Oakville TOC Development
Solid Waste Management Plan

217-227 Cross Avenue and 571-587 Argus Cross Road, Oakville ON

Oakville Argus Cross LP
90 Wingold Avenue, Unit 1
Toronto ON M6B 1P5

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October 2024
300054098.1000

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Record of Revisions

Revision	Date	Description
0	March 28, 2024	Issued for Rezoning, OLT and SPA
1	September 25, 2024	Issued for Oakville TOC Submission
2	October 4, 2024	Revised for Oakville TOC Submission Comments

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Waste Management Comment-Location Matrix

The table below addresses previous comments from Region of Halton, Waste Management. This table is not comprehensive of all comments received, instead providing a general overview of where key requirements are addressed within this Waste Management Plan.

Requirement / Comment from Halton Region	Applicable Part of Development	Report Location
Storage and collection of commercial waste in a manner that is safe, functional, and accessible.	Towers 1, 2, and 3	Described in Section 2.6 and illustrated in Appendix A, Drawing #A201.S
Bulk waste storage room is indicated on the site plan.	Towers 1, 2, and 3	Illustrated in Appendix A, Drawing #A152.S
Show number and size of waste room receptables in waste storage rooms.	Towers 1, 2, and 3	Described in Section 2.1 and illustrated in Appendix A, Drawing #A152.S
Show configuration of waste containers and compacting and sorting equipment in waste storage rooms.	Towers 1, 2, and 3	Described in Sections 2.1 and 2.2, and illustrated in Appendix A, Drawing #A152.S
Minimum door width of 2.2 m for bin passage.	Towers 1, 2, and 3	Described in Section 2.1 and illustrated in Appendix A, Drawing #A152.S
Show configuration of waste containers in staging area.	Towers 1 and 3	Described in Section 2.6.2 and illustrated in Appendix A, Drawing #A201.S
Truck turning plan showing waste collection route (to and from municipal road).	Towers 1 and 3	Illustrated in Appendix B
Turning Radius of 13 m from the center line.	Towers 1 and 3	Illustrated in Appendix B

Requirement / Comment from Halton Region	Applicable Part of Development	Report Location
Minimum 18 m head-on approach and maximum 18 m reversal distance.	Towers 1 and 3	Reversal distance illustrated in Appendix B. The Site is constrained such that an 18 m straight ahead approach is not achievable, Per Requirements, 2.3.1.5, the collection vehicle can enter the Site, collect the waste, and exit the Site without backing more than 18 m, and not backing onto a municipal road.
Loading area overhead clearance of 7.5 m and minimum width of 6 m.	Towers 1 and 3	Illustrated on Appendix A, Drawing #A201.S
Access to loading area must be clear of obstructions.	Towers 1 and 3	Illustrated in Appendix A Drawing #A201.S
Collection Point level (± 2%).	Towers 1, 2, and 3	Described in Section 2.6.2
Weight capacity of loading area (35,000 kg).	Towers 1, 2, and 3	Described in Section 2.6.2

1.0 Introduction

This document describes the preliminary Solid Waste Management Plan (Plan) for the proposed Oakville Transit Oriented Communities (TOC) site located at 217-227 Cross Avenue and 571-587 Argus Road in the Town of Oakville, Ontario.

Ontario's TOC program is a government initiative focused on creating lively, pedestrian-friendly, and sustainable urban areas near major transit stations. By combining residential, commercial, and public areas with transit infrastructure, the program aims to decrease car dependency, increase public transportation usage, and enhance overall accessibility. Additionally, it seeks to stimulate economic growth and promote the development of affordable housing.

This Plan is intended for municipal review during the developmental approvals process. R.J. Burnside & Associates Limited (Burnside) acknowledges that the existing design features minor deficiencies related to waste management operation, most of which have been identified with this submission. These deficiencies will be addressed in future iterations of the design. As such, the development's Site Plan is expected to change during the Zoning By-law Amendment (ZBA) and / or Site Plan Approval (SPA) process. However, it is expected that the general methods of handling solid waste as expressed in this report will not require revision.

This report is based on the '217-227 Cross Avenue and 571-587 Argus Road' drawing set, dated September 24, 2024. Table 1 provides a list of drawings from this package that are contained in Appendix A. These drawings describe the solid waste management system for residential and non-residential wastes.

Table 1: Appendix A Drawing List

Drawing No.	Drawing Title
A101.S	Site Plan and Statistics
A152.S	P1 and P1 Mezzanine Underground Plans
A201.S	Ground and Second Floor Plans
A401.S	Building A and B – East and North Elevations
A402.S	Building A and B – West and South Elevations
A403.S	Building C – East and North Elevations
A404.S	Building C – West and South Elevations

This proposed Oakville TOC development consists of three Towers (i.e., Tower 1, Tower 2, and Tower 3)[1] featuring:

- 1,977 residential units.

[1] The architectural set refers to these Towers as Buildings A, B, and C, respectively. Arup comments dated October 1, 2024, specifically requested Burnside's Plan refer to them as Towers 1, 2, and 3.

  - Tower 1 will be 46-storeys[2] and will contain 536 residential units.
  - Tower 2 will be 52-storeys and will contain 659 residential units.
  - Tower 3 will be 59-storeys and will contain 782 residential units.
- Approximately 3,730 m^2 Gross Floor Area (GFA) of commercial space.
  - Tower 1 has 504 m^2 of retail space on the ground floor.
  - Tower 2 has 215 m^2 of retail space on the ground floor.
  - Tower 3 has 886 m^2 of retail space on the ground floor and 2,125 m^2 of office space on Level 2.
- 6 ½ levels of underground parking.
  - All three Towers are connected at these parking levels.
- Each Tower has their own residential waste storage room located on Level P1.
- Non-residential waste storage rooms for commercial and office tenants are located on the ground floors of all Towers.
- Towers 1 and 2 will share a waste Collection Point (includes loading and staging area) located on the ground floor of Tower 1.
- Tower 3 will have its own Collection Point (also located on the ground floor).

During discussions with Halton Region and comments received, they have indicated that all waste streams could be collected twice per week (or more frequently). The design of this development assumes each stream will be collected twice per week. From a building maintenance / operating perspective, the twice per week collection schedule is expected to be similar to once per week collection. Increasing beyond twice per week collections would increase operating costs.

As noted in comments from Halton Region staff, the development will not be eligible to receive non-residential waste collection services. Therefore, private collection must be arranged. The management of non-residential wastes is discussed in Section 3.0.

1.1 Design Resources

In preparing this report, Burnside has considered the following sources:

- Halton Region – 'Development Design Guidelines for Source Separation of Solid Waste, Regional Official Plan Guidelines', Version 1.0 dated June 2014.
- Pre-consultation Comments Report from the Town of Oakville dated June 28, 2023.
- Waste Management Meeting with Halton Region's Waste Management Team dated September 18, 2023, and other direct communications with Halton staff.
- Halton Region – By-law No. 123-12 and No. 88-15.
- Waste Diversion Ontario – Continuous Improvement Fund (CIF) Report 219: Best Practices for the Storage and Collection of Recyclables in Multi-residential Buildings, dated February 2011.

[2] All floor counts include the podiums for each Tower.

- Waste Diversion Ontario – Continuous Improvement Fund (CIF)
  Report 723: Multi-residential Project Debriefing Series, dated March 14, 2014.
- *Resource Recovery and Circular Economy Act*, 2016.
- Ontario Food and Organic Waste Framework, dated April 2018.

1.1.1 Halton Region Guidelines

Halton Region's (Region) 'Development Design Guidelines for Source Separation of Solid Waste' document (hereinafter, the 'Guidelines') outline the requirements to obtain approval for municipal waste collection services. Following the Guidelines provides some flexibility to address future solid waste management needs and programs. In addition, the Region's municipal waste collection services are preferred over private services when considering long-term operating costs for the development.

Based on the Guidelines, the residential portion of this development is expected to be compatible with Regional provided recycling, organics, and refuse collection. This waste management plan for the development is sufficiently flexible to allow future revision of Regional waste collection processes, including privatization and changes anticipated by the *Resource Recovery and Circular Economy Act* (RRCEA).

1.1.2 Other Considerations

In addition to the Region's Guidelines, Burnside considered Continuous Improvement Fund (CIF) Report 219 and Report 723 related to multiunit residential buildings for their waste management effectiveness. Both reports made recommendations for the design and operation of waste management systems for new multi-residential buildings. The findings of the CIF reports are consistent with Region's Guidelines. Burnside has also studied the Ontario Food and Organic Waste Framework which outlines the objective of increasing resource recovery (from food and organic waste in particular) from multi-unit residential buildings.

2.0 Residential Waste Management System Elements

2.1 Waste Storage Rooms

Towers 1, 2, and 3 provide residents with equal access for waste disposal. Each Tower has its own Residential Waste Storage Room, as well as a separate Bulky Waste Storage Room, located on Level P1. In accordance with Sections 1.9.2 and 1.9.3 of the Guidelines, each Residential Waste Storage Rooms for this development will feature the following:

- A chute system, consisting of three separate chutes for recyclables, organics, and garbage, to deliver these wastes to the Residential Waste Storage Rooms.
  - The chute system will be accessible to all residential units via internal corridors.
  - Controls at chute access points include an interlock to prevent simultaneous access and access during maintenance.
- Each Residential Waste Storage Room will have a compactor to minimize the number of bins required for garbage storage.
- Aside from the Bulk Waste Room, all waste storage rooms (for residential and non-residential waste – see Section 3.0) will be locked and inaccessible to residents. See additional details in Section 2.3.
- All waste storage rooms, including Bulky Waste Storage Rooms, will be rodent proof, properly ventilated, and include a hose bib and floor drain for periodically washing the room, equipment, and waste containers (carts and bins). Should it be necessary, odour and insect issues can be addressed by:
  - Increasing the cleaning efforts for the room and its equipment.
  - Adding odour neutralizer sprays in the waste room(s).
  - Increasing the ventilation (air changes per hour).
  - Adding an in-room air filter / odour control unit.
  - Reducing the storage temperature (air conditioning).
- All residential waste storage rooms have an overhead door to accommodate movement of waste containers. These doors will be a minimum of 2.2 m wide.

2.2 Equipment Requirements

Three chutes will lead recyclables, organic waste, and garbage into each Residential Waste Storage Room. The following equipment will be located under each chute:

- Recyclables chute: 4 yd^3 front-load bins for storing recyclables.
- Organics chute: 360 L semi-automated carts for storing organics waste[3].
- Garbage chute: A compactor that loads 3 yd^3 front-load bins for storing garbage.

[3] May be replaced by 2 yd^3 front-load bins in the future, should this be adopted by the Region.

Waste storage container needs (bin counts), based on updated information from the Region's Multi-residential Waste Diversion Coordinator[4]. These rates assume once per week collection as follows:

a) Recycling (loose):

    a) 56 residential units can be serviced by one 4 yd^3 front-lift bin.

Organics:

    b) One 360 L (0.34 yd^3) organics bin is required for every 25 residential units.

Garbage (compacted):

    c) 54 residential units per 3 yd^3 front-lift bin.

As noted in Section 1.0, the development has been designed to operate on a twice per week collection for all streams, meaning there is a maximum of four days between collection for any waste stream. Burnside has therefore reduced the container counts to $4/7^{ths}$, rounded up to a whole number. Further detail on this collection schedule has been provided in Section 2.6.1.

Table 2 outlines the minimum container counts and requirements of other equipment for each Residential Waste Storage Room. Maintenance staff will check the bins daily to ensure those reaching capacity are exchanged for empty ones. They will also control access to the Residential Waste Storage Room as there are safety concerns associated with the chutes and the garbage compactor.

[4] Garbage and recycling bin ratios were provided to Burnside via March 22, 2022, email from Halton Region's Multi-Residential Waste Diversion Coordinator, Andrew Suprun. These values update Halton's Guidelines.

Table 2: Residential Waste Storage Room Equipment

Item	Stream/Use	Quantity		
		Tower 1 (536 Units)	Tower 2 (659 Units)	Tower 3 (782 Units)
4 yd^3 front-lift container (loose)	Recycling	7	8	9
360 L semi-automated carts	Organics	14	17	19
3 yd^3 front-lift container (compaction type)	Garbage (compacted)	7	8	10
Waste Compactor	Compacts garbage into the 3 yd^3 front-lift bins	1	1	1
Cart Trailer	To move carts	1		
Tractor	Moves bin pullers and cart trailers	1		

Note:
Container counts (carts and bins) assume twice per week collection.
Container counts include one extra for continuous service during collection.

The layout of the waste containers in each Residential Waste Storage Room is shown on their respective floor plans, attached as Appendix A. The Residential Waste Storage Room designs accommodate the spatial requirements for all equipment identified in Table 2, and provides space for an additional (extra) organic cart(s), recycling bin(s), and garbage bin(s), as illustrated in each Residential Waste Storage Room in Appendix A. The current design also includes additional space to facilitate more efficient bin movements.

The design of the Residential Waste Storage Rooms also provides flexibility to accommodate future changes to the development's solid waste management requirements such as:

- Storage space for any additional equipment required for solid waste management.
- A revised mixture of containers. For example, in the future, organics could be stored in 2 yd^3 front lift bins.
- Producer Responsibility Organization(s) implementation of two-stream recyclables (e.g., fiber and containers) collection.

2.3 Bulky Waste Disposal

Bulky Waste Storage Room, at least 10 m^2, will be located adjacent to each Residential Waste Storage Room. Bulky waste items such as used furniture, mattresses,

appliances, etc., will be temporarily stored in this room. This material will be collected by the Region as coordinated by the Property Manager.

The Bulky Waste Storage Rooms will be operated in a manner ensuring controlled access to residents. Access to these rooms will be facilitated either through the use of a key card system or by staff providing escorted entry. Giving residents easy access, via key card, will provide convenience and reduce bulky wastes from being forced down the waste chutes. Regular supervision of these rooms (i.e., through property management staff checks or via video camera) will help ensure unacceptable wastes (see Section 2.5) or materials that are subject to a stewardship or Product Care Association program (such as automotive tires, paints, and electronics) will not be left in the rooms. Should misuse and disposal of unacceptable wastes occur during operation of these rooms, then access can be limited to staff escorted use.

Halton Region also supplies a 40 yd^3 roll-off bin twice per year for bulky waste collection. If required, this bin will be placed in an outdoor area acceptable to Property Management Staff and the Region. Property Management Staff will contact the Region to coordinate the delivery and collection of the bin.

2.4 Grounds Keeping, Maintenance, and Renovations

It is anticipated that waste generated by minor building maintenance activities, such as replacing broken fixtures, light bulbs, etc. (but excluding those noted in Section 2.5), can be accommodated in the waste room.

Grounds keeping is expected to be a contracted service. The service provider will remove the leaf and yard waste as part of their contract.

Construction contractors will typically undertake significant renovations or maintenance projects. It is expected that wastes generated during the work will be removed as part of their contract.

2.5 Materials Not Collected

Waste materials not accepted by the Region's three stream waste collection program will not be collected by the Region. Similarly, these materials will not be accepted nor stored in the Residential Waste Storage Rooms. Residents with Hazardous and Special Products (HSP, sometimes called Household Hazardous Waste) or Electronics and Electrical Equipment (EEE) are responsible for their storage and disposal.

Residents are to handle and dispose of all waste in accordance with Halton Region's guidelines[5]. They may do so by using Return-to-Retailer programs or making use of the

[5] Information on how alternate waste streams must be disposed / recycled can be found on the Region's website, www.halton.ca/waste (accessed September 2024).

Halton Waste Management Site. Generally, the Halton Waste Management Site accepts all waste types, including those not collected by the development's waste management system. Residents must deliver their waste to the Halton Waste Management Site or retailer themselves.

The waste materials that are collected may change as Individual Producer Responsibility (IPR) stewardship programs are developed under the RRCEA. For instance, the HSP program began in October 2021. Changes included additional take-back programs at retailers.

2.6 Waste Collection

All waste streams accumulated in each of the Residential Waste Storage Rooms (Section 2.1) and Bulky Waste Storage Areas (Section 2.3) of each Tower will be taken by maintenance staff to their respective loading /staging area (i.e., Collection Point), discussed in Section 2.6.2.

2.6.1 Collection Schedule

Based on Halton's comments and discussions with Halton Waste Management staff, a preliminary collection schedule has been proposed to accommodate the overall development's significant size (number of residential units). During discussions, Halton Region indicated that garbage could be collected three-times-per-week. However, to be conservative, the design assumes all streams would be collected twice-per-week. This reduces maintenance staff efforts and therefore operating costs. We are therefore assuming collection as follows:

- Recyclables – Monday and Thursday.
- Organics – Monday and Thursday.
- Garbage – Tuesday and Friday.

The Region has told Burnside that if collection of two streams happens on the same day (as is proposed above), both streams must await collection in the staging area simultaneously. In the future, the Region may provide additional collection days, or morning collection of one stream and afternoon collection of the second stream. However, the schedule remains unknown until the Region begins collection services.

Further, the Blue Box Transition under the RRCEA, Regulation 391/21, is scheduled to begin April 1, 2025, for the Town of Oakville. This may affect who collects recyclables and the Region's overall collection schedule.

Based upon the proposed collection schedule, both staging areas are appropriately sized to accommodate organics carts and recycling bins, representing a 'worst-case' schedule as shown in Appendix A. The staging area is also sized to allow collection of

organics and garbage on the same day, however same day collection of recycling and garbage cannot be accommodated.

Burnside assumes an acceptable non-residential waste collection schedule can be implemented that avoids conflicts with the Region's residential waste collection (see Section 2.6). Similarly, the collection schedule will accommodate future Blue Box material collection by the Producer Responsibility Organization without conflicts.

2.6.2 Loading / Staging Area Design

Waste from each of the Tower's will be collected as follows:

- Waste from Towers 1 and 2 will be collected at the shared Collection Point, located on the ground floor of Tower 1.
- Waste from Tower 3 will be collected at the Collection Point, located on the ground floor of Tower 3.

Each Collection Point is designed in accordance with Halton Guidelines so that the residential waste collection service provider does not need to exit the vehicle to jockey bins or carts while collecting the waste. Each Collection Point will feature:

- A loading area that is at least 6 m in width by 13 m in length.
- A minimum 7.5 m overhead clearance.
  - Having no overhead encumbrances (i.e., beams, sprinkler heads, etc.) below this height.
- A ± 2% grade.
- The ability to accommodate a 35,000 kg (35 tonne)[6] waste collection vehicle.

The Region's collection vehicle will be able to access the loading areas, as indicated in the vehicle movement diagrams, attached as Appendix B, showing the minimum 13 m centreline turning radii.

2.6.3 Collection Method

On each collection day, prior to 7:00 a.m., maintenance staff will move the waste containers from each Residential Waste Storage Room to their respective Collection Point. As illustrated with the 'Waste Route to Ground Floor Loading Room' in Appendix A, containers from Towers 1 and 2 will be transported through the P1 Level, up the parking ramp to the Collection Point located on the ground floor of Tower 1. Similarly, bins from Tower 3 will be transported through the P1 Level to the Collection

[6] Confirmation to be provided by others.

Point located on the ground floor of Tower 3. Containers (and bulky waste) will be moved by Tower staff using a ride-on tractor[7] and/or a cart trailer[8].

During collection, maintenance staff will assist in moving and positioning the containers to the collection vehicle. This will allow its driver to remain within the vehicle during collection, and not require multiple rows of bins in the staging area, positioned for collection (per Appendix 4 of the Guidelines, a minimum of 6 m width). Staff will then shuffle containers in the staging area as the tipping proceeds.

All waste containers will be returned to their respective Residential Waste Storage Rooms following collection.

While waste containers are awaiting collection in the staging areas, there may not be any left for resident use in the Residential Waste Storage Rooms. In this case, the chute system may be 'locked out' to prevent disposal of that waste type (or all wastes). All residents will be made aware of the waste collection schedule so they can plan their disposal routine while minimizing waste stream contamination and maximizing diversion.

[7] Such as https://www.kubota.ca/products/BX80-Series for example (accessed September 2024). This will be stored in one of the Residential Waste Storage Rooms, currently illustrated in Tower 1 (per Appendix A).
[8] For example, https://www.xerowaste.ca/electric-tugs/tote-trailer-cart/ (accessed September 2024).

3.0 Non-residential Waste Management

The Region has stated they will not provide waste collection for non-residential (retail and office) wastes generated by this development. As such, private collection will be arranged for non-residential wastes produced at the property. In each Tower, non-residential wastes will be stored separately from residential wastes within their own dedicated waste storage rooms, located on the ground floor as shown in Appendix A.

3.1 Storage Rooms and Equipment

It is expected that non-residential (retail / office wastes) will be temporarily stored within each respective unit in a small closet using 360 L carts (or smaller) for each waste stream (i.e., garbage, recyclables, and organic waste), before they are transported to their waste storage rooms on the ground level, adjacent to their Tower's Collection Point[9]. This movement will be completed by the commercial tenants, Tower staff, or property cleaners either daily or once the cart(s) are filled.

Each Non-residential Waste Room will be of a sufficient size to allow for the storage and maneuvering of multiple 360 L carts or front-lift bins for each waste stream, dependent on their operational requirements. Retail unit tenants in Towers 1 and 2 will transport their waste to their respective Non-residential Waste Rooms using routes that take them outside the Towers. Retail and office unit tenants in Tower 3 can transport their waste to their respective Non-residential Waste Room internally. Office tenants (or cleaners), located on the second level of Tower 3, will transport their wastes to their Waste Room through an internal route via service elevator.

3.1.1 Using Front-lift Bins

Should front-lift bins be used for storage of waste from the retail units, cart tippers[10] will be required in the non-residential Waste Rooms to empty carts into front-lift bins. The use of the room in this manner can be operated by either:

a) Non-residential Tenants:

   Tenants will bring their waste carts to their respective Non-residential Waste Room and use the cart tipper to empty the cart into the appropriate front-lift bin. The tenant will then return their emptied cart to their (commercial unit) storage closet.

   This option has the benefit of requiring the fewest carts. However, training must be provided to the tenant's staff for the safe use of the cart tipper.

[9] Such as https://www.kubota.ca/products/BX80-Series for example (accessed September 2024). This will be stored in one of the Residential Waste Storage Rooms, currently illustrated in Tower 1 (per Appendix A).
[10] A cart tipper such as one from Vestil Manufacturing Corp. or similar may be used (e.g., https://www.vestil.com/product.php?FID=227, accessed September 2024).

b) Facility Maintenance:

Tenants will bring their filled waste carts to their respective Non-residential Waste Room. There will be spare, empty carts in the room. The tenant will grab one of the spare carts and return to their (commercial / office) unit, leaving their filled cart(s) in the waste storage room.

Facility maintenance staff will empty the filled carts using the cart tipper. The emptied carts will then be positioned for reuse by the tenants.

A minimum of two days of carts are recommended with this method. Tenant staff will not require training to operate the cart tipper.

3.1.2 Using Carts Only

If using only carts (no front-lift bins), then the tenants will:

- Deliver their filled carts to the Retail Waste Room.
- Grab an empty cart before returning to their (retail) unit.

This option is likely to require the highest number of carts compared to other options. Increasing collection frequency would reduce the cart count. Some manual movement of waste to completely load partly filled carts may also reduce the number of carts required. This cart-only design is shown in Appendix A.

3.2 Collection Point and Waste Collection

Collection of non-residential waste will take place at the same Collection Points[11] used for residential waste:

- Facility maintenance staff will be responsible for moving the front-lift bins or carts into the staging areas using the double doors that separate each staging area from the Non-residential Waste Rooms.
  - Wastes from Tower 2 will need to be transported externally to Tower 1's Collection Point.
- For waste from the office unit(s), facility maintenance staff will move the carts from its Non-residential (Office) Waste Room to the staging area using an internal corridor.

Private collection of non-residential waste will be scheduled so that it does not conflict with the Region's (residential) waste collection schedule or future Producer Responsibility Organization collection of residential Blue Box materials.

[11] The loading area adjacent to the Tower 2 Non-Residential Waste Room is not intended for waste collection.

Also note that the loading bay of Tower 3 has an optional, stationary compactor for non-residential wastes. Should this equipment be used, it would reduce the number of required storage containers and collection frequency.

4.0 Conclusions

From the research completed in preparing this report, Burnside believes that the Oakville TOC site, located at 217-227 Cross Avenue and 571-587 Argus Road, has a waste management system that will operate in a safe, functional, and accessible manner, compatible with the Region's residential waste collection system. Furthermore, the development's design provides flexibility to address future solid waste management systems.

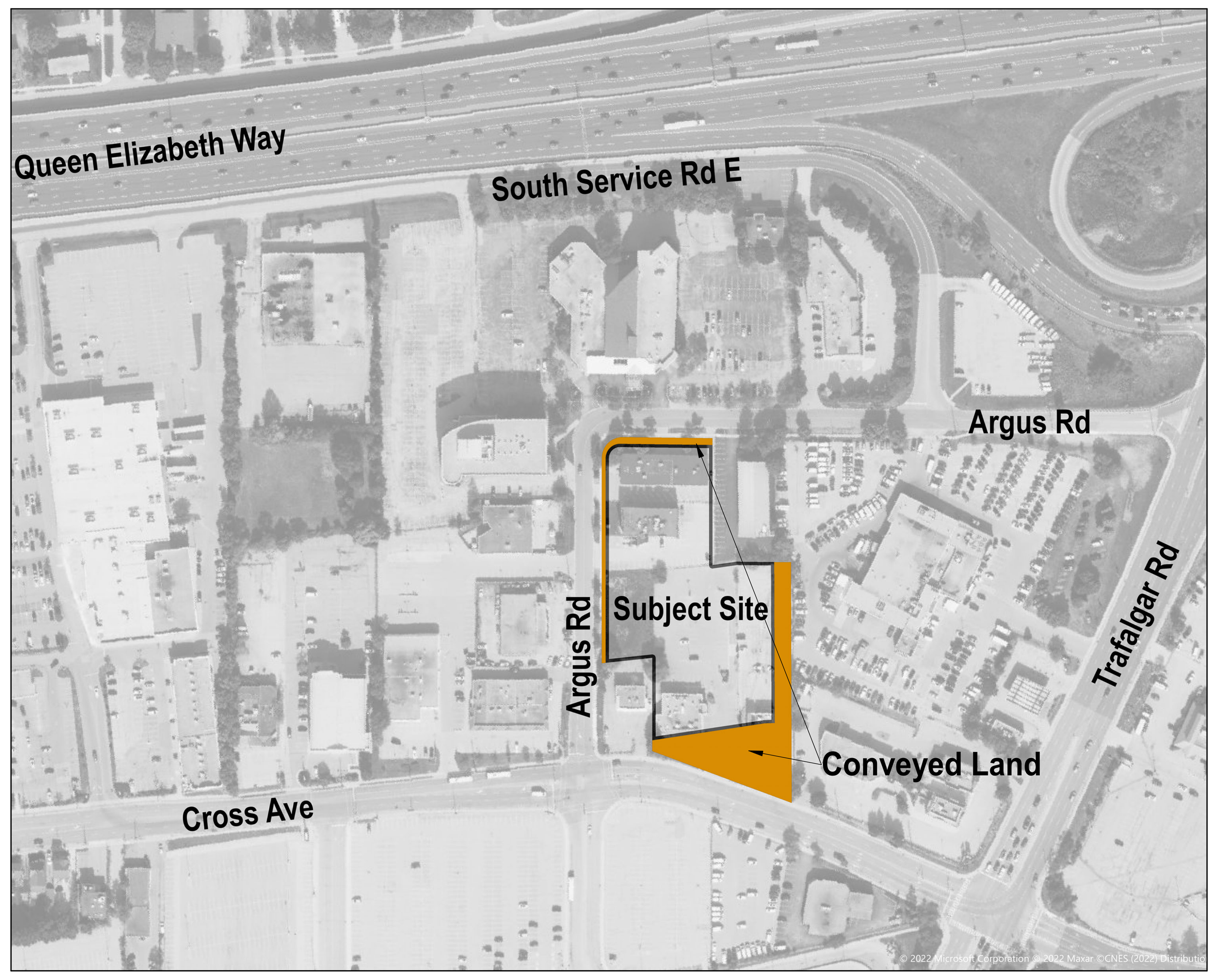
Burnside will work with the architectural team to ensure the site's design considers the Region's waste management Guidelines and addresses any municipal comments when preparing future submissions.

BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix A

Architectural Plans



3 A101.S CONTEXT PLAN

2 A101.S KEY PLAN

217-227 Cross Ave and 571-587 Argus Rd | Distrikt Developments	sm	sf
Gross Lot Area:	12598	135604
Area of Road Conveyances:	2790	30033
Net Lot Area (excluding conveyances):	9808	105571
POPS Area (not conveyed):	2574	27707

BUILDING A 46 STOREY — Proposed Residential

Floor		Floor Area/Typ. Floor (sm)	No. Typ. Floors	Gross Floor Area** sm	Gross Floor Area** sf	Residential GFA (sm)	Non-Res GFA (sm) Retail (sm)	Non-Res GFA (sm) Office (sm)	Indoor Amenity GFA (sm)	Outdoor Amenity (sm)	Residential Net Saleable Area - RNSA (sm)	No. of Units
Tower A	MPH	0	1	0	0	0	0	0	0	0	0	0
	Level 9-46	850	38	32300	347677	26662	0	0	0	0	26662	455
	Level 8	850	1	850	9149	702	0	0	0	0	702	12
Podium A	Level 7	697	1	697	7504	267	0	0	305	486	267	5
	Level 5-6	1405	2	2809	30238	2186	0	0	0	0	2186	32
	Level 3-4	1442	2	2883	31037	2263	0	0	0	0	2263	32
	Level 2	1196	1	1196	12871	0	0	0	800	303	0	0
	Ground	1608	1	1608	17313	0	480	0	0	0	0	0
Building A Total				**42344**	**455790**	**32079**	**480**	**0**	**1105**	**788**	**32079**	**536**
												100%

BUILDING B 52 STOREY — Proposed Residential

Floor		Floor Area/Typ. Floor (sm)	No. Typ. Floors	Gross Floor Area** sm	Gross Floor Area** sf	Residential GFA (sm)	Non-Res GFA (sm) Retail (sm)	Non-Res GFA (sm) Office (sm)	Indoor Amenity GFA (sm)	Outdoor Amenity (sm)	Residential Net Saleable Area - RNSA (sm)	No. of Units
Tower B	MPH	0	1	0	0	0	0	0	0	0	0	0
	Level 9-52	850	44	37400	402574	31117	0	0	0	0	31117	569
	Level 8	850	1	850	9149	707	0	0	0	0	707	13
Podium B	Level 7	720	1	720	7746	575	0	0	0	0	575	13
	Level 5-6	1136	2	2273	24461	1946	0	0	0	0	1946	32
	Level 3-4	1239	2	2479	26682	2152	0	0	0	0	2152	32
	Level 2	1297	1	1297	13964	0	0	0	894	191	0	0
	Ground	1137	1	1137	12238	0	215	0	0	107	0	0
Building B Total				**46155**	**496814**	**36497**	**215**	**0**	**894**	**298**	**36497**	**659**
												100%

BUILDING C 59 STOREY — Proposed Residential

Floor		Floor Area/Typ. Floor (sm)	No. Typ. Floors	Gross Floor Area** sm	Gross Floor Area** sf	Residential GFA (sm)	Non-Res GFA (sm) Retail (sm)	Non-Res GFA (sm) Office (sm)	Indoor Amenity GFA (sm)	Outdoor Amenity (sm)	Residential Net Saleable Area - RNSA (sm)	No. of Units
Tower C	MPH	0	1	0	0	0	0	0	0	0	0	0
	Level 33-59	850	27	22950	247034	18936	0	0	0	0	18936	351
	Level 32	850	1	850	9149	701	0	0	0	0	701	10
	Level 9-31	850	23	19550	210436	16130	0	0	0	0	16130	299
	Level 8	972	1	972	10457	514	0	0	299	255	514	10
Podium C	Level 7	1164	1	1164	12524	0	0	0	852	951	0	0
	Level 3-6	2058	4	8231	88598	6986	0	0	0	0	6986	112
	Level 2	2694	1	2694	29002	0	0	2125	0	0	0	0
	Mezzanine	0	0	0	0	0	0	0	0	0	0	0
	Ground	2621	1	2621	28209	0	886	0	111	32	0	0
Building C Total				**59031**	**635410**	**43268**	**886**	**2125**	**1262**	**1239**	**43268**	**782**
												100%

Total Floor Area, Gross**		**147,530 sm**		**± 1,588,014 sf**
Total Residental GFA:		**111,844 sm**		**± 1,203,890 sf**
FSI*:	Gross:	**11.71**	Net:	**15.04**
Total No. of Units		**1977**		

Parking	Min. Rate	Min. No.	Provided
Resident	0	0	974
Visitor	0	0	292
Retail	0	0	20
Office	0	0	29
TOTAL		0	1315
P1 Mezzanine			36
P1			130
P2			187
P3			192
P4			192
P5			192
P6			192
P7			194
TOTAL			1315

Bicycle Parking	Min. Rate	Min. No.	Provided
Long Term	0.75	1483	1488
Short Term	0.25	494	497
Retail	1	2	2
Office	1	2	3
TOTAL		1981	1990
Mezzanine			0
P1 Mezzanine			348
P1			762
P2			635
P3			245
P4			0
P5			0
P6			0
P7			0
TOTAL			1990

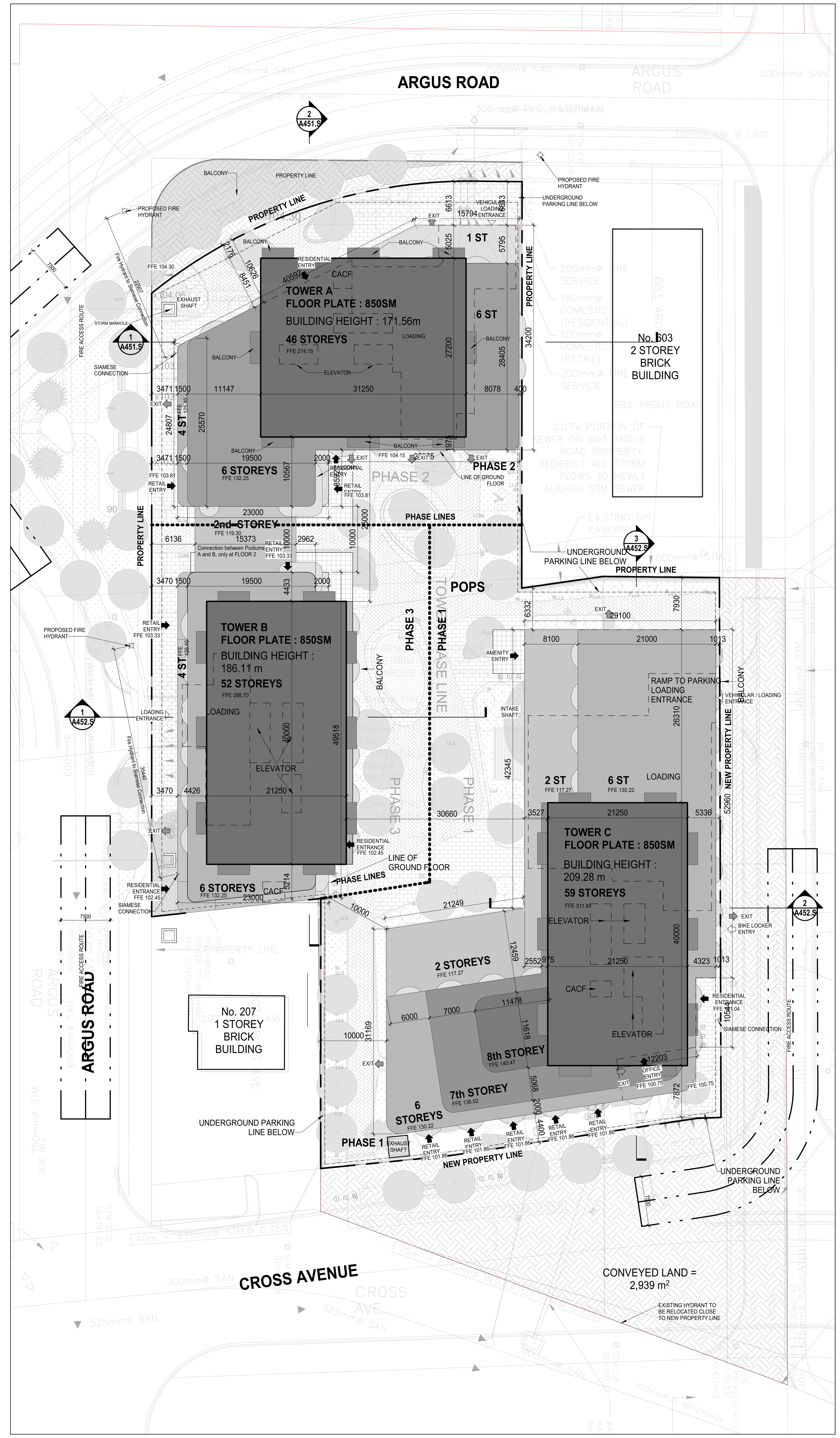
Residential Amenity	Provided	Rate
Indoor	3261	1.65
Outdoor	2324	1.18
TOTAL	5586	

Lockers	
P1 Mezzanine	0
P1	18
P2	31
P3	109
P4	256
P5	256
P6	256
P7	256
TOTAL	1182

Approx. Unit Mix			
Studios	1B	2B	3B
102	1,213	550	112
5%	61%	28%	6%

Definitions of Gross Floor Area, Net Floor Area and FSI are taken from Oakville By Law 2014-014, 2015-018 and 2023-065
*** FSI - Floor Space Index By-Law 2014-014:** means the net floor area of all buildings on a lot divided by the lot area.
Amended by 2023-065 to read: means the gross floor area of all buildings on a lot divided by the lot area.
**** Gross Floor Area Definition By-Law 2023-065:** means the total area of all of the floors in a building measured from the exterior faces of the exterior walls, but shall not include an attic, basement or mechanical penthouse.

STATISTICS



1 A101.S SITE PLAN
SCALE: 1 : 300

SITE PLAN LEGEND
PROPERTY LINE
LINE OF UNDER GROUND GARAGE BELOW
MAIN BUILDING ENTRANCE
RETAIL ENTRANCE
EXIT
VEHICLE / LOADING ENTRANCE / EXIT
FIRE HYDRANT
SIAMESE CONNECTION
MANHOLE COVER
AREA DRAIN
CATCH BASIN
FLOOR DRAIN (PARKING SLAB)
FLOOR DRAIN (INTERIOR)
EXISTING LIGHT
TYPICAL PARKING SPACE
TYPICAL B.F. PARKING SPACE
FINISH FLOOR ELEVATION
EXISTING ELEVATION
PROPOSED ELEVATION
TOP OF ROOF
BUILDING ENVELOPE
FIRE ACCESS ROUTE HEAVY DUTY PAVING ASSEMBLY TO BE DESIGNED TO MEET THE LOADS IMPOSED BY FIRE FIGHTING EQUIPMENT.
GREEN ROOF
TERRACE PAVERS

Date	No.	Description

REVISION RECORD

2024-09-24	Issued for TOC Submission
2024-03-28	Issued for ZBA, OPA rev 1 & SPA
2022-04-19	Issued for Rezoning

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19072	1:300	UI	KVE
PROJECT	SCALE	DRAWN	REVIEWED

Site Plan and Statistics

A101.S

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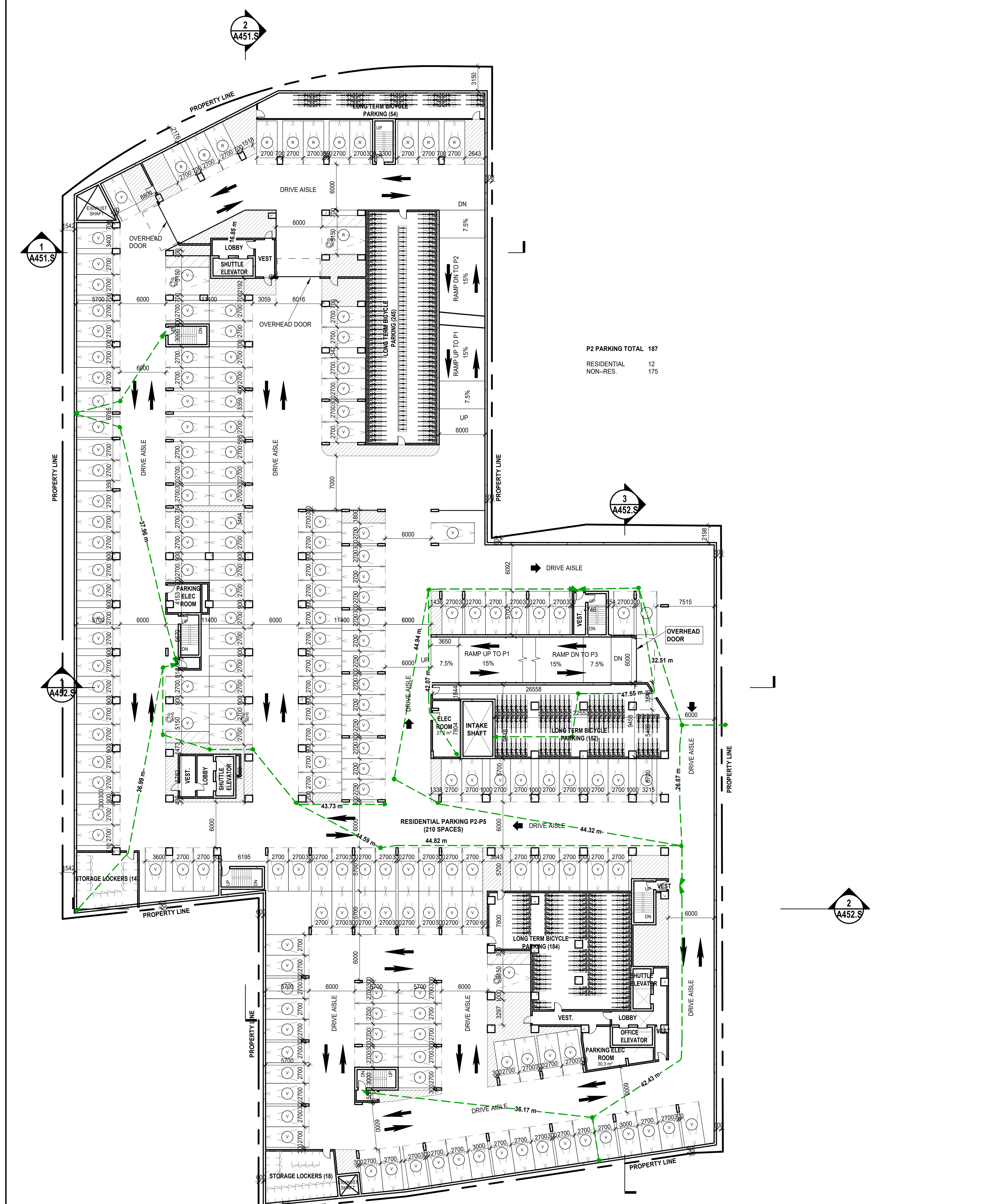
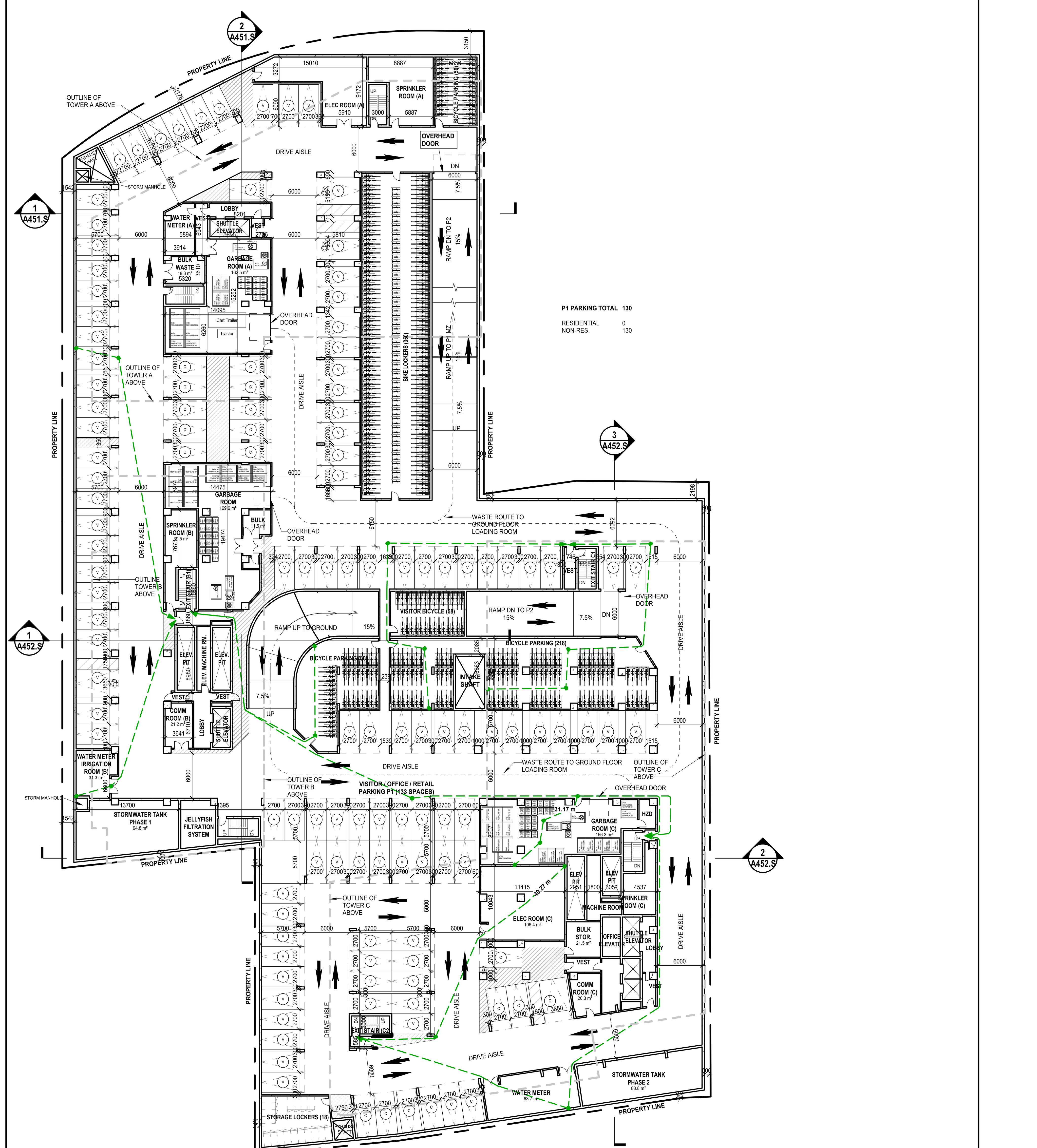


2 A152.S P2 UNDERGROUND PLAN

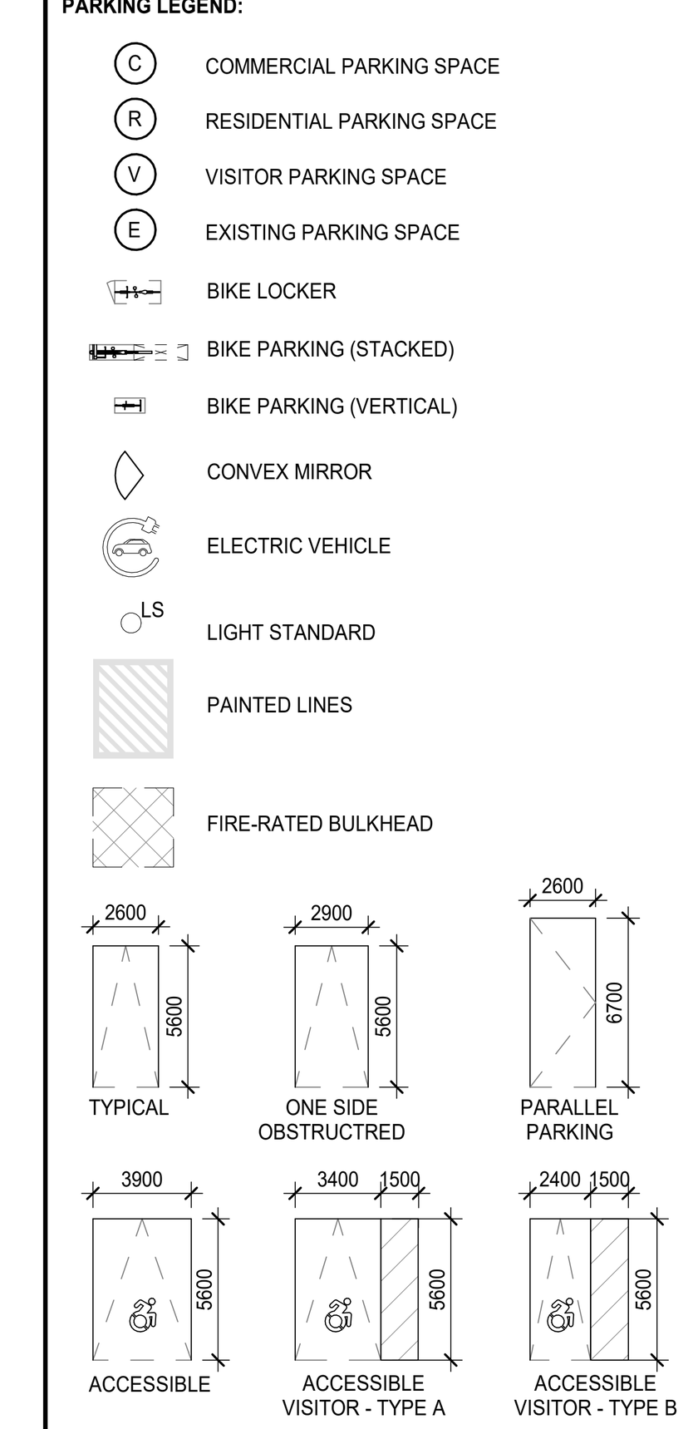


1 A152.S P1 UNDERGROUND PLAN

PARKING NOTES:

1. MINIMUM PARKING SPACE SIZES (UNLESS OTHERWISE NOTED):
   - 2600mm WIDE X 5600mm LONG (NO SIDES OBSTRUCTED)
   - 2900mm WIDE X 5600mm LONG (ONE SIDE OBSTRUCTED)
   - 3200mm WIDE X 5600mm LONG (TWO SIDES OBSTRUCTED)
2. MAINTAIN MININUM DRIVE AISLE WIDTH OF 6000mm UNLESS OTHERWISE NOTED.
3. MAINTAIN MINIMUM HEADROOM CLEARANCE OF 2100mm THROUGHOUT.

PARKING LEGEND:



Date	No.	Description

REVISION RECORD

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2024-03-28	Issued for ZBA, OPA rev 1 & SPA	
2022-04-19	Issued for Rezoning	

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19072	1:250	UI	KVE
PROJECT	SCALE	DRAWN	REVIEWED

P2 and P1 Underground Plan

A152.S

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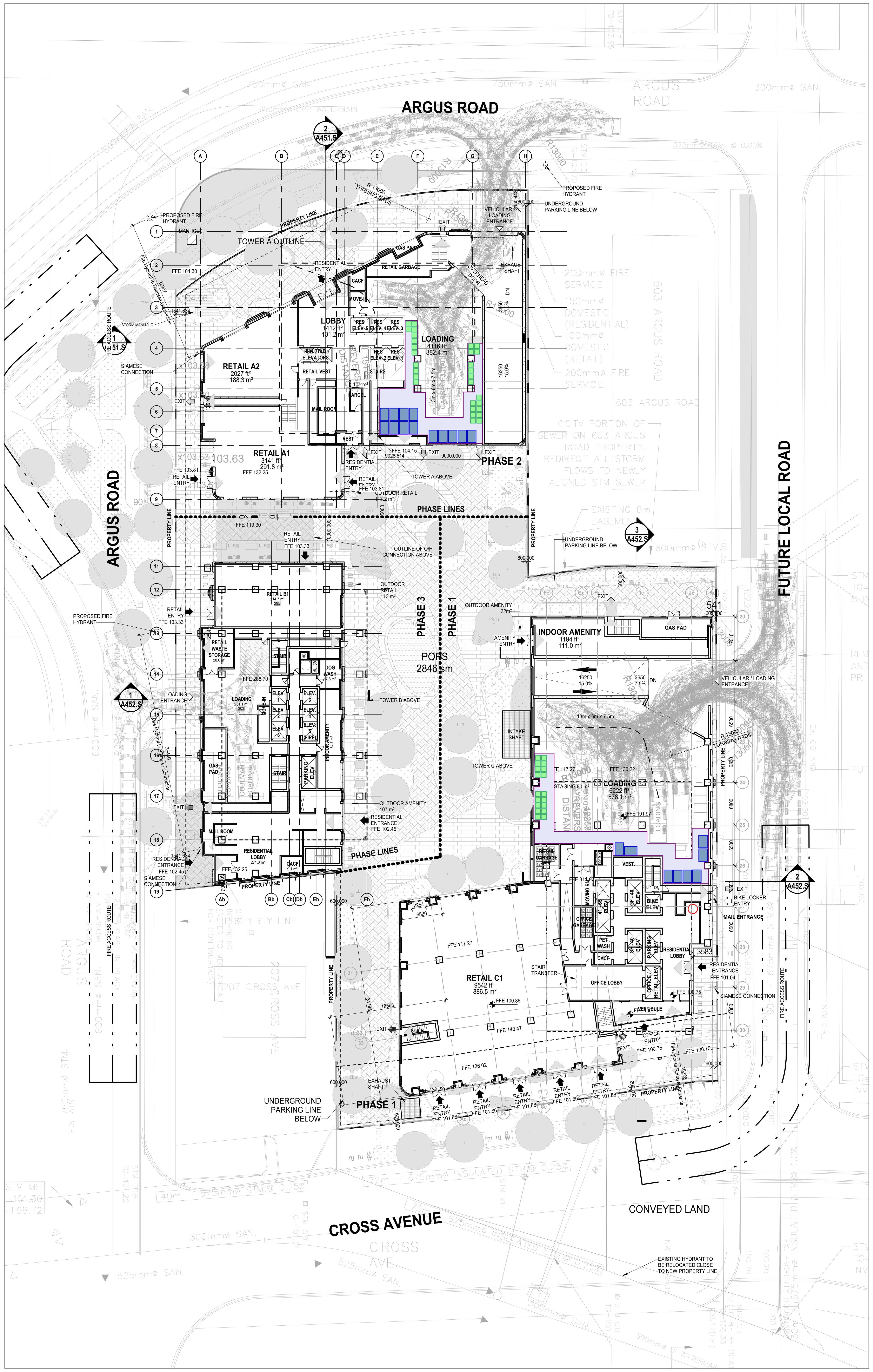
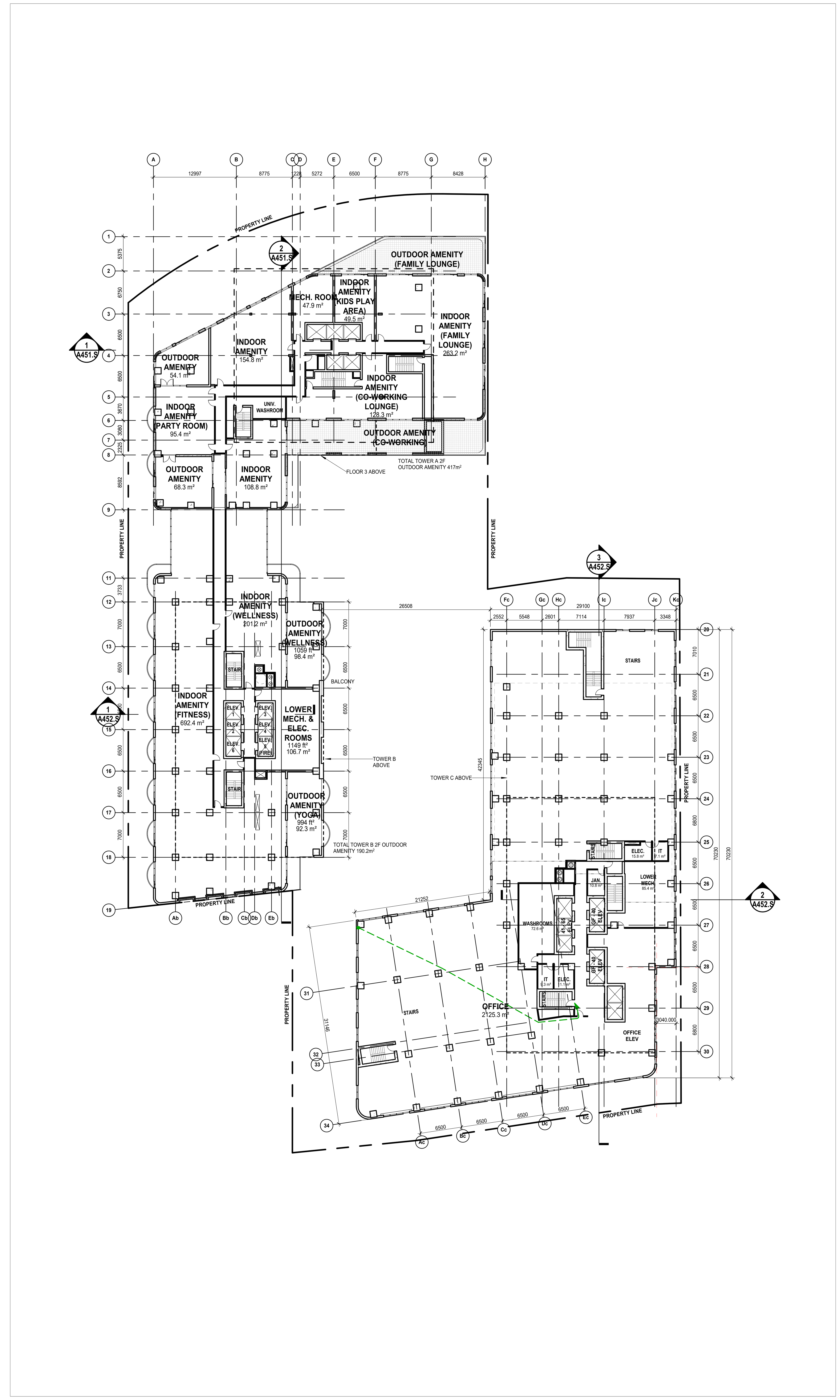


1 A201.S GROUND FLOOR PLAN
SCALE: 1 : 300



2 A201.S SECOND FLOOR PLAN

Date	No.	Description

REVISION RECORD

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2024-03-28		Issued for ZBA, OPA rev 1 & SPA
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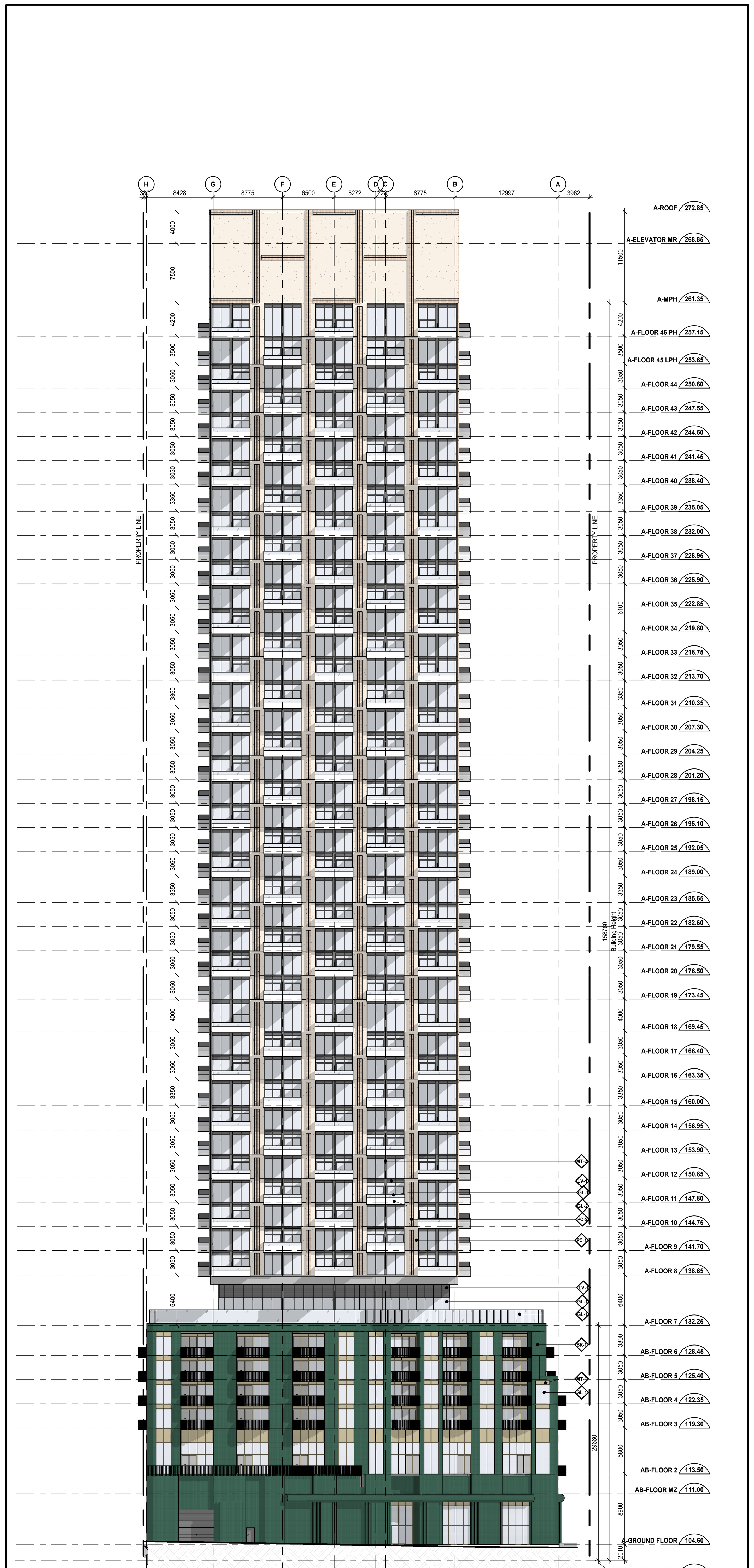
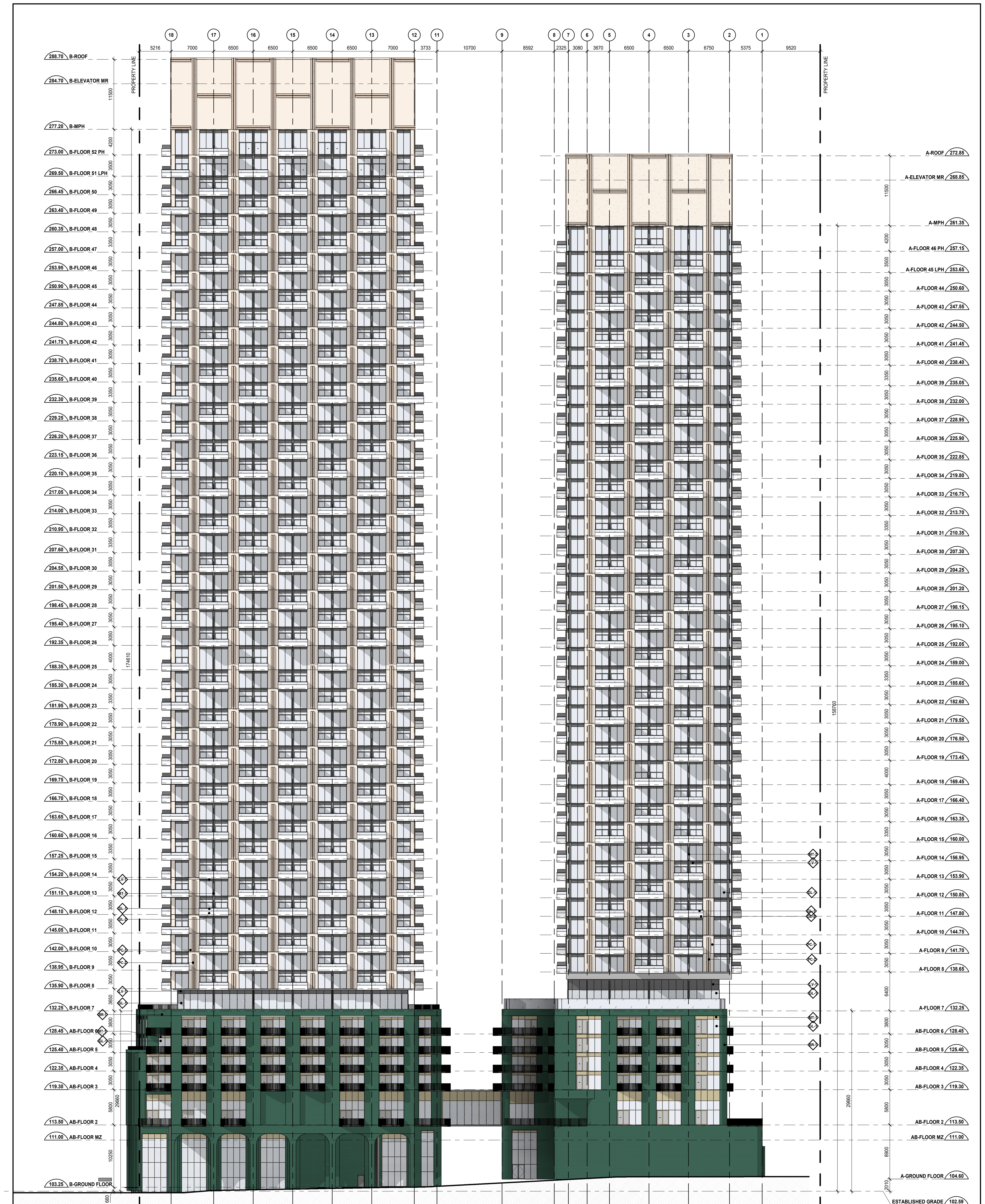
19072 1 : 300 EG KVE
PROJECT SCALE DRAWN REVIEWED

Ground and Second Floor Plans

A201.S



1 A401.S **BUILDING A - NORTH ELEVATION**
SCALE: 1 : 300



2 A401.S **BUILDING AB - EAST ELEVATION**
SCALE: 1 : 300

LEGEND:

BR-1	GLAZED BRICK - COLOUR 1
PC-1	PRECAST PANEL
PC-2	PRINTED PRECAST
MT-1	PREFINISHED ALUMINUM - COLOUR 1
MT-2	PREFINISHED ALUMINUM - COLOUR 2
GL-1	VISION GLAZING
GL-2	RAILING GLASS WITH BIRD FRIENDLY FRIT PATTERN
LV-1	RESIDENTIAL AND STOREFRONT WINDOW SYSTEM LOUVRE

Date	No.	Description

REVISION RECORD

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2022-04-19	Issued for Rezoning

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19072	1:300	HL	KVE
PROJECT	SCALE	DRAWN	REVIEWED

Building A and B - East and North Elevations

A401.S

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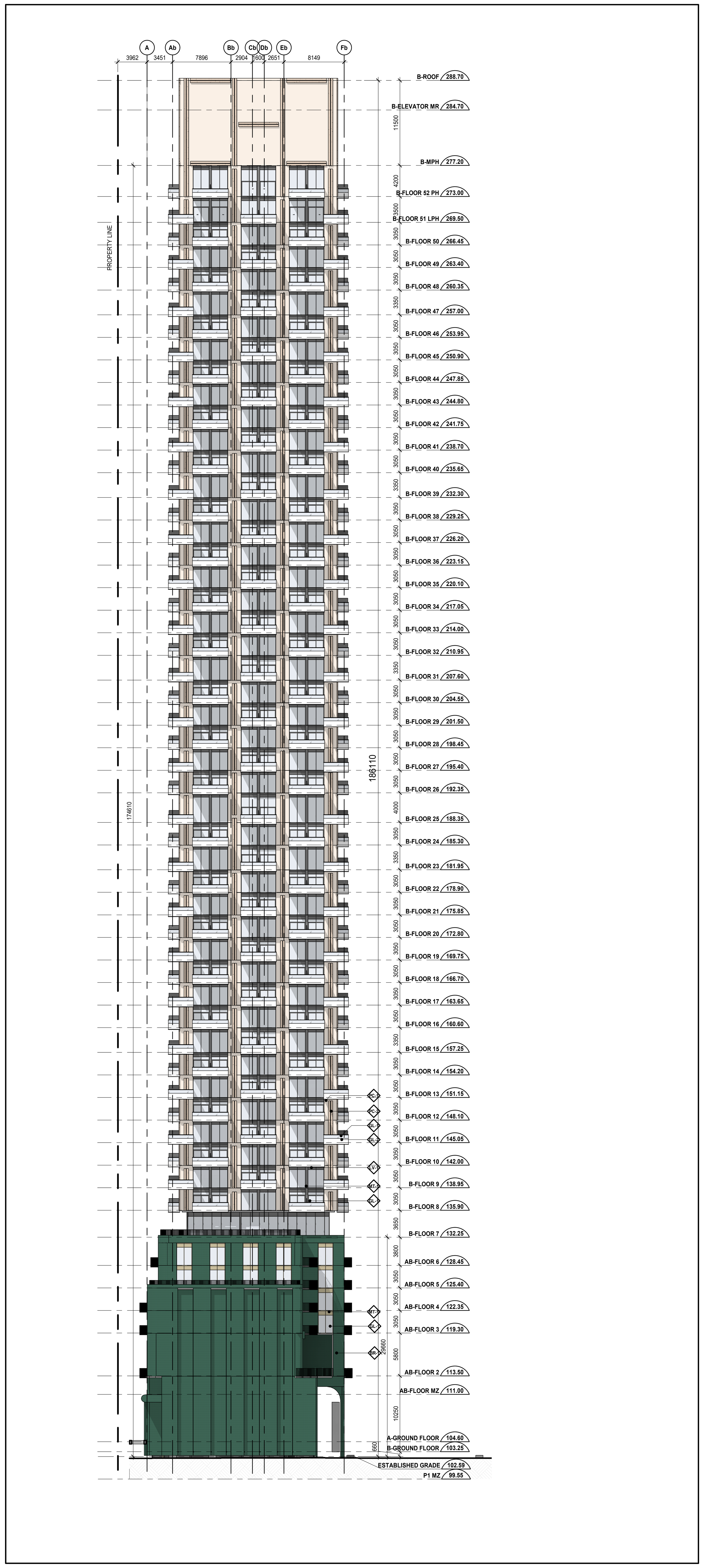
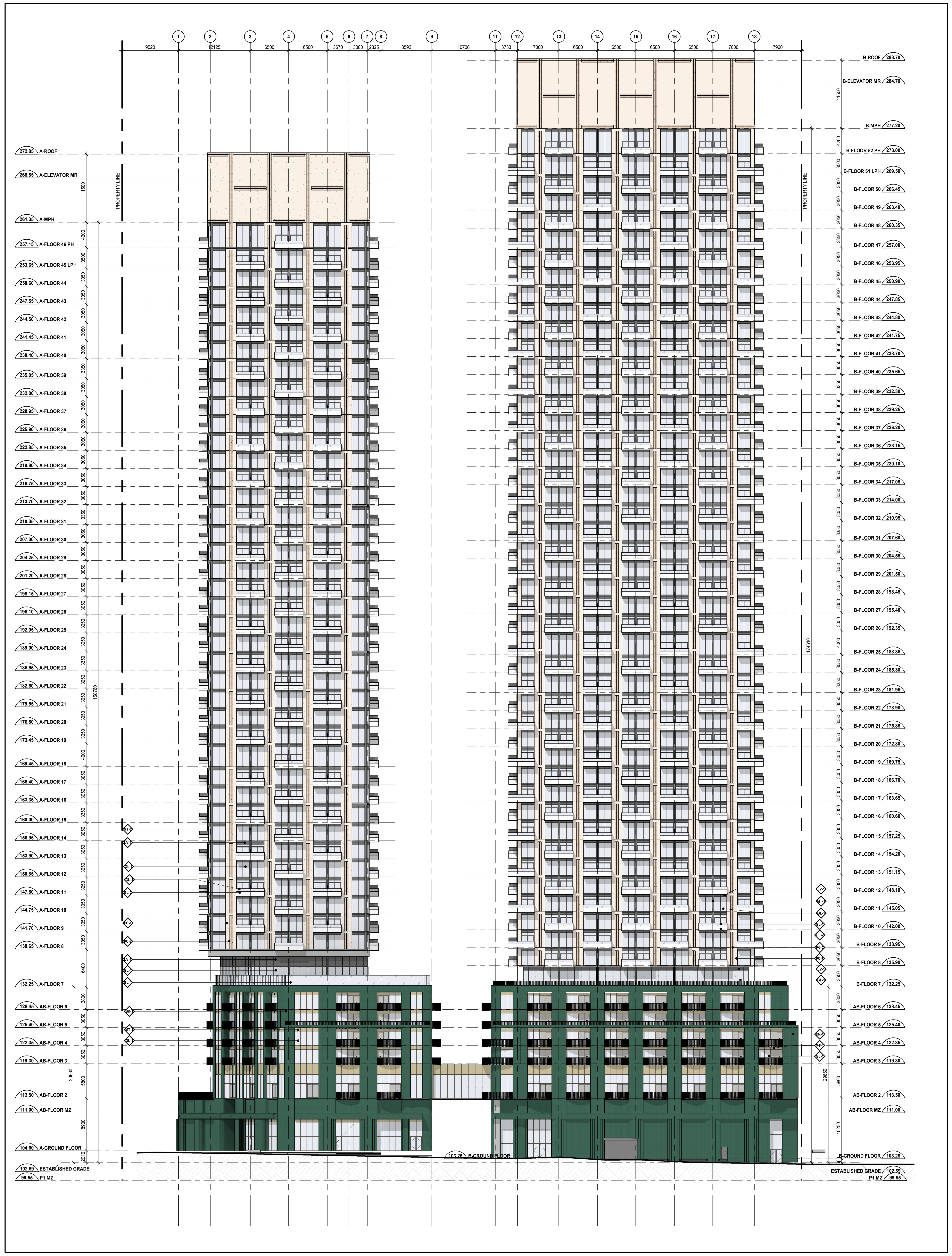


2 / A402.S BUILDING B - SOUTH ELEVATION
SCALE: 1 : 300



1 / A402.S BUILDING AB - WEST ELEVATION
SCALE: 1 : 300

LEGEND:

BR-1	GLAZED BRICK - COLOUR 1
PC-1	PRECAST PANEL
PC-2	PRINTED PRECAST
MT-1	PREFINISHED ALUMINUM - COLOUR 1
MT-2	PREFINISHED ALUMINUM - COLOUR 2
GL-1	VISION GLAZING
GL-2	RAILING GLASS WITH BIRD FRIENDLY FRIT PATTERN
LV-1	RESIDENTIAL AND STOREFRONT WINDOW SYSTEM LOUVRE

Date	No.	Description

REVISION RECORD

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PROJECT	SCALE	DRAWN	REVIEWED

Building A and B - West and South Elevations

A402.S

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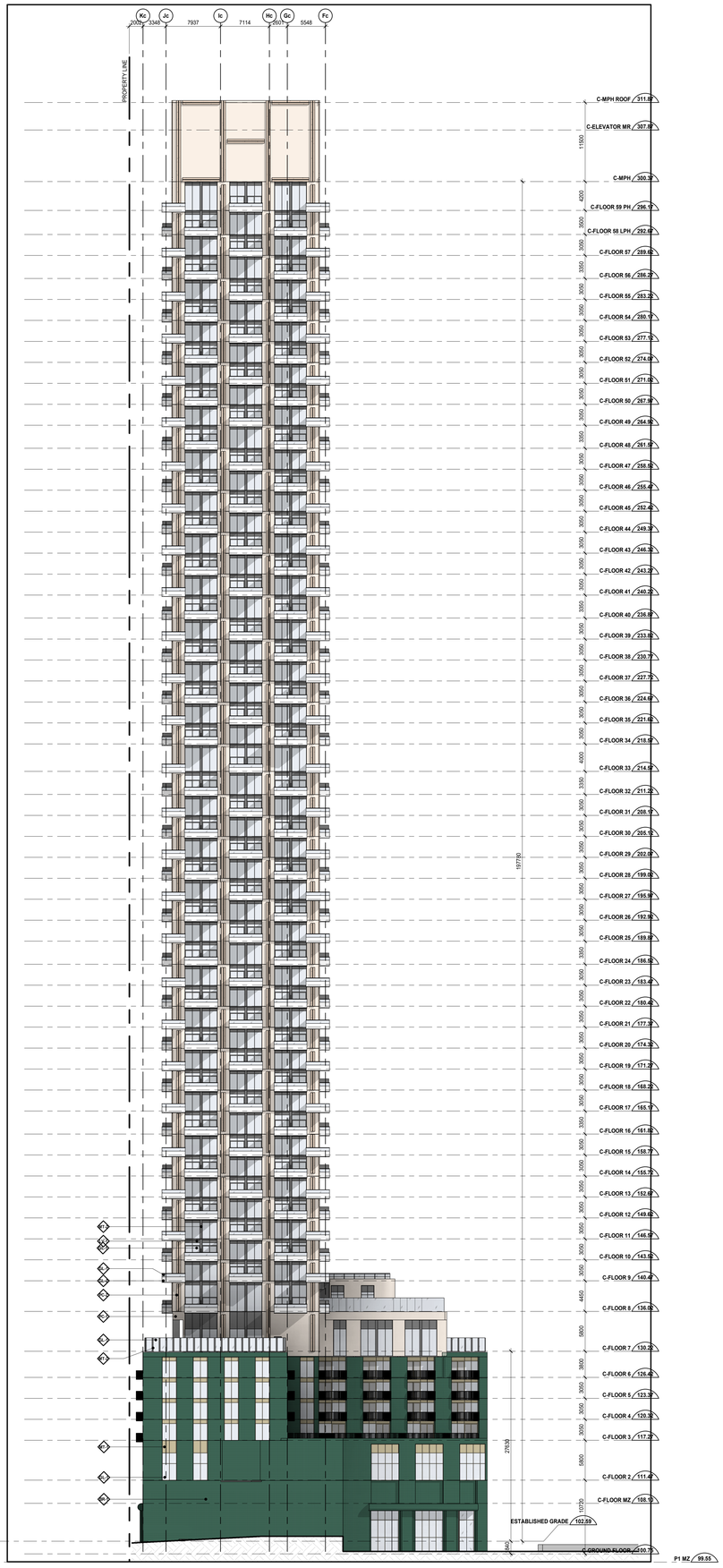

2 A403.S BUILDING C - NORTH ELEVATION
SCALE : 1 : 300

1 A403.S BUILDING C - EAST ELEVATION
SCALE : 1 : 300

LEGEND:

BR-1	GLAZED BRICK - COLOUR 1
PC-1	PRECAST PANEL
PC-2	PRINTED PRECAST
MT-1	PREFINISHED ALUMINUM - COLOUR 1
MT-2	PREFINISHED ALUMINUM - COLOUR 2
GL-1	VISION GLAZING
GL-2	RAILING GLASS WITH BIRD FRIENDLY FRIT PATTERN
LV-1	RESIDENTIAL AND STOREFRONT WINDOW SYSTEM LOUVRE

Date	No.	Description

REVISION RECORD

2024-09-20	Issued for TOC Submission
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PROJECT	SCALE	DRAWN	REVIEWED
19072	As indicated	HL	KVE

Building C - East and North Elevations

A403.S

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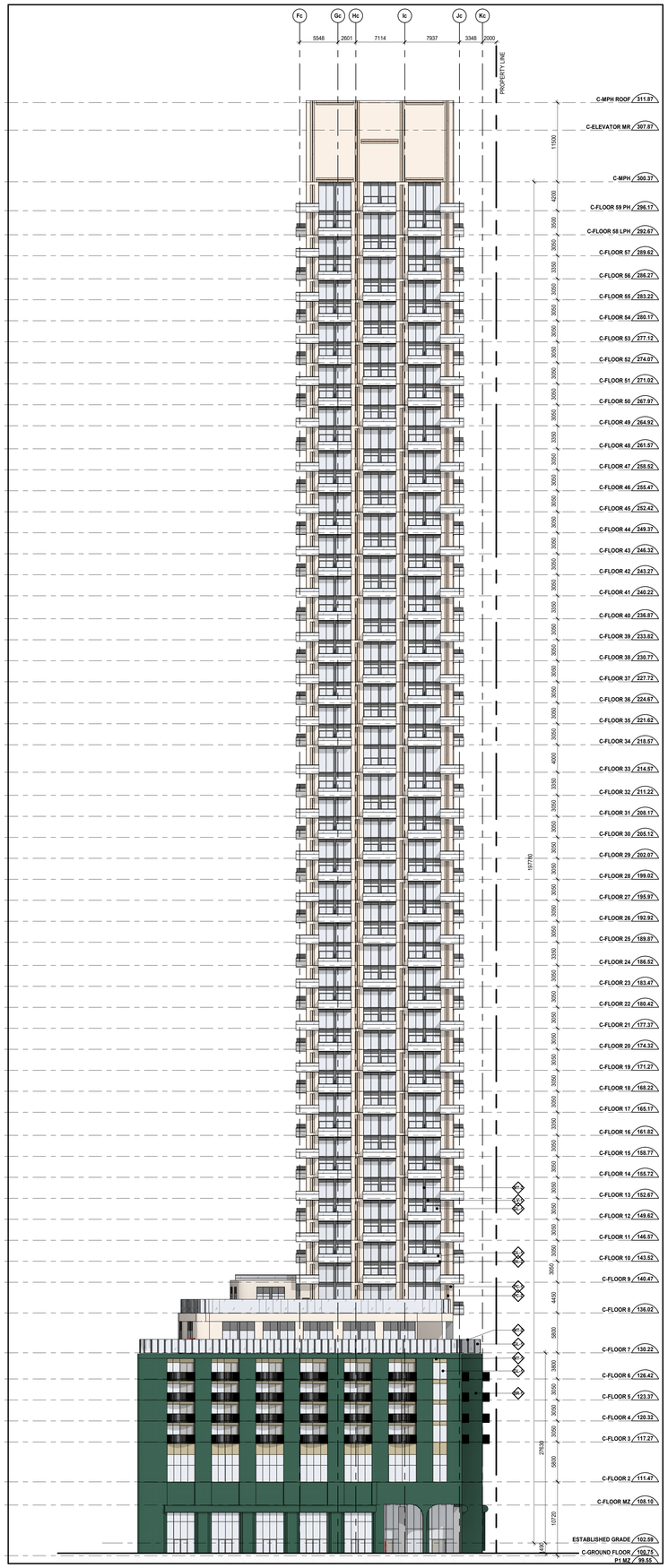
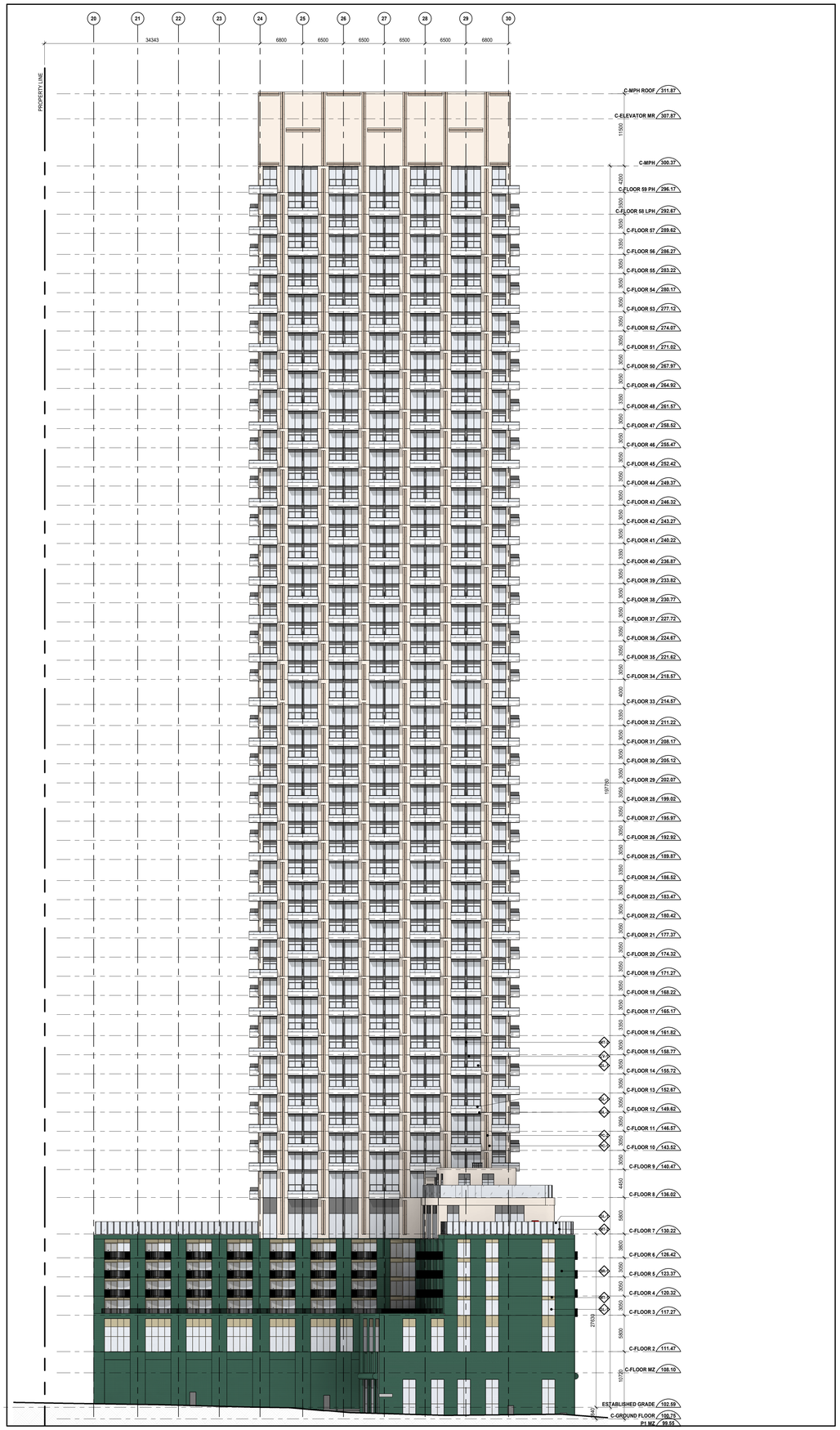


1 A404.S BUILDING C - SOUTH ELEVATION
SCALE: 1 : 300



2 A404.S BUILDING C - WEST ELEVATION
SCALE: 1 : 300

LEGEND:

- GB-1 GLAZED BRICK - COLOUR 1
- PC-1 PRECAST PANEL
- PC-2 PRINTED PRECAST
- MT-1 PREFINISHED ALUMINUM - COLOUR 1
- MT-2 PREFINISHED ALUMINUM - COLOUR 2
- GL-1 VISION GLAZING
- GL-2 RAILING GLASS WITH BIRD FRIENDLY FRIT PATTERN
- LV-1 RESIDENTIAL AND STOREFRONT WINDOW SYSTEM LOUVRE

Date	No.	Description

REVISION RECORD

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PROJECT	SCALE	DRAWN	REVIEWED

Building C - West and South Elevations

A404.S

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BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix B

Collection Vehicle Movement Diagrams

INBOUND

OUTBOUND

R13000

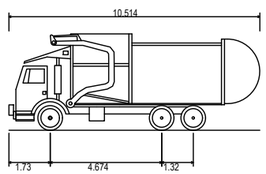
R13000

R13000

GARBAGE/LOADING

REVERSAL DISTANCE 15170

Design Vehicle -
HALTON REGION GARBAGE, YR 2008-2014



Overall Length	10.514m
Overall Width	2.570m
Overall Body Height	4.040m
Min Body Ground Clearance	0.391m
Track Width	2.570m
Lock-to-lock time	5.00s
Wall to Wall Turning Radius	13.715m

Date Plotted: September 18, 2024 Filename: J:\8078-01\ba\site Plan Review\15. July 22-2024\ba-Cross And Argus-SPR-July22-2024.dwg

BA Group

CROSS AND ARGUS

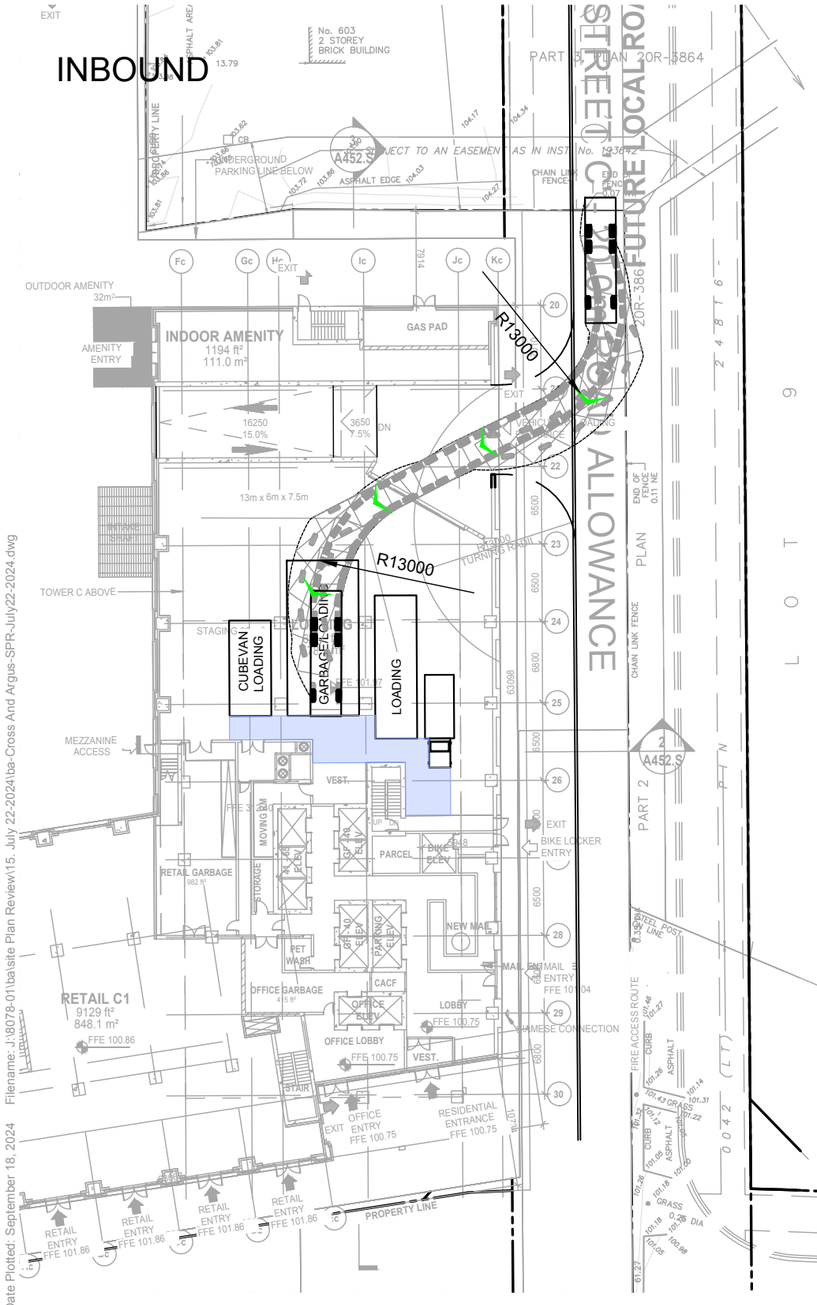
VEHICLE MANOEUVRING DIAGRAM
BUILDING 'A' LOADING AREA
HALTON REGION GARBAGE TRUCK

Project:	CROSS AND ARGUS
Project No.	8078-01
Date:	May 25, 2022
Revised:	September 18, 2024

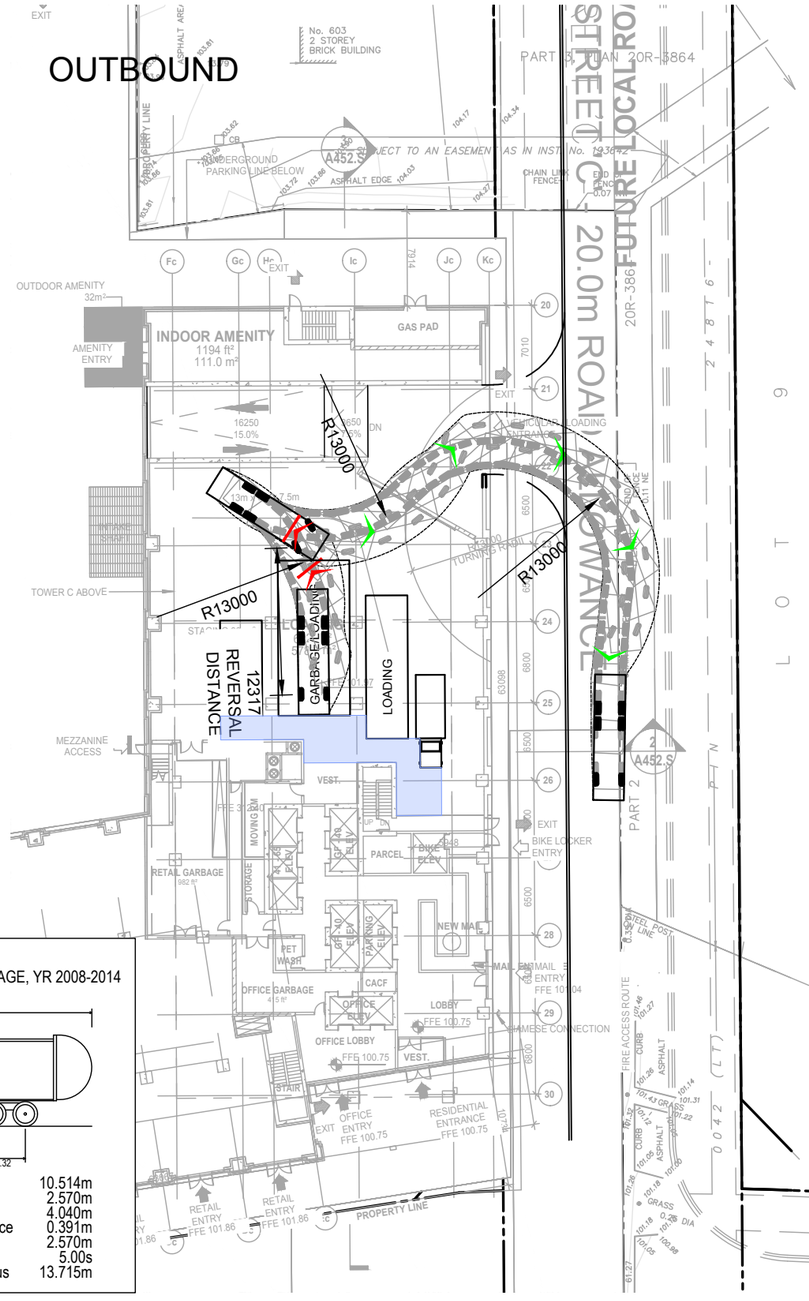
Scale 1:500 (0, 5, 10, 15, 20m)

Drawing No. VMD-01

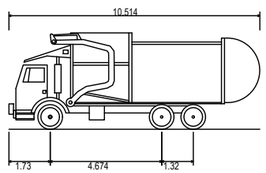
INBOUND



OUTBOUND



Design Vehicle -
HALTON REGION GARBAGE, YR 2008-2014



Overall Length	10.514m
Overall Width	2.570m
Overall Body Height	4.040m
Min Body Ground Clearance	0.391m
Track Width	2.570m
Lock-to-lock time	5.00s
Wall to Wall Turning Radius	13.715m

Filename: J:\8078-01\basite Plan Review\15 July 22-2024\ba-Cross And Argus-SPR-July22-2024.dwg
Date Plotted: September 18, 2024

BA Group

CROSS AND ARGUS

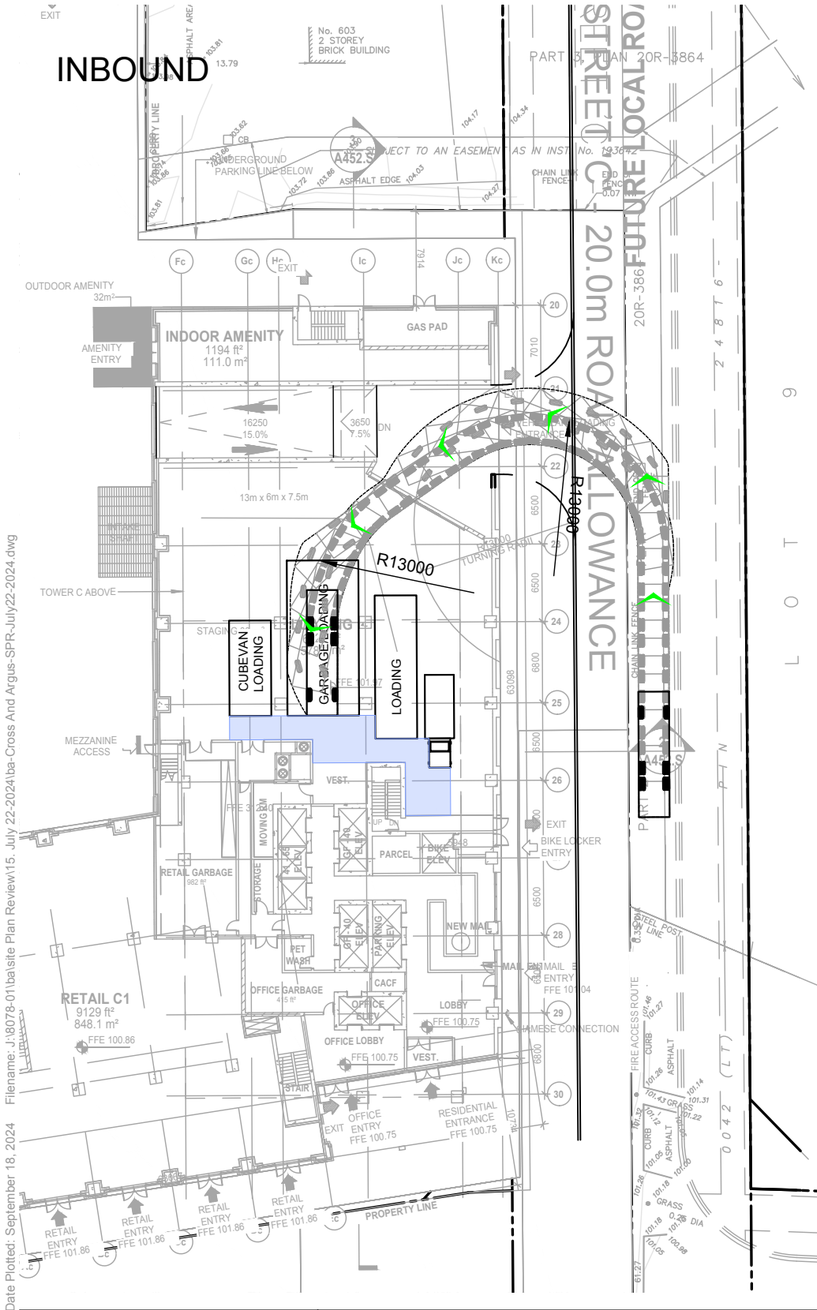
VEHICLE MANOEUVRING DIAGRAM
BUILDING 'C' GARBAGE / LOADING AREA
HALTON REGION GARBAGE TRUCK - ENTRY FROM NORTH

Project:	CROSS AND ARGUS
Project No.	8078-01
Date:	May 25, 2022
Revised:	September 18, 2024

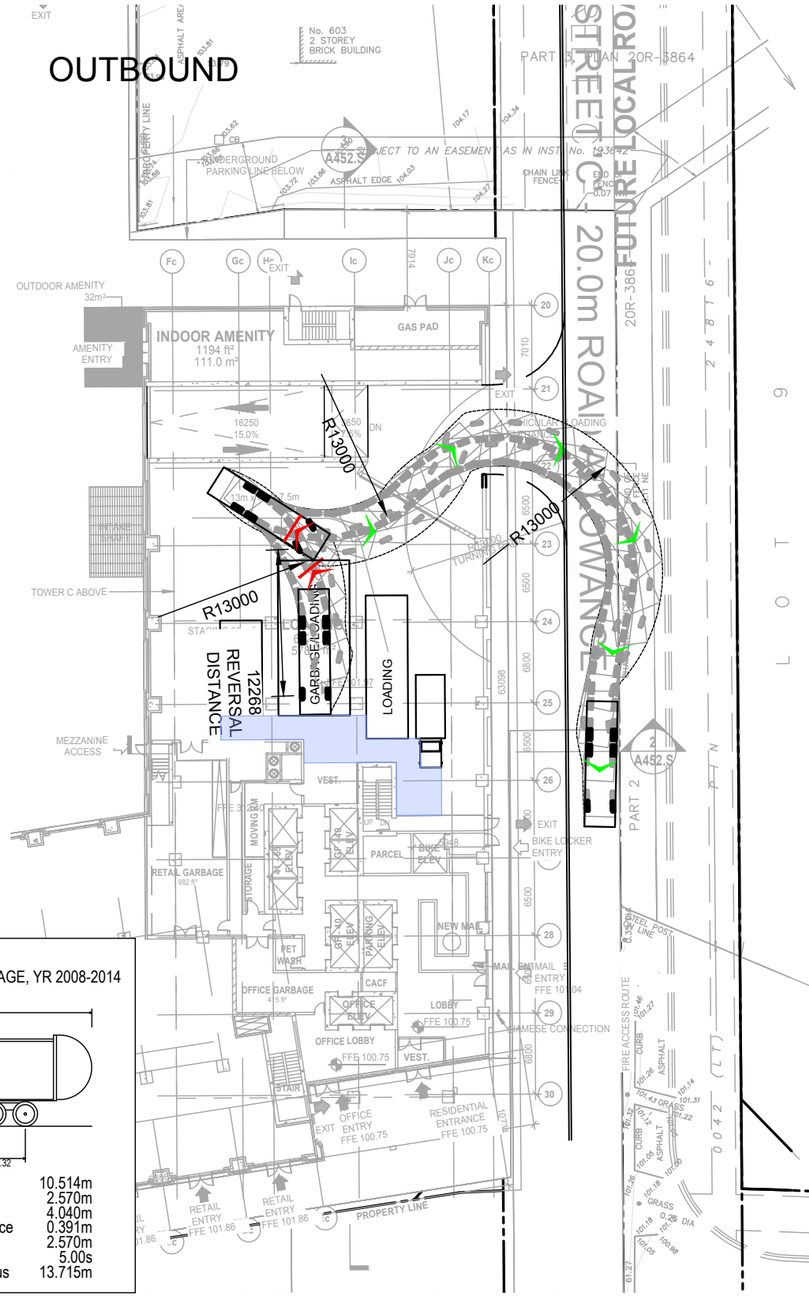
Scale 1:500 — 0 5 10 15 20m

Drawing No. VMD-04A

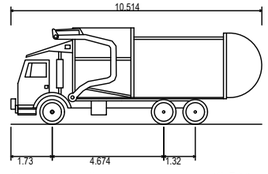
INBOUND



OUTBOUND



Design Vehicle -
HALTON REGION GARBAGE, YR 2008-2014



Overall Length	10.514m
Overall Width	2.570m
Overall Body Height	4.040m
Min Body Ground Clearance	0.391m
Track Width	2.570m
Lock-to-lock time	5.00s
Wall to Wall Turning Radius	13.715m

Filename: J:\8078-01\ba\site Plan Review\15. July 22-2024\ba-Cross And Argus-SPR-July22-2024.dwg
Date Plotted: September 18, 2024

BA Group

CROSS AND ARGUS

VEHICLE MANOEUVRING DIAGRAM
BUILDING 'C' GARBAGE / LOADING AREA
HALTON REGION GARBAGE TRUCK - ENTRY FROM SOUTH

Project:	CROSS AND ARGUS
Project No.	8078-01
Date:	May 25, 2022
Revised:	September 18, 2024

Scale 1:500 — 0 5 10 15 20m

Drawing No. VMD-04B

R.J. Burnside & Associates Limited