

Technical Memorandum

To: Mike Chase, BOND Builder

Date:

2025-05-13

Cc: Jonathan Benczkowski, SOL-Arch

From: Zhengxuan Lai, CGH Transportation
Mark Crockford, CGH Transportation

Project Number:

2023-087

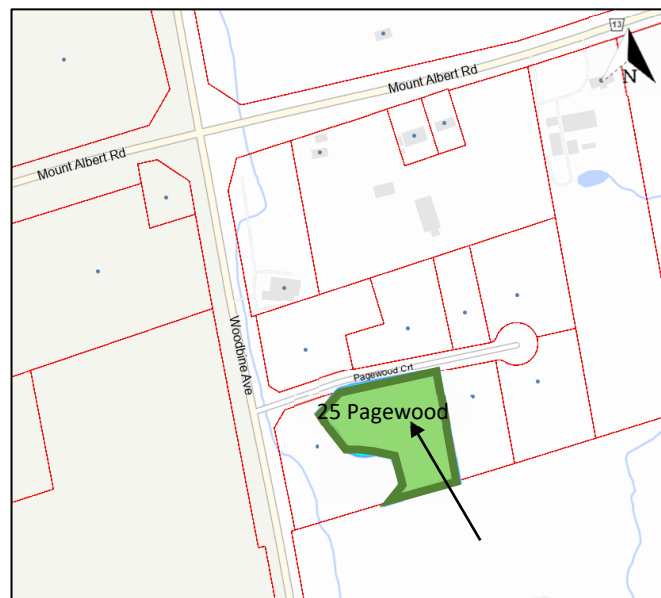
Re: 25 Pagewood Court, East Gwillimbury - Transportation Brief

1 Background

CGH Transportation Inc. has been retained by BOND Builder to prepare a Traffic Brief to review the transportation impacts in support of the Site Plan application for their proposed industrial/commercial development at 25 Pagewood Court, in East Gwillimbury. As part of this review, Truck Turning Templates (for fire truck, garbage truck, and HSU) and a Signage Plan have been included in the attachments to this Transportation Brief. The latest version of this brief was dated March 2024. The report has been updated to reflect minor modifications to the development design and unit count.

The proposed development consists of a two-storey 43,115.14 ft² building for industrial use (manufacturing). The proposed parking supply includes 44 permanent parking spaces and 4 temporary parking spaces, shown on the site plan (attached). Vehicular access is via two full-moves driveways onto Pagewood Court. See Figure 1 for a map of the area.

Figure 1 – Area Map



2 Existing Conditions

Woodbine Avenue is a north/south arterial roadway under the jurisdiction of the Regional Municipality of York. It has one travel-lane in each direction, gravel shoulders with ditch, and a posted speed limit of 80 km/h.

Mount Albert Road is an east/west arterial roadway under the jurisdiction of the Regional Municipality of York. It has one travel-lane in each direction, gravel shoulders with ditch, and a posted speed limit of 60 km/h. The intersection of Woodbine Avenue and Mount Albert Road is signalized.

Pagewood Court is classified as an east/west local industrial roadway and is under the jurisdiction of the Town of East Gwillimbury. It has one travel-lane in each direction, curb and gutter, and a statutory speed limit of 50 km/h. Pagewood Court is stop controlled where it intersects Woodbine Avenue.

3 Transportation Demand Management and Transit

There are no cycling or pedestrian facilities directly in the vicinity of 25 Pagewood Court. The surrounding roadway network (Mount Albert Road and Woodbine Avenue) consists of rural cross-sections, with shoulders and ditching. The primary objective for the adjacent roadway network is that of goods movement.

Transit services by York Region Transit (YRT) are only available with YRT's Mobility on-Request Service.

4 Traffic Generation

Trip Generation rates for the subject site have been determined using the Trip Generation Manual, 11th Edition, published by the Institute of Transportation Engineers (ITE). Trips have been calculated using the proposed GFA of the three-storey building and the average rates for ITE Land Use Code 140 "Manufacturing" as they provide higher projection for PM trip generation which is preferred for its conservativity. The ITE trip generation rates and directional splits are shown in Table 1 below.

Table 1: ITE Trip Generation Rates by Peak Hour of Adjacent Street

Land Use	ITE Land Use Code	Peak Hour	Method	Rate	Directional Split	
Manufacturing	140	AM	Average Rate	0.68	In	76%
					Out	24%
		PM	Average Rate	0.74	In	31%
					Out	69%

Based on the information above, the total vehicle trip generation during the weekday AM and PM peak hours has been estimated. Table 2 summarizes the total trip generation for the proposed development.

Table 2: Total Vehicular Trip Generation by Peak Hour

Land Use	GFA (ft ²)	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Manufacturing	43,115.14	22	7	29	10	22	32

The proposed development is anticipated to add 29 two-way vehicle trips in the AM peak hour, and 32 two-way vehicle trips in the PM peak hour.

5 Parking Requirements

The proposed development will include 44 permanent parking spaces and 4 temporary parking spaces which are also used as snow storage area. The minimum parking requirements according to Table 5B of the Town of East

Gwillimbury Zoning By-law 2018-043 as well as proposed vehicle parking provisions are summarized in Table 3. As it is anticipated that the owner will own and operate the entire building, the parking rates for the “industrial use in a single-use building” land use is applied.

Table 3: Vehicle Parking Requirement Per the Zoning By-Law

Land Use	Area (ft ²)	Area (m ²)	Parking Rate (Required)	Parking Spaces (Required)	Parking Spaces (Provided)	Difference
Industrial uses in a single-use building	43,115.14	4,005.53	1/100 m ² for the first 10,000 m ² of floor area, and 1/200 m ² for any floor area after the first 10,000 m ²	41	44	+3

The total number of parking spaces required equates to 41. The requirements of accessible parking spaces calculated per Table 5C of the Town of East Gwillimbury Zoning By-law 2018-043 and parking space provisions are summarized in Table 4.

Table 4: Barrier-Free Vehicle Parking Requirement and Provision

Total Number of Parking Spaces	Range	Minimum Barrier-free Parking Rates	Barrier-free Parking Spaces (Required)	Barrier-free Parking Spaces (Provided)	Difference
41	13-100	4% of the total number of parking spaces provided	2 (including 1 Type A and 1 Type B)	4 (including 2 Type A and 2 Type B)	+2

The development requires a total of 43 parking spaces, including 41 regular spaces and 2 accessible spaces, as the Zoning By-law stipulates that accessible spaces must be provided in addition to the minimum parking requirement when more than 12 spaces are needed. The proposed site plan includes 44 parking spaces (40 regular and 4 accessible), resulting in a surplus of one space.

Regarding accessible parking, the By-law requires an even number of spaces, equally divided between Type A (minimum 3.4 metres wide) and Type B (minimum 2.4 metres wide). The development provides three accessible parking spaces, each measuring 3.6 metres in width with an additional 1.5-metre aisle, exceeding the minimum width requirements for both Type A and Type B parking spaces. They have satisfied the accessible parking space size requirements.

Since the proposal complies with all parking space quantity and dimensional standards, no parking variance is required.

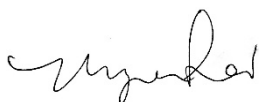
6 Conclusions and Next Steps

The background information and analysis compiled by CGH regarding the proposed industrial building at 25 Pagewood Court, East Gwillimbury indicates the traffic generated by the facility can be accommodated within the constraints of the current roadway network. The following is a summary of this memorandum:

- Woodbine Avenue is an arterial roadway, with one travel-lane in each direction, a posted speed limit of 80 km/h, and is under the jurisdiction of the Regional Municipality of York
- Mount Albert Road is an arterial roadway, with one travel-lane in each direction, a posted speed limit of 60 km/h, and is under the jurisdiction of the Regional Municipality of York

- Pagewood Court is a local industrial roadway, with one travel-lane in each direction, a statutory speed limit of 50 km/h, and is under the jurisdiction of the Town of East Gwillimbury
- It is understood that the proposed development is an industrial (Manufacturing) facility with a GFA of 43,114.14ft²
- The proposed development is anticipated to add 29 two-way vehicle trips in the AM peak period, and 32 two-way vehicle trips in the PM peak period
- The proposed development provides for 44 permanent parking spaces and 4 temporary parking spaces that can be used as snow storage area, which represents a surplus of 1 parking space above the requirement of Zoning By-law 2018-043
- Based on this review, the anticipated traffic generated by the proposed development can be accommodated within the constraints of the existing roadway network

It is recommended that, from a transportation perspective, the proposed development applications proceed.



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List of Attachments

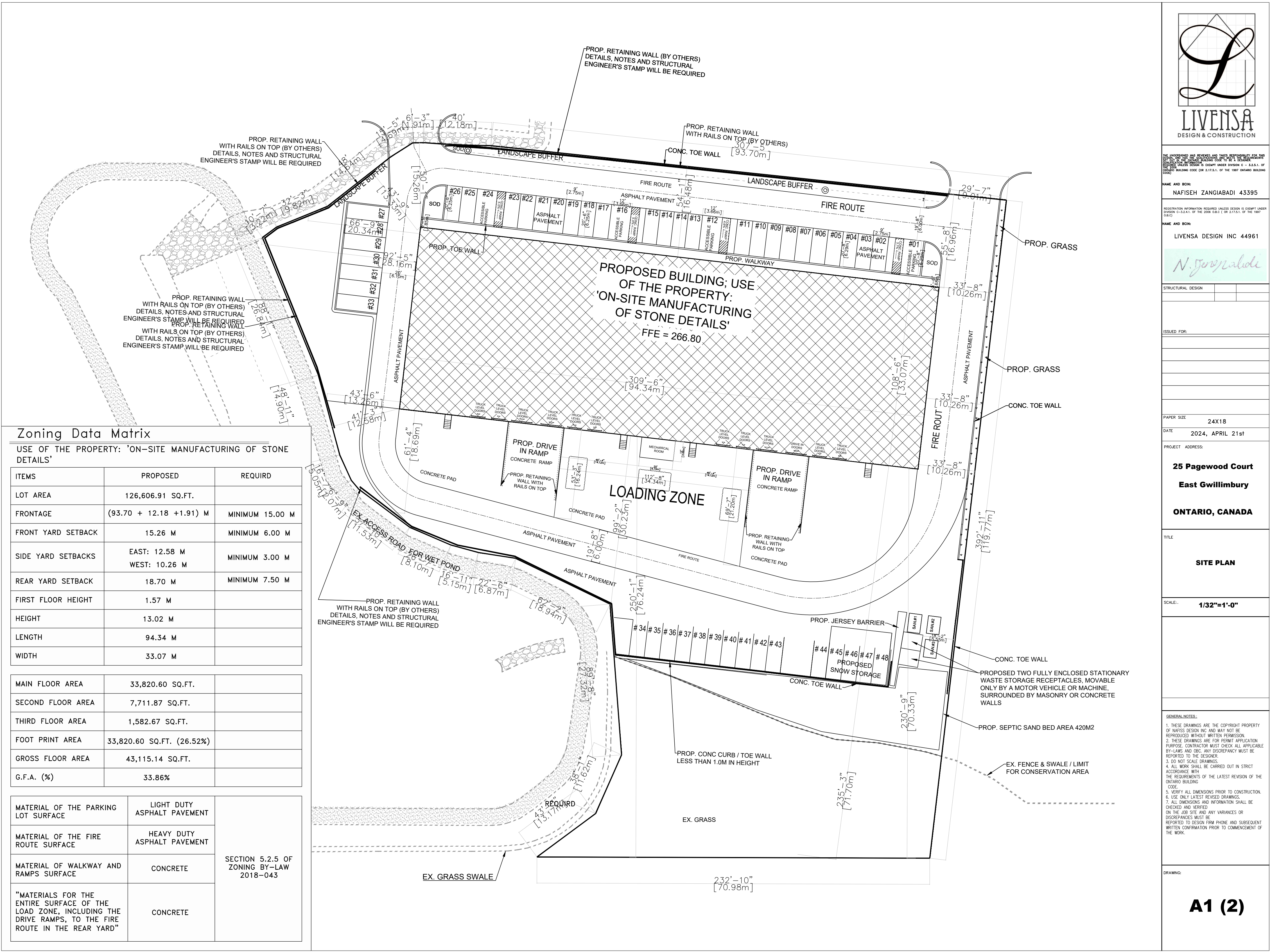
Attachment 1 - Site Plan

Attachment 2 - Truck Turning Templates

Attachment 3 - Pavement Markings and Signage Plan

Attachment 1

Site Plan



Zoning Data Matrix		
USE OF THE PROPERTY: 'ON-SITE MANUFACTURING OF STONE DETAILS'		
ITEMS	PROPOSED	REQUIRD
LOT AREA	126,606.91 SQ.FT.	
FRONTAGE	(93.70 + 12.18 +1.91) M	MINIMUM 15.00 M
FRONT YARD SETBACK	15.26 M	MINIMUM 6.00 M
SIDE YARD SETBACKS	EAST: 12.58 M WEST: 10.26 M	MINIMUM 3.00 M
REAR YARD SETBACK	18.70 M	MINIMUM 7.50 M
FIRST FLOOR HEIGHT	1.57 M	
HEIGHT	13.02 M	
LENGTH	94.34 M	
WIDTH	33.07 M	

MAIN FLOOR AREA	33,820.60 SQ.FT.	
SECOND FLOOR AREA	7,711.87 SQ.FT.	
THIRD FLOOR AREA	1,582.67 SQ.FT.	
FOOT PRINT AREA	33,820.60 SQ.FT. (26.52%)	
GROSS FLOOR AREA	43,115.14 SQ.FT.	
G.F.A. (%)	33.86%	

MATERIAL OF THE PARKING LOT SURFACE	LIGHT DUTY ASPHALT PAVEMENT	SECTION 5.2.5 OF ZONING BY-LAW 2018-043
MATERIAL OF THE FIRE ROUTE SURFACE	HEAVY DUTY ASPHALT PAVEMENT	
MATERIAL OF WALKWAY AND RAMPS SURFACE	CONCRETE	
"MATERIALS FOR THE ENTIRE SURFACE OF THE LOAD ZONE, INCLUDING THE DRIVE RAMPS, TO THE FIRE ROUTE IN THE REAR YARD"	CONCRETE	



THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT. THE DESIGNER IS NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF THE PROJECT IF THE DESIGNER IS NOT A REGISTERED DESIGNER UNDER DIVISION C-3.2.4.1. OF THE 1997 ONTARIO BUILDING CODE (OR 2.17.5.1. OF THE 1997 ONTARIO BUILDING CODE).

NAME AND BCIN:
NAFISEH ZANGIABADI 43395

REGISTRATION INFORMATION REQUIRED: UNLESS DESIGN IS EXEMPT UNDER DIVISION C-3.2.4.1. OF THE 1997 ONTARIO BUILDING CODE (OR 2.17.5.1. OF THE 1997 ONTARIO BUILDING CODE).

NAME AND BCIN:
LIVENSA DESIGN INC 44961

N. Zangiabadi

STRUCTURAL DESIGN

ISSUED FOR:

PAPER SIZE: 24X18

DATE: 2024, APRIL 21st

PROJECT ADDRESS:

25 Pagewood Court
East Gwillimbury
ONTARIO, CANADA

TITLE
SITE PLAN

SCALE: 1/32"=1'-0"

GENERAL NOTES:
1. THESE DRAWINGS ARE THE COPYRIGHT PROPERTY OF NAFISEH ZANGIABADI AND MAY NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION.
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5. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
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DRAWING:

A1 (2)

Attachment 2

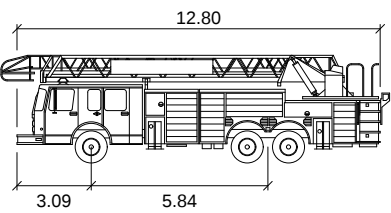
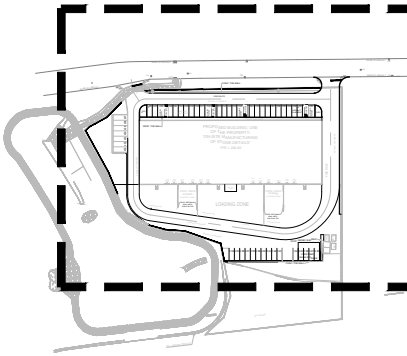
Truck Turning Templates

Fire Truck Movements East Access Inbound



Notes:
Key Plan:

Key Plan:



Aerial Fire

	meters
Width	: 2.54
Track	: 2.54
Lock to Lock Time	: 6.0
Steering Angle	: 37.0

04	Issued for Review:	EA	2025-04-
REV:	DESCRIPTION:	BY:	DATE:
STATUS:			



CGH Transportation

628 Haines Road
Newmarket, ON
L3Y 6V5
(905) 251-4070

CLIENT: **Bond Build**

ARCHITECT:

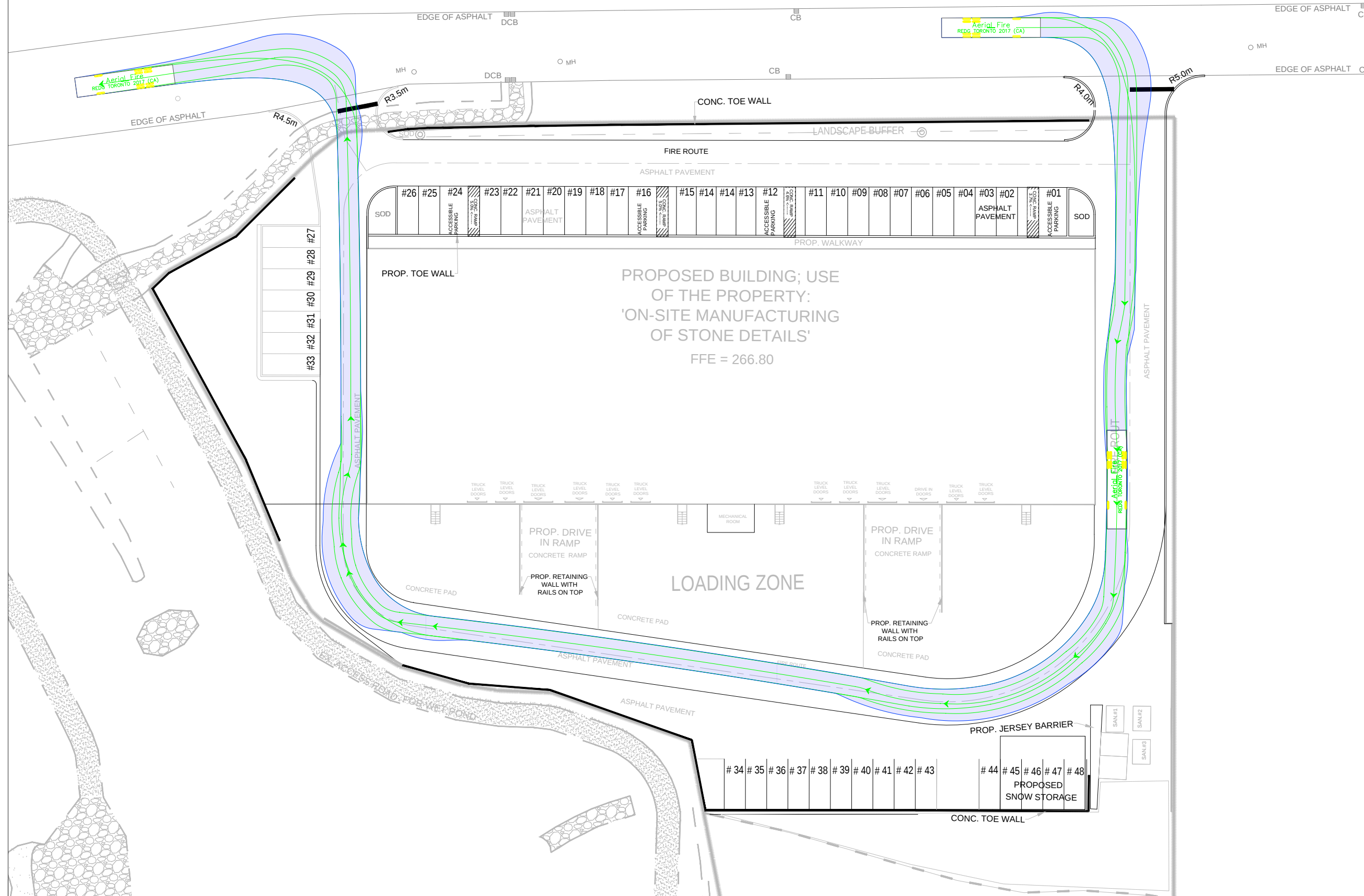
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25 Pagewood Court

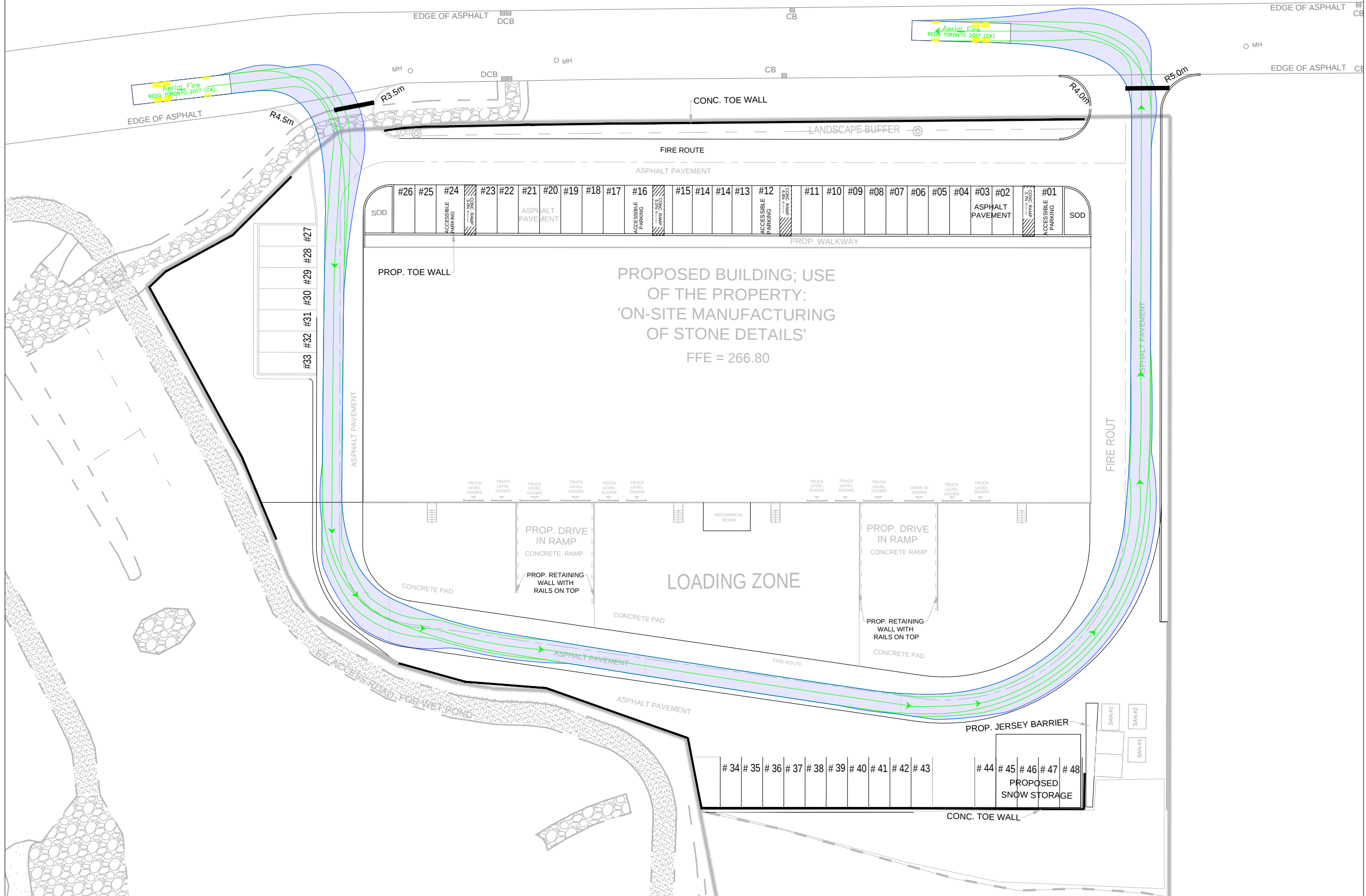
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Fire Truck Turning Templates (1)

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PROJECT NO: 2023-087	DRAWING NO: 001		REVISION: 04

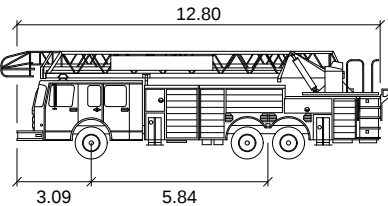
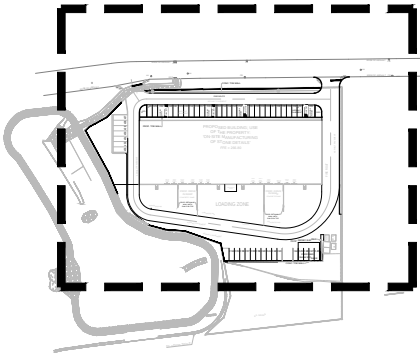


Fire Truck Movements
West Access Inbound



Notes:

Key Plan:



Aerial Fire		meters
Width	:	2.54
Track	:	2.54
Lock to Lock Time	:	6.0
Steering Angle	:	37.0

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STATUS:			



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CLIENT: Bond Build

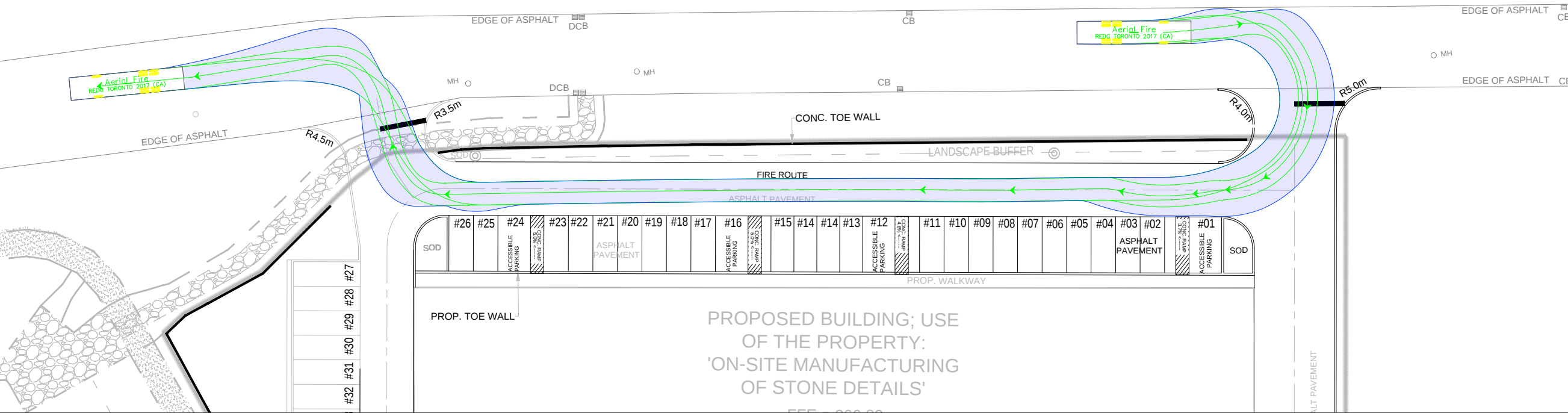
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SITE:
25 Pagewood Court

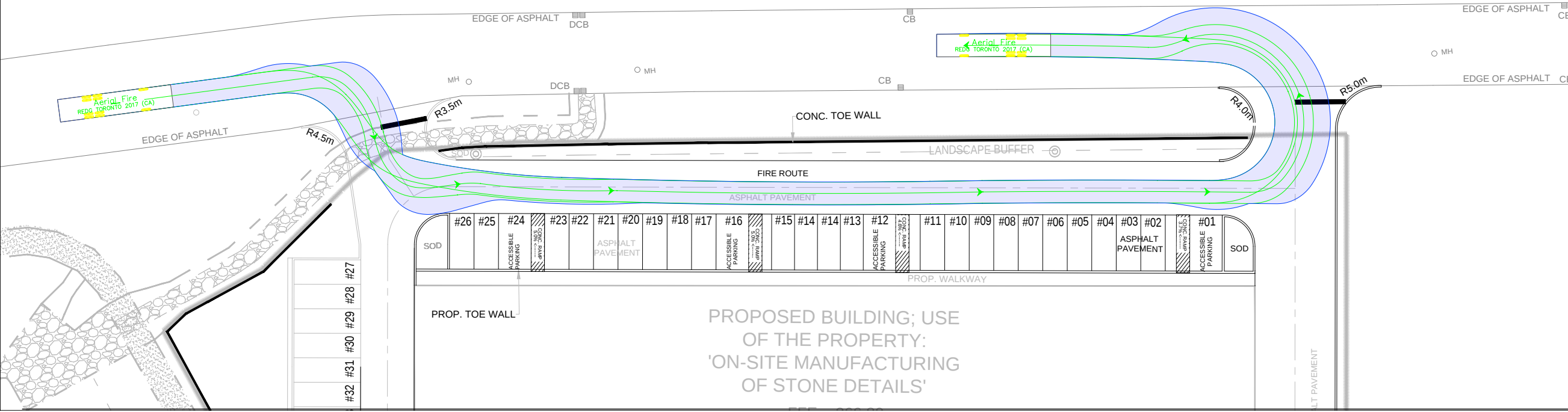
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PROJECT NO: 2023-087	DRAWING NO: 002	REVISION: 04	

Fire Truck Movement
East Access Inbound

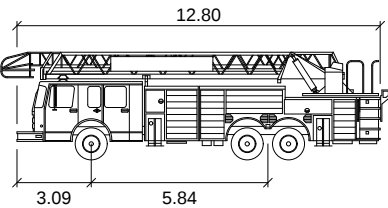
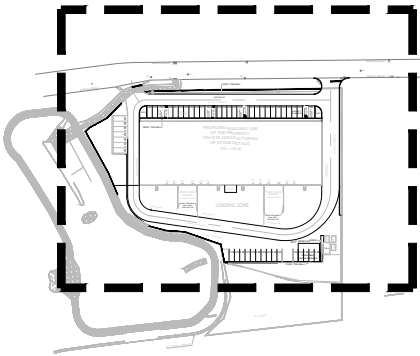


Fire Truck Movement
West Access Inbound



Notes:

Key Plan:



Aerial Fire

	meters
Width	: 2.54
Track	: 2.54
Lock to Lock Time	: 6.0
Steering Angle	: 37.0

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CLIENT: Bond Build

ARCHITECT:

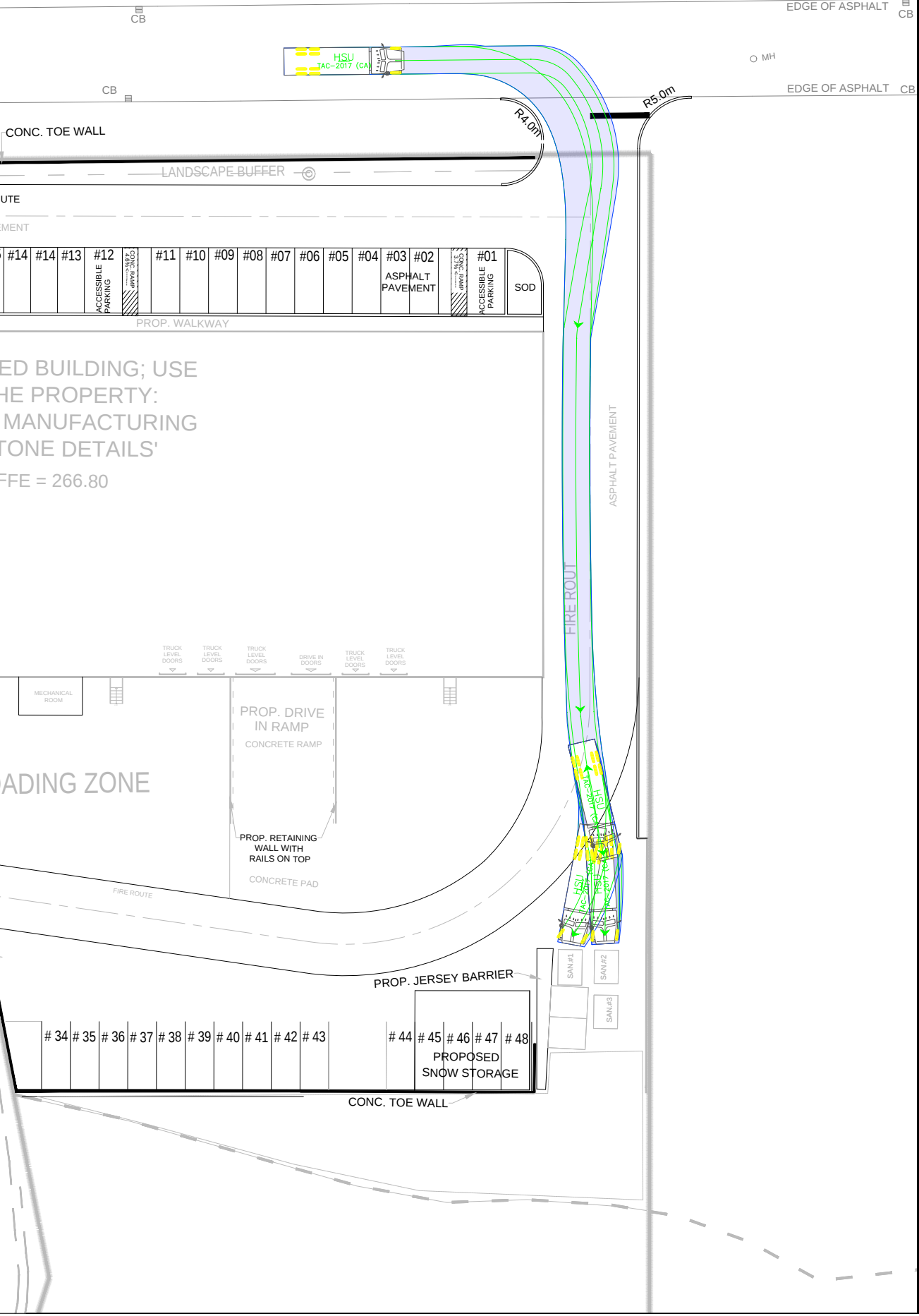
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25 Pagewood Court

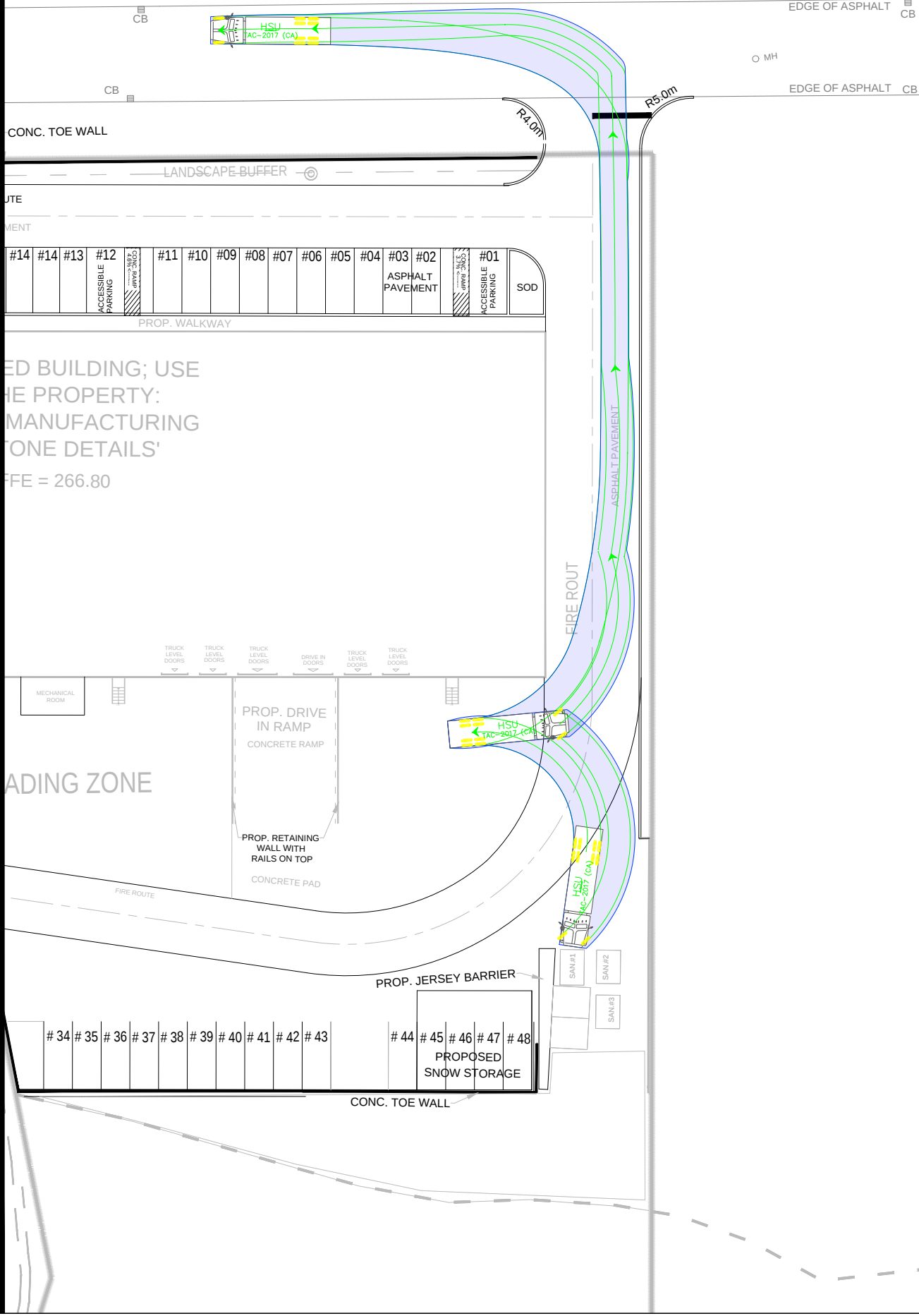
TITLE: Fire Truck Turning Templates
North Driveway

SCALE AT A3: NTS	DATE: 2025-04-25	DRAWN: EA	CHECKED: MC
PROJECT NO: 2023-087	DRAWING NO: 003	REVISION: 04	

A) Garbage Inbound Movement

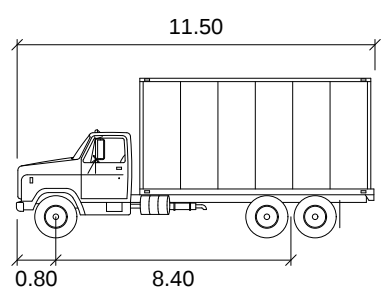
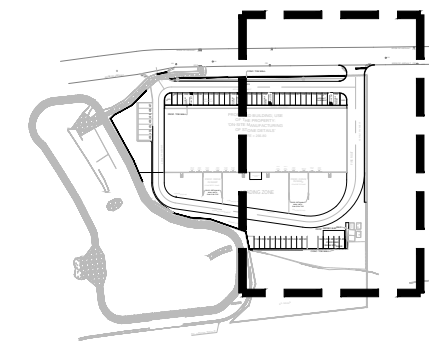


B) Garbage Outbound Movement



Notes:

Key Plan:



HSU

Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

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STATUS:			



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CLIENT: Bond Build

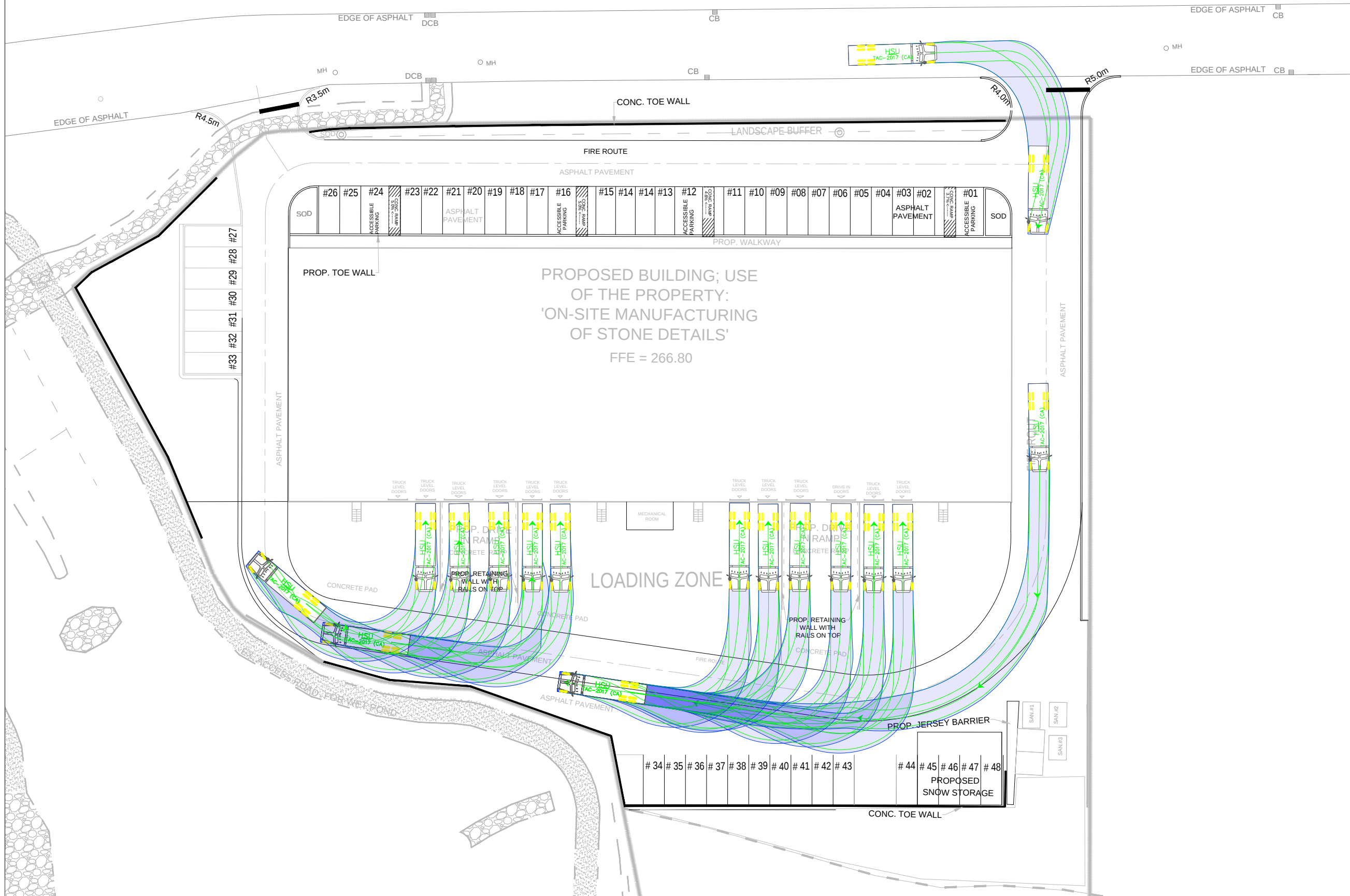
ARCHITECT:

SITE:
25 Pagewood Court

TITLE: Turning Movement Analysis
Garbage Turning Movements

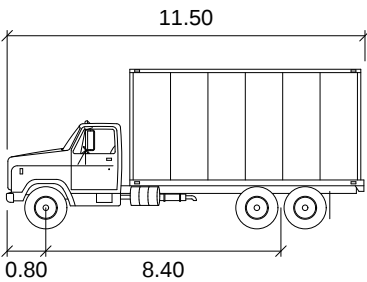
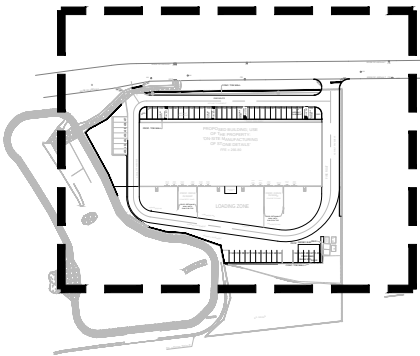
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PROJECT NO: 2023-087	DRAWING NO: 004	REVISION: 04	

HSU Loading Bay
Movements Inbound
EB Approach



Notes:

Key Plan:



HSU	
	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

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STATUS:			



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CLIENT: Bond Build

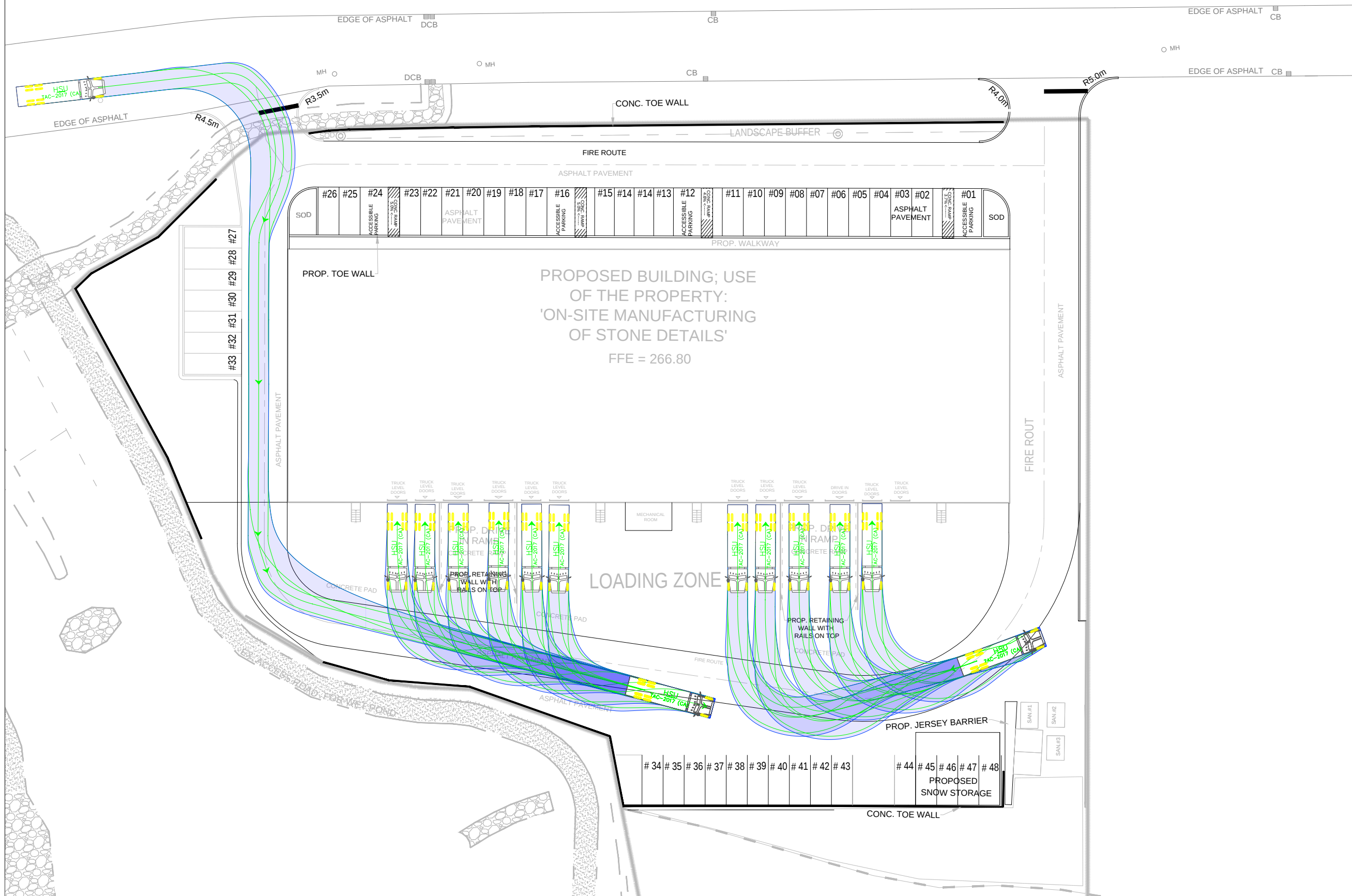
ARCHITECT:

SITE:
25 Pagewood Court

TITLE: HSU Turning Movements
Loading Movements (1)

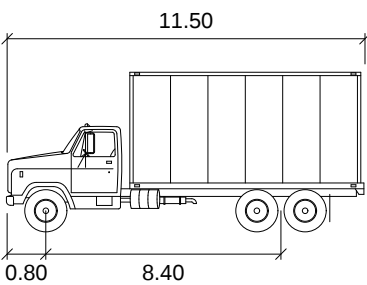
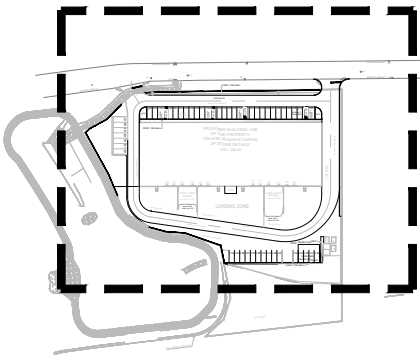
SCALE AT A3: NTS	DATE: 2025-04-25	DRAWN: EA	CHECKED: MC
PROJECT NO: 2023-087	DRAWING NO: 005	REVISION: 04	

HSU Loading Bay
Movements Inbound
WB Approach



Notes:

Key Plan:



HSU		meters
Width	:	2.60
Track	:	2.60
Lock to Lock Time	:	6.0
Steering Angle	:	40.0

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REV:	DESCRIPTION:	BY:	DATE:
STATUS:			



CGH Transportation
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CLIENT: Bond Build

ARCHITECT:

SITE:
25 Pagewood Court

TITLE: HSU Turning Movements
Loading Movements (2)

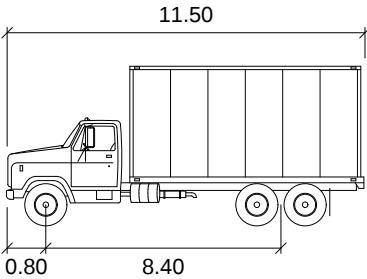
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PROJECT NO: 2023-087	DRAWING NO: 006	REVISION: 04	

HSU Loading Bay
Movements **Outbound** - EB



Notes:

Key Plan:



HSU	
	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

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STATUS:			

CGH Transportation

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CLIENT: Bond Build

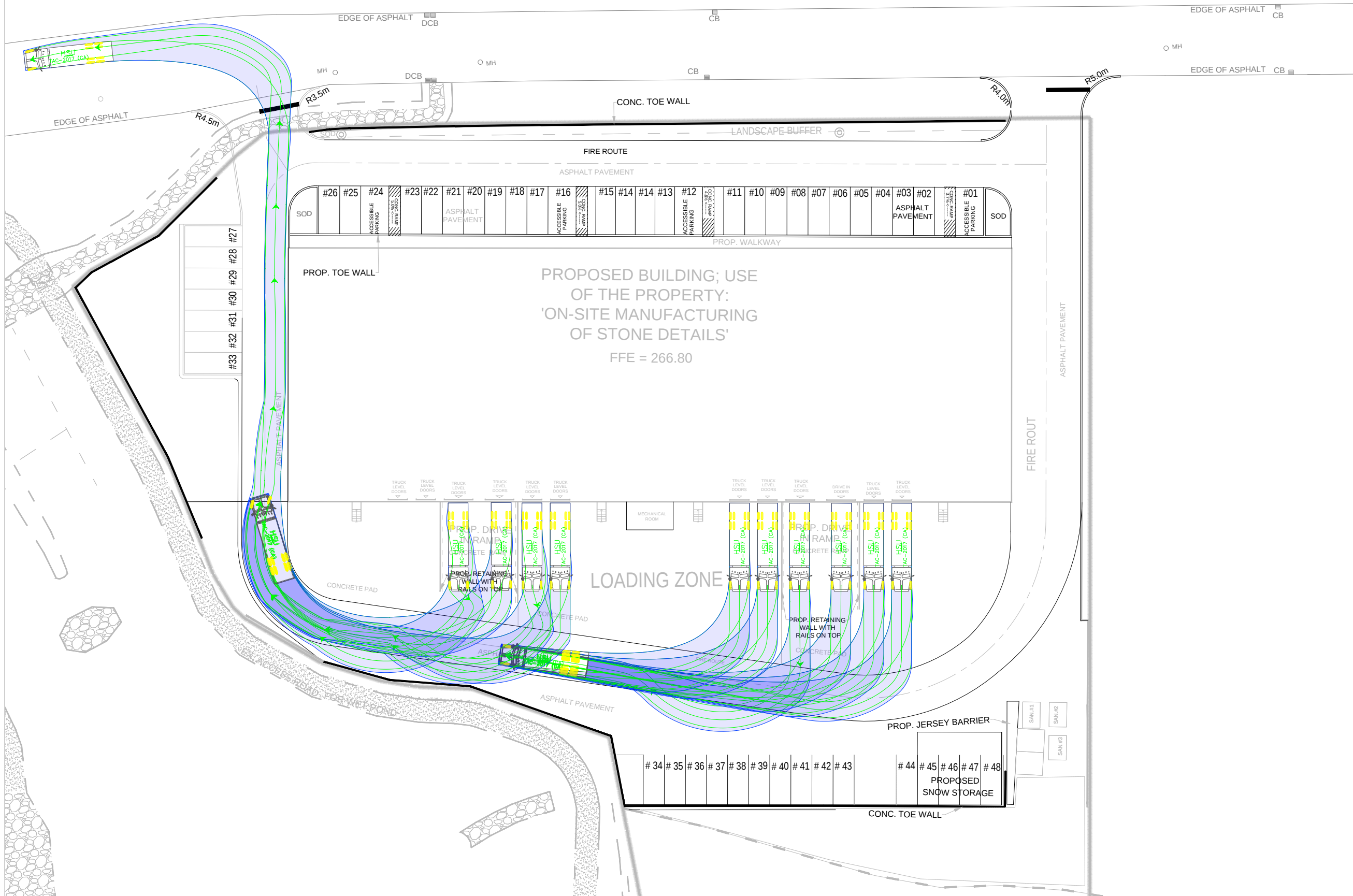
ARCHITECT:

SITE: 25 Pagewood Court

TITLE: HSU Turning Movements
Loading Movements (3)

SCALE AT A3: NTS	DATE: 2025-04-25	DRAWN: EA	CHECKED: MC
PROJECT NO: 2023-087	DRAWING NO: 007	REVISION: 04	

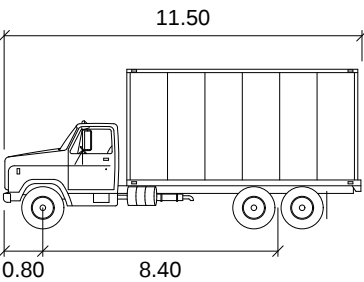
HSU Loading Bay
Movements **Outbound** - WB



Notes:

Key Plan:

The key plan shows a dashed rectangular area representing the site's location within a larger context. Inside this area, a smaller rectangle represents the site itself, with a north arrow pointing towards the upper right.



HSU		units
Width	:	2.60
Track	:	2.60
Lock to Lock Time	:	6.0
Steering Angle	:	40.0

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STATUS:			

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CLIENT: **Bond Build**

ARCHITECT:

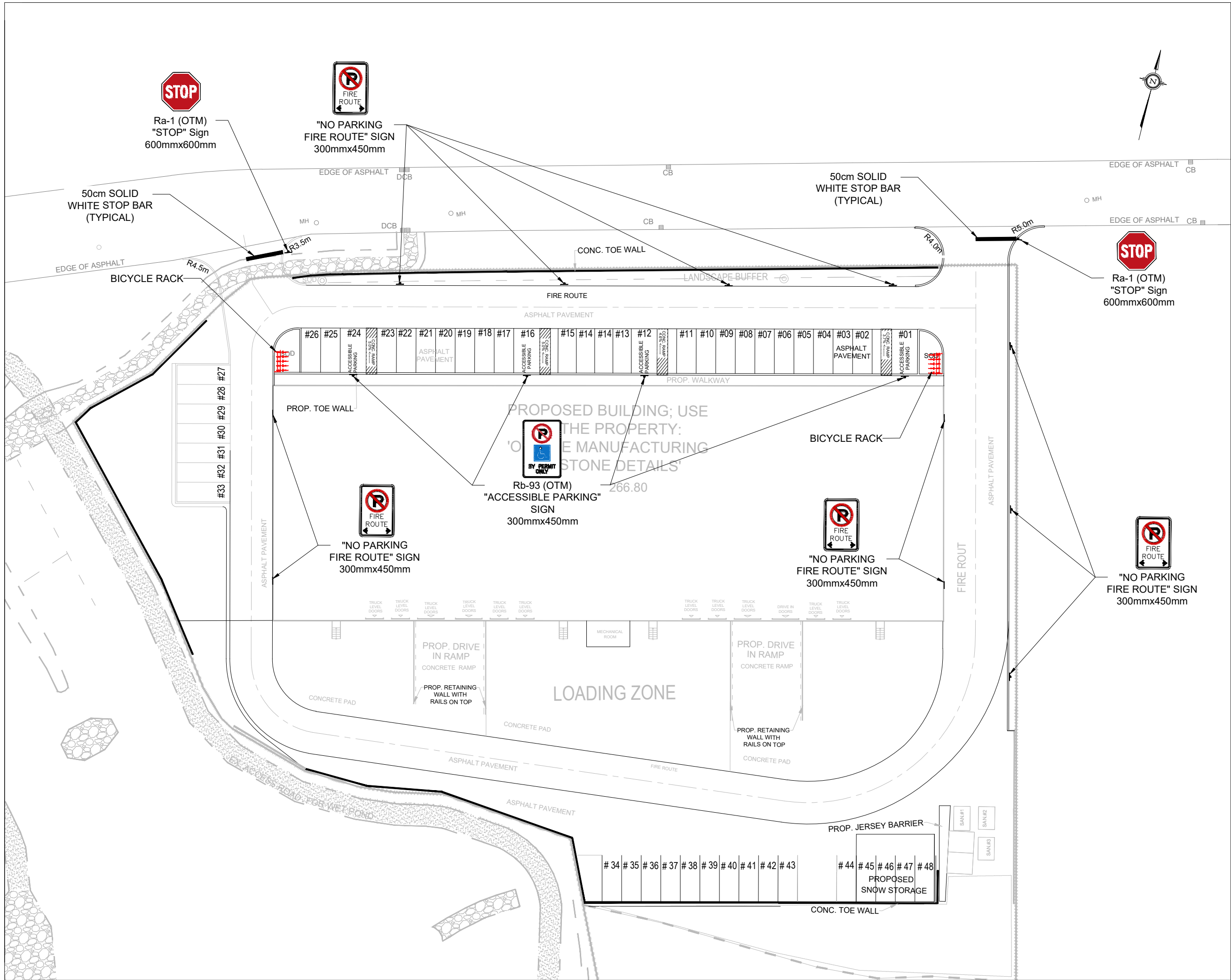
SITE: **25 Pagewood Court**

TITLE: **HSU Turning Movements Loading Movements (4)**

SCALE AT A3: NTS	DATE: 2025-04-25	DRAWN: EA	CHECKED: MC
PROJECT NO: 2023-087	DRAWING NO: 008	REVISION: 04	

Attachment 3

Pavement Markings and Signage Plan



Notes:

Key Plan:

NOTE: ALL TRAFFIC SIGNS AND PAVEMENT MARKING TO BE INSTALLED PER TOWN OF EASY GWILLIMBURY STANDARD
DETAIL DRAWING - TRAFFIC SIGN AND PAVEMENT MARKING INSTALLATION DETAIL

04	Issued for Review:	EA	2025-04-25
REV:	DESCRIPTION:	BY:	DATE:
STATUS:			

CGH Transportation
628 Haines Road
Newmarket, ON
L3Y 6V5
(905) 251-4070

CLIENT: Bond Build

ARCHITECT:

SITE:
25 Pagewood Court

TITLE:
Signage Plan

SCALE AT A3: NTS	DATE: 2025-04-25	DRAWN: EA	CHECKED: MC
PROJECT NO: 2023-087	DRAWING NO: 001	REVISION: 04	