Total | 68 | 8030 | 2443 | 28 | 115 | 267 | 20 | 239 | 144 | 114 | 347 | 8 | 133 | 11956 |
| Percent | 0.6% | 67.2% | 20.4% | 0.2% | 1.0% | 2.2% | 0.2% | 2.0% | 1.2% | 1.0% | 2.9% | 0.1% | 1.1% | |
| AM Peak | 11:00 | 07:00 | 07:00 | 08:00 | 07:00 | 11:00 | 07:00 | 07:00 | 05:00 | 09:00 | 08:00 | 06:00 | 07:00 | 07:00 |
| Vol. | 6 | 690 | 223 | 4 | 12 | 22 | 3 | 30 | 13 | 11 | 41 | 2 | 17 | 1049 |
| PM Peak | 13:00 | 17:00 | 17:00 | 14:00 | 13:00 | 15:00 | 14:00 | 16:00 | 15:00 | 17:00 | 17:00 | 16:00 | 17:00 | 17:00 |
| Vol. | 6 | 773 | 179 | 3 | 13 | 25 | 2 | 33 | 19 | 12 | 55 | 2 | 23 | 1111 |

Ontario Traffic, Inc.
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 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10
 Station ID: D34
 Albion Vaughan Rd north of Kirby Rd

Date Start: 25-Oct-16
 Date End: 27-Oct-16
 Date Start: 25-Oct-16

| NB, SB | | | | | | | | | | | | | | |
|-------------|-----------|-----------------|-------------|----------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|------------|
| Start Time | Bikes | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Total |
| 10/27/16 | 2 | 72 | 19 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 |
| 01:00 | 3 | 39 | 7 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 54 |
| 02:00 | 0 | 35 | 10 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 49 |
| 03:00 | 0 | 32 | 10 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 44 |
| 04:00 | 1 | 74 | 22 | 0 | 2 | 1 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 106 |
| 05:00 | 2 | 256 | 125 | 0 | 2 | 6 | 0 | 2 | 3 | 3 | 1 | 0 | 2 | 402 |
| 06:00 | 5 | 468 | 196 | 1 | 8 | 6 | 1 | 9 | 4 | 6 | 21 | 0 | 8 | 733 |
| 07:00 | 2 | 662 | 183 | 3 | 9 | 12 | 2 | 18 | 10 | 8 | 48 | 0 | 11 | 968 |
| 08:00 | 3 | 576 | 180 | 4 | 13 | 16 | 0 | 9 | 9 | 8 | 25 | 1 | 12 | 856 |
| 09:00 | 8 | 351 | 138 | 4 | 10 | 20 | 1 | 12 | 11 | 7 | 15 | 1 | 2 | 580 |
| 10:00 | 3 | 281 | 109 | 1 | 11 | 17 | 2 | 10 | 6 | 7 | 9 | 1 | 7 | 464 |
| 11:00 | 10 | 259 | 102 | 1 | 10 | 32 | 1 | 7 | 8 | 7 | 11 | 0 | 5 | 453 |
| 12 PM | 3 | 271 | 116 | 1 | 11 | 16 | 0 | 7 | 8 | 4 | 5 | 1 | 8 | 451 |
| 13:00 | 5 | 280 | 109 | 0 | 14 | 19 | 2 | 2 | 10 | 4 | 13 | 0 | 3 | 461 |
| 14:00 | 5 | 346 | 135 | 2 | 10 | 19 | 0 | 7 | 8 | 7 | 17 | 2 | 6 | 564 |
| 15:00 | 5 | 481 | 152 | 1 | 9 | 21 | 0 | 15 | 9 | 6 | 25 | 1 | 6 | 731 |
| 16:00 | 6 | 686 | 156 | 3 | 12 | 17 | 1 | 15 | 9 | 6 | 30 | 1 | 10 | 952 |
| 17:00 | 5 | 737 | 131 | 3 | 5 | 8 | 1 | 25 | 10 | 1 | 50 | 2 | 9 | 987 |
| 18:00 | 5 | 521 | 125 | 2 | 2 | 8 | 0 | 11 | 5 | 7 | 21 | 0 | 1 | 708 |
| 19:00 | 2 | 392 | 78 | 0 | 3 | 3 | 1 | 6 | 6 | 1 | 9 | 0 | 2 | 503 |
| 20:00 | 2 | 283 | 66 | 2 | 1 | 1 | 0 | 1 | 5 | 0 | 3 | 0 | 0 | 364 |
| 21:00 | 1 | 248 | 55 | 0 | 0 | 3 | 0 | 1 | 3 | 2 | 3 | 1 | 1 | 318 |
| 22:00 | 2 | 198 | 29 | 1 | 1 | 6 | 0 | 3 | 2 | 0 | 1 | 0 | 0 | 243 |
| 23:00 | 4 | 132 | 25 | 0 | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 169 |
| Day Total | 84 | 7680 | 2278 | 29 | 133 | 246 | 12 | 160 | 133 | 89 | 308 | 11 | 94 | 11257 |
| Percent | 0.7% | 68.2% | 20.2% | 0.3% | 1.2% | 2.2% | 0.1% | 1.4% | 1.2% | 0.8% | 2.7% | 0.1% | 0.8% | |
| AM Peak | 11:00 | 07:00 | 06:00 | 08:00 | 08:00 | 11:00 | 07:00 | 07:00 | 09:00 | 07:00 | 07:00 | 08:00 | 08:00 | 07:00 |
| Vol. | 10 | 662 | 196 | 4 | 13 | 32 | 2 | 18 | 11 | 8 | 48 | 1 | 12 | 968 |
| PM Peak | 16:00 | 17:00 | 16:00 | 16:00 | 13:00 | 15:00 | 13:00 | 17:00 | 13:00 | 14:00 | 17:00 | 14:00 | 16:00 | 17:00 |
| Vol. | 6 | 737 | 156 | 3 | 14 | 21 | 2 | 25 | 10 | 7 | 50 | 2 | 10 | 987 |
| Grand Total | 221 | 23574 | 7106 | 86 | 400 | 818 | 43 | 654 | 420 | 350 | 962 | 36 | 368 | 35038 |
| Percent | 0.6% | 67.3% | 20.3% | 0.2% | 1.1% | 2.3% | 0.1% | 1.9% | 1.2% | 1.0% | 2.7% | 0.1% | 1.1% | |

Appendix B

Sample STAMSON 5.04 Output



ACOUSTICS



NOISE



VIBRATION

Filename: a.te Time Period: Day/Night 16/8 hours
Description: Pred. Loc. [A], Tower B SE facade flanking Hwy 50

Road data, segment # 1: Albion Vghn (day/night)

Car traffic volume : 13201/2330 veh/TimePeriod *
Medium truck volume : 450/79 veh/TimePeriod *
Heavy truck volume : 1350/238 veh/TimePeriod *
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 11888
Percentage of Annual Growth : 2.50
Number of Years of Growth : 16.00
Medium Truck % of Total Volume : 3.00
Heavy Truck % of Total Volume : 9.00
Day (16 hrs) % of Total Volume : 85.00

Data for Segment # 1: Albion Vghn (day/night)

Angle1 Angle2 : -90.00 deg 0.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 43.00 / 43.00 m
Receiver height : 19.50 / 19.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Road data, segment # 2: Hwy 50 (day/night)

Car traffic volume : 23678/3538 veh/TimePeriod *
Medium truck volume : 846/126 veh/TimePeriod *
Heavy truck volume : 3664/548 veh/TimePeriod *
Posted speed limit : 60 km/h
Road gradient : 0 %
Road pavement : 1 (Typical asphalt or concrete)

* Refers to calculated road volumes based on the following input:

24 hr Traffic Volume (AADT or SADT): 32400
Percentage of Annual Growth : 0.00
Number of Years of Growth : 0.00
Medium Truck % of Total Volume : 3.00
Heavy Truck % of Total Volume : 13.00



ACOUSTICS



NOISE



VIBRATION

Day (16 hrs) % of Total Volume : 87.00

Data for Segment # 2: Hwy 50 (day/night)

Angle1 Angle2 : 0.00 deg 90.00 deg
Wood depth : 0 (No woods.)
No of house rows : 0 / 0
Surface : 1 (Absorptive ground surface)
Receiver source distance : 80.00 / 80.00 m
Receiver height : 19.50 / 19.50 m
Topography : 1 (Flat/gentle slope; no barrier)
Reference angle : 0.00

Results segment # 1: Albion Vghn (day)

Source height = 1.73 m

ROAD (0.00 + 63.18 + 0.00) = 63.18 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-90 0 0.11 71.60 0.00 -5.09 -3.33 0.00 0.00 0.00 63.18

Segment Leq : 63.18 dBA

Results segment # 2: Hwy 50 (day)

Source height = 1.90 m

ROAD (0.00 + 64.23 + 0.00) = 64.23 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

0 90 0.11 75.60 0.00 -8.06 -3.32 0.00 0.00 0.00 64.23

Segment Leq : 64.23 dBA

Total Leq All Segments: 66.75 dBA

Results segment # 1: Albion Vghn (night)

Source height = 1.73 m

ROAD (0.00 + 58.65 + 0.00) = 58.65 dBA

Angle1 Angle2 Alpha RefLeq P.Adj D.Adj F.Adj W.Adj H.Adj B.Adj SubLeq

-90 0 0.11 67.07 0.00 -5.09 -3.33 0.00 0.00 0.00 58.65



ACOUSTICS



NOISE



VIBRATION

Segment Leq : 58.65 dBA

Results segment # 2: Hwy 50 (night)

Source height = 1.90 m

ROAD (0.00 + 58.99 + 0.00) = 58.99 dBA

| Angle1 | Angle2 | Alpha | RefLeq | P.Adj | D.Adj | F.Adj | W.Adj | H.Adj | B.Adj | SubLeq |
|--------|--------|-------|--------|-------|-------|-------|-------|-------|-------|--------|
| 0 | 90 | 0.11 | 70.36 | 0.00 | -8.06 | -3.32 | 0.00 | 0.00 | 0.00 | 58.99 |

Segment Leq : 58.99 dBA

Total Leq All Segments: 61.83 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 66.75
(NIGHT): 61.83



ACOUSTICS



NOISE



VIBRATION

Appendix C

Supporting Drawings



ACOUSTICS

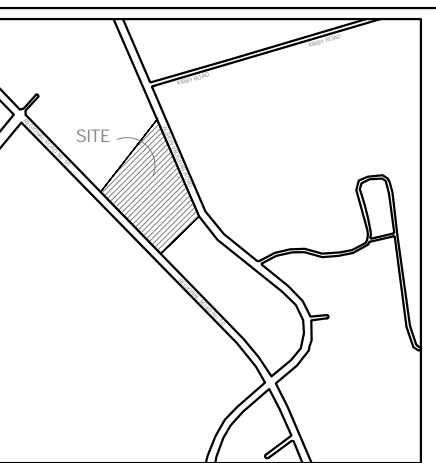


NOISE

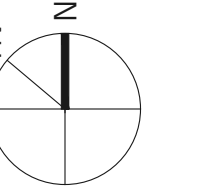


VIBRATION

ALBION VAUGHAN ROAD
 (ROAD ALLOWANCE BETWEEN TOWNSHIPS OF ALBION & VAUGHAN)
 PIN 03321-0094(LT) CENTRELINE OF ORIGINAL ROAD ALLOWANCE

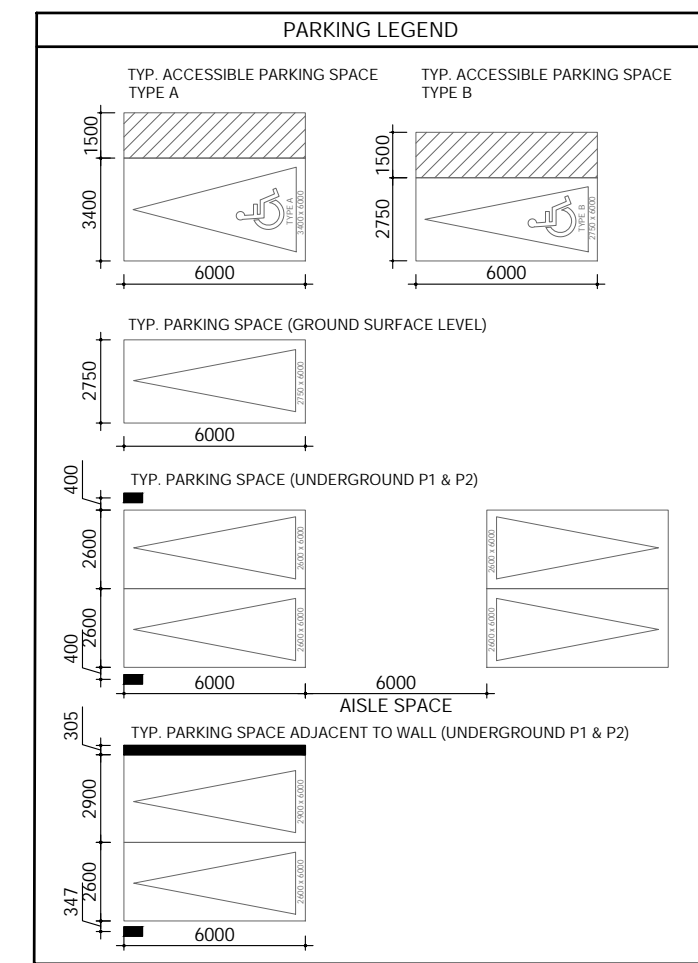


KEY PLAN

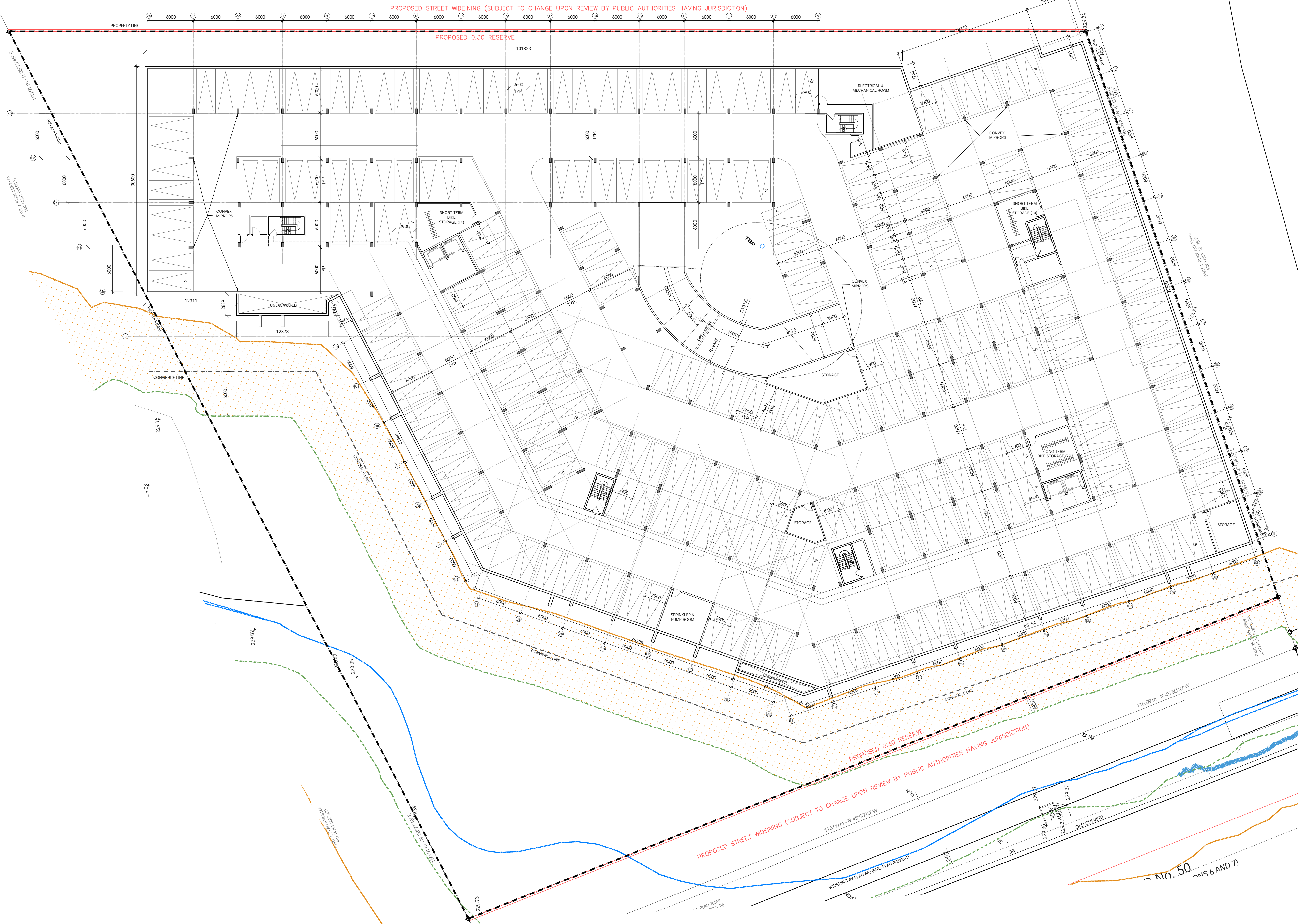


| PARKING | | | |
|--|---|---------|------------------|
| BY LAW - PARKING REQUIREMENTS | | | |
| CONDO UNITS PARKING SPACES | 1.5 PARKING SPOTS PER DWELLING UNIT | 398 | |
| VISITOR - CONDO UNITS PARKING SPACE | 0.25 PARKING SPACES PER UNIT FOR VISITOR PARKING IN A DESIGNATED VISITOR PARKING AREA | 66 | |
| ACCESSIBLE PARKING RECORDED C/P# OF TOTAL - P2 | | 11 240 | |
| GRAND TOTAL PARKING REQUIRED | | 463 750 | |
| RESIDENT (ACCESSIBLE) | RESIDENT SPOTS | TOTAL | |
| P1 LEVEL | 8 | 213 | |
| P2 LEVEL | 0 | 231 | |
| GROUND SURFACE LEVEL | 4 | 6 | |
| GRAND TOTAL PARKING PROVIDED | 12 | 450 | 442 spaces prov. |

| BICYCLE STORAGE | | | |
|-----------------------------------|-----------|------------|-------|
| | LONG TERM | SHORT TERM | TOTAL |
| GROUND SURFACE LEVEL | | | 30 |
| P1 LEVEL | 28 | 28 | |
| P2 LEVEL | 28 | 28 | |
| GRAND TOTAL BICYCLE STORAGE SPOTS | 56 | 86 | 142 |



1 P2 LEVEL - PARKING TOWER A & B
 A2.1 SCALE: 1:250



| NO. | ISSUED FOR | DESCRIPTION | DATE |
|-----|-------------------------|-------------|------------|
| 1 | ISSUED FOR CONSTRUCTION | | 04/04/2020 |

| NO. | REVISIONS | DATE |
|-----|-----------|------|
| | | |

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 ISSUED FOR BUILDING PERMIT
 ISSUED FOR SITE PLAN APPROVAL
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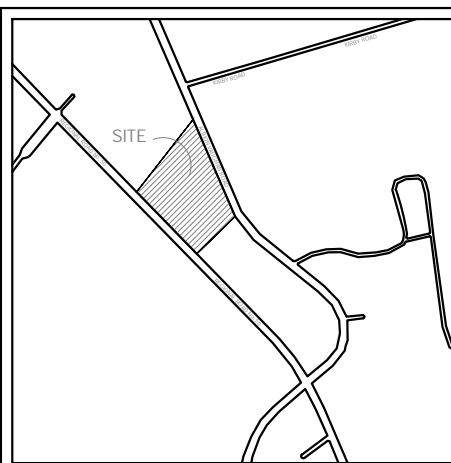
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 BOLTON
 TOWN OF CALEDON

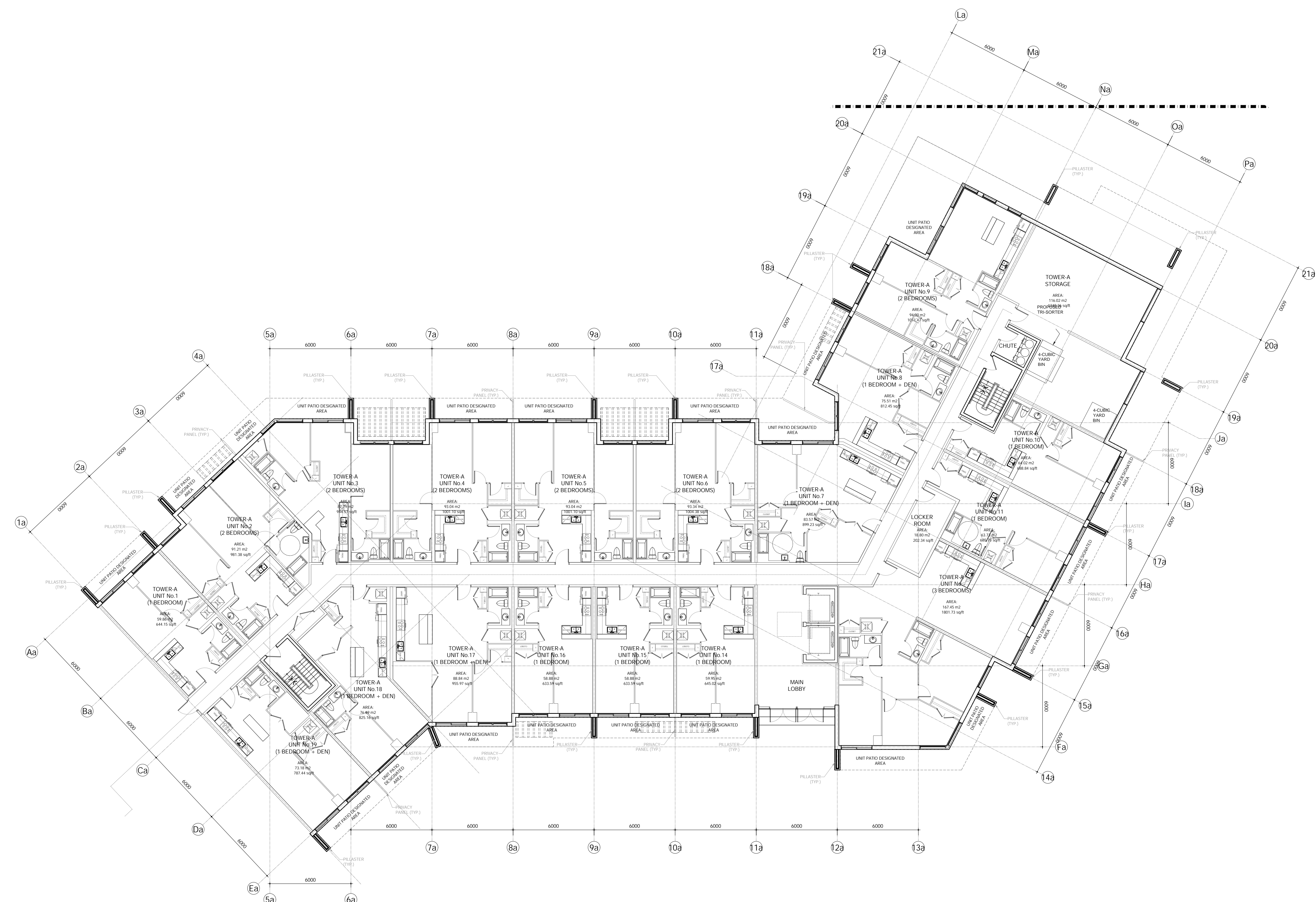
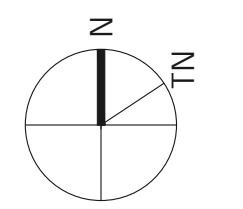
DRAWING: P2 LEVEL (TOWER A & B)

| DATE | PROJECT NO. |
|-------------|-------------|
| 14/08/2020 | 2019-22 |
| SCALE | DRAWING NO. |
| AS NOTED | A2.1 |
| DESIGNED BY | REVIEWED BY |
| AD | F.C. |

FILE NAME: 12148VAUGHANRD_A2.1(2) 2020.08.06



KEY PLAN



| No. | DESCRIPTION | DATE |
|-----|-------------------------------|----------|
| 1 | ISSUED FOR CONSTRUCTION | 00/00/00 |
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| | ISSUED FOR BUILDING PERMIT | |
| | ISSUED FOR SITE PLAN APPROVAL | |
| | SUBMITTALS | |

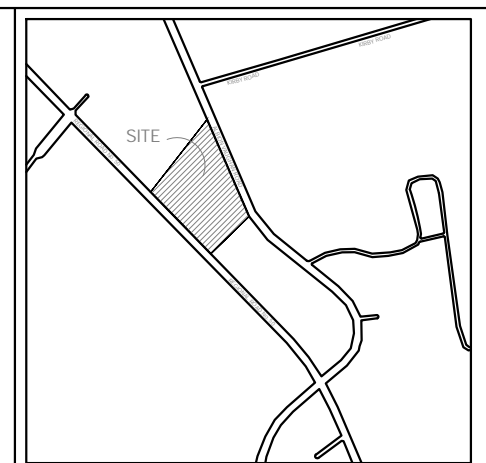
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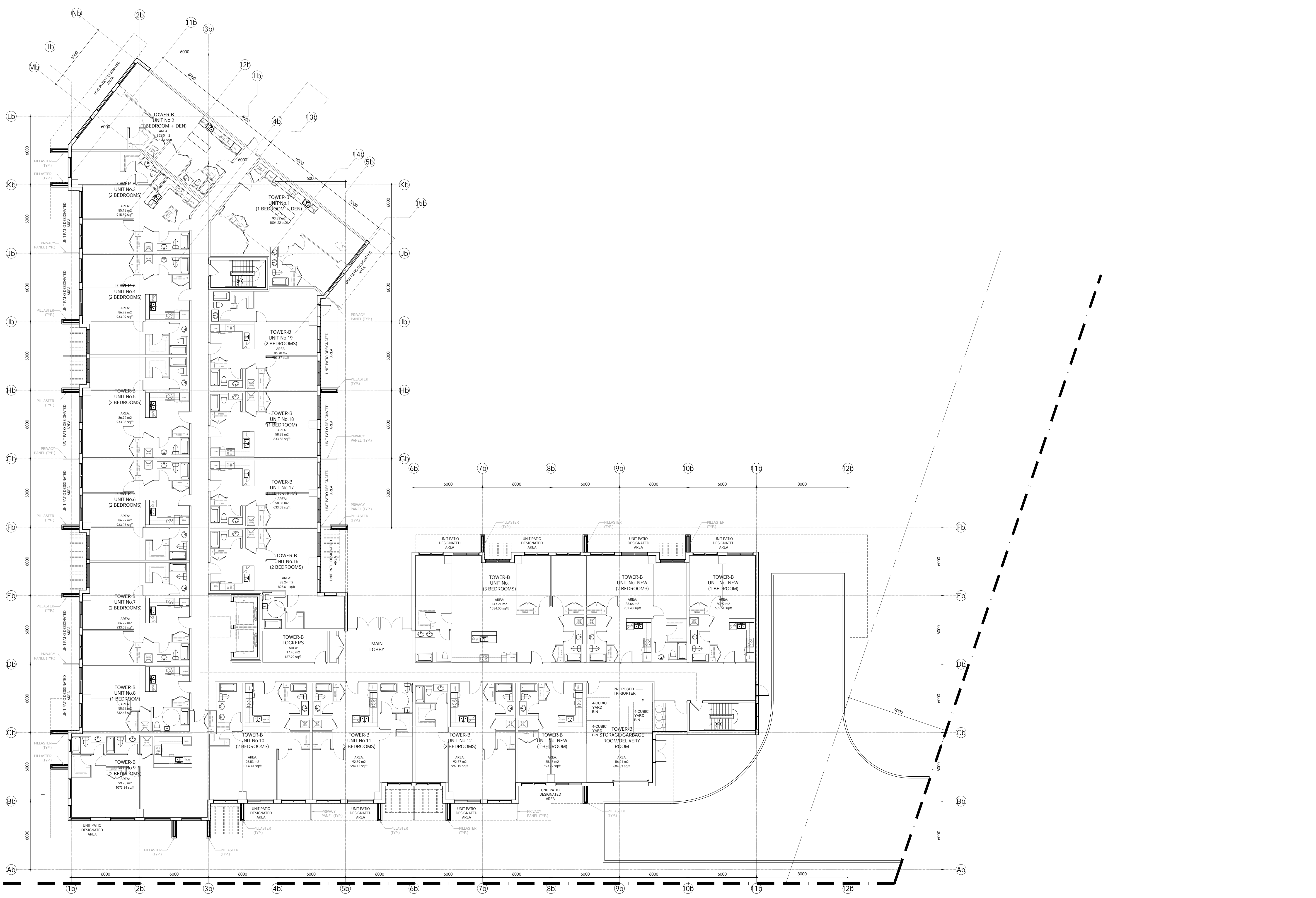
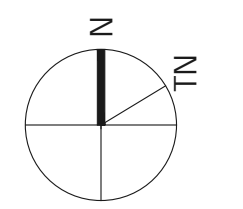
PROPOSED MIX-USE CONDO DEVELOPMENT
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 TOWN OF CALEDON

| | |
|----------------------------------|---------------------|
| DRAWING: MAIN FLOOR PLAN TOWER A | |
| PLOTTED: N/A | |
| DATE: 02/22/2020 | PROJECT No: 2019-22 |
| SCALE: AS NOTED | DRAWING No: A2.2A |
| DESIGNED BY: L.C. | REVIEWED BY: F.C. |

1 MAIN FLOOR PLAN - TOWER A
 A2.2A SCALE: 1:150



KEY PLAN



1 MAIN FLOOR PLAN - TOWER B
A2.2B SCALE: 1:150

| No. | ISSUED FOR | DESCRIPTION | DATE |
|-----|-------------------------------|-------------|------------|
| 1 | ISSUED FOR CONSTRUCTION | | 04/04/2020 |
| | ISSUED FOR BID | | |
| | ISSUED FOR BUILDING PERMIT | | |
| | ISSUED FOR SITE PLAN APPROVAL | | |
| | ISSUED FOR SUBMITTALS | | |

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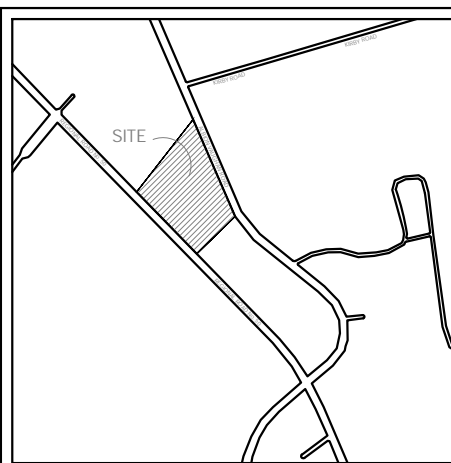
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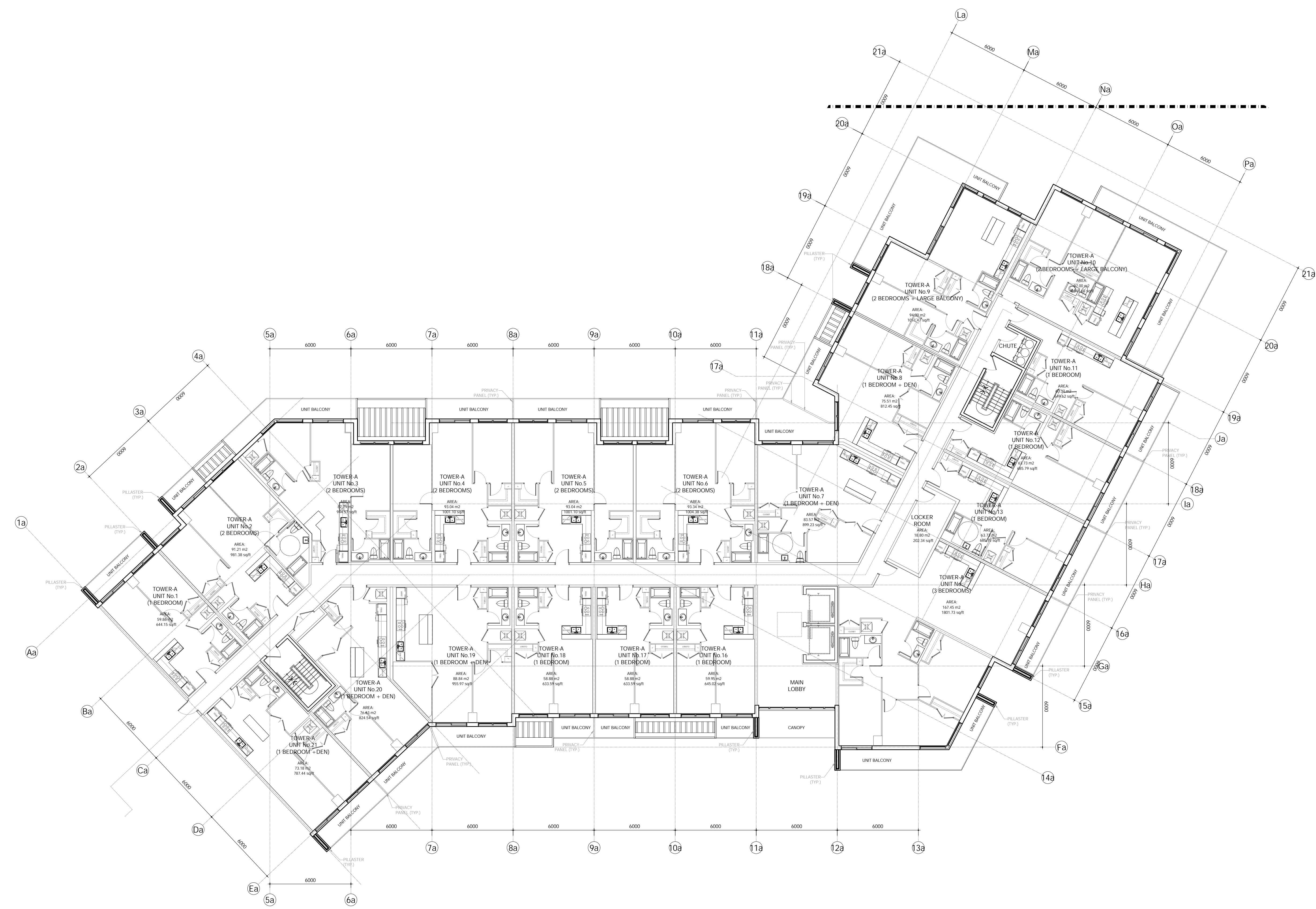
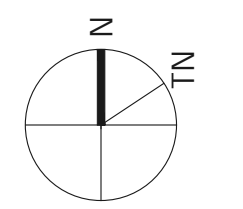
MAIN FLOOR PLAN TOWER B

| | | | |
|-------------|------------|-------------|---------|
| DATE | 14/08/2020 | PROJECT No. | 2019-22 |
| SCALE | AS NOTED | DRAWING No. | A2.2B |
| DESIGNED BY | L.C. | REVIEWED BY | F.C. |

FILE NAME: D:\1418ALBION\1418ALBION_2019-22\2020\2020-08-14\A2.2B.dwg



KEY PLAN



| No. | DESCRIPTION | DATE |
|-----|-------------------------|------------|
| 1 | ISSUED FOR CONSTRUCTION | 20/04/2020 |

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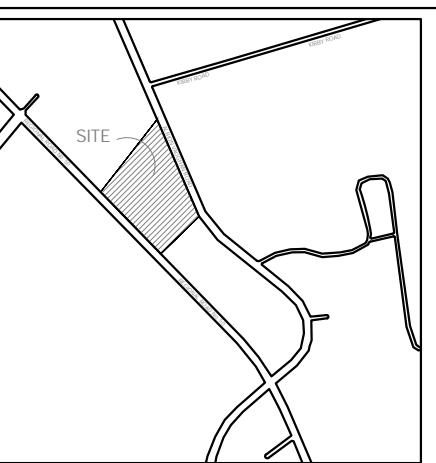
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12148 ALBION VAUGHAN RD.
BOLTON
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SECOND FLOOR PLAN
TOWER A

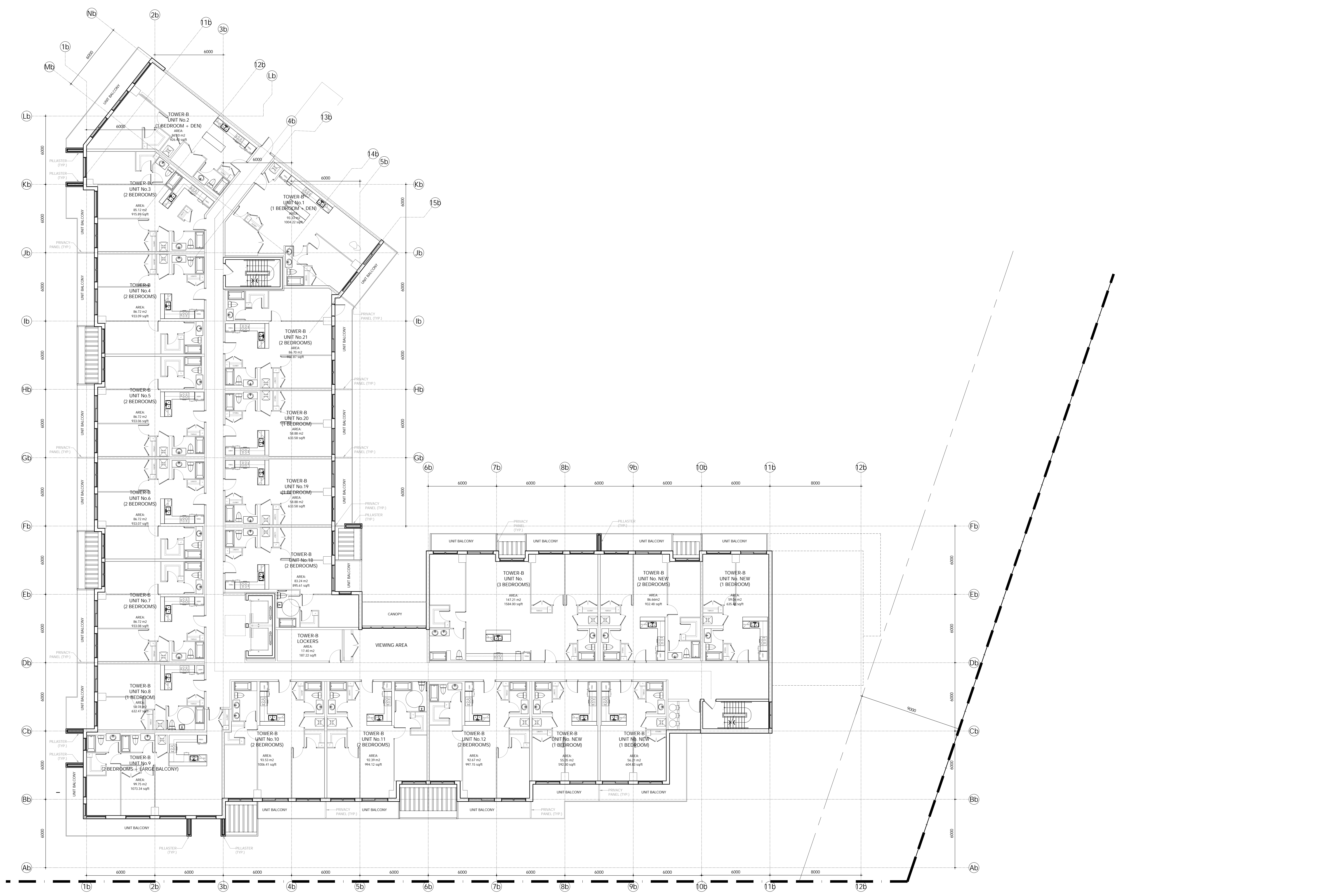
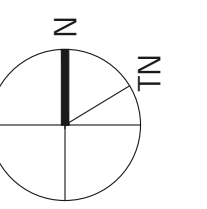
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|-------------|-------------|
| DATE | PROJECT No. |
| 02/12/2020 | 2019-22 |
| SCALE | DRAWING No. |
| AS NOTED | A2.3A |
| DESIGNED BY | REVIEWED BY |
| L.C. | F.C. |

1 SECOND FLOOR PLAN - TOWER A
A2.3A SCALE: 1:150

FILE NAME: 12148ALBIONVAUGHANRD_A2.3A2A_2019-22.DWG



KEY PLAN



1 SECOND FLOOR PLAN - TOWER B
A2.3B SCALE: 1:150

| No. | ISSUED FOR | DESCRIPTION | DATE |
|-----|-------------------------|-------------|-------------|
| 1 | ISSUED FOR CONSTRUCTION | | 04/MAY/2022 |

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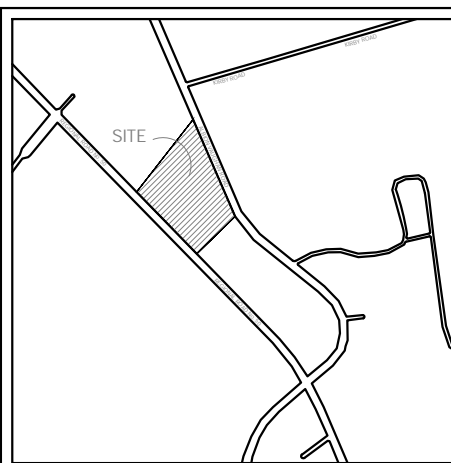
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DATE: 14/08/2022 PROJECT No: 2019-22

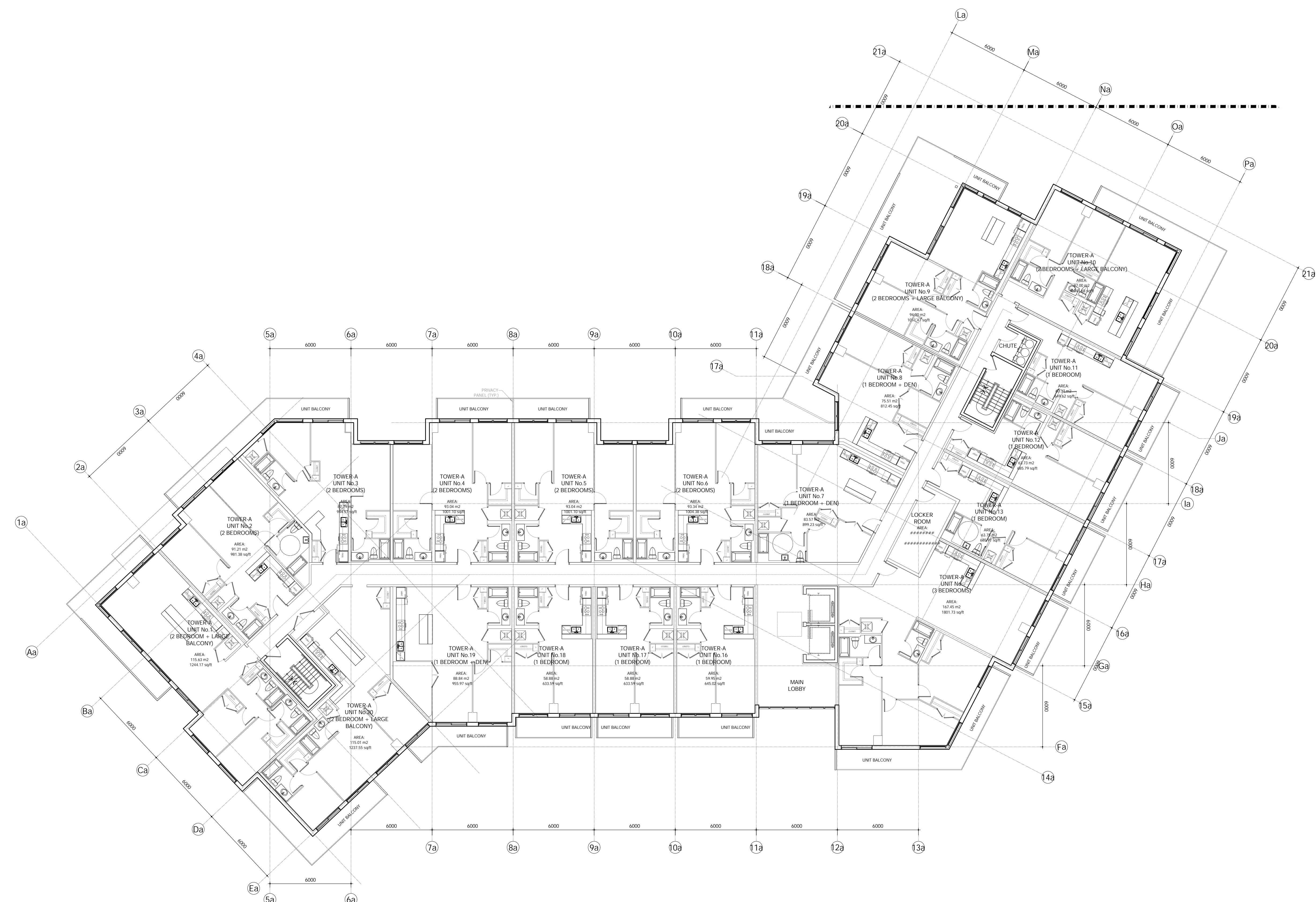
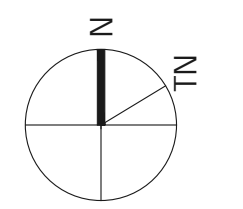
SCALE: AS NOTED DRAWING No: A2.3B

DESIGNED BY: L.C. REVIEWED BY: F.C.

FILE NAME: D:\P\ALBION\A2.3B\FLOOR 2022.BR3



KEY PLAN



| No. | DESCRIPTION | DATE |
|-----|-------------------------|------------|
| 1 | ISSUED FOR CONSTRUCTION | 04/04/2020 |
| | REVISIONS | |

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 ISSUED FOR SITE PLAN APPROVAL
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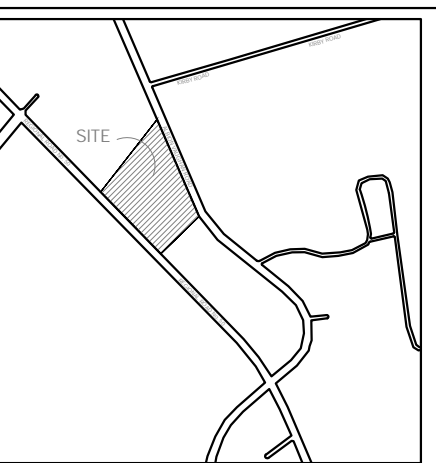
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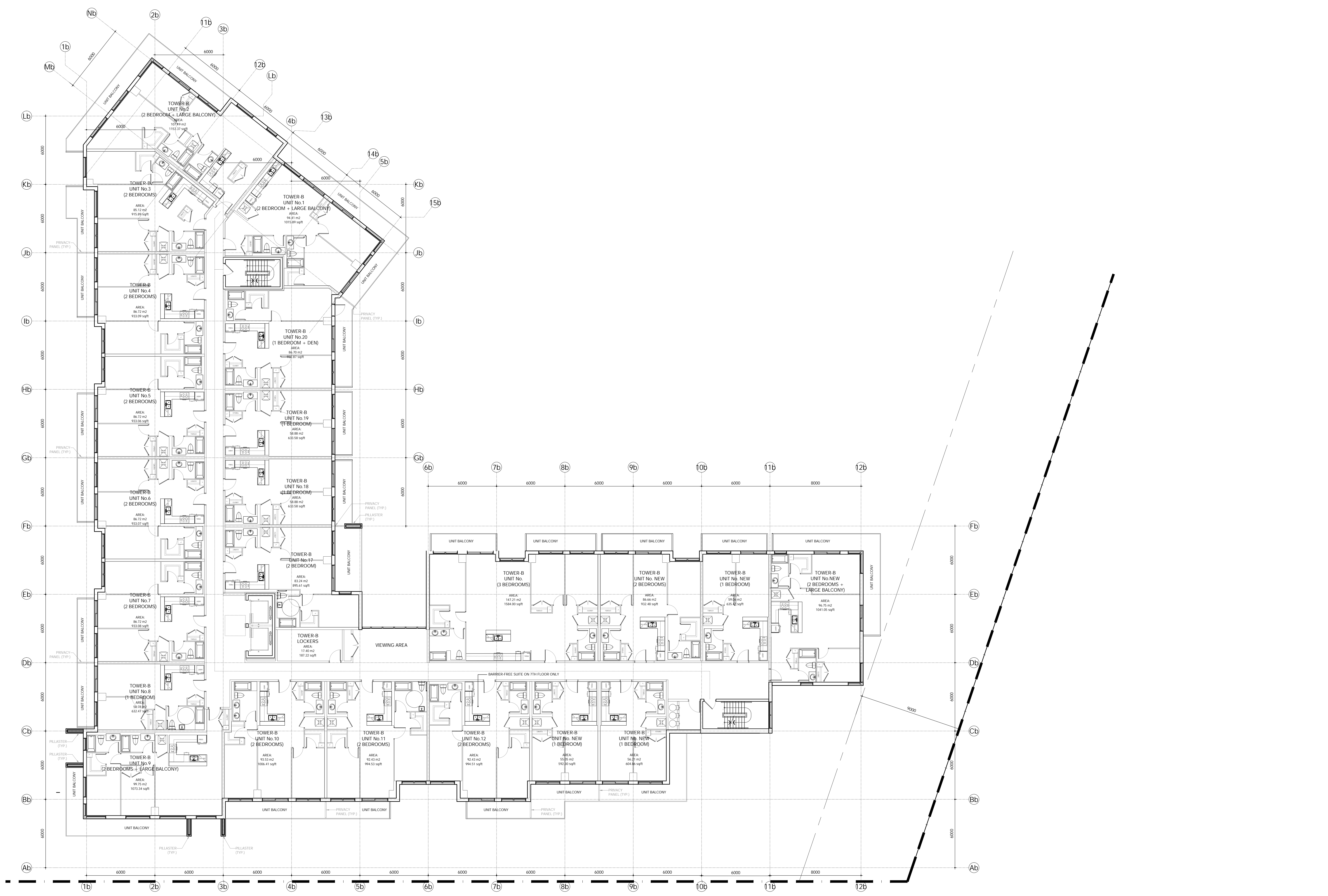
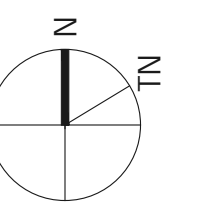
DRAWING:
**THIRD TO SIXTH FLOOR PLAN
 TOWER A**

| | |
|-------------|-------------|
| DATE | PROJECT No. |
| 02/12/2020 | 2019-22 |
| SCALE | DRAWING No. |
| AS NOTED | A2.4A |
| DESIGNED BY | REVIEWED BY |
| L.C. | F.C. |

FILE NAME: 12148ALBIONVAUGHANRD_A2.4A2019-2203.DWG



KEY PLAN



1 THIRD TO SEVENTH FLOOR PLAN - TOWER B
A2.4B SCALE: 1:150

| No. | ISSUED FOR | DESCRIPTION | DATE |
|-----|-------------------------|-------------|------------|
| 1 | ISSUED FOR CONSTRUCTION | | 04/04/2022 |

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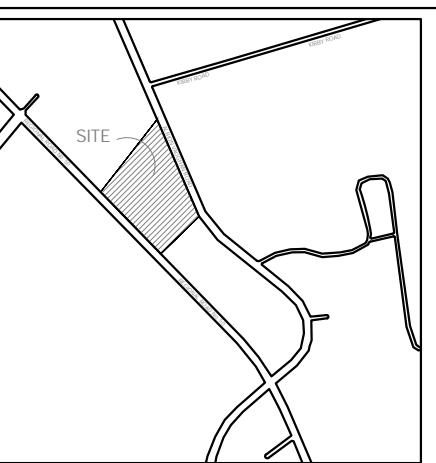
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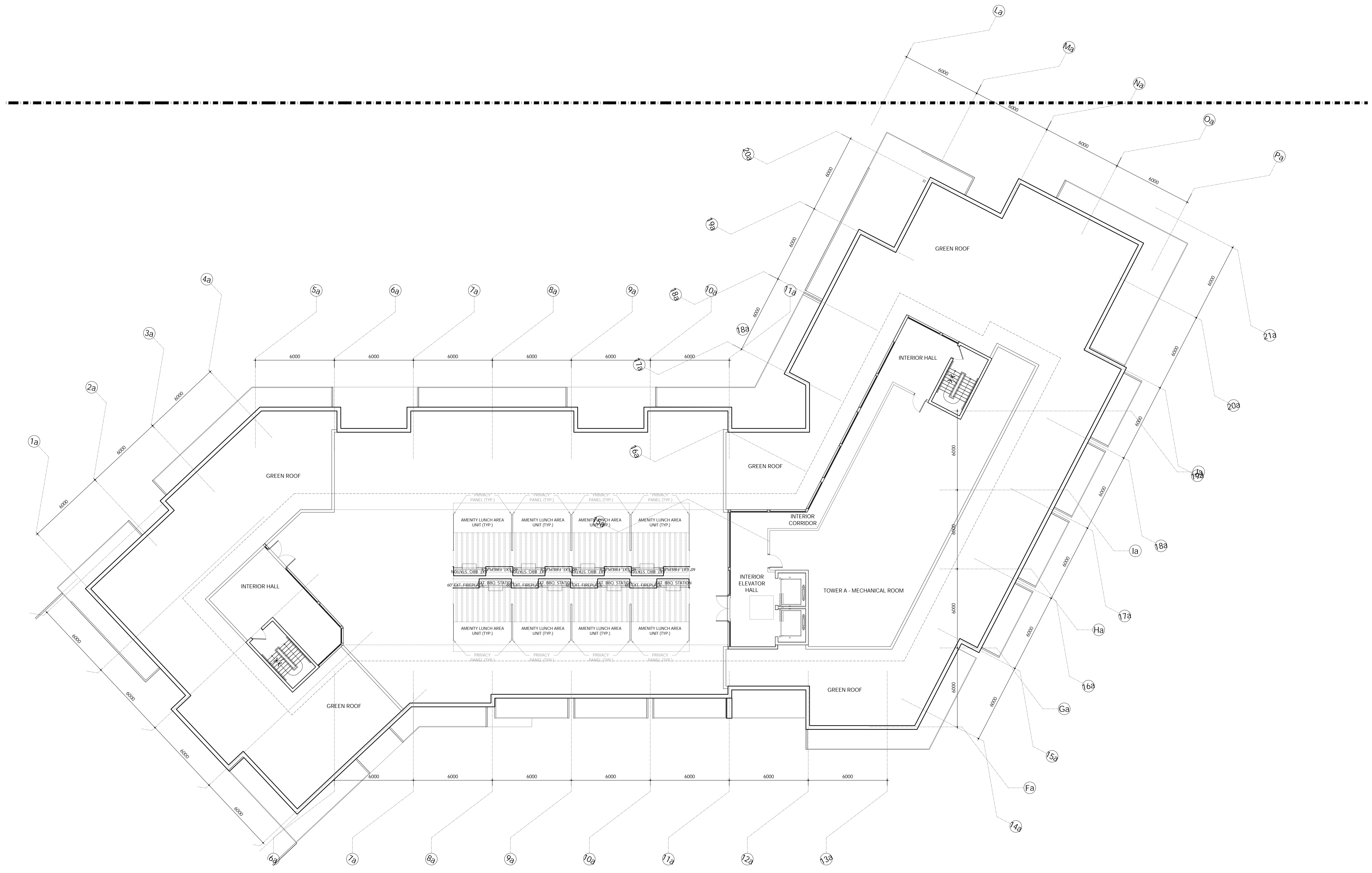
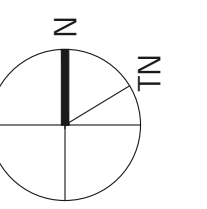
DRAWING: THIRD TO SEVENTH FLOOR PLAN TOWER B

| | |
|-------------|-------------|
| DATE | PROJECT No. |
| 14/08/2022 | 2019-22 |
| SCALE | DRAWING No. |
| AS NOTED | A2.4B |
| DESIGNED BY | REVIEWED BY |
| L.C. | F.C. |

FILE NAME: D:\1418\1418-02\A2.4B - 2022.BREISS



KEY PLAN



| | | |
|-----|-------------------------|----------|
| 1 | ISSUED FOR CONSTRUCTION | 6/0/2019 |
| No. | DESCRIPTION | DATE |
| | REVISIONS | |

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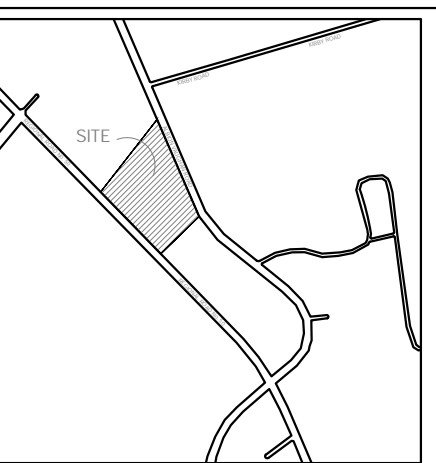
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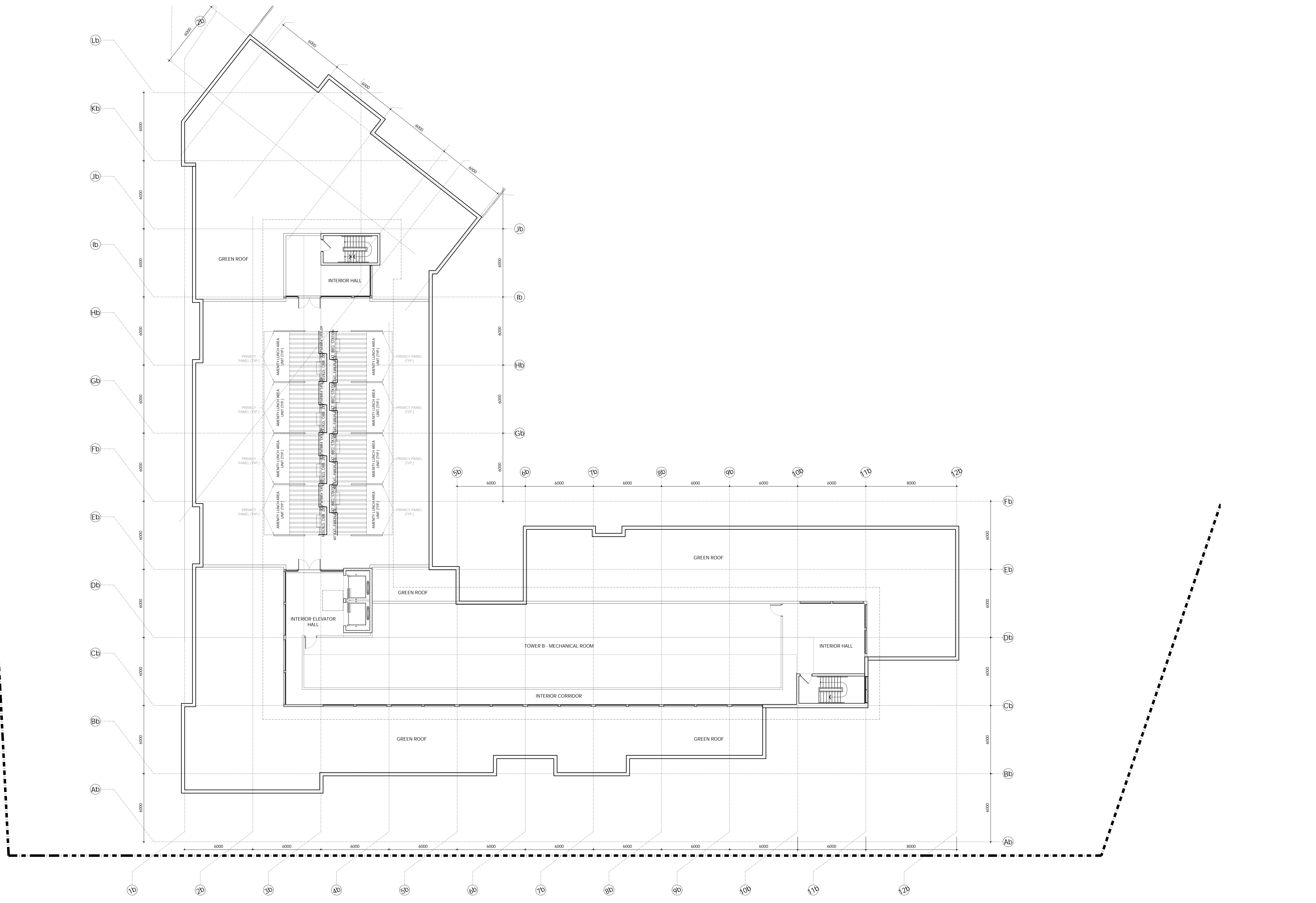
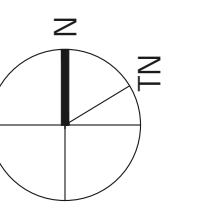
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| | |
|----------------------------|---------------------|
| DRAWING: PENTHOUSE TOWER B | |
| DATE: 21/09/2020 | PROJECT No: 2019-22 |
| SCALE: AS NOTED | DRAWING No: A2.5A |
| DESIGNED BY: AD | REVIEWED BY: F.C. |

1 PENTHOUSE - TOWER A
 A2.5A SCALE: 1:150



KEY PLAN



1 PENTHOUSE - TOWER B
A2.5B SCALE: 1:150

| | | |
|-----|-------------|------------|
| No. | ISSUED FOR | 00/00/0000 |
| | DESCRIPTION | DATE |
| | REVISIONS | |

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DRAWING: PENTHOUSE TOWER B

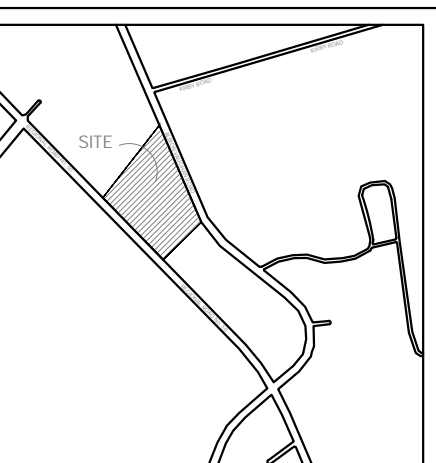
PLOTTED: N/A

DATE: 21/09/2020 PROJECT No: 2019-22

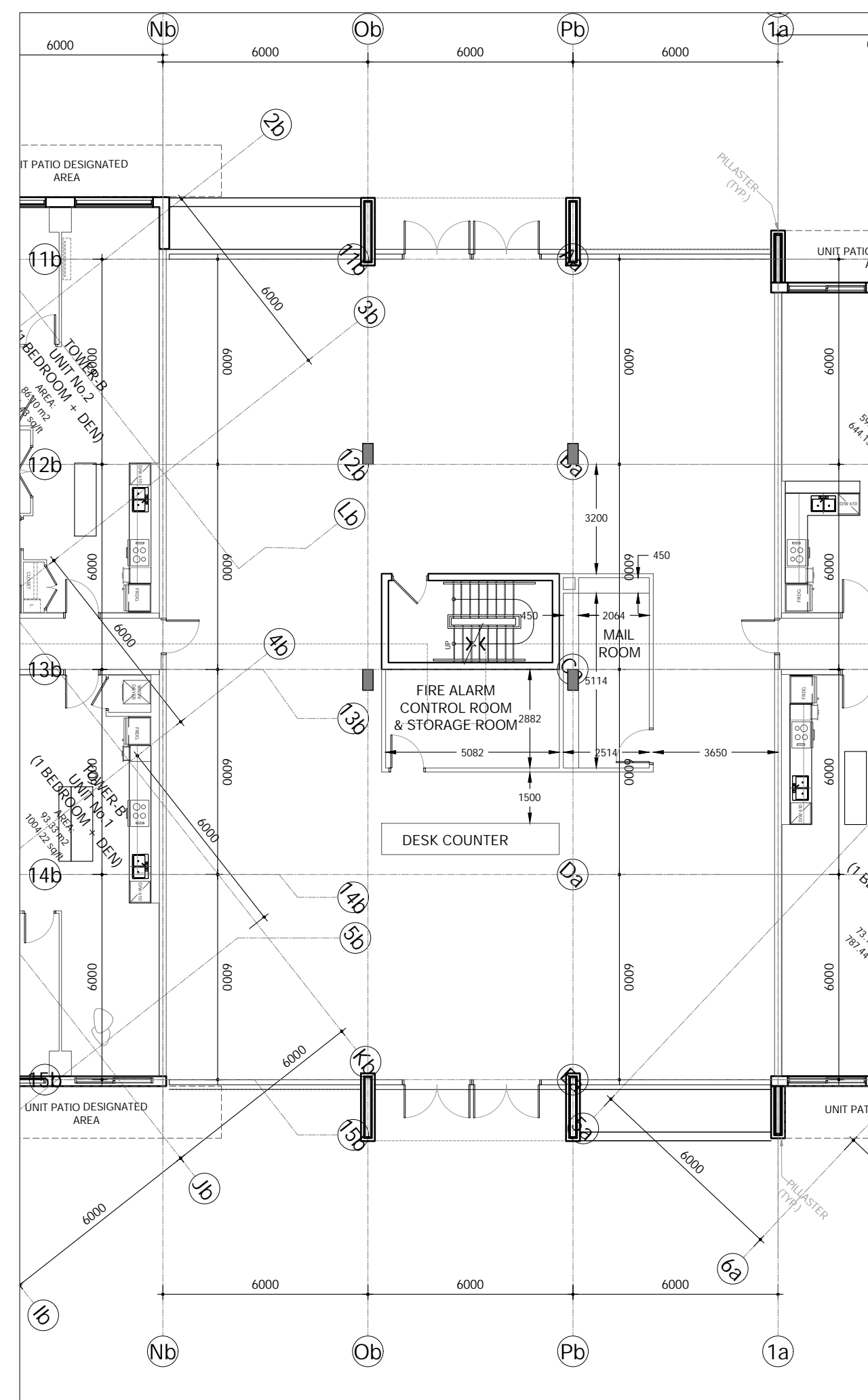
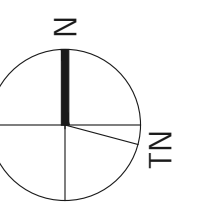
SCALE: AS NOTED DRAWING No: A2.5B

DESIGNED BY: AD REVIEWED BY: F.C.

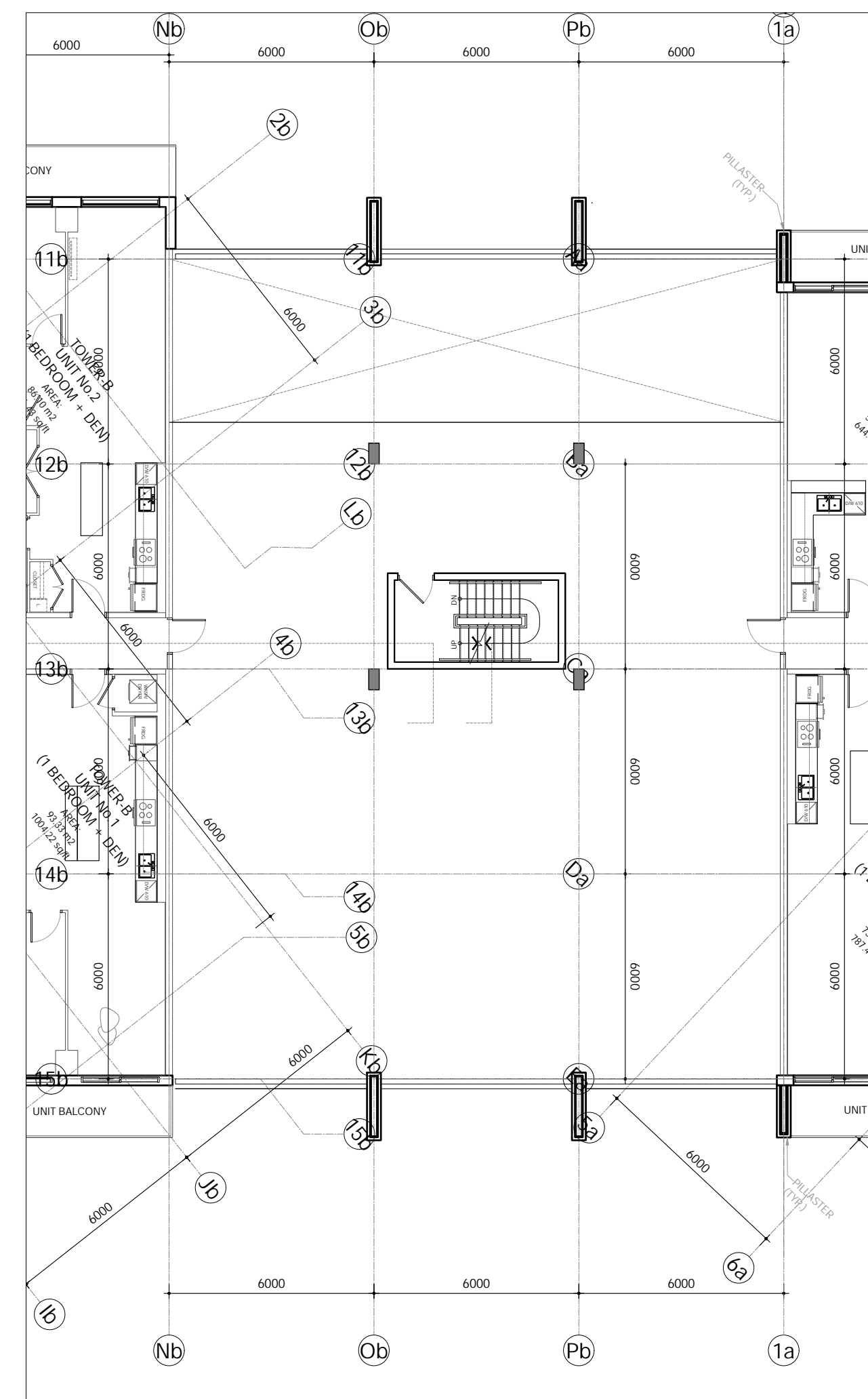
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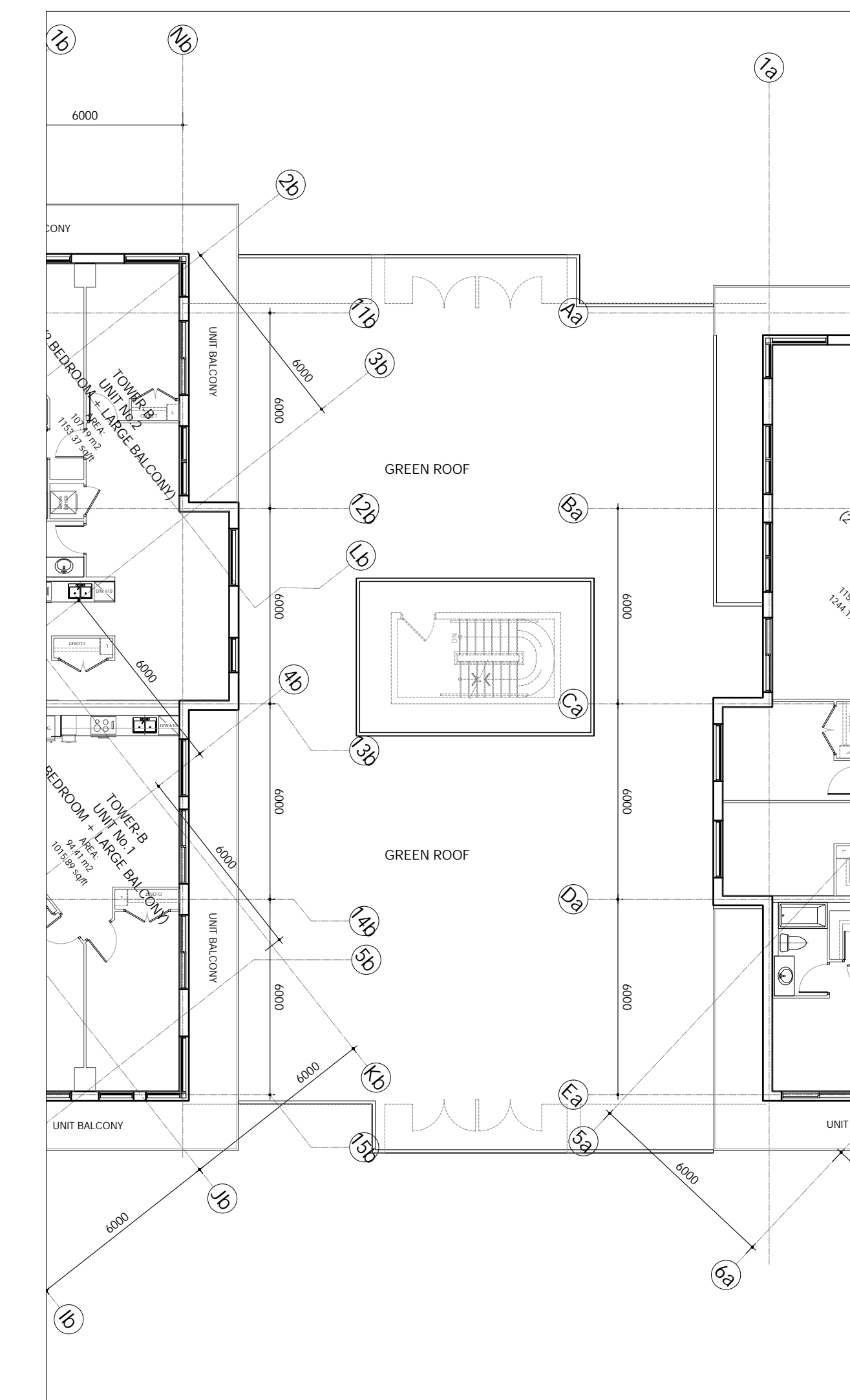
KEY PLAN



1 MAIN FLOOR PLAN - MAIN AMENITY CORE
SCALE: 1:150



2 2ND FLOOR PLAN - MAIN AMENITY CORE
SCALE: 1:150



3 3RD FLOOR PLAN - MAIN AMENITY CORE
SCALE: 1:150

| No. | DESCRIPTION | DATE |
|-----|-------------------------|------------|
| 1 | ISSUED FOR CONSTRUCTION | 20/04/2020 |

| No. | DESCRIPTION | DATE |
|-----|-------------------------|------------|
| 1 | ISSUED FOR CONSTRUCTION | 20/04/2020 |

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ISSUED FOR SITE PLAN APPROVAL

ISSUED FOR SUBMITTALS

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PROPOSED MIX-USE CONDO DEVELOPMENT
 12148 ALBION VAUGHAN RD.
 BOLTON
 TOWN OF CALEDON

DRAWING: MAIN AMENITY CORE - PLANS

DATE: 09/12/2020 PROJECT No: 2019-22

SCALE: AS NOTED DRAWING No: A2.6

DESIGNED BY: AD REVIEWED BY: F.C.

PLOT SCALE: 1" = 150'



1 WEST ELEVATION - TOWER A
A3.0 SCALE: 1:150



2 NORTH ELEVATION - TOWER A
A3.0 SCALE: 1:150



3 NORTH ELEVATION - TOWER A
A3.0 SCALE: 1:150



4 EAST ELEVATION - TOWER A
A3.0 SCALE: 1:150

EXTERIOR FINISH SCHEDULE

- 1 BRICK VENEER
- 2 MASONRY UNITS
- 3 VINYL WINDOWS W/ CLEAR VISION GLASS (BLACK FRAMES)
- 4 CLEAR VISION GLASS SLIDING DOORS (BLACK)
- 5 SPANDREL GLASS (DARK GREY REFLECTIVE)
- 6 ALUMINUM RAILING (DARK GREY) W/ TEMPERED LAMINATED VISION GLASS
- 7 CONCRETE BALCONIES SMOOTH CONCRETE FINISH (GREY)
- 8 ALUMINUM COMPOSITE MATERIAL (DARK GREY)
- 9 PREFINISHED METAL FLASHING (BLACK)
- 10 ALUMINUM METAL SIDING (LONGBOARD - WESTERN CEDAR)
- 11 BRICK VENEER SOLDIER COURSE
- 12 PRECAST SILL (GREY)
- 13 CLEAR VISION GLASS ALUMINUM FRAME CURTAIN WALL (BLACK FRAMES)
- 14 GLASS CANOPY
- 15 WALL SCONCE LIGHTING

| No. | ISSUED FOR | DESCRIPTION | DATE |
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REVISIONS

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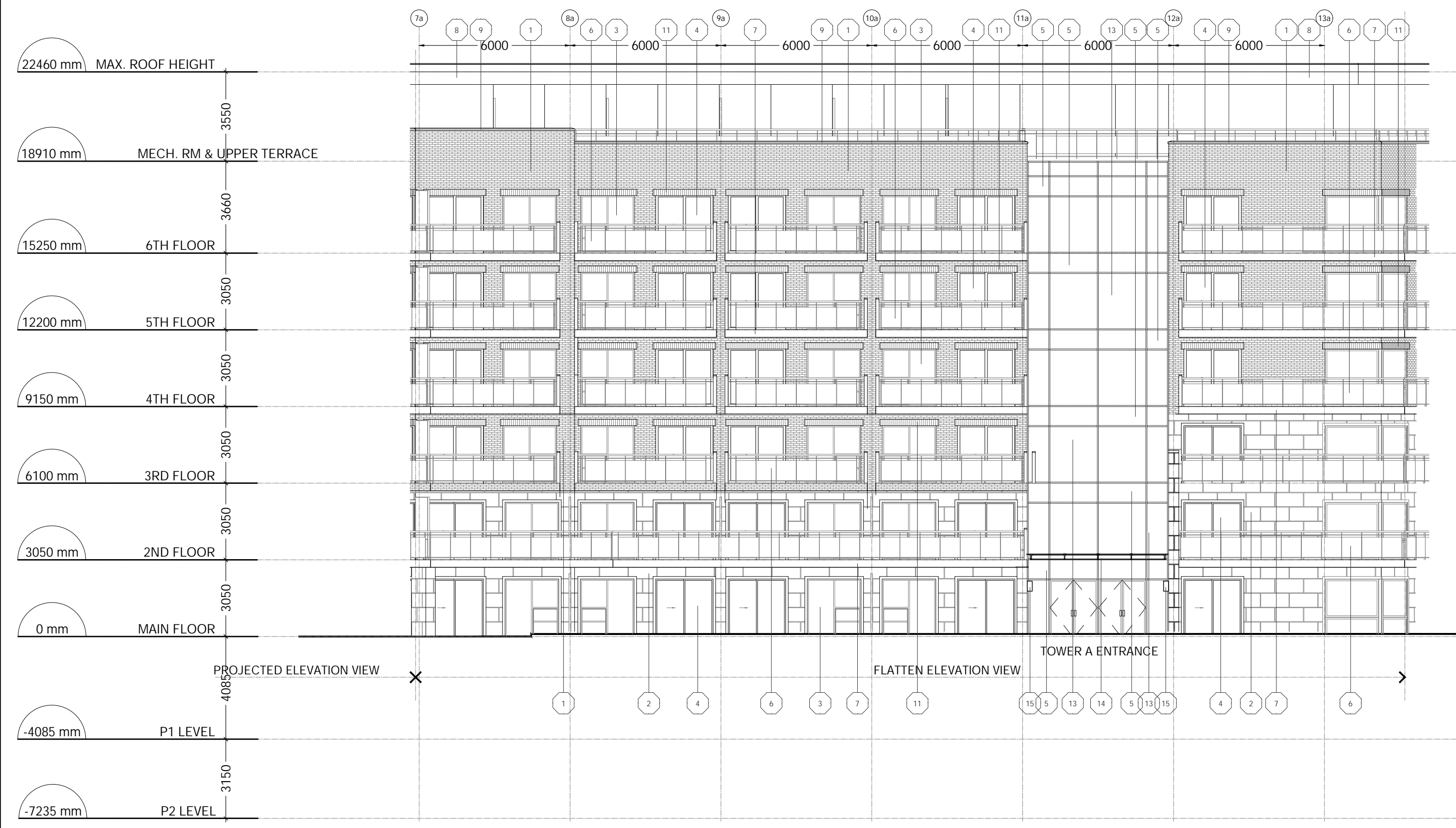
ISSUED FOR CONSTRUCTION
ISSUED FOR BID
ISSUED FOR BUILDING PERMIT
ISSUED FOR SITE PLAN APPROVAL
SUBMITTALS
CONTRACTORS MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND MUST REPORT ANY DISCREPANCIES TO THE DESIGNER BEFORE PROCEEDING WITH CONSTRUCTION.
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DO NOT SCALE DRAWINGS.



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PROPOSED MIX-USE CONDO DEVELOPMENT
12148 ALBION-VAUGHAN RD
TOWN OF CALEDON

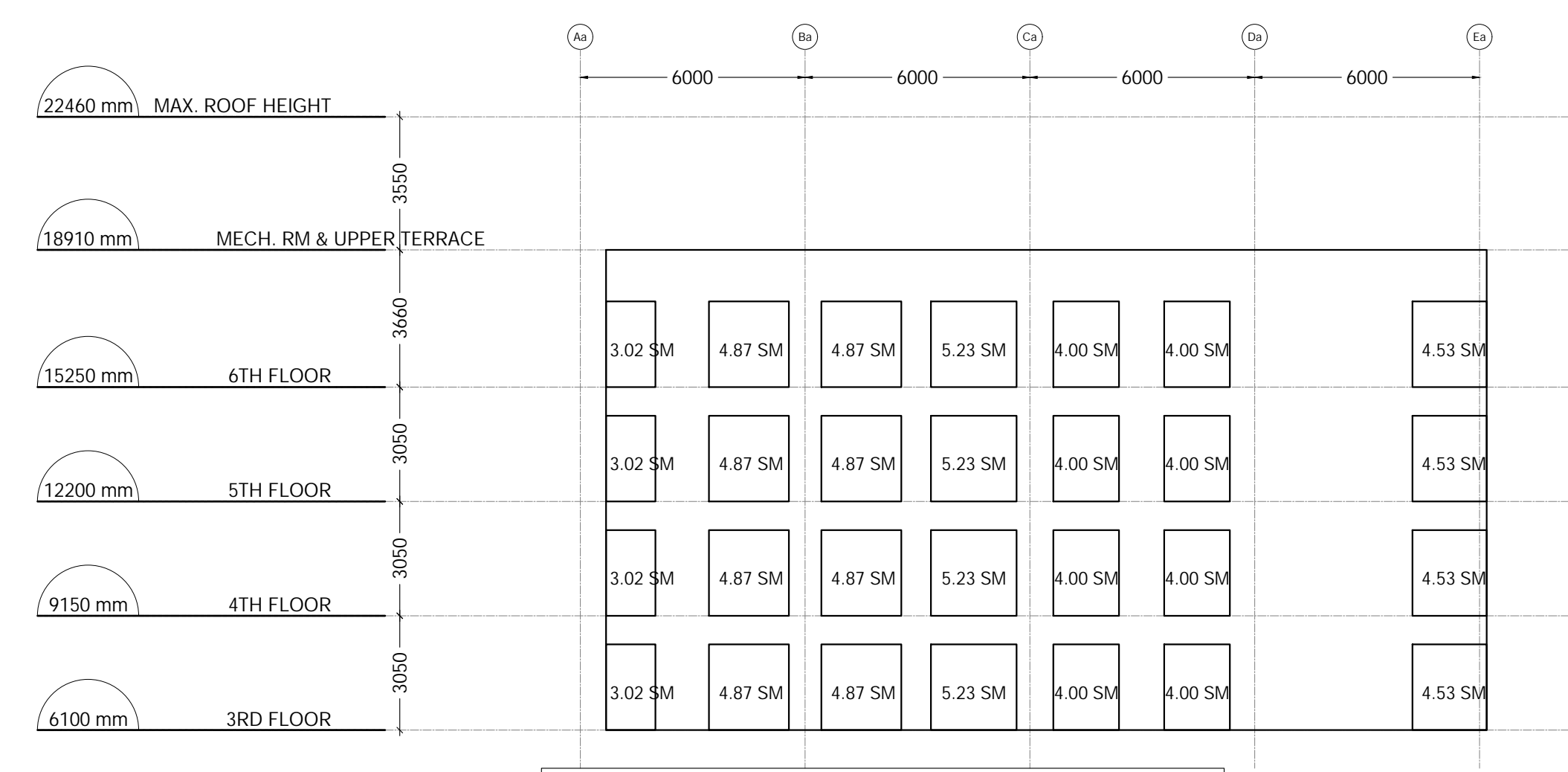
| DATE | PROJECT NO. |
|-----------------|-------------------|
| 08/12/2022 | 2019-22 |
| SCALE: AS NOTED | DRAWING NO. A3.0 |
| DRAWN BY: AD | REVIEWED BY: F.C. |



1 EAST ELEVATION - TOWER A
A3.1 SCALE: 1:150

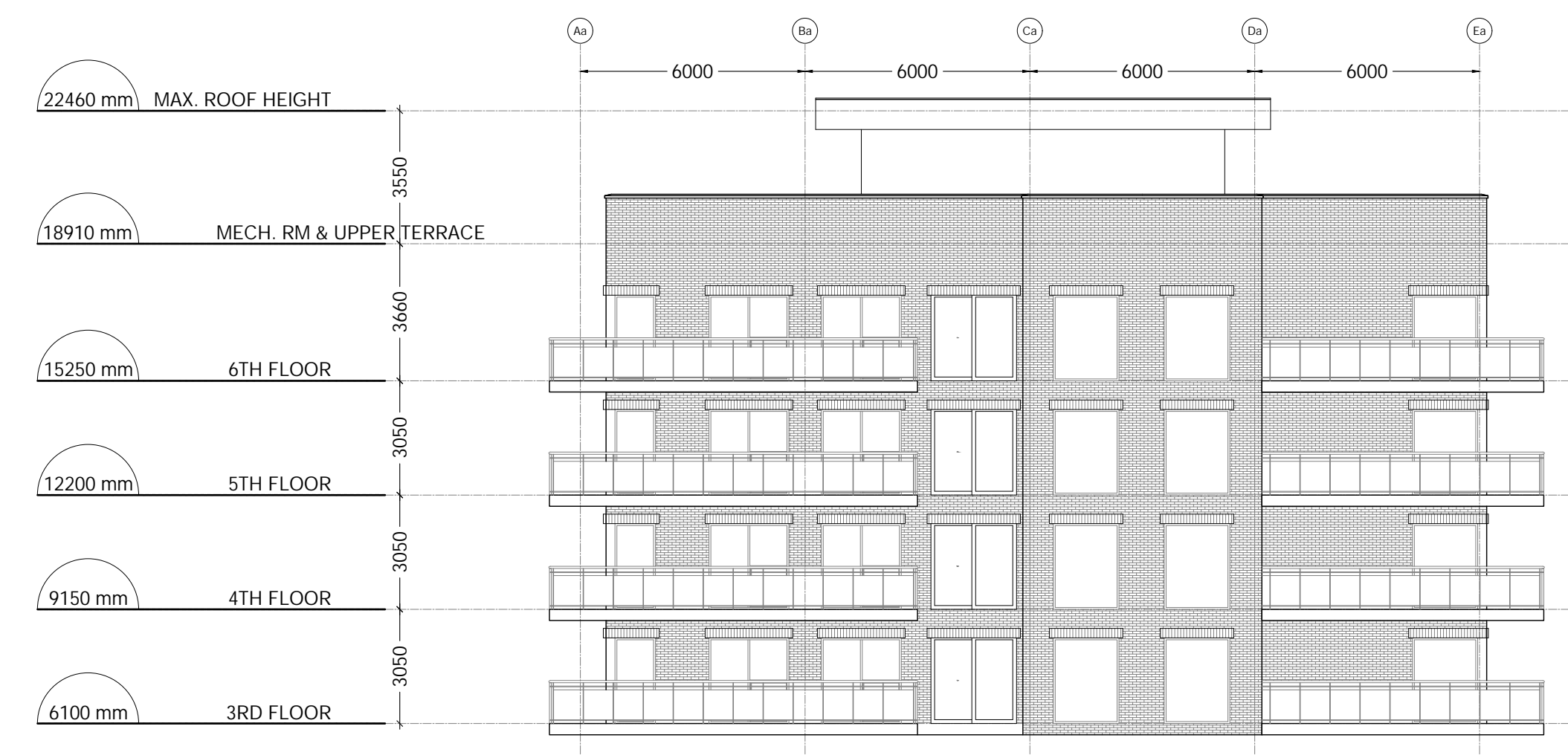


2 EAST ELEVATION - OVERALL
A3.1 SCALE: 1:250

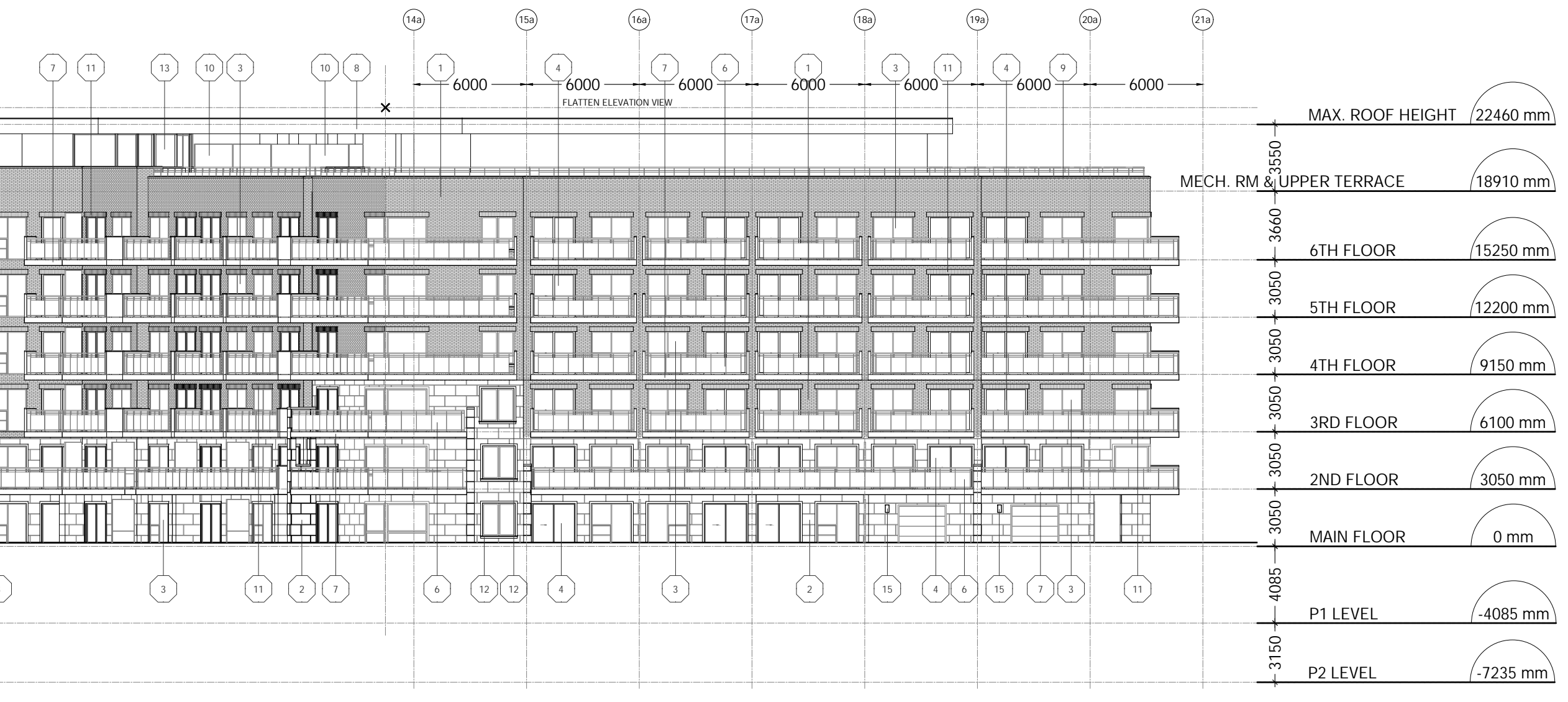


UNPROTECTED OPENING LIMITS:
 TOTAL AREA OF WALL = 301.07 SM
 AREA OF UNPROTECTED OPENINGS PROVIDED = 152.60 SM
 % OF UNPROTECTED OPENINGS PROVIDED = 50.7%
 % OF UNPROTECTED OPENINGS ALLOWED @ 7.2m LIMITING DISTANCE = 66%

4 UNPROTECTED OPENING LIMIT SOUTH ELEVATION BETWEEN AMENITIES - TOWER A
A3.1 SCALE: 1:150



3 SOUTH ELEVATION BETWEEN AMENITIES - TOWER A
A3.1 SCALE: 1:150



EXTERIOR FINISH SCHEDULE

- 1 BRICK VENEER
- 2 MASONRY UNITS
- 3 VINYL WINDOWS W/ CLEAR VISION GLASS (BLACK FRAMES)
- 4 CLEAR VISION GLASS SLIDING DOORS (BLACK)
- 5 SPANDREL GLASS (DARK GREY REFLECTIVE)
- 6 ALUMINUM RAILING (DARK GREY) W/ TEMPERED LAMINATED VISION GLASS
- 7 CONCRETE BALCONIES SMOOTH CONCRETE FINISH (GREY)
- 8 ALUMINUM COMPOSITE MATERIAL (DARK GREY)
- 9 PREFINISHED METAL FLASHING (BLACK)
- 10 ALUMINUM METAL SIDING (LONGBOARD - WESTERN CEDAR)
- 11 BRICK VENEER SOLDIER COURSE
- 12 PRECAST SILL (GREY)
- 13 CLEAR VISION GLASS ALUMINUM FRAME CURTAIN WALL (BLACK FRAMES)
- 14 GLASS CANOPY
- 15 WALL SCONCE LIGHTING

| No. | DESCRIPTION | DATE |
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| REVISIONS | | |

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PROPOSED MIX-USE CONDO DEVELOPMENT
 12148 ALBION-VAUGHAN RD
 BOLTON
 TOWN OF CALEDON

| | |
|-------------------------------|---------------------|
| DRAWING: ELEVATIONS - TOWER A | |
| PLOTTED: N/A | |
| DATE: 08/12/2022 | PROJECT NO: 2019-22 |
| SCALE: AS NOTED | DRAWING NO: A3.1 |
| DRAWN BY: AD | REVIEWED BY: F.C. |



1 SOUTH ELEVATION - TOWER B
A3.2 SCALE: 1:150



2 WEST ELEVATION - TOWER B
A3.2 SCALE: 1:150

EXTERIOR FINISH SCHEDULE

- 1 BRICK VENEER
- 2 MASONRY UNITS
- 3 VINYL WINDOWS W/ CLEAR VISION GLASS (BLACK FRAMES)
- 4 CLEAR VISION GLASS SLIDING DOORS (BLACK)
- 5 SPANDREL GLASS (DARK GREY REFLECTIVE)
- 6 ALUMINUM RAILING (DARK GREY) W/ TEMPERED LAMINATED VISION GLASS
- 7 CONCRETE BALCONIES SMOOTH CONCRETE FINISH (GREY)
- 8 ALUMINUM COMPOSITE MATERIAL (DARK GREY)
- 9 PREFINISHED METAL FLASHING (BLACK)
- 10 ALUMINUM METAL SIDING (LONGBOARD - WESTERN CEDAR)
- 11 BRICK VENEER SOLDIER COURSE
- 12 PRECAST SILL (GREY)
- 13 CLEAR VISION GLASS ALUMINUM FRAME CURTAIN WALL (BLACK FRAMES)
- 14 GLASS CANOPY
- 15 WALL SCONCE LIGHTING

| No. | ISSUED FOR | DESCRIPTION | DATE |
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| No. | ISSUED FOR | DESCRIPTION | DATE |
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| 1 | ISSUED FOR CONSTRUCTION | | |
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| 3 | ISSUED FOR BUILDING PERMIT | | |
| 4 | ISSUED FOR SITE PLAN APPROVAL | | |
| 5 | SUBMITTALS | | |

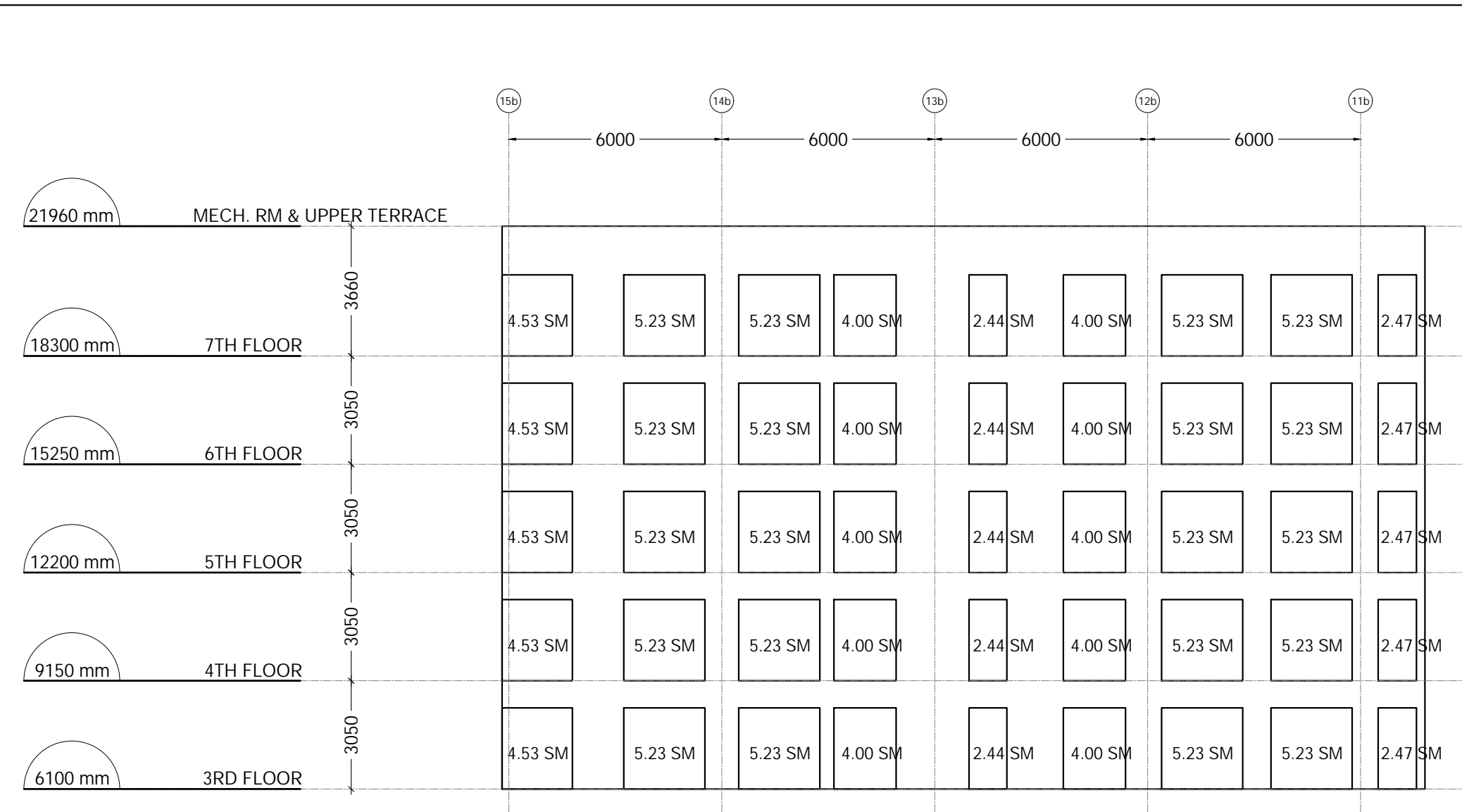
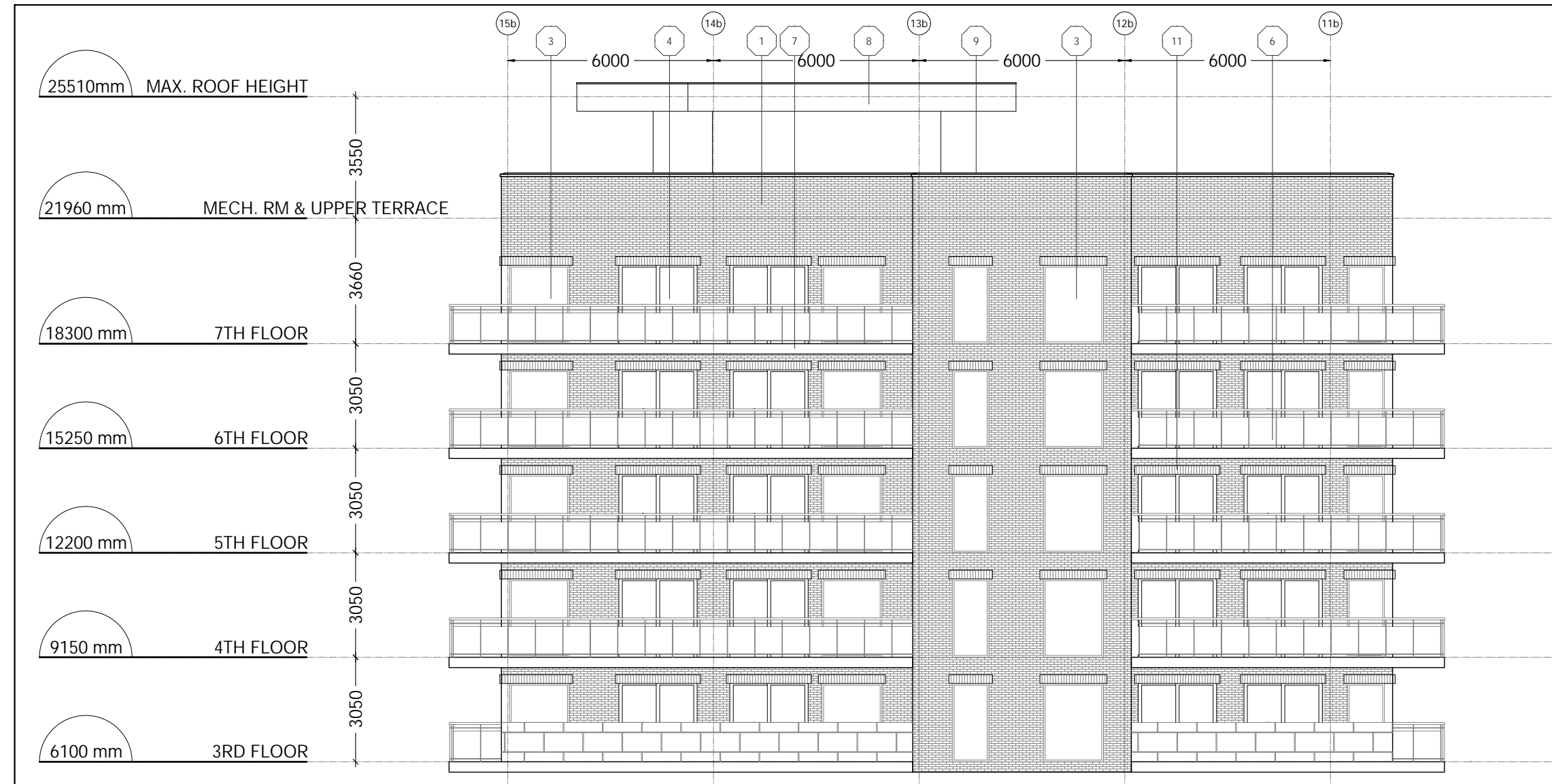
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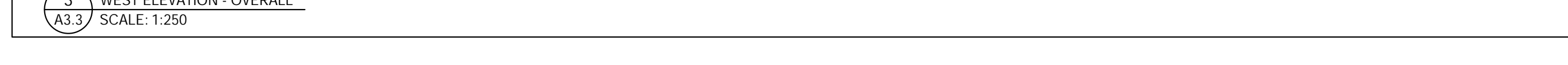
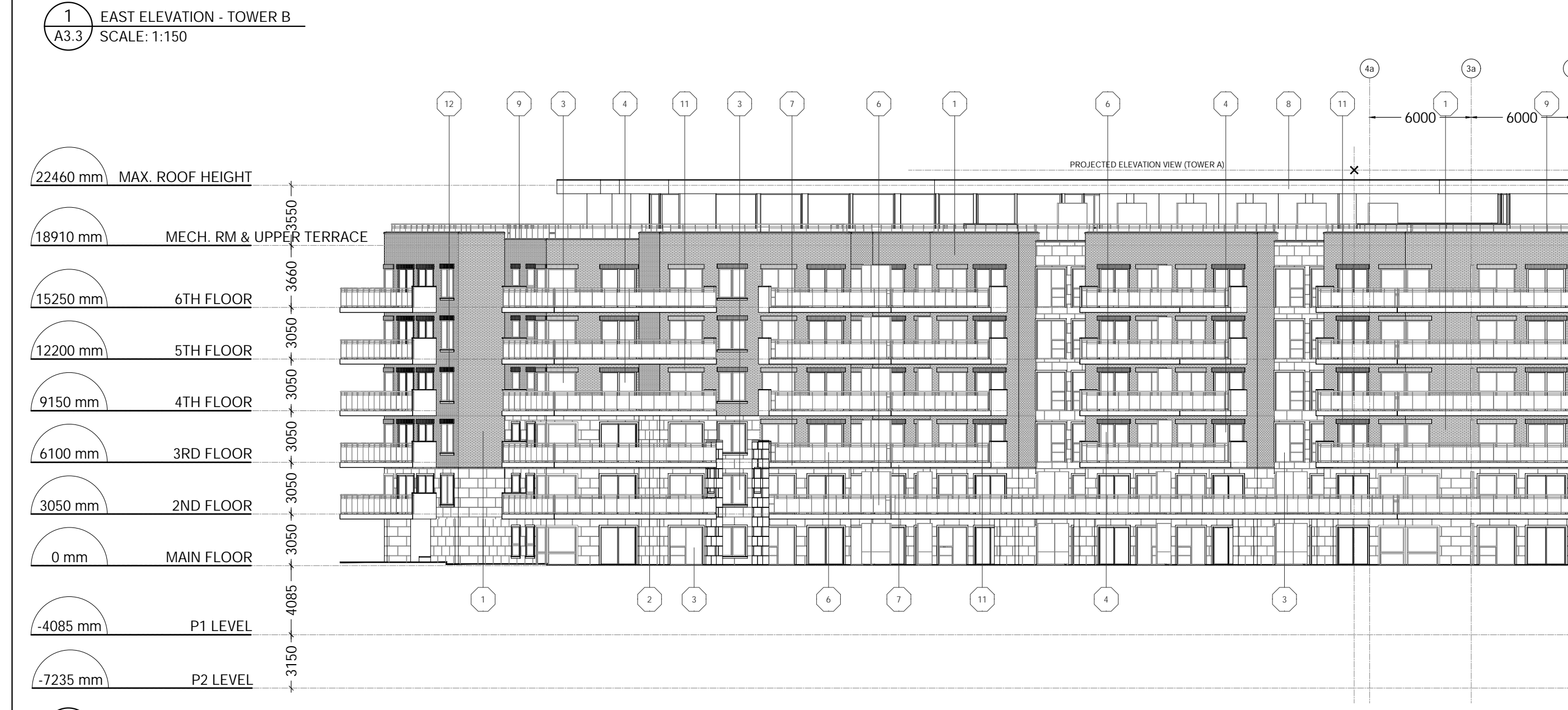
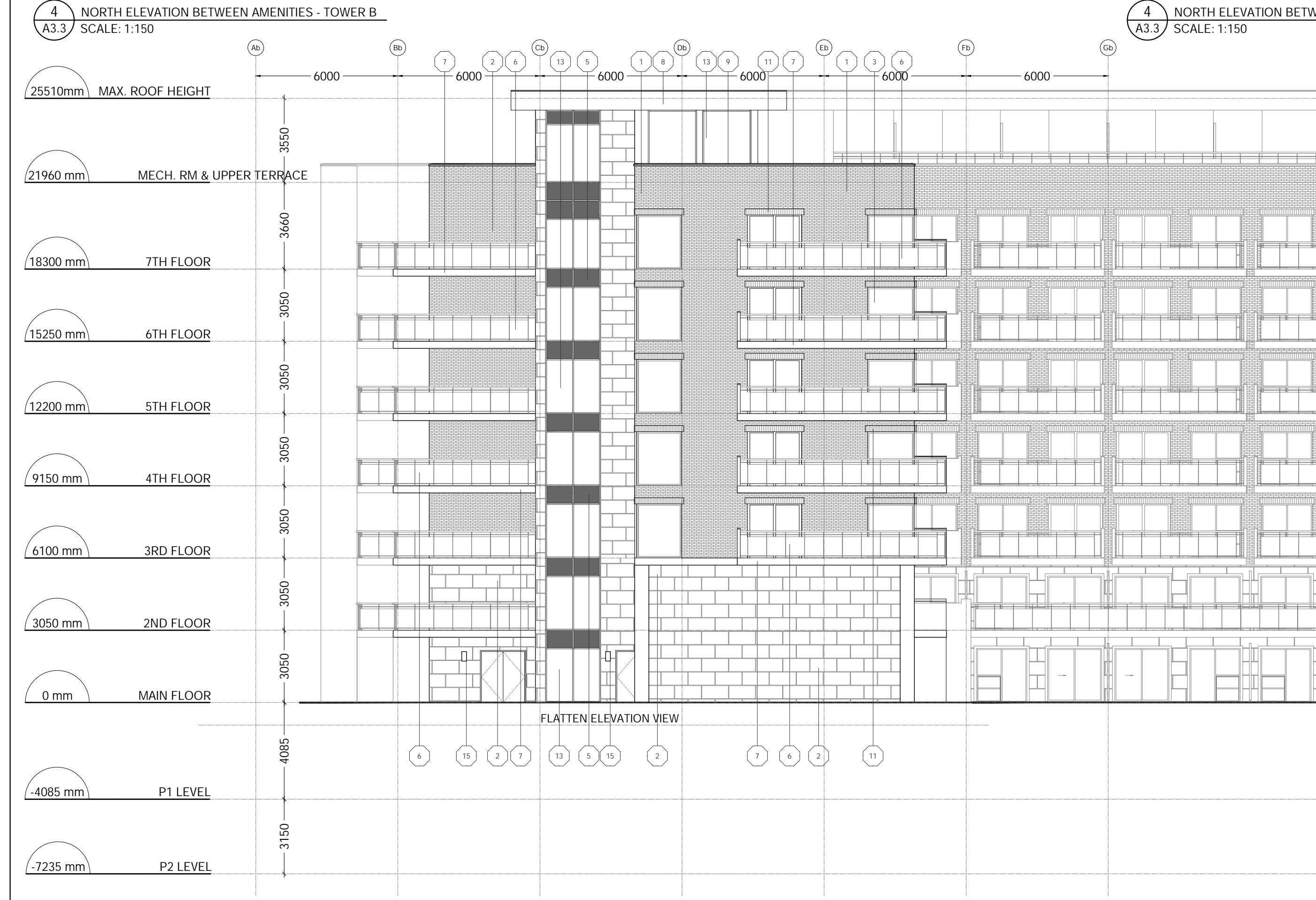
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PROPOSED MIX-USE CONDO DEVELOPMENT
12148 ALBION-VAUGHAN RD
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TOWN OF CALEDON

| DRAWING: ELEVATIONS TOWER B | |
|-----------------------------|---------------------|
| DATE: 23/09/2022 | PROJECT No: 2019-22 |
| SCALE: AS NOTED | DRAWING No: A3.2 |
| DRAWN BY: AD | REVIEWED BY: F.C. |



UNPROTECTED OPENING LIMITS:
 TOTAL AREA OF WALL = 412.40 SM
 AREA OF UNPROTECTED OPENINGS PROVIDED = 191.80 SM
 % OF UNPROTECTED OPENINGS PROVIDED = 46.5%
 % OF UNPROTECTED OPENINGS ALLOWED @ 7.2m LIMITING DISTANCE = 66%



EXTERIOR FINISH SCHEDULE

| | |
|----|---|
| 1 | BRICK VENEER |
| 2 | MASONRY UNITS |
| 3 | VINYL WINDOWS W/ CLEAR VISION GLASS (BLACK FRAMES) |
| 4 | CLEAR VISION GLASS SLIDING DOORS (BLACK) |
| 5 | SPANDREL GLASS (DARK GREY REFLECTIVE) |
| 6 | ALUMINUM RAILING (DARK GREY) W/ TEMPERED LAMINATED VISION GLASS |
| 7 | CONCRETE BALCONIES SMOOTH CONCRETE FINISH (GREY) |
| 8 | ALUMINUM COMPOSITE MATERIAL (DARK GREY) |
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| 11 | BRICK VENEER SOLDIER COURSE |
| 12 | PRECAST SILL (GREY) |
| 13 | CLEAR VISION GLASS ALUMINUM FRAME CURTAIN WALL (BLACK FRAMES) |
| 14 | GLASS CANOPY |
| 15 | WALL SCONCE LIGHTING |

| No. | ISSUED FOR | DATE |
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| 1 | ISSUED FOR CONSTRUCTION | |
| REVISIONS | | |
| | DESCRIPTION | |

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PROPOSED MIX-USE CONDO DEVELOPMENT
 12148 ALBION-VAUGHAN RD
 BOLTON
 TOWN OF CALEDON

ELEVATIONS TOWER B

DATE: 23/09/2022 PROJECT NO: 2019-22
 SCALE: AS NOTED DRAWING NO: A3.3
 DRAWN BY: AD REVIEWED BY: F.C.

Appendix D

Region of Peel Comments and HGC Responses



ACOUSTICS



NOISE



VIBRATION

Region of Peel Comments dated August 6, 2022

HGC Responses in Blue

- The combined noise level of the transportation noise sources (Highway 50) and stationary noise sources must be presented. Please include a table summarizing the unmitigated and mitigated resultant DBA sound levels for the units.

Noted. Comment was further clarified with the Region of Peel, and an assessment of stationary noise as well as transportation noise are included in the updated report. Noise mitigation measures are provided for both transportation and stationary noise.

- Please ensure that the Warning Clauses recommended in the study are consistent with the Region's guidelines. Once a table summarizing the unmitigated and mitigated resultant combined DBA sound levels is included, the warning clauses may need to be revised.

Noted. Warning Clauses revised as per Region of Peel's guidelines.