

14 December 2023

ADVERTISED PLAN

Gosia Nowobilaska
McIldowie Partners
5/183-185 Flinders Lane
MELBOURNE VIC 3000

Proposed Facilities Development 90 Alexandra Road, Ringwood East Access and Car Parking Layout Assessment Letter

Dear Gosia,

As requested, Ratio Consultants has assessed the vehicular access arrangements and car parking layout of the proposed additional facilities on the subject site at 90 Alexandra Road, Ringwood East. Accordingly, we report as follows.

1. The Proposal

It is proposed to construct additional facilities for the existing Tintern Grammar School on the subject site at 90 Alexandra Road, Ringwood East. More specifically, the application proposes the following:

- Construction of two buildings as follows:
 - Building 1: Workshop and Storage Areas
 - Building 2: Offices and Storage Areas
- A total of 11 at-grade car parking spaces have been provided.
- Vehicular access to the site is provided via an extension of the existing road into the site to/from Gracedale Avenue.
- An existing internal road running east-west within the site to be two-way and concreted.
- Pedestrian access to the site will be via the pedestrian footpaths along Gracedale Avenue and the existing concrete footpath connecting to/from Auburn Grove.
- Waste collection via a new bin enclosure located at the entrance of the development.

2. Car Parking Assessment

It is noted that the proposed facilities are considered to be ancillary to Tintern Grammar School. On this basis, the application will not generate any additional car parking demands and as such, does not have a statutory requirement to provide any car parking.

Nevertheless, 11 car parking spaces have been provided within the site area as part of the application to facilitate staff members who will be accessing the facilities.

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Access and Car Parking Layout

The proposed vehicular access arrangements and car parking layout have been designed in accordance with the objectives and design requirements of Clause 52.06-9 of the Maroondah Planning Scheme and in accordance with the relevant sections of AS/NZS 2890.1:2004.

An assessment against the relevant standards of Clause 52.06-9 of the Maroondah Planning Scheme is provided below:

2.1 Design Standard 1 – Accessways

Design Standard 1 of Clause 52.06-9 relates to the design of accessways. The requirements of Design Standard 1 are assessed against the proposal in Table 3.1 below:

Table 3.1: Design Standard 1 Assessment – Accessways

Requirement	Comments
Must be at least 3m wide.	<u>Satisfied</u> – Each accessway has been provided a minimum width of 4.2 metres satisfying this requirement.
Have an internal radius of at least 4m at changes of direction or intersection or be at least 4.2m wide.	<u>Satisfied</u> – Each accessway has been provided a minimum width of 4.2 metres satisfying this requirement.
Allow vehicles parked in the last space of a dead-end accessway in public car parks to exit in a forward direction with one manoeuvre.	<u>Satisfied</u> – All cars can ingress and egress the site in a forward direction.
Provide at least 2.1m headroom beneath overhead obstructions, calculated for a vehicle with a wheel base of 2.8m.	<u>Satisfied</u> – The car park is designed to be open air.
If the accessway serves four or more car spaces or connects to a road in a Transport Zone 2 or Transport Zone 3, the accessway must be designed so that cars can exit the site in a forward direction.	<u>Satisfied</u> – Vehicles can enter and exit the site in a forward direction.
Provide a passing area at the entrance at least 6.1m wide and 7m long if the accessway serves ten or more car parking spaces and is either more than 50m long or connects to a road in a Transport Zone 2 or Transport Zone 3.	<u>N/A</u> – The accessway is not more than 50 metres in length and does not connect to a road in Transport Zone 2 or 3.
Have a corner splay or area at least 50% clear of visual obstructions extending at least 2m along the frontage road from the edge of an exit lane and 2.5m along the exit lane from the frontage, to provide a clear view of pedestrians on the footpath of the frontage road. The area	<u>Satisfactory</u> – Given that the gate entrance does not have any pedestrian infrastructure, bypassing pedestrians are expected to travel along the pedestrian footpath connecting between Gracedale Avenue and Auburn Grove.

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clear of visual obstructions may include an adjacent entry or exit lane where more than one lane is provided, or adjacent landscaped areas, provided the landscaping in those areas is less than 900mm in height.	At the gate entrance, pedestrian sight splay measuring 2.0 metres along the road frontage and extending 2.5 metres into the site is provided with the fence being at least 50percent clear of visual obstructions.
If an accessway to four or more car parking spaces is from land in a Transport Zone 2 or Transport Zone 3, the access to the car spaces must be at least 6m from the road carriageway.	<u>Satisfactory</u> – All car parking spaces are in excess of 6 metres from the road carriageway
If entry to the car space is from a road, the width of the accessway may include the road.	<u>N/A</u> - Entry to the car space is not from a road.

2.2 Design Standard 2 – Car Parking Spaces

Design Standard 2 of Clause 52.06-9 relates to the design of car parking spaces. The requirements of Design Standard 2 are assessed against the proposal in Table 3.2:

Table 3.2: Design Standard 2 Assessment – Car Parking Spaces

Requirement	Comments
Car parking spaces and accessways must have the minimum dimensions as outlined in Table 2 of Design Standard 2.	<u>Satisfied</u> – All parking spaces are provided in excess of the minimum dimensions as outlined in Table 2 of Design Standard 2 with 2.6 metres in width and 5.4 metres in length accessed by a 6.4-metre accessway aisle.
A wall, fence, column, tree, tree guard or any other structure that abuts a car space must not encroach into the area marked ‘clearance required’ on Diagram 1 of Design Standard 2, other than: - A column, tree or tree guard, which may project into a space if it is within the area marked ‘tree or column permitted’ on Diagram 1. - A structure, which may project into the space if it is at least 2.1m above the space.	<u>Satisfied</u> – All car parking spaces are provided in compliance with Diagram 1 of Design Standard 2
Car spaces in garages or carports must be at least 6m long and 3.5m wide for a single space and 5.5m wide for a double space measured inside the garage or carport.	<u>N/A</u> – No car parking spaces are provided within garages or carports
Where parking spaces are provided in tandem (one space behind the other) an additional 500mm in length must be provided between each space.	<u>N/A</u> – No car parking spaces are provided in a tandem arrangement.

Where two or more car parking spaces are provided for a dwelling, at least one space must be under cover.

N/A – Not a dwelling land use

Swept Path Assessment

An assessment (refer to Appendix A) of the accessibility to/from the critical car parking space using the 'Autodesk Vehicle Tracking' software has been conducted. The B85 (85th percentile car) was used in the assessment and it was found that each of the car spaces could be accessed (ingress and egress) in a satisfactory manner. All vehicles will be able to enter/exit the site in a forward direction.

A swept path assessment has been undertaken for the largest vehicle anticipated to access the site for loading, that being a 10.2-metre-long front-loading refuse truck. It was found that the vehicle is able to access the site, collect waste, and turn around using the accessway to depart the site in a forward direction.

The assessment indicates that the vehicular access arrangements and car parking layout have been designed appropriately and in accordance with the requirements of the Maroondah Planning Scheme, and/or AS/NZS 2890.1:2004.

3. Conclusion

The proposal seeks to construct additional facilities for the existing Tintern Grammar School at 90 Alexandra Road in Ringwood East. Based on the preceding assessment, it is considered the development is appropriate for the following reasons:

- The proposed development does not have a statutory requirement to provide any additional car parking spaces given that the proposed facilities are considered to be ancillary to Tintern Grammar School. Notwithstanding, the application seeks to provide 11 car parking spaces.
- The proposed car parking layout and vehicular access arrangements have been designed suitably and in accordance with the dimensional requirements of Clause 52.06 of the Maroondah Planning Scheme and the relevant sections of AS/NZS 2890.1:2004.
- The swept path assessment demonstrates that all nominated vehicles will be able to enter/exit the site in a forward direction.

Overall, the proposed development is not expected to create any adverse traffic or parking impacts in the precinct and is therefore considered acceptable.

If you have any queries, please feel free to contact the undersigned on 9429 3111.

Yours sincerely,



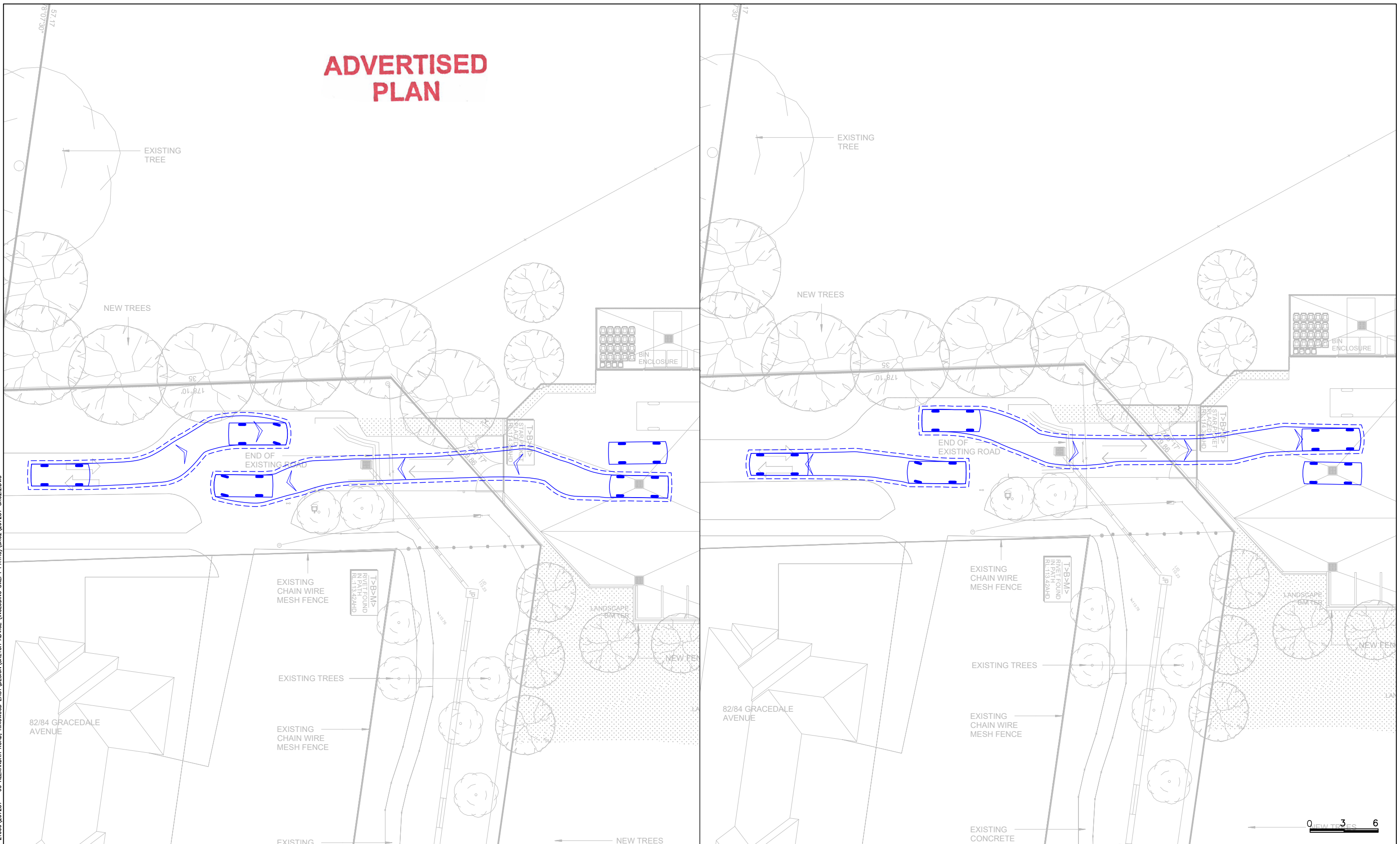
Satish Dangol
Senior Transport Engineer
Ratio Consultants

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Appendix A : Swept Path Assessment

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ratio:
 RATIO CONSULTANTS PTY LTD
 ABN 005 422 104
 8 GWYNNE STREET
 CREMORNE, VICTORIA 3121
 TELEPHONE (03)9429 3111
 FACSIMILE (03)9429 3011

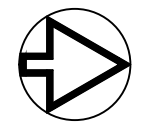
B99 Vehicle (AS/NZS2890.1:2004)

VEHICLE ENVELOPE (FORWARD)
 300mm CLEARANCE (FORWARD)
 VEHICLE ENVELOPE (REVERSE)
 300mm CLEARANCE (REVERSE)

Tintern Grammar - Facilities
 90 Alexandra Road, Ringwood East
 Swept Path Assessment

NOTE:
 1) Base Plan Supplied by McIldowie Partners
 2) Maximum Design Speed 10km/h

RATIO REFERENCE 20728T-SK02.2/SD	SHEET No. 1 of 7	SCALE 1:300@A3	DATE 14/12/2023
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SUMMARY:

EXISTING CARPARKS APPROX. 0
 EXISTING STAFF APPROX. 10
 EXISTING STUDENTS APPROX. 0

PROPOSED CARPARKS APPROX. 11
 PROPOSED STAFF APPROX. 10
 PROPOSED STUDENTS APPROX. 0

SITE DIMENSIONS:

TOTAL SITE AREA
 PROPOSED BUILDING AREA
 PROPOSED BUILDING FOOTPRINT

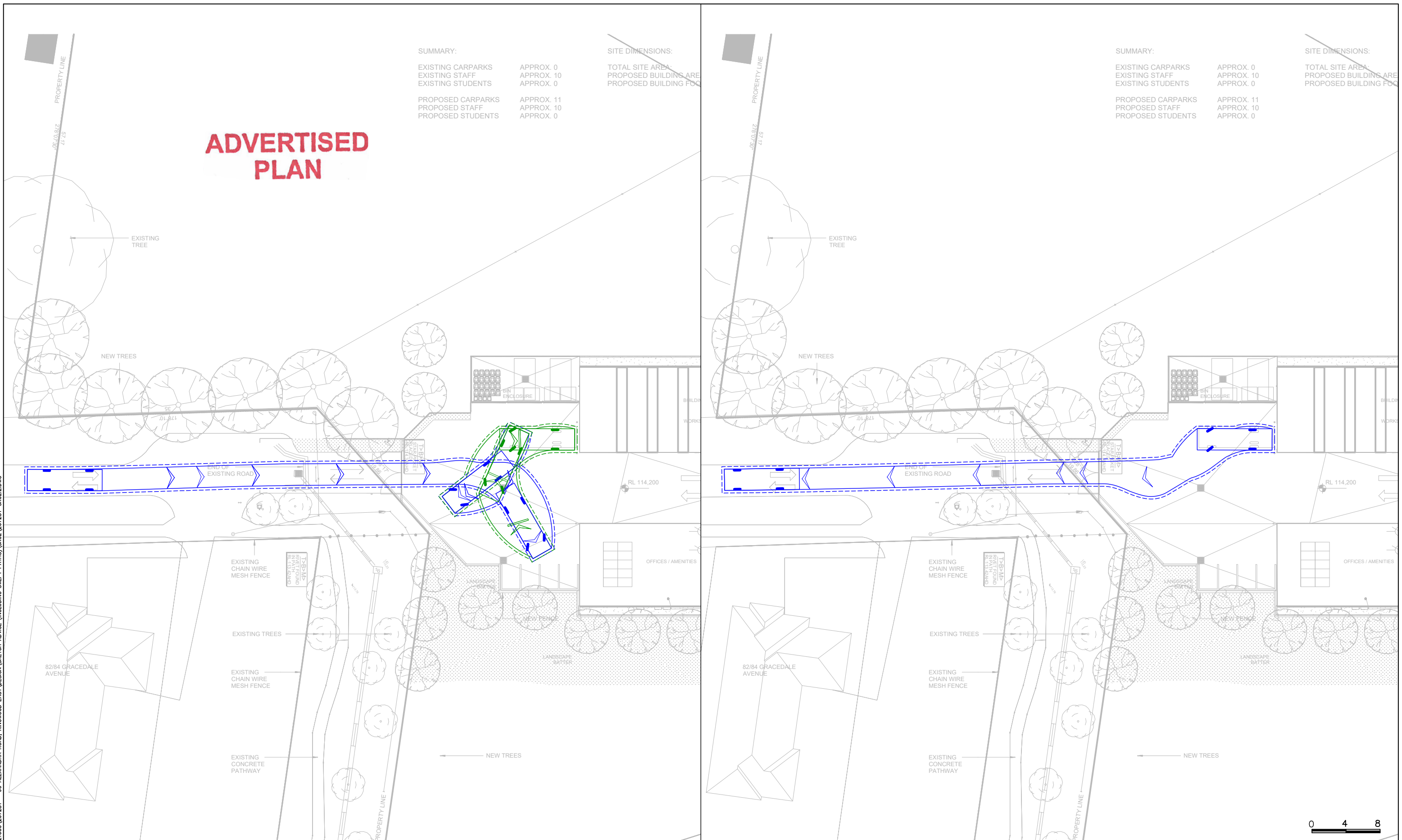
SUMMARY:

EXISTING CARPARKS APPROX. 0
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 EXISTING STUDENTS APPROX. 0

PROPOSED CARPARKS APPROX. 11
 PROPOSED STAFF APPROX. 10
 PROPOSED STUDENTS APPROX. 0

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 PROPOSED BUILDING AREA
 PROPOSED BUILDING FOOTPRINT

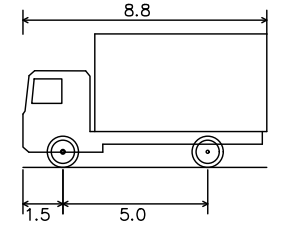


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MRV – Medium Rigid Vehicle (AS/NZS2890.2:2002)



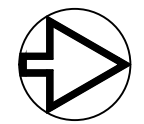
VEHICLE ENVELOPE (FORWARD)
 500mm CLEARANCE (FORWARD)
 VEHICLE ENVELOPE (REVERSE)
 500mm CLEARANCE (REVERSE)

Overall Length 8.800m
 Overall Width 2.500m
 Track Width 2.500m
 Lock to Lock Time 4.00 sec
 Curb to Curb Turning Radius 10.000m

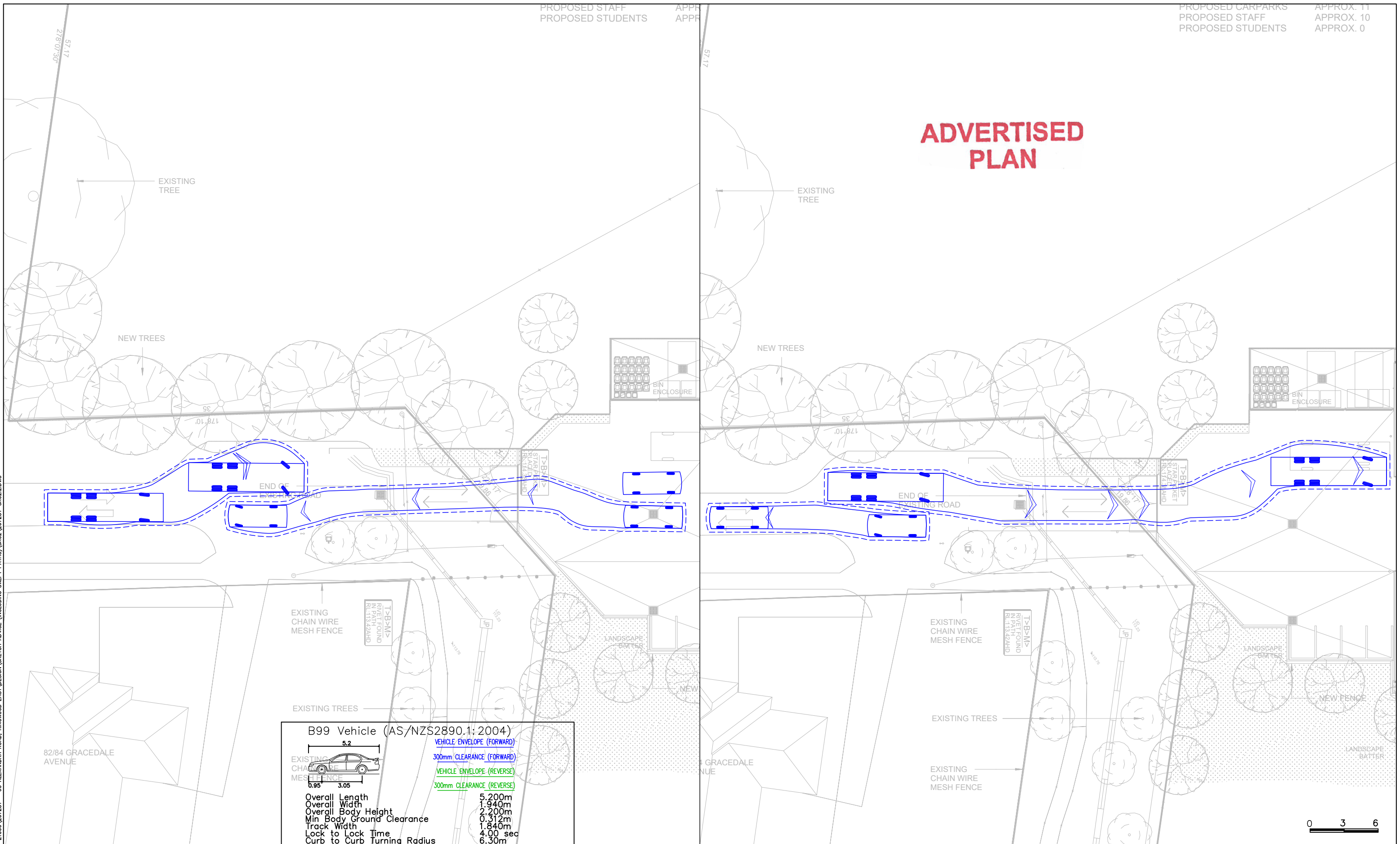
Tintern Grammar - Facilities
 90 Alexandra Road, Ringwood East
 Swept Path Assessment

NOTE:
 1) Base Plan Supplied by Mouldie Partners
 2) Maximum Design Speed 10km/h

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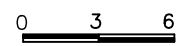


B99 Vehicle (AS/NZS2890.1:2004)	
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m
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VEHICLE ENVELOPE (REVERSE)	300mm CLEARANCE (REVERSE)

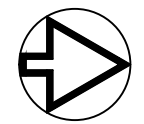
Front Loading Refuse Truck	
Overall Length	10.203m
Overall Width	2.500m
Overall Body Height	3.205m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock-to-lock time	6.00s
Wall to Wall Turning Radius	9.450m
VEHICLE ENVELOPE (FORWARD)	300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)	300mm CLEARANCE (REVERSE)

Tintern Grammar - Facilities
90 Alexandra Road, Ringwood East
Swept Path Assessment

NOTE:
1) Base Plan Supplied by McIldowie Partners
2) Maximum Design Speed 10km/h



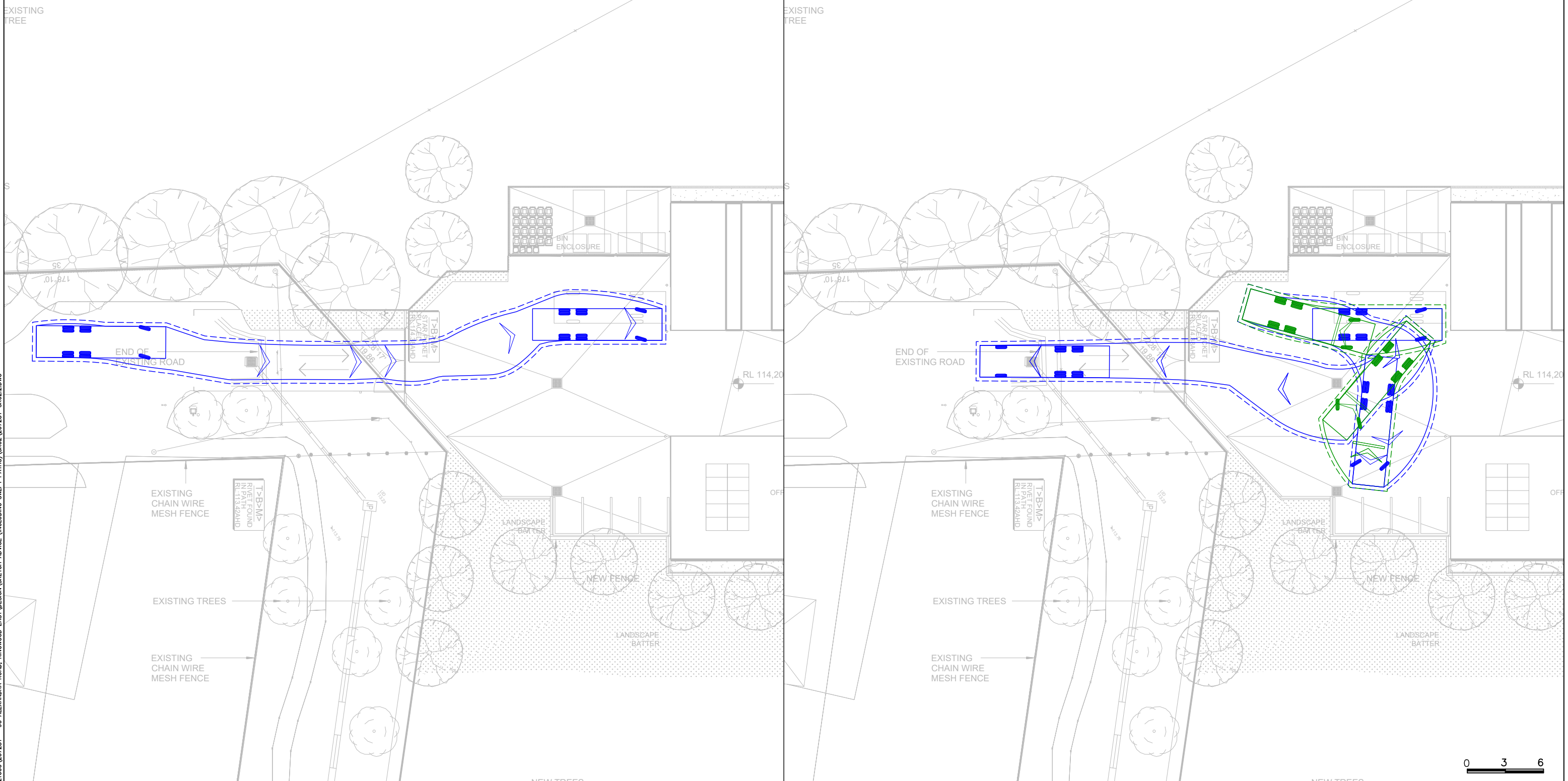
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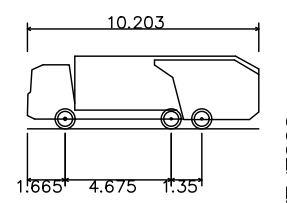


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Front Loading Refuse Truck



VEHICLE ENVELOPE (FORWARD)
 300mm CLEARANCE (FORWARD)
 VEHICLE ENVELOPE (REVERSE)
 300mm CLEARANCE (REVERSE)

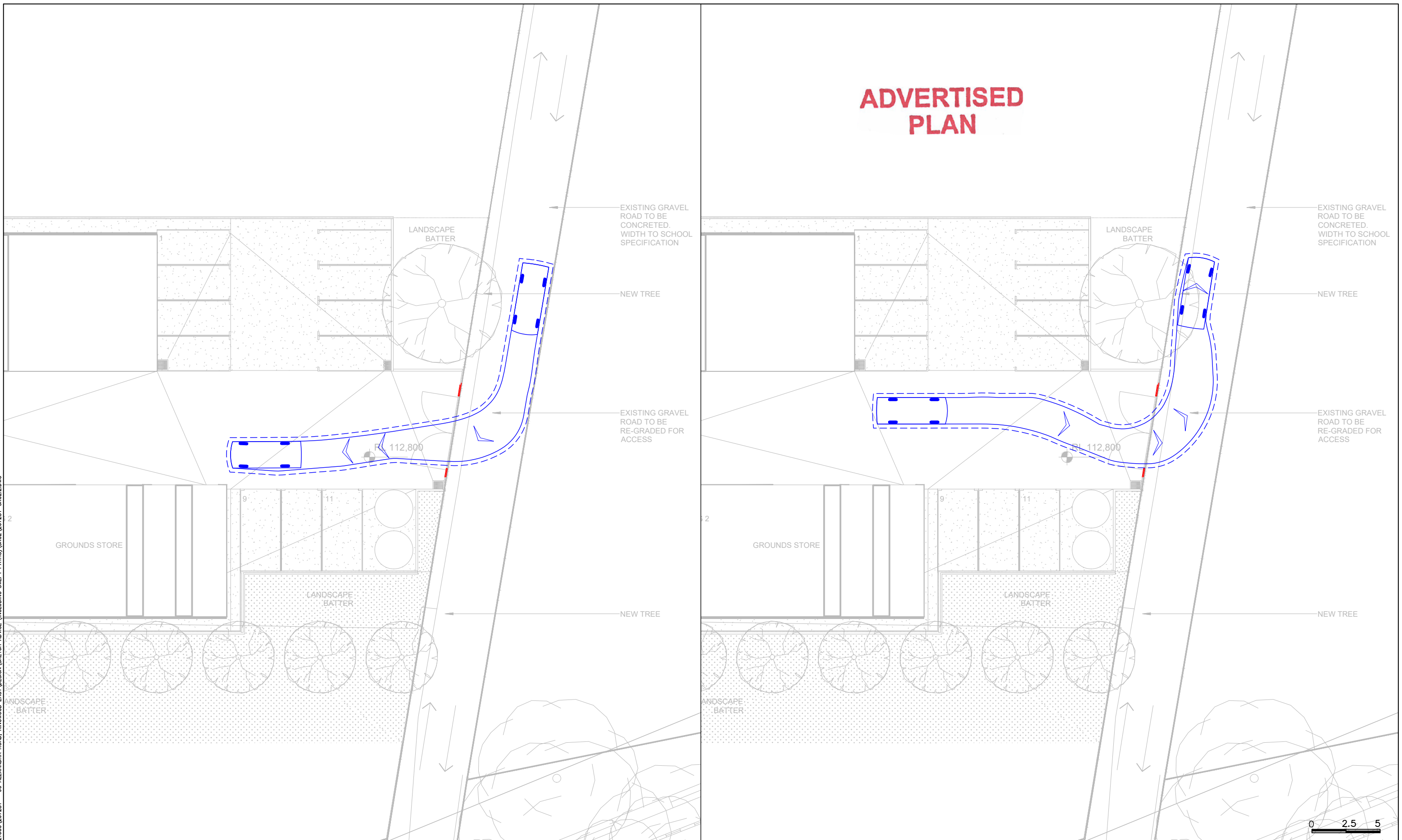
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 Lock-to-lock time 6.00s
 Wall to Wall Turning Radius 9.450m

Tintern Grammar - Facilities
 90 Alexandra Road, Ringwood East
 Swept Path Assessment

NOTE:
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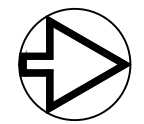
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B99 Vehicle (AS/NZS2890.1:2004)	
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300mm CLEARANCE (FORWARD)	1.940m
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300mm CLEARANCE (REVERSE)	0.312m
	1.840m
	4.00 sec
	6.30m

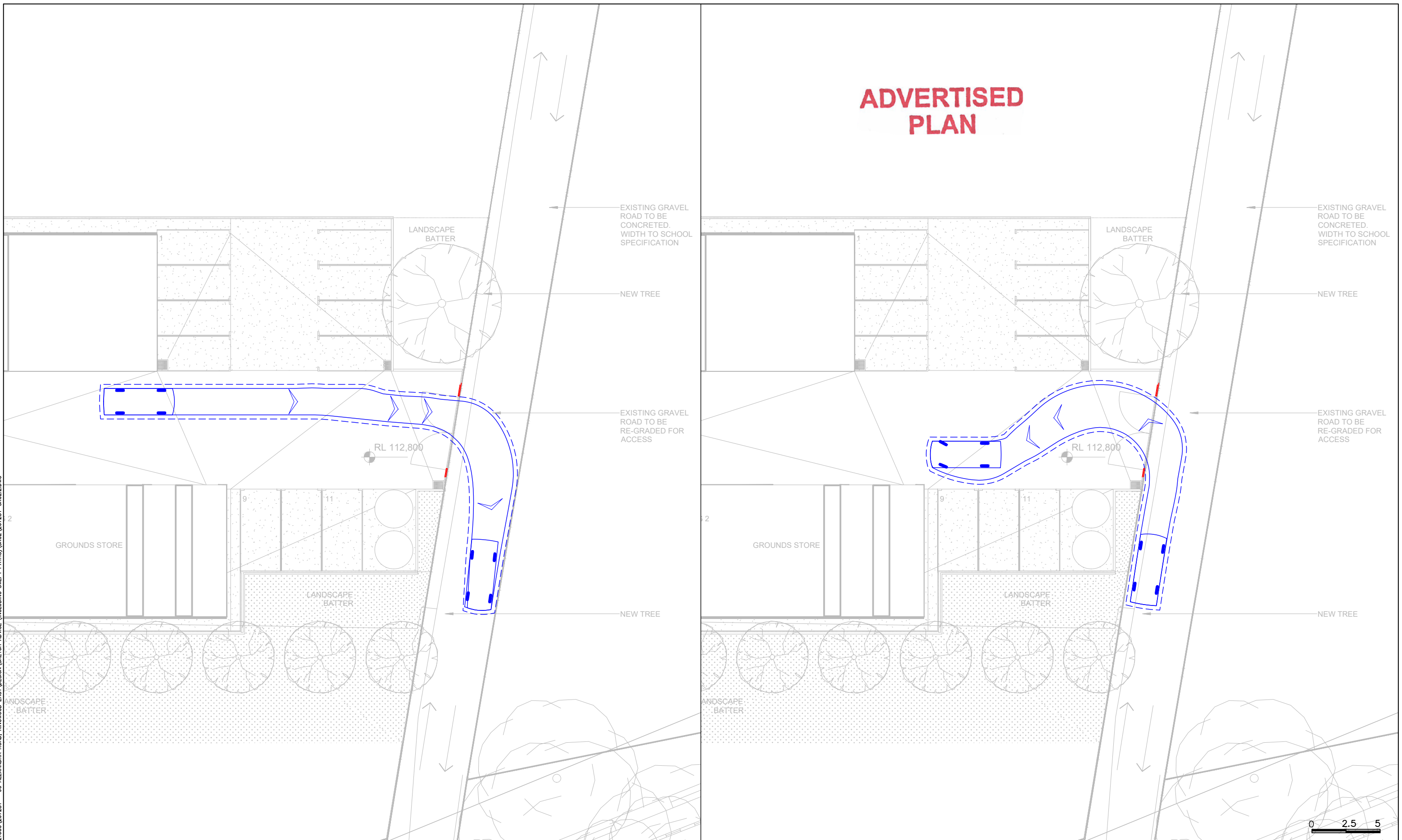
Tintern Grammar - Facilities
 90 Alexandra Road, Ringwood East
 Swept Path Assessment

NOTE:
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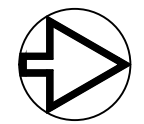
ratio:
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B99 Vehicle (AS/NZS2890.1:2004)	
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	300mm CLEARANCE (FORWARD)
	VEHICLE ENVELOPE (REVERSE)
	300mm CLEARANCE (REVERSE)
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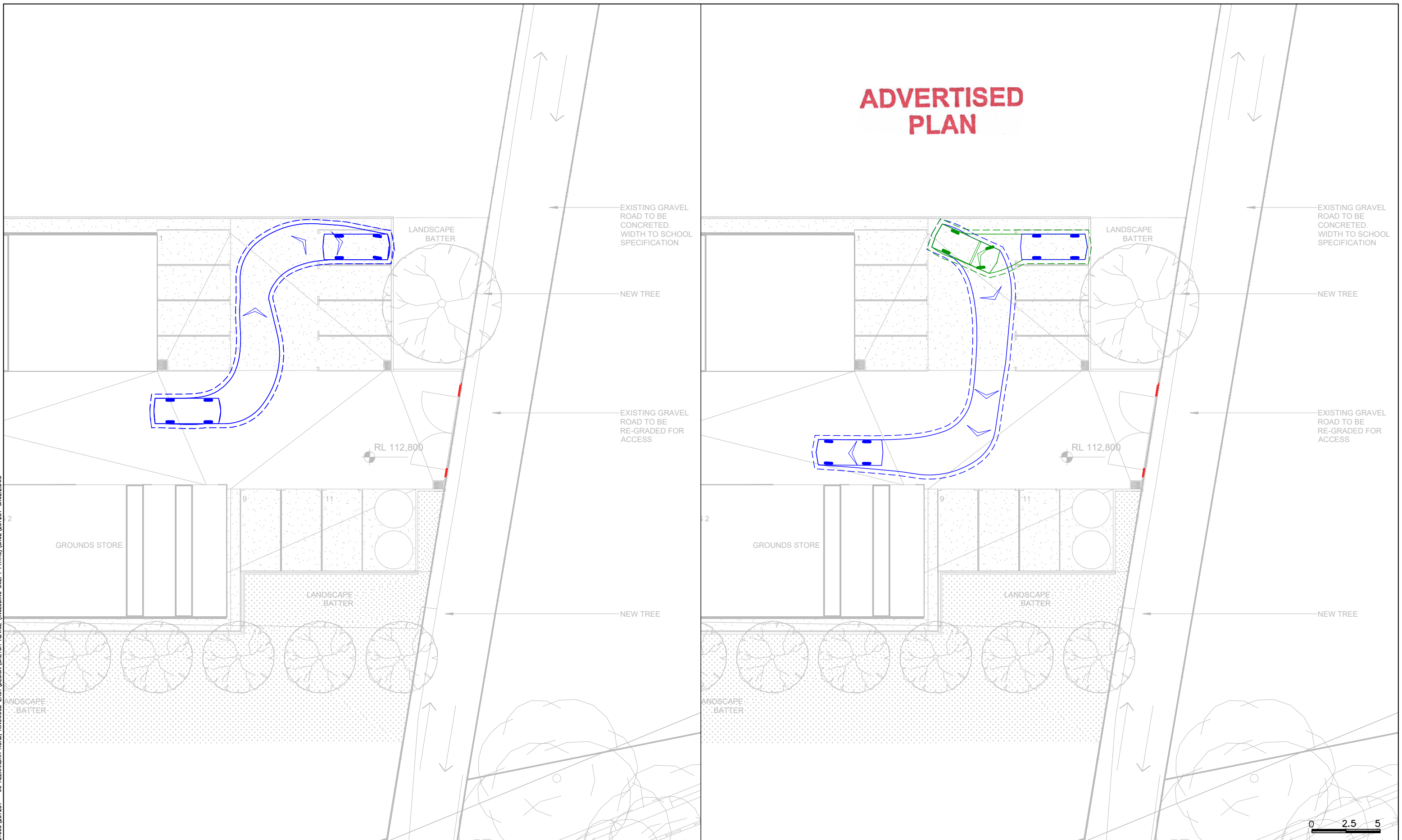
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 Swept Path Assessment

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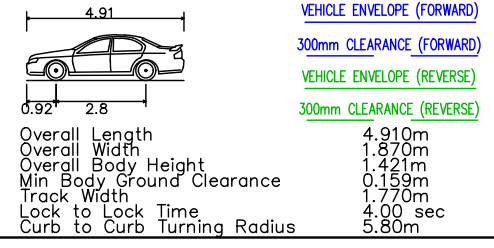


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B85 Vehicle (AS/NZS2890.1:2004)



Tintern Grammar - Facilities
 90 Alexandra Road, Ringwood East
 Swept Path Assessment

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 7 of 7

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 1:250@A3

DATE
 14/12/2023

