

**50 Speers Road, Oakville ON
Preliminary (Rezoning/OPA)
Solid Waste Management Plan**

**Helberg Properties Limited c/o Arcanos
Property Management Corporation
542 Mount Pleasant Road, Suite 302
Toronto, ON M4S 1M7**



BURNSIDE

**50 Speers Road, Oakville ON
Preliminary (Rezoning/OPA)
Solid Waste Management Plan**

**Helberg Properties Limited c/o
Arcanos Property Management
Corporation
542 Mount Pleasant Road, Suite 302
Toronto, ON M4S 1M7**

**R.J. Burnside & Associates Limited
1465 Pickering Parkway Suite 200
Pickering ON L1V 7G7 CANADA**

**October 2022
300055467.0000**

50 Speers Road, Oakville ON
 October 2022

Distribution List

No. of Hard Copies	PDF	Email	Organization Name
0	Yes	Yes	Helberg Properties Limited c/o Arcanos Property Management Corporation
0	Yes	Yes	Collage Works

Record of Revisions

Revision	Date	Description
0	October 13, 2022	Submission to Client

R.J. Burnside & Associates Limited

Report Prepared By:



Christian Jordan, B.Sc.
 Project Manager
 CJ:cv

Report Reviewed By:



Jamie R. Hollingsworth, P.Eng.
 Solid Waste Specialist
 JRH:cv

50 Speers Road, Oakville ON
October 2022

Table of Contents

1.0	Introduction	1
2.0	Waste Management System Requirements	2
	2.1 Waste Storage Room	2
	2.2 Equipment Requirements	3
3.0	Waste Loading	5
4.0	Conclusions	5

Appendices

Appendix A Site Plan and Statistics

Appendix B Waste Room and Loading Area Plan

Appendix C Waste Collection Vehicle Turning Path Analysis

50 Speers Road, Oakville ON
October 2022

Disclaimer

Other than by the addressee, copying or distribution of this document, in whole or in part, is not permitted without the express written consent of R.J. Burnside & Associates Limited.

In the preparation of the various instruments of service contained herein, R.J. Burnside & Associates Limited was required to use and rely upon various sources of information (including but not limited to: reports, data, drawings, observations) produced by parties other than R.J. Burnside & Associates Limited. For its part R.J. Burnside & Associates Limited has proceeded based on the belief that the third party/parties in question produced this documentation using accepted industry standards and best practices and that all information was therefore accurate, correct and free of errors at the time of consultation. As such, the comments, recommendations and materials presented in this instrument of service reflect our best judgment in light of the information available at the time of preparation. R.J. Burnside & Associates Limited, its employees, affiliates and subcontractors accept no liability for inaccuracies or errors in the instruments of service provided to the client, arising from deficiencies in the aforementioned third party materials and documents.

R.J. Burnside & Associates Limited makes no warranties, either express or implied, of merchantability and fitness of the documents and other instruments of service for any purpose other than that specified by the contract.

50 Speers Road, Oakville ON
October 2022

1.0 Introduction

This document describes the Preliminary Solid Waste Management Plan (plan) developed for the proposed 50 Speers Road multi-residential 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 BDP Quadrangle 'Issued for Rezoning & Official Plan Amendment' drawing set, dated October 12, 2022. The 'Context, Site Plan & Statistics' (#A101.S), as well as the 'Ground Floor Plan' (#A201.S) from this set have been attached to this report as Appendix A. It describes the solid waste handling for both residents and property management staff perspectives.

The 50 Speers Road development covers a total site (property) area of 4,180 m². The development is a 27-storey multi-residential building, which includes:

- 314 residential units, including 14 townhome units on the ground floor
- Three-levels of underground parking
- A ground floor waste storage room
- A ground floor waste loading area (including staging area)

In preparing this report, Burnside has considered the following Halton Region documents:

- Development Design Guidelines for Source Separation of Solid Waste, Regional Official Plan Guidelines, dated June 2014
 - Direct communications with Halton's Multi-Residential Waste Diversion Coordinator¹
- By-law No's. 123-12, 88-15

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

¹ Not specific to the 50 Speers Road development.

50 Speers Road, Oakville ON
October 2022

2.0 Waste Management System Requirements

2.1 Waste Storage Room

Current plans provide a waste storage room on the ground floor. We assume this will carry through to final design and construction. The waste storage room could be moved to the underground parking levels with minimal changes, the primary change being the need to use a tractor or 'front-lift-bin mover' to shuffle the waste containers between the underground level waste storage room and the loading area on the ground floor.

The development will feature the following residential waste collection system:

- A single-chute system, accessible on each residential floor (beginning at Level 2), will be used to deliver the waste to the waste storage room:
 - Controls at the chute access include an interlock to prevent simultaneous access and access during maintenance.
- A tri-sorter will be installed on the chute (in the waste storage room) to direct the waste into a container for recycling (blue-box), organics, or garbage.
- A compactor will minimize the number of bins required for garbage storage.
- 10 m² of contiguous space for the storage of bulky wastes will be included in its own storage room, also located on the ground floor.
- The waste storage room will be locked and inaccessible to residents.
- The development features 14 ground floor 'townhouse' suites that will not have access to the chute system for their waste. These residents will dispose of their wastes in small carts within the 'TH Garbage Drop-Off' room on the ground floor, located across the hall from the waste storage room.
 - Carts (expected to be 360 L/95-gallon capacity or similar) will be available to collect waste. Property staff will transfer wastes from this room to bins in the waste storage room, as necessary.
 - For the recycling waste stream, the carts will be dumped into the front-lift bins regularly. A cart tipper² will be used to assist maintenance staff with this task. Use of a cart tipper will reduce the likelihood of workplace accidents and reduce strain on maintenance staff.
 - For the garbage stream, front-lift bins will need to be 'pre-loaded' using the cart tipper to empty the cart into an empty garbage bin. The garbage bin can then be connected to the compactor to be filled. This is expected to occur every time an empty (mostly) front-lift bin is connected to the compactor.

² A cart tipper such as one from Vestil Manufacturing Corp. or similar will be used (example, <https://www.vestil.com/product.php?FID=227>, accessed July 2022).

50 Speers Road, Oakville ON
October 2022

- For the organics stream, containers will simply be replaced should 360 L carts be used. If smaller bins are present servicing the through the wall chutes, they will be emptied within carts using a cart tipper (as noted for recyclables).

The front-load bins and semi-automated carts used to store materials will have castors/wheels to allow maintenance staff to move the bins as required.

2.2 Equipment Requirements

The chute will lead waste into the waste storage room. A tri-sorter will be installed on the bottom of the chute. The tri-sorter will feed:

- 4 yd³ front load bins for recycling;
- 360 L semi-automated carts for organics; and
- A compactor that loads 3 yd³ front load bins for garbage.

Recyclables and garbage will be collected by the Region separately on different days each week. Garbage may be collected twice weekly while recyclables and organics will only be collected once per week.

Table 1 outlines the equipment requirements for the residential waste storage room. Maintenance staff will check the bins daily to ensure those reaching capacity are exchanged for empty units. Carts accepting townhome wastes will also be checked and emptied as necessary into bins, as described in Section 2.1. Trained maintenance staff will control access to the waste storage room as there are safety concerns associated with the chutes and the garbage compactor.

Burnside has based our waste storage containers (bin counts) on details provided by Halton Region via direct communications³:

a) Recycling:

- 42 units per 3 yd³ front-end bin (loose).
- 56 units per 4 yd³ front-end bin (loose).

b) Organics:

- Halton Guideline 1.8.1.3.2 requires one 360 L (0.34 yd³) organics bin for every 25 residential units.
- To ensure flexibility, the development could instead use two, 2 yd³ bins. Burnside has confirmed that the current waste storage room and loading area can accommodate this change (if collected separately).

³ Garbage and recycling bin ratios were provided via email by Halton Region's Multi-Residential Waste Diversion Coordinator, Andrew Suprun, on March 22, 2022. These values replace those in the Guidelines.

50 Speers Road, Oakville ON
October 2022

c) Garbage (compacted):

- 54 units per 3 yd³ front-end bin (compacted).
- 72 units per 4 yd³ front-end bin (compacted).

Table 1: Residential Waste Storage Room Equipment & Spatial Requirements

Equipment	No. Required	Area Needed	Collection Frequency
Tower – level 2 and above [†]			
Waste Chute & Controls (activates Trisorter)	1		
Trisorter (Directs wastes to appropriate container)	1	± 5 m ²	
Compactor (Garbage stream)	1		
Recycling Bins – 4 yd ³ front load type	6 [†]	19.5 m ²	Weekly
Organics Carts – 360 L semi-automated carts	12 [†]	10.4 m ²	Weekly
Garbage Bins – 3 yd ³ front load, compaction type	6 [†]	15.9 m ²	Weekly
Townhomes – ground level access [‡]			
360 L semi-automated carts (or smaller)	3	2.4 m ²	
Cart Tipper	1	± 2 m ²	
Bulky Waste Storage Area		10 m ²	As Required
Container Movement/Jockeying Space [§]		20%	
Total Waste Storage Room Area Needs		80 m²	

Notes:

- † The room sizing provides flexibility to store extra containers to allow service while bins await collection in loading area. Extra bins have not been shown in table.
- ‡ Townhome recycling and garbage carts are transferred as required into tower recycling or garbage bins. Organics carts do not need to be transferred, merely replaced with empty (tower) carts.
- § Estimated area required to move bins and carts within the waste storage room. Room configuration can impact this value.

The total space needed for waste containers, equipment, Bulky Waste Storage Area and maneuvering within the room is estimated to be 80 m². The current design for the waste storage room accommodates this space. The additional space provides flexibility to accommodate future waste management needs.

50 Speers Road, Oakville ON
October 2022

3.0 Waste Loading

Recyclables, organics, and garbage will be collected in one Loading Area, located on the ground level. Maintenance staff will be available during collection to maneuver bins, should there be any containers that cannot be accommodated in the designated loading area.

On each collection day, prior to 7:00 AM., maintenance staff will move the bins from the waste storage room to the Staging Area, to prepare for collection. The location of recycling bins awaiting collection is illustrated in Appendix B. The maintenance staff may use a ride-on tractor or a trash bin mover⁴ for ease of moving bins. Maintenance staff will assist in moving the bins, so the waste collection vehicle does not have to move during collection. Once a bin is empty, staff will return it to the waste storage room, and move another bin to the front-lift vehicle, until all bins have been collected.

The collection truck drive path is attached as Appendix C. The Transportation Engineer has confirmed the maneuvers are functional for Halton Region's Waste Collection vehicle.

4.0 Conclusions

From the research completed in preparing this report, Burnside believes that the 50 Speers Road multi-residential development can successfully operate using Halton Region's waste management services. Further, 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 Halton Region's waste management requirements and ZBA comments when preparing the SPA submission.

⁴ The WasteCaddy (<https://www.djproducts.com/product/video-wastecaddy-efficient-trash-bin-mover/>, accessed July 2022) is provided as an example.

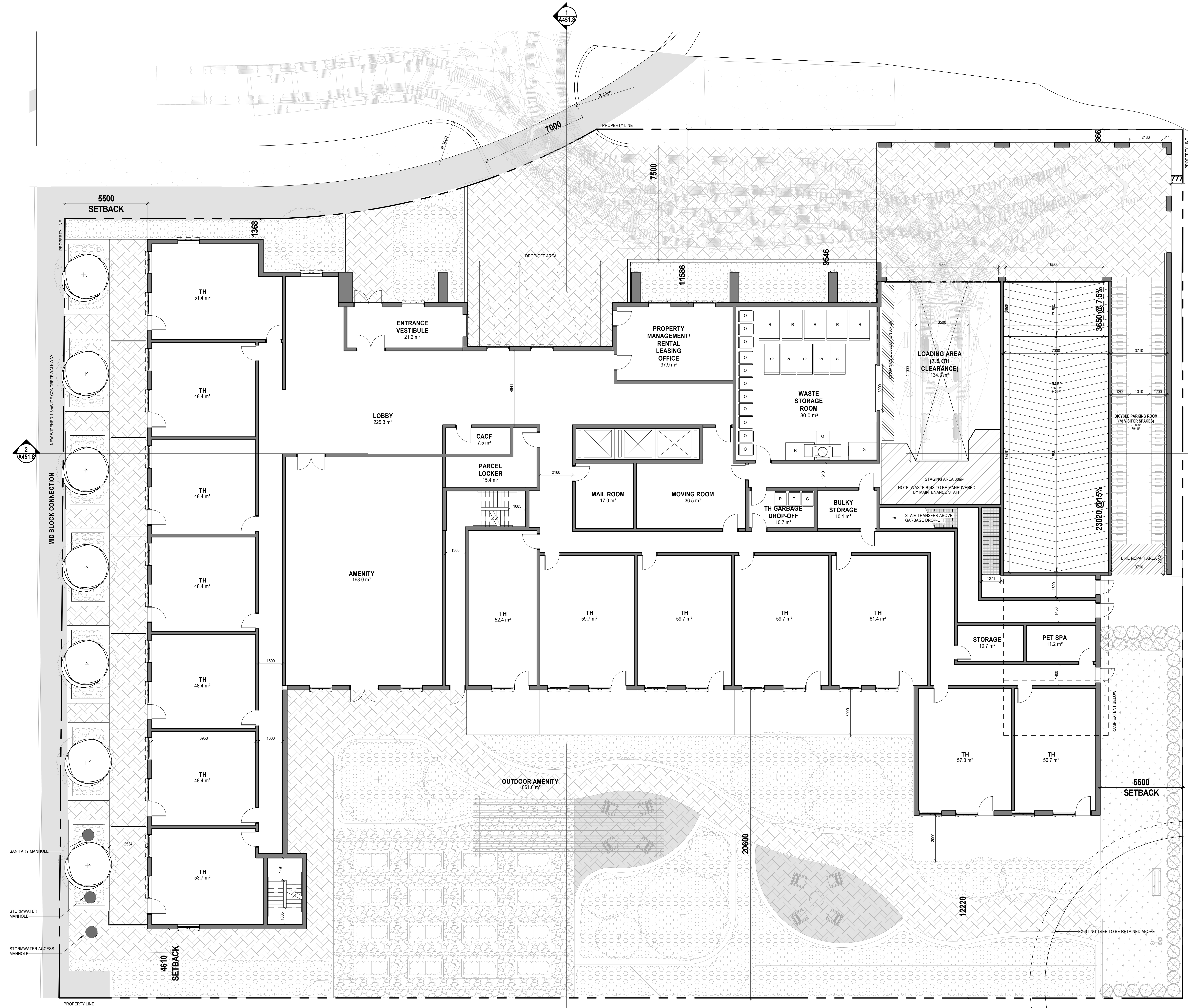


BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix A

Site Plan and Statistics



1 GROUND FLOOR PLAN
SCALE: 1:100

SITE PLAN LEGEND

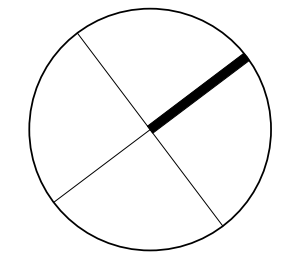
- PROPERTY LINE
- LINE OF UNDER GARAGE BELOW
- MAIN BUILDING ENTRANCE
- RETAIL ENTRANCE
- EXIT
- VEHICLE / LOADING ENTRANCE / EXIT
- FIRE HYDRANT
- SIAMESE CONNECTION
- MANHOLE COVER
- AREA DRAIN
- CATCH BASIN
- FLOOR DRAIN (PARKING SLAB)
- FLOOR DRAIN (INTERIOR)
- EXISTING LIGHT
- TYPICAL PARKING SPACE
- TYPICAL B.F. PARKING SPACE
- F.F.E. 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
2022-10-12	Reasoning & Official Plan Amendment	

REVISION RECORD

Date	Description
2022-10-12	Reasoning & Official Plan Amendment

ISSUE RECORD



BDP. Quadrangle

Quadrangle Architects Limited
901 King Street West, Suite 701 Toronto, ON M5V 3H5
416-598-1240 www.bdpquadrangle.com

50 Speers Road
Oakville, ON
for Helberg Properties Limited

2023 1:100 PROJECT SCALE ED, AT
VOC REVIEWED

Ground Floor Plan

A201.S

Note: This drawing is the property of the Architect and may not be reproduced or used without the expressed consent of the Architect. The Contractor is responsible for checking and verifying all sizes and dimensions and shall report all discrepancies to the Architect and obtain verification prior to commencing work.

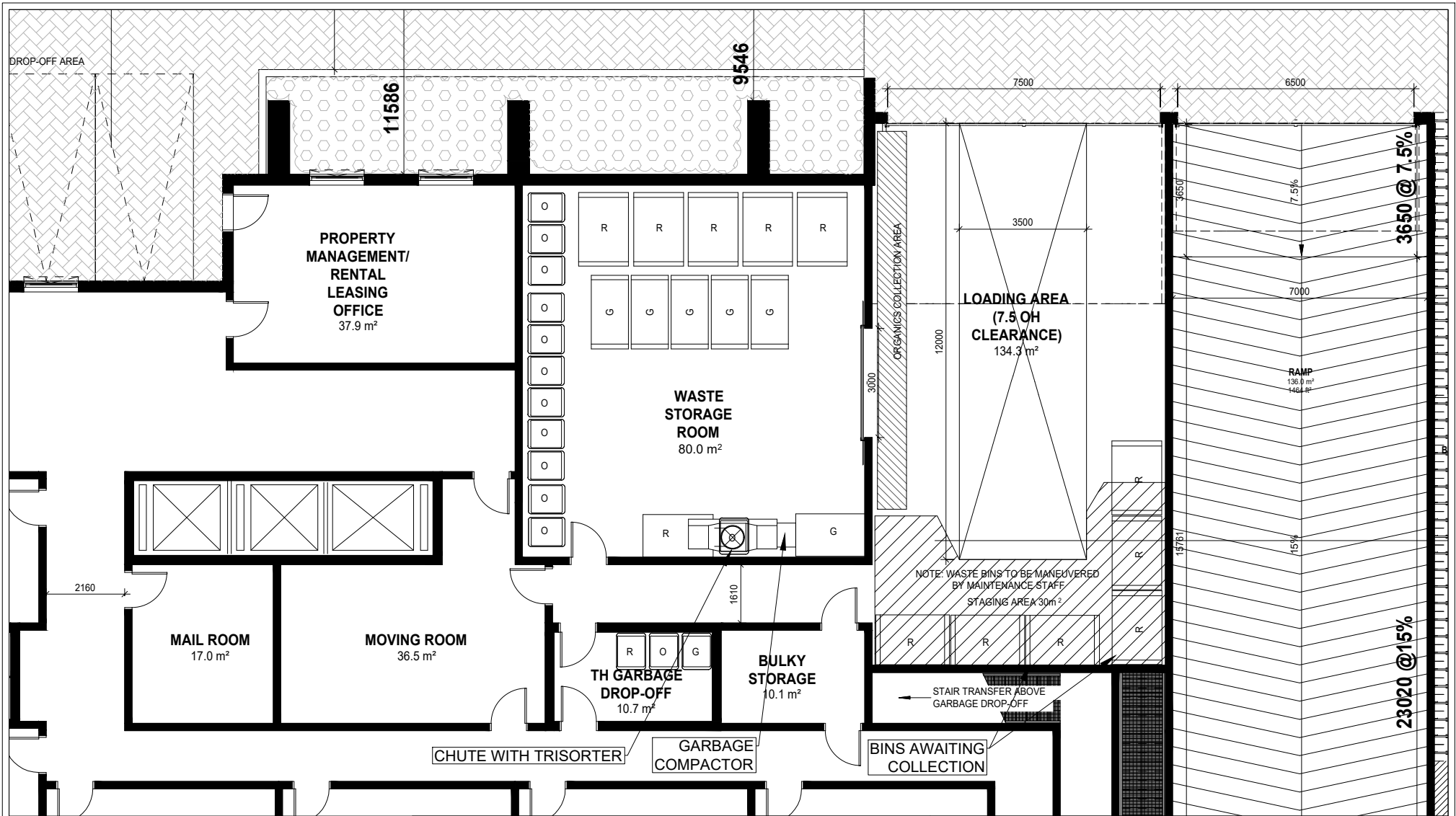


BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix B

Waste Room and Loading Area Plan



NOTES:
 - BASED UPON THE BDP QUADRANGLE 'REZONING & OFFICIAL PLAN AMENDMENT' DRAWING SET, DATED OCTOBER 12, 2022.



Figure Title

WASTE STORAGE ROOM AND LOADING AREA
WASTE MANAGEMENT PLAN

Client **HELBERG PROPERTIES LIMITED c/o**
ARCANOS PROPERTY MANAGEMENT CORPORATION

Drawn CJ	Checked JH	Date OCTOBER 2022
Scale N.T.S.	Project No. 300055467.0000	

Figure No.
1



BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix C

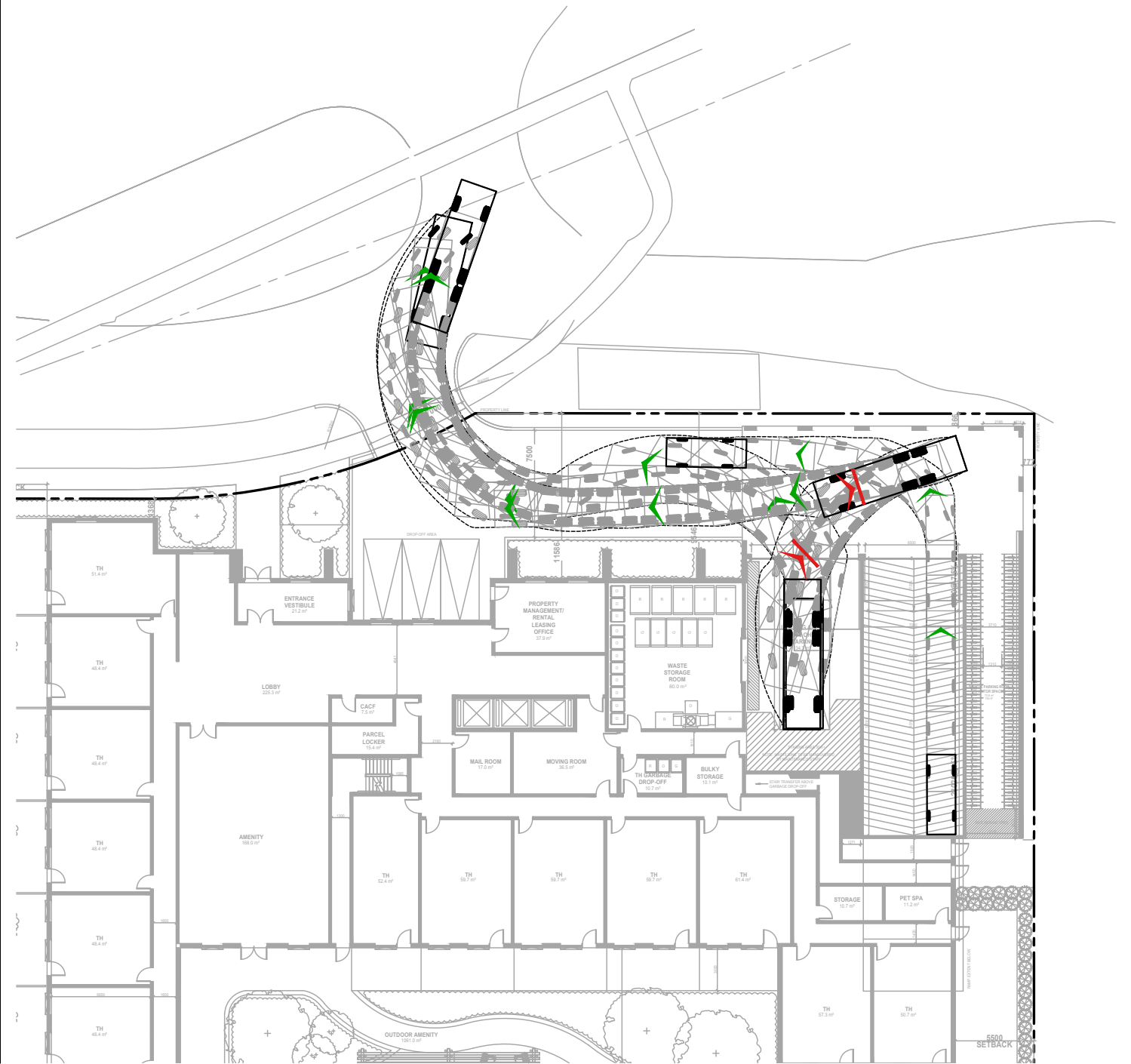
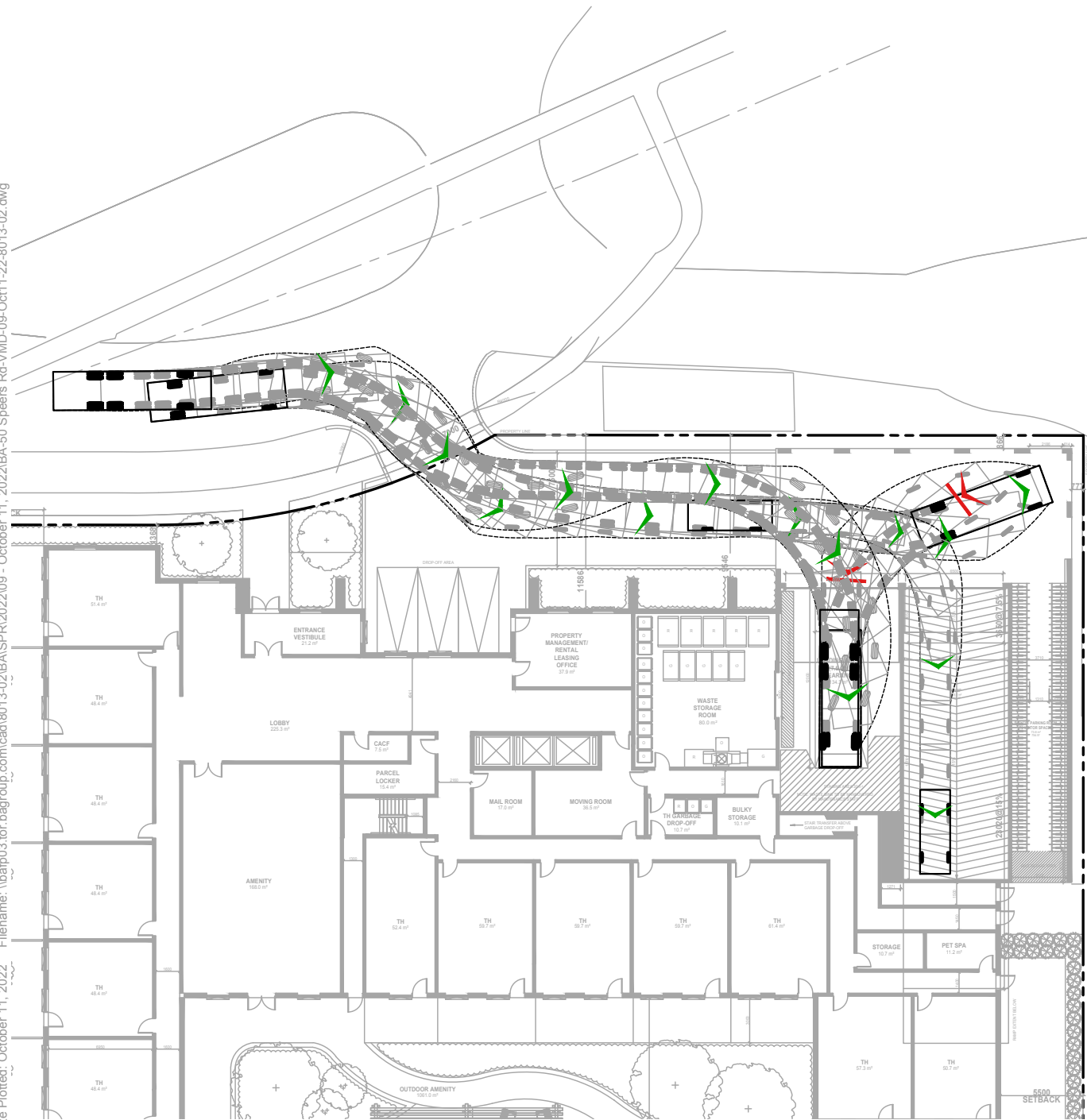
Waste Collection Vehicle Turning Path Analysis

INBOUND

OUTBOUND

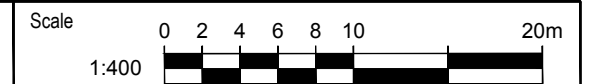


Date Plotted: October 11, 2022. Filename: \\bafp03.tor.bagroup.com\caal\8013-02\BA\SPR\2022\09 - October 11, 2022\BA-50 Speers Rd-VMD-09-Oct11-22-8013-02.dwg



50 SPEERS ROAD
VEHICLE MANOEUVRING DIAGRAM
ALL VEHICLE MANOEUVRES

Project: 50 SPEERS ROAD
 Project No. 8013-02
 Date: June 7, 2022
 Revised: October 11, 2022



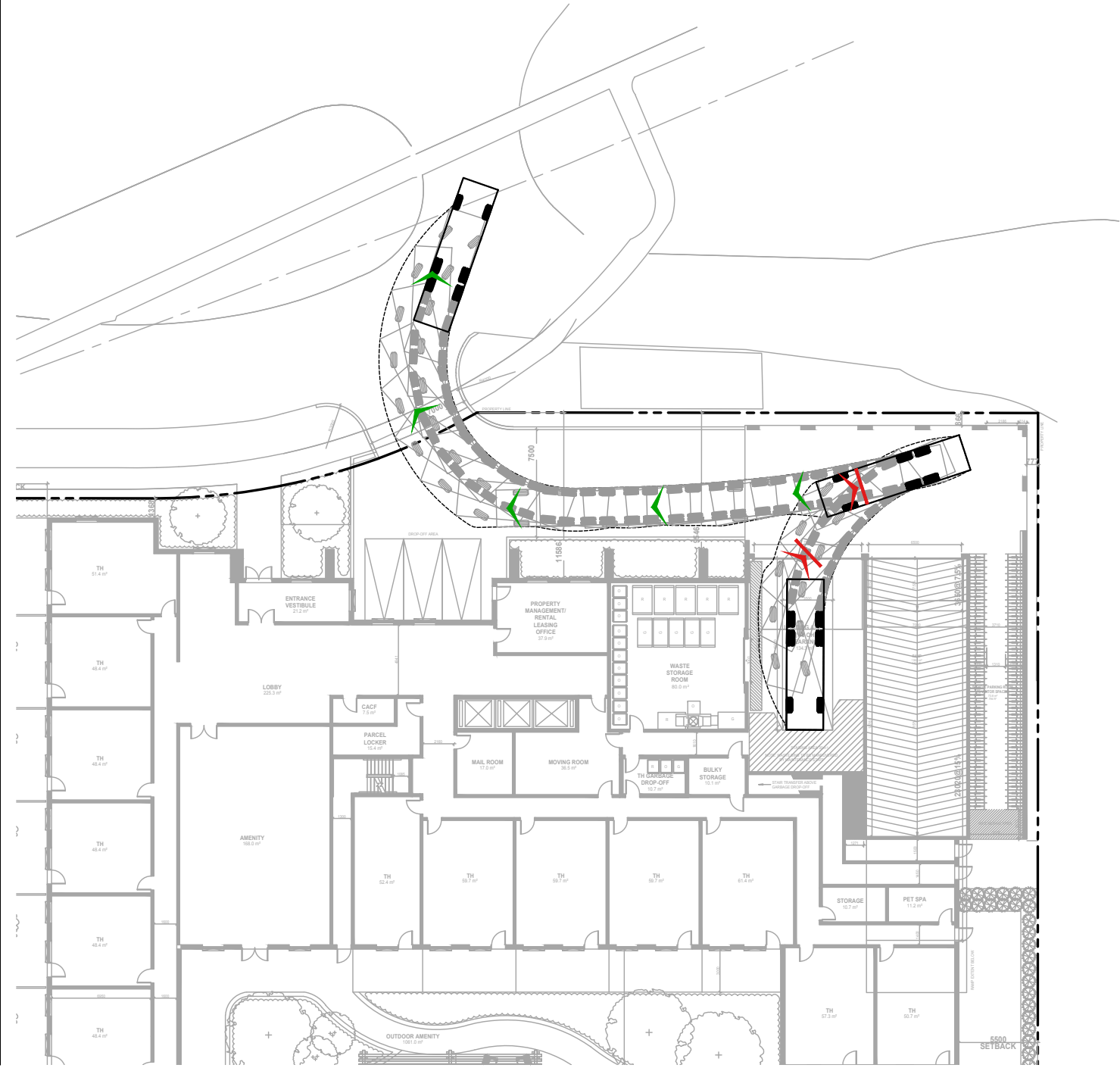
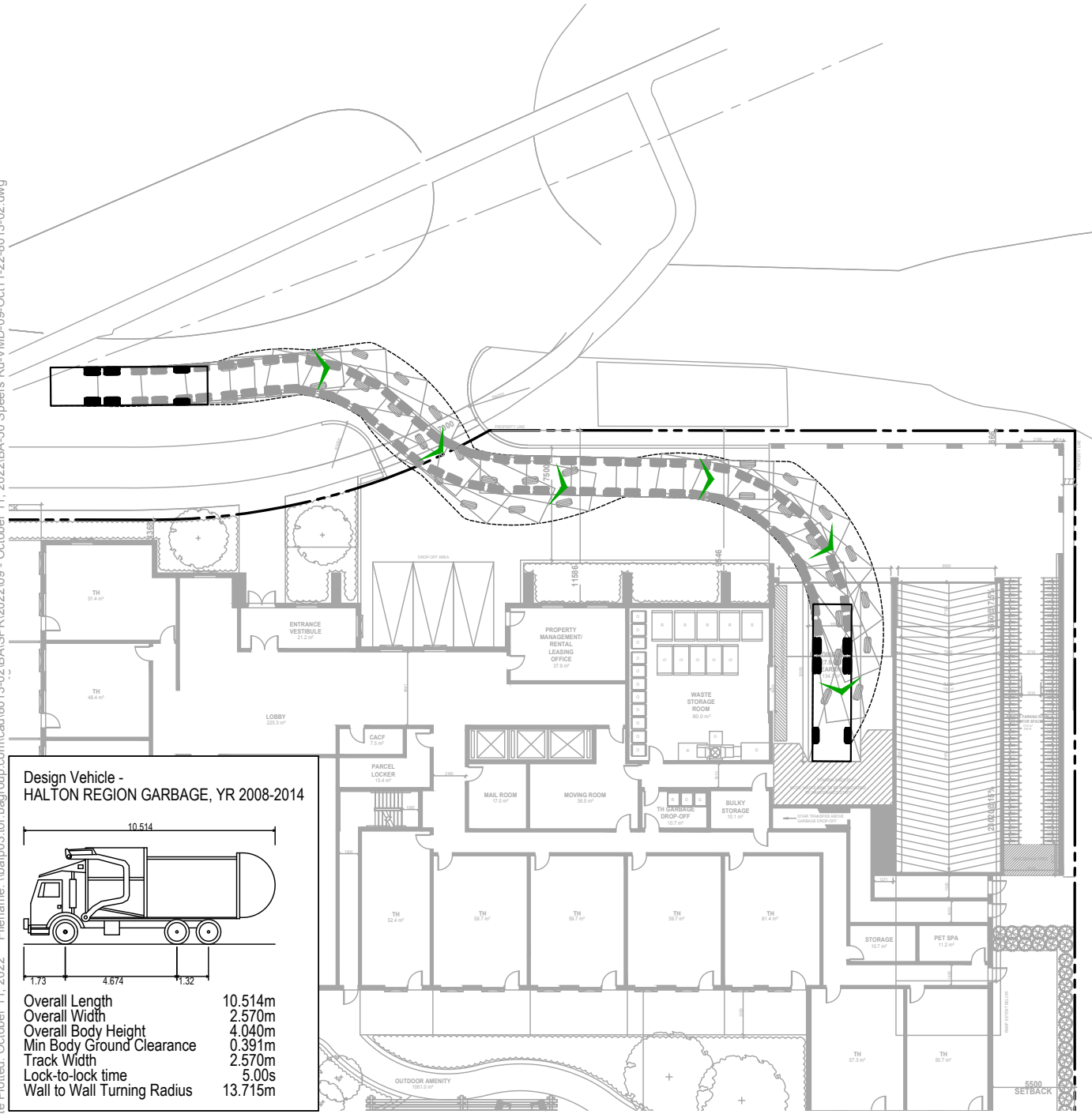
Drawing No. **VMD-01**

INBOUND

OUTBOUND



Date Plotted: October 11, 2022. Filename: \\bafp03.tor.bagroup.com\cad\8013-02\BA\SPR\2022\09 - October 11, 2022\BA-50 Speers Rd-VMD-09-Oct11-22-8013-02.dwg



**Design Vehicle -
HALTON REGION GARBAGE, YR 2008-2014**

10.514
2.570
4.040
0.391
2.570
5.00s
13.715m



**50 SPEERS ROAD
VEHICLE MANOEUVRING DIAGRAM
HALTON REGION GARBAGE TRUCK**

Project: 50 SPEERS ROAD
Project No. 8013-02
Date: June 7, 2022
Revised: October 11, 2022

Scale 1:400

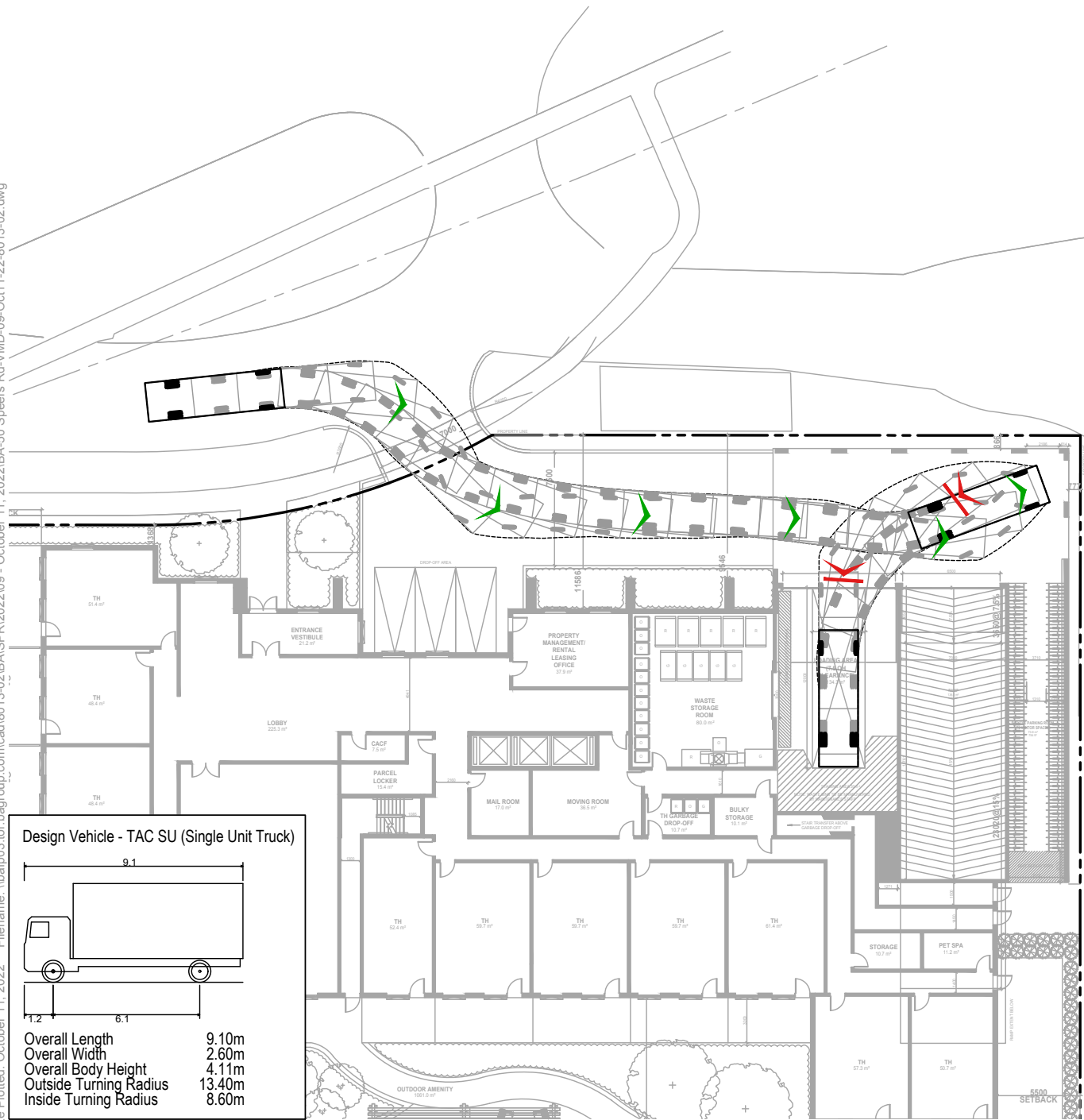
Drawing No. **VMD-02**

INBOUND

OUTBOUND

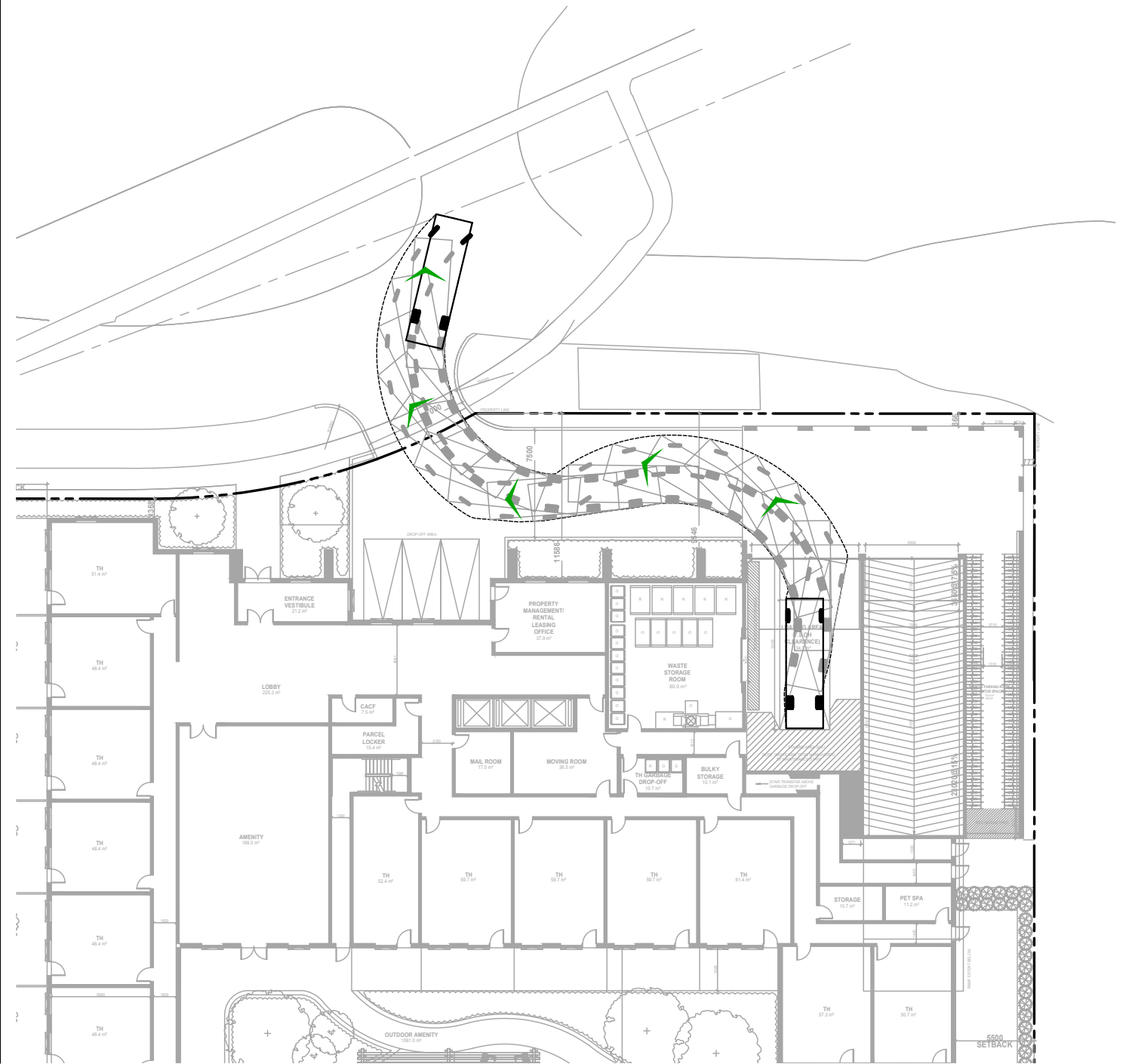


Date Plotted: October 11, 2022 File name: \\bafp03\for\bagroup.com\cad\8013-02\BA\SPR\2022\09 - October 11, 2022\BA-50 Speers Rd-VMD-09-Oct11-22-8013-02.dwg



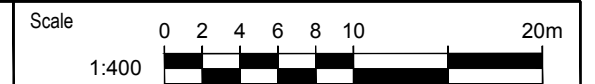
Design Vehicle - TAC SU (Single Unit Truck)

Overall Length 9.10m
 Overall Width 2.60m
 Overall Body Height 4.11m
 Outside Turning Radius 13.40m
 Inside Turning Radius 8.60m



50 SPEERS ROAD
VEHICLE MANOEUVRING DIAGRAM
TAC SINGLE UNIT (SU) TRUCK

Project: 50 SPEERS ROAD
 Project No. 8013-02
 Date: June 7, 2022
 Revised: October 11, 2022



Drawing No. **VMD-03**

