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**590 Argus Road, Oakville ON
ZBA Application
Solid Waste Management Plan**

**590 Argus LP
90 Wingold Avenue, Unit 1
Toronto, ON M6B 1P5**



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90 Wingold Avenue, Unit 1
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**March 2023
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590 Argus LP

590 Argus Road, Oakville ON
March 2023

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March 2023

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Waste Management Comment-Location Matrix

Requirement	Report Location	Notes
Set out and collection locations for residential and commercial units	Sections 2.3 & 3.0	
Staging Area Bin Configuration Figure	Appendix B, Figure 4	
Residential and/or Commercial Floors and Units	Section 1.0	
Number and Size of Waste Receptacles	Section 2.2	
Configuration of Waste Containers, Compacting and Sorting Equipment	Appendix B, Figures 1, 2, & 3	
Flow of Receptacles from the Waste Storage Room to Loading Area	Described in Sections 2.3 & 3.0, Illustrated in Appendix B, Figure 6	
Truck Turning Plan Showing Waste Collection Route (to and from Municipal Road)	Appendix C	
Turning Radius of 13 m from the Centreline	Illustrated in Appendix C	
Maximum 18 m Reversal Distance	Illustrated in Appendix C	Slight Exceedance
Loading Area Overhead Clearance of 7.5 metres	Described in Section 2.3 Illustrated in Appendix A, Level 1 Plan (No. A204).	
Number of Organics Carts (360 L) Required for the Site	Section 2.2	
Collection Point Level (+/- 2%)	Section 2.3, Appendix A, Waste Management & Loading Plan (No. A112), Note 7.	
Weight Capacity of Loading Area (35,000 kg)	Section 2.3, Appendix A, Waste Management & Loading Plan (No. A112), Note 5.	
Loading Area Width Required (6 metres)	Section 2.3, Appendix A, Waste Management & Loading Plan (No. A112), Note 6.	Type C loading area will not be in use during collection periods, meeting required width
Head-On Approach (Minimum 18 m)	Appendix C (figure VMD-01)	
Door Width for Bin Passage (min. 2.2 metres)	Appendix A, Waste Management & Loading Plan (No. A112), Note 10	
Sufficient Storage for all Waste Receptacles	Appendix B, Figures 1, 2, & 3	

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1.0 Introduction

This document describes the preliminary Solid Waste Management Plan (Plan) developed for the proposed 590 Argus Road mixed-use development located in the Town of Oakville, Ontario. This Plan is intended for municipal review during the Zoning By-Law Amendment (ZBA) process. The development's Site Plan may change during the ZBA process and prior to Site Plan Approval (SPA) / construction, though it is currently expected that the methods of handling solid waste as expressed in this report will not require revision. This report will be developed further during SPA, featuring further specifics and operational detail.

This report is based on the 'Issued for OPA/ZBA' drawing package, dated March 20, 2023. The 'Building Statistics' (Drawing No. A002), 'Waste Management & Loading Plan' (Drawing No. A112), 'Level P1 Plan' (Drawing No. A203) and 'Level 1 Plan' (Drawing No. A204) drawings from this set have been attached as . These parts of the drawing set describe the development's solid waste management features for both residential and commercial waste.

The 590 Argus Road development will provide:

- 1,750 residential units.
 - Tower A will be 44-storeys¹ and will contain 513 residential units.
 - Tower B will be 58-storeys and will contain 660 residential units.
 - Tower C will be 50-storeys and will contain 577 residential units.
- 1,744 m² Gross Floor Area (GFA) of commercial space
 - The ground floor of Tower A provides 470 m².
 - The ground floor of Tower B provides 599 m².
 - The ground floor of Tower C provides 637 m².
- Six-levels of underground parking (i.e., Levels P1 to P6).
 - All three Towers are connected at these parking levels.
- Each Tower has their own residential waste storage room located at Level P1.
- A commercial waste storage room is located on the ground floor of Tower A
- All three Towers share a Collection Point (including loading and staging area) in Tower A.

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 Meeting notes from Halton Region dated December 7, 2022;
- Halton Region – Direct communications with Halton Region's Multi-Residential Waste Diversion Coordinator;

¹ All floor counts include the six-storey podium that is shared by all three Towers.

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- 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;
- 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; and
- Ontario Food and Organic Waste Framework, dated April 2018.

Halton Region's (Region) 'Development Design Guidelines for Source Separation of Solid Waste' document (hereinafter referred to as 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.

During the December 7, 2022, ZBA application meeting with Region staff, we were informed the development will not receive commercial waste collection services. Therefore, private collection must be arranged. The management of commercial wastes is discussed in Section 3.0.

2.0 Waste Management System Requirements

2.1 Residential Waste Storage Rooms

Towers A, B and C provide residents with equivalent waste disposal service. Each Tower has its own Residential Waste Storage Room located on Level P1. In accordance with Section's 1.9.2 and 1.9.3 of the Guidelines, the Residential Waste Storage Rooms for this development will feature the following:

- A chute system consisting of three separate chutes for recyclables, organics, and garbage will be used 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.
- A room (i.e., the Bulky Waste Storage Area) adjacent to each Residential Waste Storage Room has been set aside for the storage of bulk waste. These rooms will be a minimum of 10 m² in size.
- All waste storage rooms (both for residential waste and commercial waste – see Section 3.0) will be locked and inaccessible to residents.
- 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); and / or
 - Reducing the storage temperature (air conditioning).
- The width of the doors for all waste storage rooms will be enough to accommodate the size of all required waste containers, a minimum of 2.2 metres in width.

2.2 Residential Waste 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: 6 yd³ front-load bins for storing recyclables.
- Organics chute: 360 L semi-automated carts for storing organics waste.
- Garbage chute: A compactor that loads 3 yd³ front-load bins for storing garbage.

Recyclables and garbage will be collected by the Region separately on different days each week. We've assumed twice weekly collection of garbage.

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Burnside has determined waste storage container needs (bin counts) from the Guidelines and details provided via direct communications² with the Region's Multi-Residential Waste Diversion Coordinator.

1. Recycling (loose):
 - 46 residential units can be serviced by one 4 yd³ front-lift bin.
 - 84 residential units can be serviced by one 6 yd³ front-lift bin.
2. Organics:
 - One 360 L (0.34 yd³) organics bin is required for every 25 residential units.
3. Garbage (compacted):
 - 54 residential units per 3 yd³ front-lift bin.

Table 1 outlines the equipment requirements 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.

Table 1: Residential Waste Storage Room Equipment

Item	Stream/Use	Quantity		
		Tower A (513 Units)	Tower B (660 Units)	Tower C (577 Units)
6 yd ³ front-lift container	Recycling	7	8	7
360 L semi-automated carts	Organics	21	27	24
3 yd ³ front-lift container (compaction type)	Garbage (compacted)	10	13	11
Waste Compactor	Compacts garbage into the 3 yd ³ front-lift bins	1	1	1
Bin Puller / Tractor	To move bins & (loaded) cart trailer	1		
Cart Trailer	To move carts	1		

The current design for each Residential Waste Storage Room not only meets these spatial requirements for all equipment, but also includes additional space to provide flexibility to accommodate future waste management needs and facilitate more efficient

² 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.

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bin movements. An additional receptacle for each waste stream has been displayed within each of the storage room floor plans in Appendix B.

2.3 Collection Point and Waste Collection

Recyclables, organics, and garbage from all three Towers will be collected in one Collection Point, located on the ground floor of Tower A. The Collection Point will feature:

- a loading area 4 m in width by 13 m in length with an overhead clearance of 7.5 m.
 - sharing of the waste loading space will be scheduled in accordance with Regional pick-up times.
 - As such, the loading area will be greater than 6 metres in width, as the Type “C” loading area will not be used during these collection periods.
- a +/- 2% grade.
- a weight capacity of 35,000 kg (35 tonnes).

As seen from Table 1, garbage bins represent the worst-case staging area requirement for collection (highest number of front-lift bins). The staging area is approximately 157.5 m² which is more than enough space to store and maneuver all the garbage bins from all three Towers during a single collection day. The layout of garbage bins awaiting collection in the staging area is illustrated on Figure 4 in Appendix B.

On each collection day, prior to 7:00 AM., maintenance staff will move the bins from each Residential Waste Storage Room to the Collection Point. As shown in Appendix B, bins from all three Towers will be transported from to the “Waste Elevator” (located adjacent to the Bike Storage Room on Level P1). This elevator will then transport the bins from Level P1 to the staging area on the ground floor. Maintenance staff may use a ride-on tractor or a trash bin mover³ for ease of transporting bins.

During collection, maintenance staff will assist in moving and positioning the bins in front of 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 metres width). Staff will then shuffle bins in the staging area as the tipping proceeds. All waste containers will be returned to their respective Residential Waste Storage Rooms following collection.

The collection truck drive path is attached as Appendix C, showing the minimum 13 metre centreline turning radii.

³ The WasteCaddy (<https://www.djproducts.com/product/video-wastecaddy-efficient-trash-bin-mover/>, or <https://www.djproducts.com/product/wastecaddy-ride-on-dumpster-mover/> accessed February 2023) is provided as an example.

3.0 Commercial Waste Management

The Region has stated they will not provide waste collection for commercial wastes generated by this development. As such, private collection will be arranged for commercial wastes produced at the property. Commercial wastes will be stored separately from residential wastes in a dedicated Commercial Waste Room (sized 91.9 m²) located at the ground floor of Tower A, adjacent to the Waste Staging Area.

3.1 Storage Room & Equipment

It is expected that commercial wastes will be temporarily stored within each commercial 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 via an external route to the Commercial Waste Room. This movement will be completed by the commercial tenants either daily or once the cart(s) are filled.

Frequent collection may be required for odorous wastes generated by the potential daycare on the ground floor of Tower A. Dedicated containers for these wastes would be labelled for identification by daycare operators and maintenance staff.

The Commercial 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 the operational requirements.

3.1.1 Using Front-lift Bins

Should front-lift bins be used for storage, a cart tipper⁴ will be required in the Commercial Waste Room to empty carts into front-lift bins. A sample layout for this Room, based on conservative estimates, has been shown as Figure 5 of Appendix B. This layout displays the anticipated:

- Weekly number of front-lift bins for collection.
- Two days' worth of full 360 L carts.
- One days' supply of empty 360 L carts.
- Cart-tipper floorspace.

⁴ 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 February 2023).

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The use of the room in this manner can be operated by either:

a) Commercial Tenants:

Tenants will bring their waste carts to the waste storage room and use the cart tipper to empty the cart into the appropriate front-lift bin. The tenant will 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.

b) Facility Maintenance:

Tenants will bring their filled waste carts to the waste storage room. There will be spare, empty carts in the room. The tenant will grab one of the spare carts and return to their (commercial) 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 room, and
- Grab an empty cart before returning to their (commercial) unit.

This option is likely to require the highest number of carts compared to other options. Increasing collection frequency (i.e., recycling collection two times per week) would reduce the cart count. Some manual movement of waste to completely load partly filled carts may also reduce the number of carts required.

Burnside has not prepared a figure that shows this waste storage option.

3.2 Collection Point and Waste Collection

Collection of commercial waste will take place at the same Collection Point that is used for residential waste. Facility maintenance staff will be responsible for moving the front-lift bins or carts into the Waste Staging Area using the double doors that separate the staging area from the Commercial Waste Storage Room.

Private collection of commercial waste will be scheduled so that it does not conflict with the Region's (residential) waste collection schedule.

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4.0 Conclusions

From the research completed in preparing this report, Burnside believes that the 590 Argus Road mixed-use development's waste management system operates in a safe, functional and accessible manner, compatible with the Region's residential waste collection system. Furthermore, the development's design provides the flexibility required 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 provided ZBA comments when preparing the SPA submission.



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Appendix A

Site Plan and Statistics



MARCH 20, 2023

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SEAL

A000

BUILDING STATISTICS - OVERALL

GCA BY LEVEL (BELOW GRADE)				
LEVELS	AREA PER LEVEL		NO. OF LEVELS TYPICAL	TOTAL AREA
	(SM)	(SF)		(SM) (SF)
LEVEL P6	9,755.99 m²	105,006 SF	1	9,755.99 m² 105,006 SF
LEVEL P5	9,755.38 m²	105,006 SF	1	9,755.38 m² 105,006 SF
LEVEL P4	9,753.51 m²	104,986 SF	1	9,753.51 m² 104,986 SF
LEVEL P3	9,753.19 m²	104,982 SF	1	9,753.19 m² 104,982 SF
LEVEL P2	9,750.45 m²	104,953 SF	1	9,750.45 m² 104,953 SF
LEVEL P1	9,734.68 m²	104,783 SF	1	9,734.68 m² 104,783 SF
TOTAL	58,602.60 m²	629,717 SF	1	58,602.60 m² 629,717 SF

GCA BY LEVEL (ABOVE GRADE)				
LEVELS	AREA PER LEVEL		NO. OF LEVELS TYPICAL	TOTAL AREA
	(SM)	(SF)		(SM) (SF)
LEVEL 01	4,761.96 m²	51,257 SF	1	4,761.96 m² 51,257 SF
LEVEL 02	5,429.62 m²	58,444 SF	1	5,429.62 m² 58,444 SF
LEVEL 03	5,730.13 m²	61,679 SF	1	5,730.13 m² 61,679 SF
LEVEL 04	5,473.08 m²	58,912 SF	1	5,473.08 m² 58,912 SF
LEVEL 05	5,520.60 m²	59,423 SF	1	5,520.60 m² 59,423 SF
LEVEL 06	5,273.17 m²	56,760 SF	1	5,273.17 m² 56,760 SF
LEVEL 07	4,167.33 m²	44,857 SF	1	4,167.33 m² 44,857 SF
LEVEL 08	3,907.42 m²	42,099 SF	1	3,907.42 m² 42,099 SF
LEVEL 09	3,593.85 m²	38,684 SF	1	3,593.85 m² 38,684 SF
LEVEL 10	3,328.30 m²	35,826 SF	1	3,328.30 m² 35,826 SF
LEVEL 11	3,037.95 m²	32,700 SF	1	3,037.95 m² 32,700 SF
LEVEL 12	2,774.16 m²	29,861 SF	1	2,774.16 m² 29,861 SF
LEVEL 13	2,551.35 m²	27,462 SF	1	2,551.35 m² 27,462 SF
LEVEL 14 + ABOVE	2,551.33 m²	27,462 SF	32 / 46 / 38	96,100.34 m² 1,034,415 SF
TOTAL	58,100.23 m²	625,386 SF		151,649.24 m² 1,632,339 SF

BUILDING STATISTICS - TOWER A

GCA BY LEVEL (ABOVE GRADE) TOWER A				
LEVELS	AREA PER LEVEL		NO. OF LEVELS TYPICAL	TOTAL AREA
	(SM)	(SF)		(SM) (SF)
LEVEL 01	1,538.72 m²	16,563 SF	1	1,538.72 m² 16,563 SF
LEVEL 02	1,357.60 m²	14,613 SF	1	1,357.60 m² 14,613 SF
LEVEL 03	979.97 m²	10,548 SF	1	979.97 m² 10,548 SF
LEVEL 04	1,874.73 m²	20,179 SF	1	1,874.73 m² 20,179 SF
LEVEL 05	1,899.44 m²	20,445 SF	1	1,899.44 m² 20,445 SF
LEVEL 06	1,758.13 m²	18,924 SF	1	1,758.13 m² 18,924 SF
LEVEL 07	1,390.56 m²	14,937 SF	1	1,390.56 m² 14,937 SF
LEVEL 08	1,222.14 m²	13,155 SF	1	1,222.14 m² 13,155 SF
LEVEL 09	1,138.46 m²	12,254 SF	1	1,138.46 m² 12,254 SF
LEVEL 10	1,064.41 m²	11,457 SF	1	1,064.41 m² 11,457 SF
LEVEL 11	990.32 m²	10,660 SF	1	990.32 m² 10,660 SF
LEVEL 12	912.27 m²	9,820 SF	1	912.27 m² 9,820 SF
LEVEL 13	850.56 m²	9,155 SF	1	850.56 m² 9,155 SF
LEVEL 14 TO 44	850.56 m²	9,155 SF	31	26,367.36 m² 283,816 SF
TOTAL	17,731.15 m²	190,857 SF		43,247.94 m² 465,517 SF

BUILDING STATISTICS - TOWER B

GCA BY LEVEL (ABOVE GRADE) TOWER B				
LEVELS	AREA PER LEVEL		NO. OF LEVELS TYPICAL	TOTAL AREA
	(SM)	(SF)		(SM) (SF)
LEVEL 01	1,055.54 m²	11,362 SF	1	1,055.54 m² 11,362 SF
LEVEL 02	1,600.54 m²	17,228 SF	1	1,600.54 m² 17,228 SF
LEVEL 03	3,045.70 m²	32,784 SF	1	3,045.70 m² 32,784 SF
LEVEL 04	1,585.69 m²	17,068 SF	1	1,585.69 m² 17,068 SF
LEVEL 05	1,809.33 m²	19,475 SF	1	1,809.33 m² 19,475 SF
LEVEL 06	1,552.30 m²	16,709 SF	1	1,552.30 m² 16,709 SF
LEVEL 07	1,293.85 m²	13,927 SF	1	1,293.85 m² 13,927 SF
LEVEL 08	1,222.14 m²	13,155 SF	1	1,222.14 m² 13,155 SF
LEVEL 09	1,138.46 m²	12,254 SF	1	1,138.46 m² 12,254 SF
LEVEL 10	1,064.41 m²	11,457 SF	1	1,064.41 m² 11,457 SF
LEVEL 11	990.32 m²	10,660 SF	1	990.32 m² 10,660 SF
LEVEL 12	912.27 m²	9,820 SF	1	912.27 m² 9,820 SF
LEVEL 13	850.56 m²	9,155 SF	1	850.56 m² 9,155 SF
LEVEL 14 TO 58	850.56 m²	9,155 SF	45	38,275.19 m² 411,991 SF
TOTAL	18,971.66 m²	204,209 SF		56,396.28 m² 607,045 SF

BUILDING STATISTICS - TOWER C

GCA BY LEVEL (ABOVE GRADE) TOWER C				
LEVELS	AREA PER LEVEL		NO. OF LEVELS TYPICAL	TOTAL AREA
	(SM)	(SF)		(SM) (SF)
LEVEL 01	1,535.61 m²	16,529 SF	1	1,535.61 m² 16,529 SF
LEVEL 02	2,276.21 m²	24,501 SF	1	2,276.21 m² 24,501 SF
LEVEL 03	1,534.37 m²	16,516 SF	1	1,534.37 m² 16,516 SF
LEVEL 04	1,979.72 m²	21,310 SF	1	1,979.72 m² 21,310 SF
LEVEL 05	1,778.89 m²	19,148 SF	1	1,778.89 m² 19,148 SF
LEVEL 06	1,827.37 m²	19,670 SF	1	1,827.37 m² 19,670 SF
LEVEL 07	1,579.63 m²	17,003 SF	1	1,579.63 m² 17,003 SF
LEVEL 08	1,463.14 m²	15,749 SF	1	1,463.14 m² 15,749 SF
LEVEL 09	1,316.93 m²	14,175 SF	1	1,316.93 m² 14,175 SF
LEVEL 10	1,199.48 m²	12,911 SF	1	1,199.48 m² 12,911 SF
LEVEL 11	1,057.30 m²	11,381 SF	1	1,057.30 m² 11,381 SF
LEVEL 12	940.62 m²	10,222 SF	1	940.62 m² 10,222 SF
LEVEL 13	850.23 m²	9,152 SF	1	850.23 m² 9,152 SF
LEVEL 14 TO 50	850.21 m²	9,152 SF	37	31,457.80 m² 338,609 SF
TOTAL	20,198.73 m²	217,417 SF		50,806.32 m² 546,875 SF

AREA SUMMARY (BELOW GRADE)												
LEVELS	GCA		DEDUCTION		RESIDENTIAL GFA		RETAIL GFA		INDOOR AMENITY		OUTDOOR AMENITY	
	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)
LEVEL P6	9,755.99 m²	105,006 SF	9,589.91 m²	103,225 SF	165.48 m²	1,781 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	1,781 SF
LEVEL P5	9,753.38 m²	105,006 SF	9,589.82 m²	103,222 SF	165.76 m²	1,784 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	1,784 SF
LEVEL P4	9,753.51 m²	104,986 SF	9,581.93 m²	103,204 SF	165.68 m²	1,782 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	1,782 SF
LEVEL P3	9,753.19 m²	104,982 SF	9,588.13 m²	103,217 SF	164.06 m²	1,766 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	1,766 SF
LEVEL P2	9,750.45 m²	104,953 SF	9,586.21 m²	103,185 SF	164.24 m²	1,768 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	1,768 SF
LEVEL P1	9,734.68 m²	104,783 SF	9,580.51 m²	102,890 SF	162.17 m²	1,743 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	1,743 SF
TOTAL	58,602.60 m²	629,717 SF	56,851.31 m²	611,942 SF	1,651.29 m²	17,774 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	17,774 SF

AREA SUMMARY (ABOVE GRADE)												
LEVELS	GCA		DEDUCTION		RESIDENTIAL GFA		RETAIL GFA		INDOOR AMENITY		OUTDOOR AMENITY	
	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)
LEVEL 01	4,761.96 m²	51,257 SF	1,263.78 m²	13,603 SF	1,754.52 m²	18,885 SF	1,743.66 m²	18,769 SF	650.87 m²	7,005.86 SF	0.00 m²	0.00 SF
LEVEL 02	5,429.62 m²	58,444 SF	1,375.42 m²	14,805 SF	4,054.20 m²	43,039 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	43,039 SF
LEVEL 03	5,730.13 m²	61,679 SF	2,192.21 m²	23,597 SF	3,537.92 m²	38,082 SF	0.00 m²	0 SF	1,970.46 m²	21,209.84 SF	386.53 m²	4,160.61 SF
LEVEL 04	5,473.08 m²	58,912 SF	231.63 m²	2,493 SF	5,241.46 m²	56,419 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	56,419 SF
LEVEL 05	5,520.60 m²	59,423 SF	231.64 m²	2,493 SF	5,288.96 m²	56,930 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	56,930 SF
LEVEL 06	5,273.17 m²	56,760 SF	390.82 m²	4,207 SF	4,882.35 m²	52,553 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	52,553 SF
LEVEL 07	4,167.33 m²	44,857 SF	250.84 m²	2,705 SF	3,916.49 m²	42,157 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	42,157 SF
LEVEL 08	3,907.42 m²	42,099 SF	228.53 m²	2,460 SF	3,678.89 m²	39,599 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	39,599 SF
LEVEL 09	3,593.85 m²	38,684 SF	231.04 m²	2,487 SF	3,362.80 m²	36,197 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	36,197 SF
LEVEL 10	3,328.30 m²	35,826 SF	396.78 m²	4,271 SF	2,931.53 m²	31,555 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	31,555 SF
LEVEL 11	3,037.95 m²	32,700 SF	226.52 m²	2,438 SF	2,811.43 m²	30,262 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	30,262 SF
LEVEL 12	2,774.16 m²	29,861 SF	224.55 m²	2,417 SF	2,549.61 m²	27,444 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	27,444 SF
LEVEL 13	2,551.35 m²	27,462 SF	222.76 m²	2,388 SF	2,326.60 m²	25,065 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	25,065 SF
LEVEL 14 + ABOVE	96,100.34 m²	1,034,415 SF	5,390.28 m²	58,312 SF	97,710.08 m²	1,042,727 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	1,042,727 SF
TOTAL	151,649.24 m²	1,632,339 SF	15,856.75 m²	170,881 SF	134,048.83 m²	1,442,890 SF	1,743.66 m²	18,769 SF	2,621.32 m²	28,215.70 SF	386.53 m²	4,160.61 SF

AREA SUMMARY (ABOVE GRADE) TOWER A														
LEVELS	GCA		DEDUCTION		RESIDENTIAL GFA		RETAIL GFA		INDOOR AMENITY		OUTDOOR AMENITY		GFA	
	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)	(m²)	(SF)		
LEVEL 01	1,538.72 m²	16,563 SF	541.20 m²	5,825 SF	527.30 m²	5,676 SF	470.23 m²	5,061 SF	206.46 m²	2,222.29 SF	0.00 m²	0.00 SF	997.52 m²	10,737 SF
LEVEL 02	1,357.60 m²	14,613 SF	361.54 m²	3,784 SF	1,006.06 m²	10,829 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	1,006.06 m²	10,829 SF
LEVEL 03	979.97 m²	10,548 SF	73.80 m²	794 SF	906.16 m²	9,754 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	906.16 m²	9,754 SF
LEVEL 04	1,874.73 m²	20,179 SF	80.10 m²	862 SF	1,794.64 m²	19,317 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	1,794.64 m²	19,317 SF
LEVEL 05	1,899.44 m²	20,445 SF	81.59 m²	878 SF	1,817.85 m²	19,567 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	1,817.85 m²	19,567 SF
LEVEL 06	1,758.13 m²	18,924 SF	114.75 m²	1,235 SF	1,643.38 m²	17,680 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	1,643.38 m²	17,680 SF
LEVEL 07	1,290.85 m²	13,957 SF	84.19 m²	906 SF	1,209.66 m²	13,021 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	1,209.66 m²	13,021 SF
LEVEL 08	1,222.14 m²	13,155 SF	76.80 m²	827 SF	1,145.34 m²	12,326 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	1,145.34 m²	12,326 SF
LEVEL 09	1,138.46 m²	12,254 SF	76.06 m²	840 SF	1,060.41 m²	11,414 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	1,060.41 m²	11,414 SF
LEVEL 10	1,064.41 m²	11,457 SF	117.71 m²	1,267 SF	946.70 m²	10,190 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	946.70 m²	10,190 SF
LEVEL 11	990.32 m²	10,660 SF	76.56 m²	824 SF	913.77 m²	9,836 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	913.77 m²	9,836 SF
LEVEL 12	912.27 m²	9,836 SF	75.15 m²	809 SF	837.11 m²	9,011 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	837.11 m²	9,011 SF
LEVEL 13	856.56 m²	9,155 SF	74.33 m²	800 SF	778.23 m²	8,356 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	778.23 m²	8,356 SF
LEVEL 14 TO 44	266.36 m²	2,860 SF	23.04 m²	24,802 SF	240.63 m²	259,013 SF	0.00 m²	0 SF	0.00 m²	0.00 SF	0.00 m²	0.00 SF	240.63 m²	259,013 SF
TOTAL	43,247.94 m²	465,517 SF	4,130.00 m²	44,455 SF	38,647.72 m²	416,001 m²	470.23 m²	5,061 SF	206.46 m²	2,222.29 SF	0.00 m²	0.00 SF	38,117.95 m²	421,062 SF

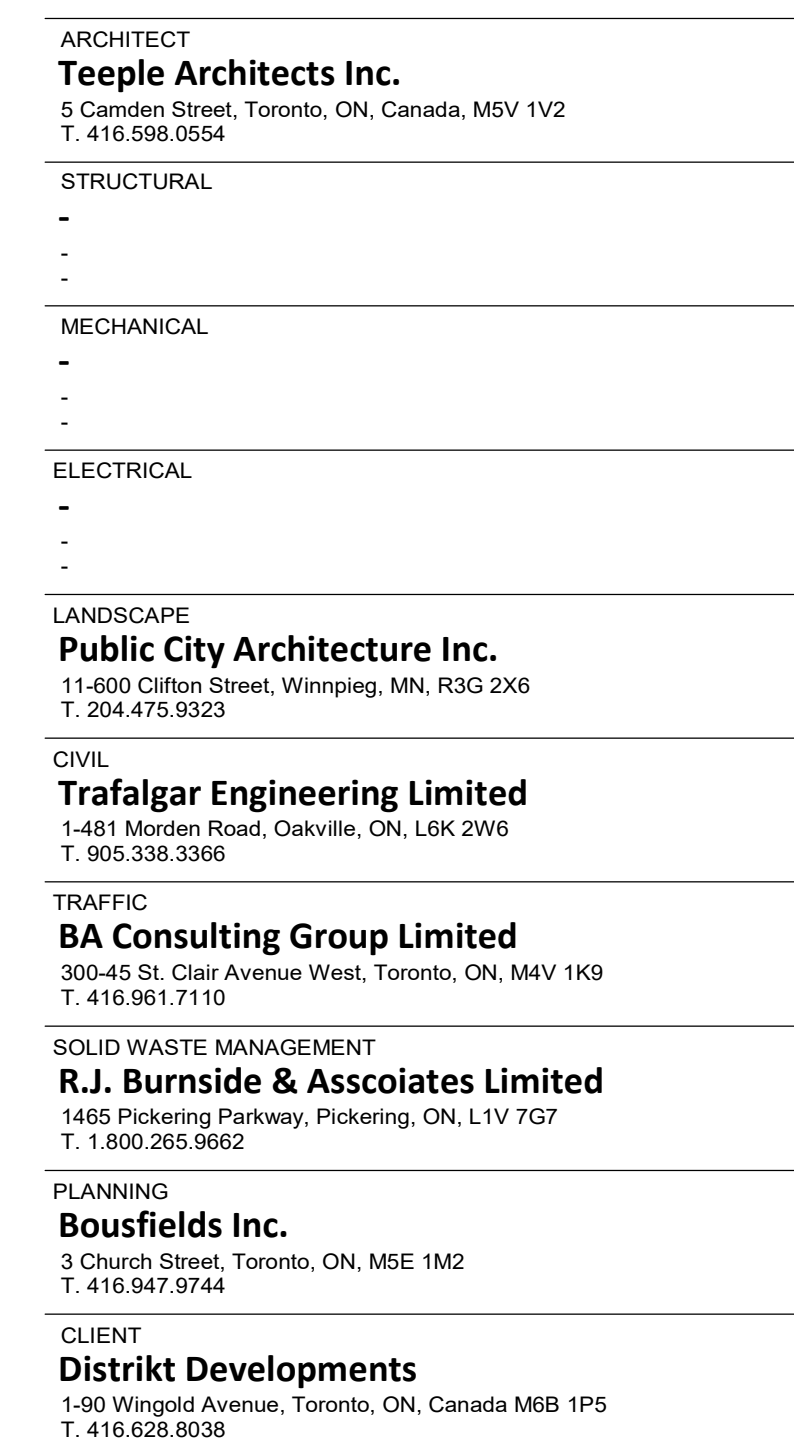
BICYCLE PARKING REQUIREMENT

Diagram illustrating bicycle parking requirements:

- BIKE STACK SECTION DETAIL:** Shows a side view of a bike rack section. Dimensions include 1800mm for the width of the bike rack section, 1800mm for the width of the aisle, and 2400mm for the height of the bike rack section. Labels include "MIN AISLE WIDTH" and "MIN HEADROOM".
- STACK BICYCLE PARKING:** Shows a top view of a stack of bicycles. Dimensions include 600mm for the width of the stack and 1800mm for the length of the stack. The text below indicates a requirement of (600 X 1800).
- VERTICAL BICYCLE PARKING:** Shows a top view of vertical bicycle parking. Dimensions include 600mm for the width of the stack and 1200mm for the length of the stack. The text below indicates a requirement of (600 X 1800).

BICYCLE PARKING SUMMARY PER LEVEL	
276	RESIDENTIAL
	NON-RESIDENTIAL*
438	VISITOR
714	TOTAL

A203



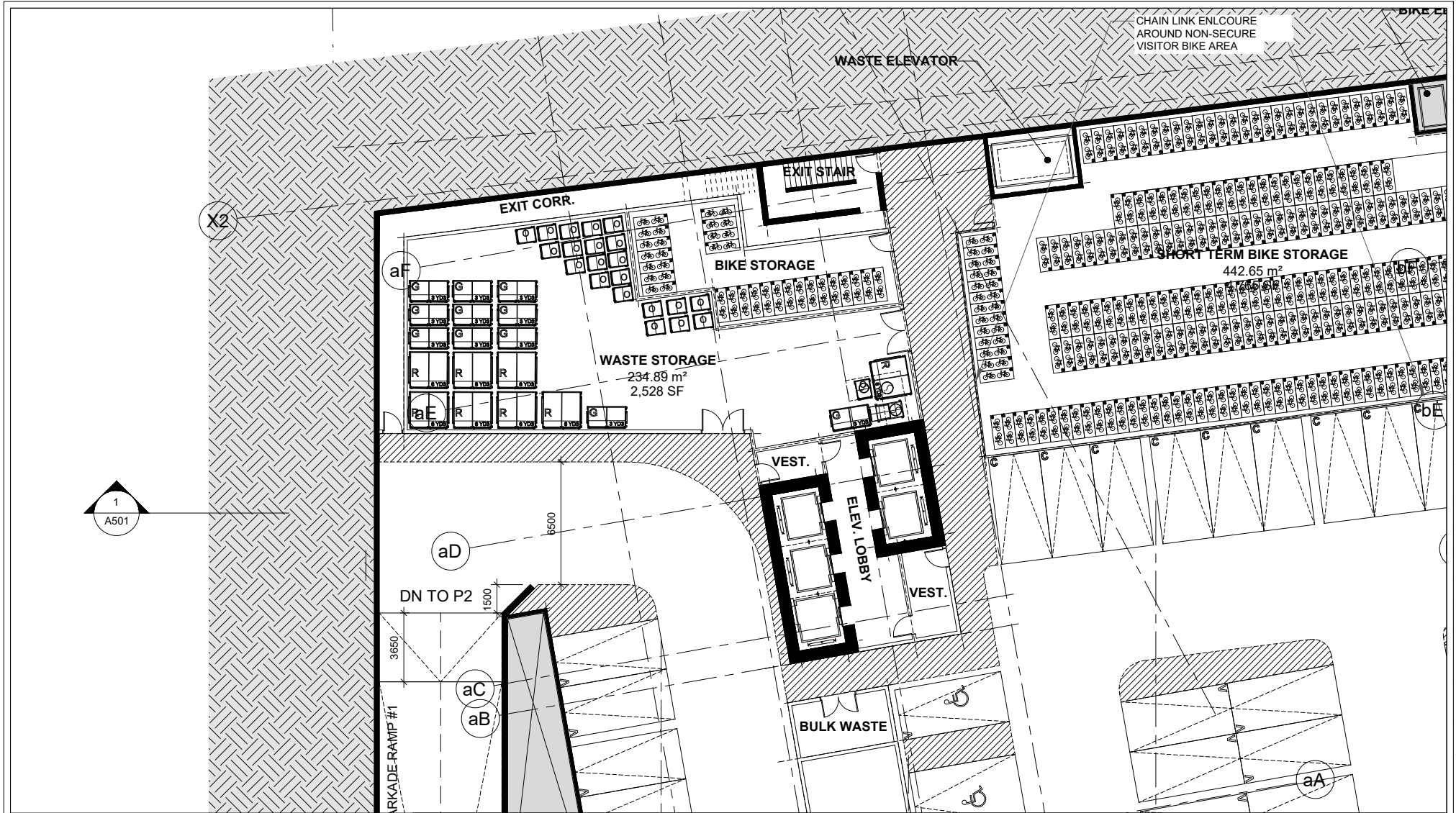


BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix B

Waste Room and Loading Area Plans



NOTES:

- FIGURES WERE MADE BASED ON THE 'ISSUED FOR OPA/ZBA' DRAWING SET, DATED MARCH 20, 2023 DRAWING SET BY TEEPLE ARCHITECTS INC.
- BIN AND CARTS SHOWN ON THIS DRAWING ARE INTENDED TO BE REPRESENTATIONAL.
- FIGURE TO BE READ IN CONJUNCTION WITH TEEPLE ARCHITECTS INC. 'WASTE MANAGEMENT & LOADING PLAN' (FIGURE NO. A112).



Client

590 ARGUS LP

Figure Title

**RESIDENTIAL WASTE STORAGE ROOM
BUILDING A**
590 ARGUS ROAD MIXED-USE DEVELOPMENT

Drawn

CJ

Checked

JH

Date

FEBRUARY 2023

Scale

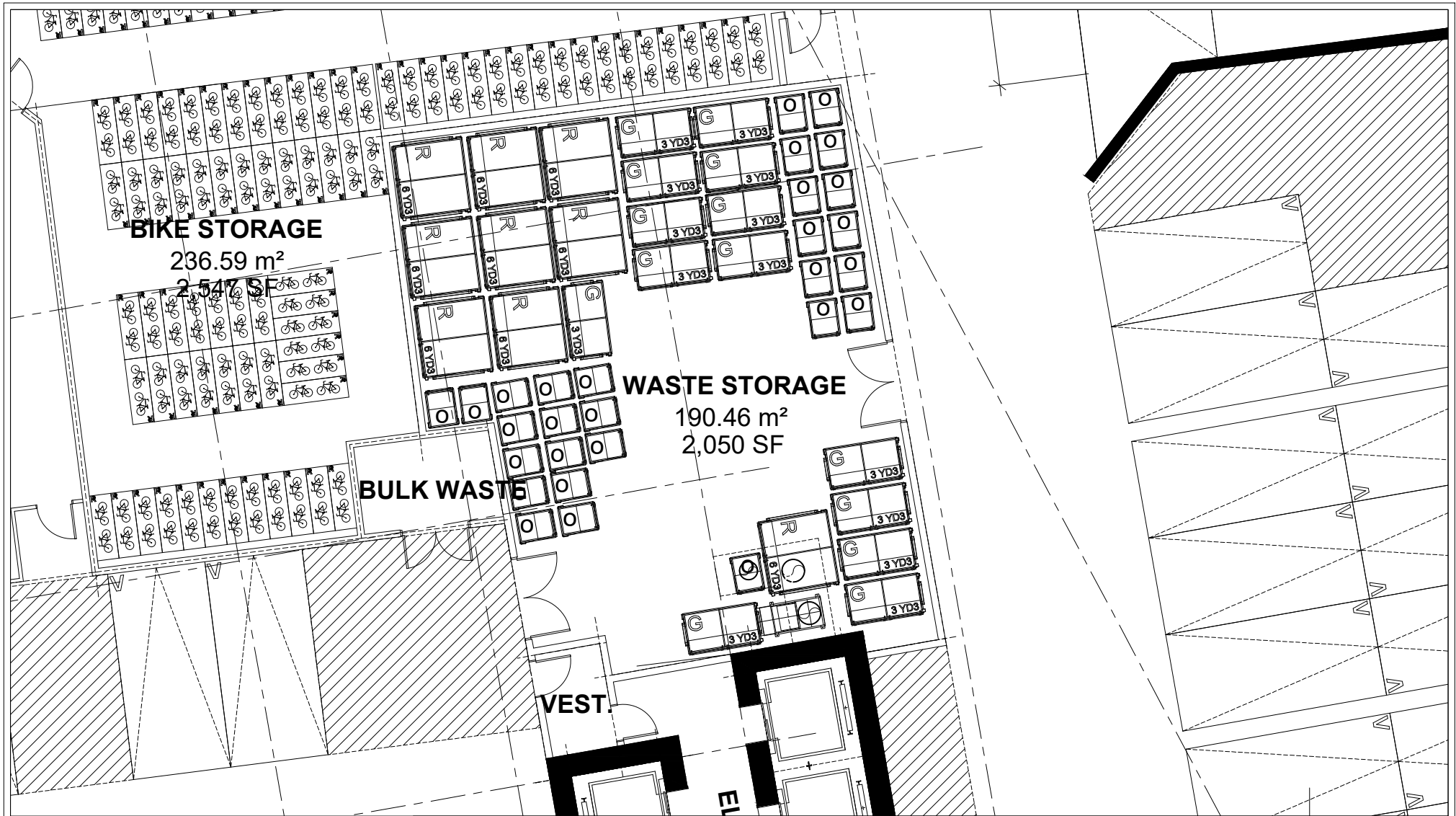
N.T.S.

Project No.

300056000.0000

Figure No.

1



NOTES:

- FIGURES WERE MADE BASED ON THE 'ISSUED FOR OPA/ZBA' DRAWING SET, DATED MARCH 20, 2023 DRAWING SET BY TEEPLE ARCHITECTS INC.
- BIN AND CARTS SHOWN ON THIS DRAWING ARE INTENDED TO BE REPRESENTATIONAL.
- FIGURE TO BE READ IN CONJUNCTION WITH TEEPLE ARCHITECTS INC. 'WASTE MANAGEMENT & LOADING PLAN' (FIGURE NO. A112).



Client

590 ARGUS LP

Figure Title

**RESIDENTIAL WASTE STORAGE ROOM
BUILDING B**
590 ARGUS ROAD MIXED-USE DEVELOPMENT

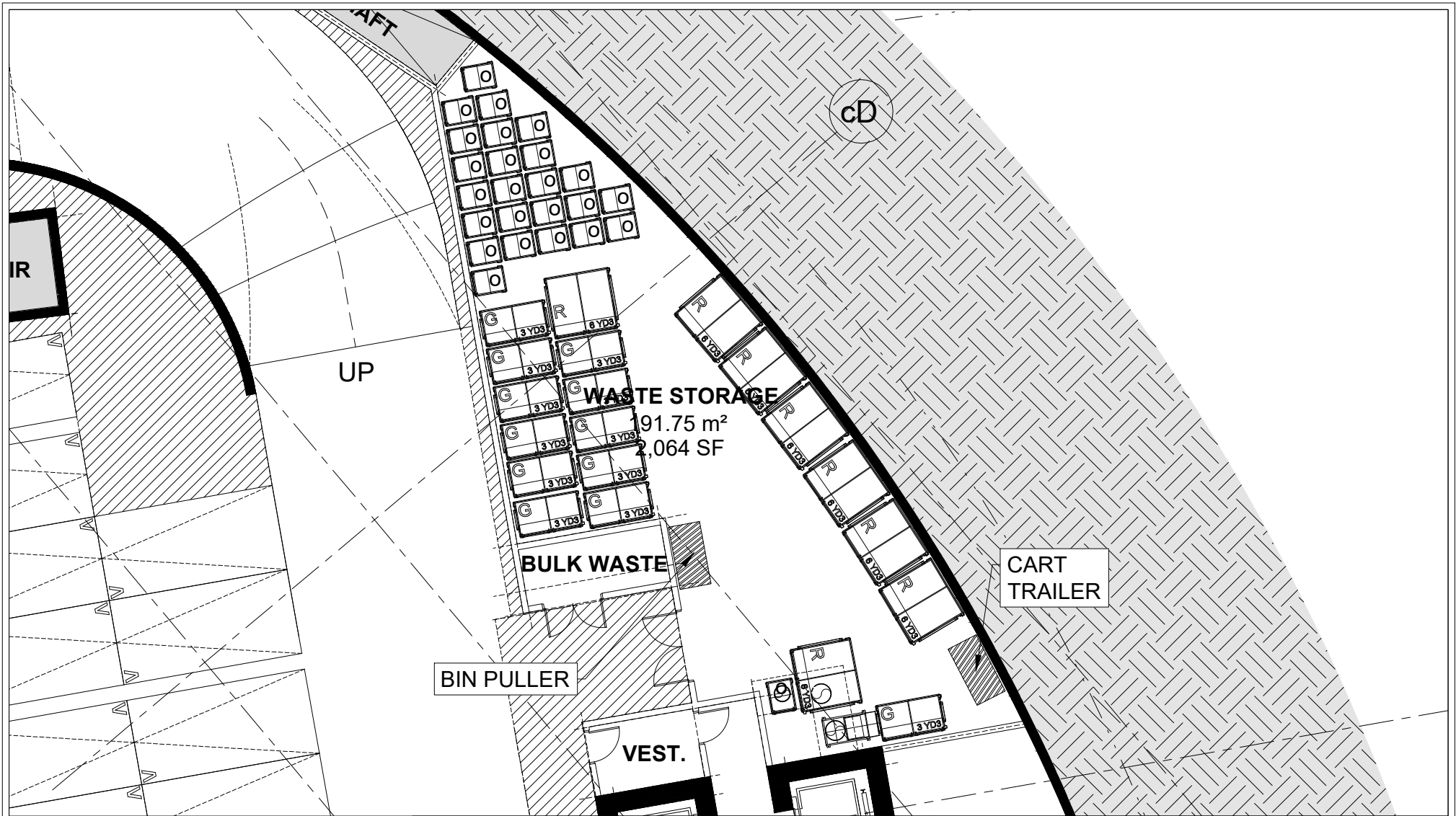
Drawn
CJ
Scale
N.T.S.

Checked
JH

Date
JAN 2023
Project No.
300056000.0000

Figure No.

2



NOTES:

- FIGURES WERE MADE BASED ON THE 'ISSUED FOR OPA/ZBA' DRAWING SET, DATED MARCH 20, 2023 DRAWING SET BY TEEPLE ARCHITECTS INC.
- BIN AND CARTS SHOWN ON THIS DRAWING ARE INTENDED TO BE REPRESENTATIONAL.
- FIGURE TO BE READ IN CONJUNCTION WITH TEEPLE ARCHITECTS INC. 'WASTE MANAGEMENT & LOADING PLAN' (FIGURE NO. A112).



Client

590 ARGUS LP

Figure Title

**RESIDENTIAL WASTE STORAGE ROOM
BUILDING C**
590 ARGUS ROAD MIXED-USE DEVELOPMENT

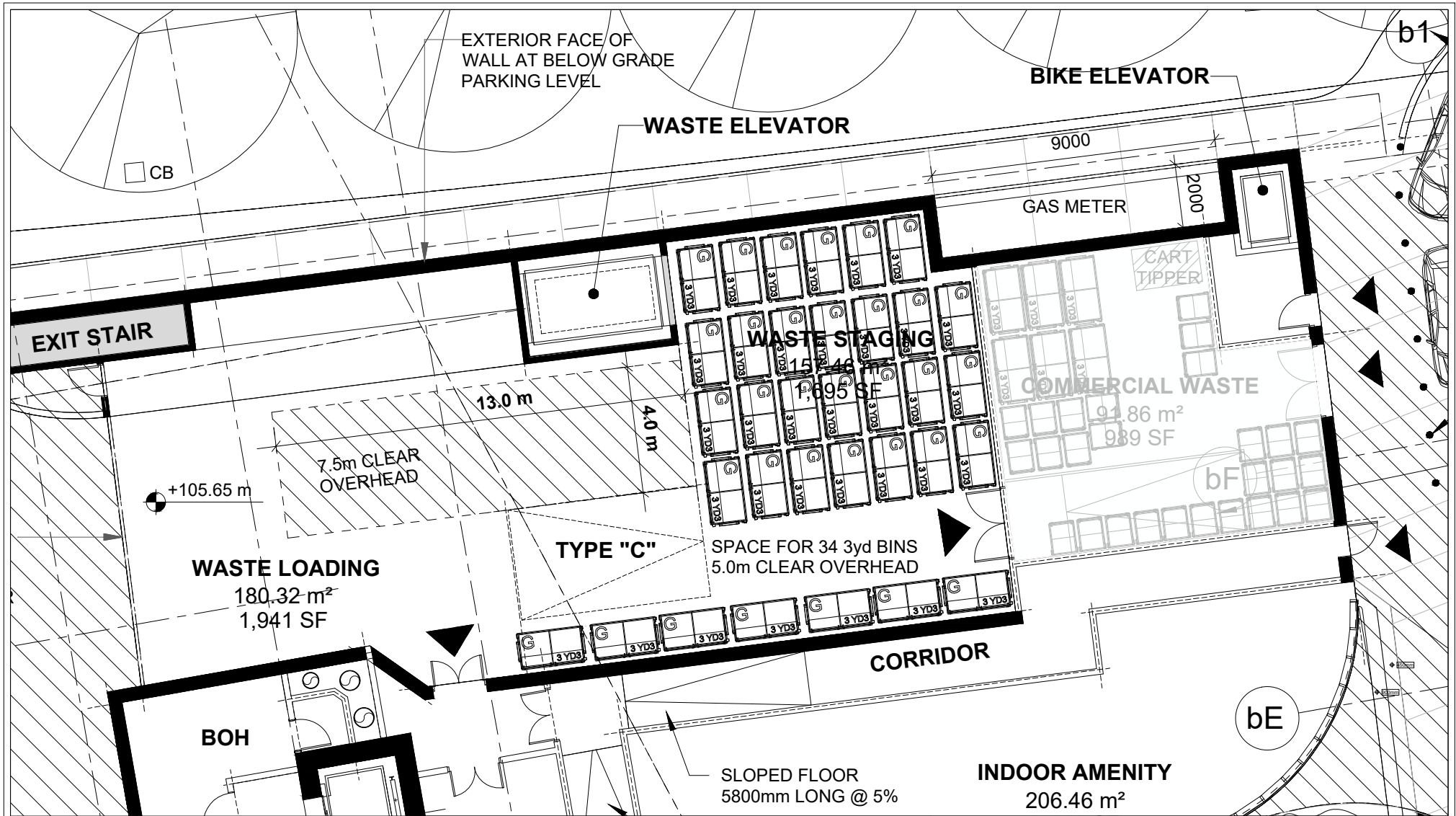
Drawn
CJ
Scale
N.T.S.

Checked
JH

Date
FEBRUARY 2023
Project No.
300056000.0000

Figure No.

3



NOTES:

- FIGURES WERE MADE BASED ON THE 'ISSUED FOR OPA/ZBA' DRAWING SET, DATED MARCH 20, 2023 DRAWING SET BY TEEPLE ARCHITECTS INC.
- BIN AND CARTS SHOWN ON THIS DRAWING ARE INTENDED TO BE REPRESENTATIONAL.
- FIGURE TO BE READ IN CONJUNCTION WITH TEEPLE ARCHITECTS INC. 'WASTE MANAGEMENT & LOADING PLAN' (FIGURE NO. A112).



Client

590 ARGUS LP

Figure Title

LOADING & STAGING AREA

590 ARGUS ROAD MIXED-USE DEVELOPMENT

Drawn

CJ

Checked

JH

Date

FEBRUARY 2023

Scale

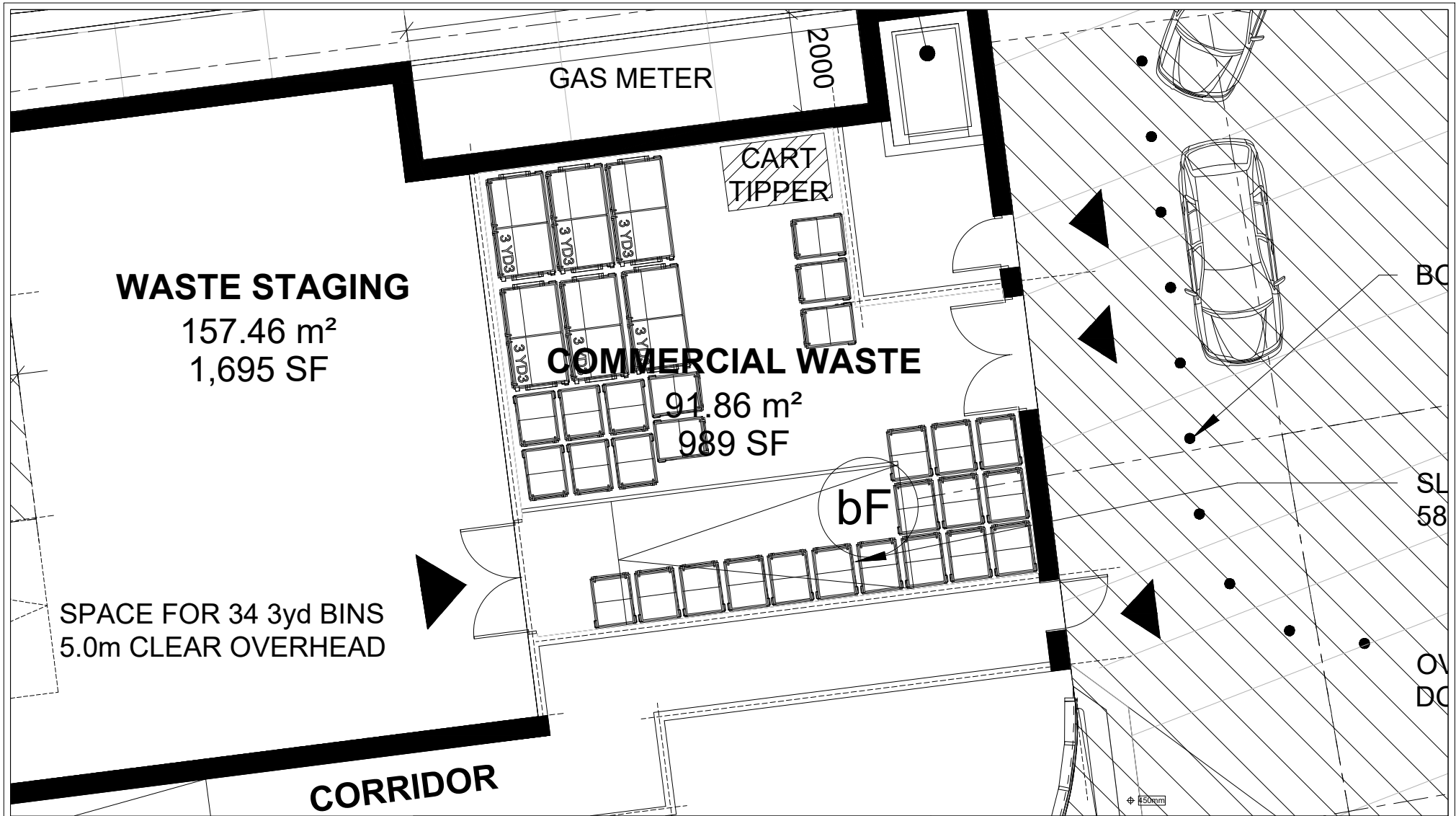
N.T.S.

Project No.

300056000.0000

Figure No.

4



NOTES:

- FIGURES WERE MADE BASED ON THE 'ISSUED FOR OPA/ZBA' DRAWING SET, DATED MARCH 20, 2023 DRAWING SET BY TEEPLE ARCHITECTS INC.
- BIN AND CARTS SHOWN ON THIS DRAWING ARE INTENDED TO BE REPRESENTATIONAL.
- FIGURE TO BE READ IN CONJUNCTION WITH TEEPLE ARCHITECTS INC. 'WASTE MANAGEMENT & LOADING PLAN' (FIGURE NO. A112).



Figure Title

COMMERCIAL WASTE STORAGE ROOM

590 ARGUS ROAD MIXED-USE DEVELOPMENT

Client

590 ARGUS LP

Drawn

CJ

Checked

JH

Date

FEBRUARY 2023

Scale

N.T.S.

Project No.

300056000.0000

Figure No.

5



BURNSIDE

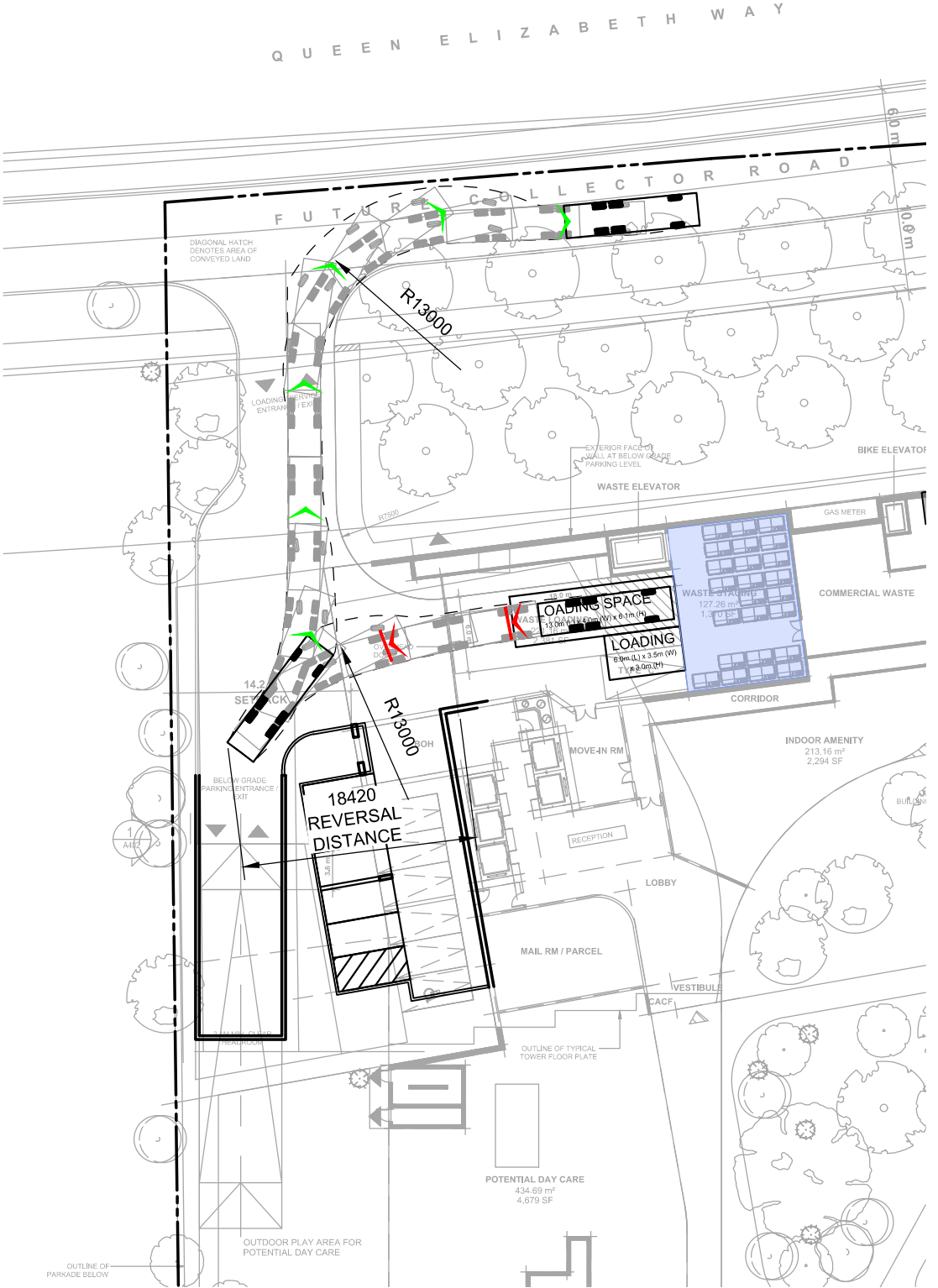
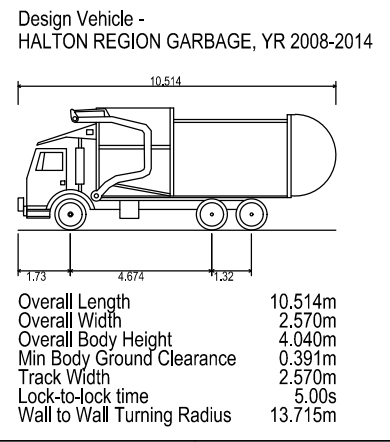
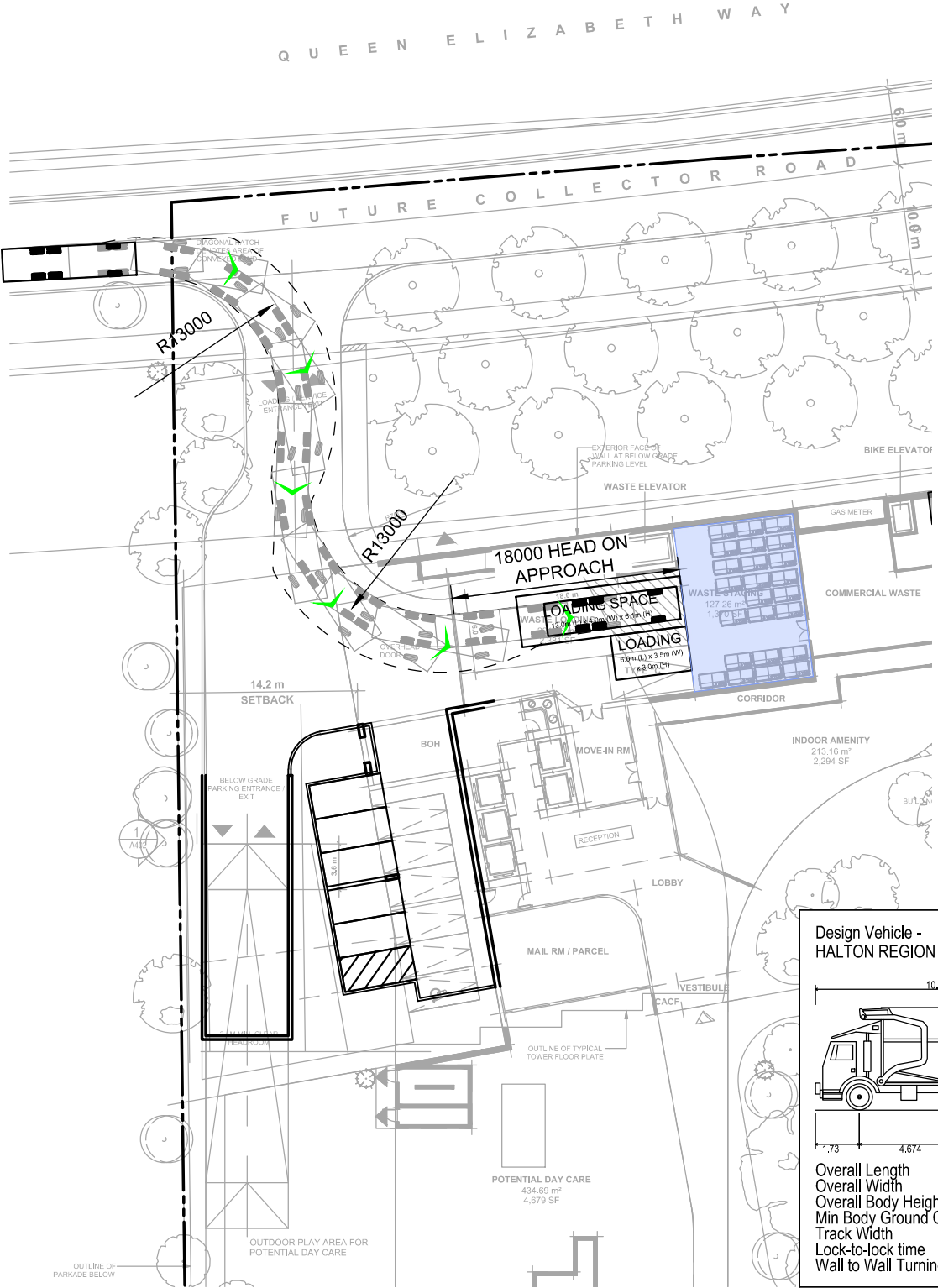
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Appendix C

Waste Collection Vehicle Turning Path Analysis

INBOUND

OUTBOUND



590 ARGUS
VEHICLE MANOEUVRING DIAGRAM
BUILDING A
HALTON REGION GARBAGE TRUCK

Project: 590 ARGUS
Project No. 8078-05
Date: February 22, 2023
Revised: -



