A2015939N Traffic Report 2.0

9th March 2021

Northern Beaches Council
PO Box 82
Manly NSW 1655

Dear Sir/Madam,

Car Parking and Traffic Assessment: Proposed Boarding House – 532 Pittwater Road, North Manly

1. Overview

ML Traffic Engineers have been engaged to prepare a Car Parking and Traffic Assessment for the proposed boarding house at 532 Pittwater Road, North Manly. The subject site is located on the northern side of Pittwater Road, with entry/exit restricted to left in and left out movements only due to median division on Pittwater Road.

2. Proposal

The proposal comprises 10 studio type dwelling units within a boarding house and a shared common room.

There are 5 on-site parking spaces of which 1 is allocated as a disabled persons space, 4 motorcycle spaces and storage for 8 bicycles.

2.1 Car Parking Requirement

The Pittwater Development Control Plan B6.3, Table 1: Onsite Car Parking Requirements specifies car parking rates for different land uses. The table however does not include a car parking rate applicable to a 'boarding house'.

NSW Planning and Environment State Environmental Planning Policy (SEPP) (Affordable Rental Housing) 2009 provides car parking rates for boarding houses, and as such this rate has been applied.

The requirement is that "at least 0.5 parking spaces are provided for each dwelling containing 1 bedroom, at least 1 parking space is provided for each dwelling containing 2 bedrooms and at least 1.5 parking spaces are provided for each dwelling containing 3 or more bedrooms". With 10 studio type dwellings, the car parking space requirement for the proposed development is 5 spaces.

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With 5 spaces provided on site, the car parking provision as determined by SEPP Affordable Rental Housing is met.

2.2 Motorcycle Parking Requirement

The SEPP Affordable Rental Housing Division 3 Boarding Houses stipulates that at least 1 motorcycle parking space is provided for every 5 dwellings. This equates to a parking space requirement of 2 spaces.

There are 4 motorcycle spaces provided, with two specifically for motorcycles and two allocated to smaller scooter type vehicles. The SEPP requirement is met.

2.3 Bicycle Parking Requirement

The SEPP Affordable Rental Housing Division 3 Boarding Houses stipulates that at least 1 bicycle parking space is provided for every 5 dwellings. This equates to a parking space requirement of 2 spaces.

With storage for up to 3 bicycles provided, the SEPP requirement is met.

2.3.1 Car Parking Area Layout

The following comments are in relation to the car park layout:

- A B99 is able to enter and/or exit the site simultaneously with a B99 travelling in the opposing direction. The vehicles are contained within the left most through lane of Pittwater Road;
- The driveway width is 5.5m for 6.0m within the property boundary, adhering to the requirement of AS2890.1:2004 2004 Part 1: Off-street car parking Table 3.2 for a Category 1 driveway, for which the requirement is a driveway width of between 3.0m and 5.5m;
- The driveway reduces to 3.6m in width before widening to 5.81m for the parking aisle. This reduced driveway width adheres to Table 3.2 of AS2890.1 as detailed above;
- The car parking spaces are a minimum of 2.8m wide x 4.8m with 600mm unobstructed overhang, or 5.4m long abutting a structure with an aisle width of 5.8m. This adheres to the dimension requirements contained with AS2890.1: Figure 2.2 for User Class 1;

- The disabled persons space (space 5) is 2.4m wide x 5.4m long with a shared zone space of the same dimension and height clearance of 2.5m, in accordance with AS2890.6 Off-street parking for people with disabilities. A bollard is to be placed within the shared zone to prevent cars parking;
- The motorcycle spaces adjacent to the disabled parking space shared zone are 1.2m wide x 2.5m long, with the scooter spaces 1.2m x 2.0m long. AS2890.1:2004 Part 2.4.7 noted that motorcycle spaces should be 1.2m wide x 2.5m. The two allocated motorcycle spaces meet the requirements of AS2890.1 with the scooter spaces slightly less in length, however these additional spaces exceed the motorcycle space requirement of 2 spaces. Access to the space may be difficult due to the presence of the bollard within the shared zone of the disabled person's space, however with the average width of a motorcycle being between 700mm – 1.0m, the spaces should be accessible;
- The columns between the car parking spaces are positioned 300mm from the edge the car parking space, when considering the minimum car parking space width of 2.4m, as per AS2890.1:2004 Figure 5.2 Design Envelope Around Parked Vehicle to be Kept Clear of Columns, Walls and Obstructions;
- Car parking spaces adjacent to walls are offset 300mm as required in AS2890.1:2004 Figure 5.2;
- A blind aisle extension of 1.0m is provided at the end of the parking aisle in accordance with AS2890.1:2004, Section 2.4.2 Angle Parking Aisle; manoeuvre
- AS2890.1:2004 Figure 3.3 Minimum Sight Lines for Pedestrians details the requirement to provided 2.5m x 2.5m sight triangles to enable visibility to approaching pedestrians. The sight triangles provided on the western side of the driveway exit lane adhere to this requirement. On the eastern side the driveway abuts the side boundary and so restricting the availability of the sight triangle. To ensure sight triangles are obtained/maintained on the eastern side, the side boundary fence is to be below driver eye height;
- Swept path analysis was undertaken for a B85 car using AutoTURN for Space 1, as it is somewhat constrained due to the narrowing of the driveway and presence of walls other side. The car parking space is accessible in a forward direction; however, the reverse egress manoeuvre requires an additional corrective movement. The car parking space is accessible with a reverse entry and forward

direction egress movement. The car park layout is considered acceptable in this instance;

- Swept paths were done at a speed of 10km/h with 'turn wheels from stop' not selected other than for the first movement following a reverse movement, within the car parking module, or from the parking aisle to the driveway is necessary. Clearance lines offset 300mm from the vehicle are displayed. Refer Appendix A.

2.4 Traffic Generation

A traffic generation rate of 0.3 trip per dwelling was adopted, which has been based on considerations for various dwelling types with similarities to a boarding house, and lower car parking requirement for a boarding house. See Table 1.

On this basis, a 10-dwelling boarding house generates 3 trips an hour. Assuming an 80% outbound / 20% inbound directional split in the AM peak period, this equates to 2.4 outbound trips and 0.6 inbound trip per AM peak hour. Assuming an 30% outbound / 70% inbound directional split in the PM peak period, this equates to 0.9 outbound trips and 2.1 inbound trip per PM peak hour. Note that the on-site car park has 5 parking spaces.

Source	Reference	Hourly Traffic Generation Rate	Car Parking Requirement
RTA Guide to Traffic Generating Developments Ver 2.2.	Section 3.3.2 Medium Density Residential Building	0.4 trip per dwelling	1 space per dwelling
	Section 3.4.1 Motels.	0.4 trip per dwelling	1 space per unit, 1 space per 2 employees.
	Section 3.3.3 High Density Residential Building in Metropolitan Regional Centre	0.24 trip per dwelling	0.4 space per 1-bedroom dwelling
	Section 3.3.4 Housing for Aged and Disabled Persons	0.1 to 0.2 evening trip per dwelling.	0.67 space per unit (residents) plus 1 space per 5 unites (visitors).
TRMS TDT 2013/04a Updated traffic surveys for Guide to Traffic Generating Developments	Housing for Seniors	0.4 trip per dwelling	
	High density residential flat dwellings which are close to public transport, greater than 6 stories and near 100% residential.	0.19 trip per dwelling in the AM peak hour and 0.15 trip per dwelling in the PM peak hour.	

Table 1: Traffic Generation References

The traffic generation of the subject site is low and will not negatively impact Pittwater Road or the surrounding road network.

3. Conclusion

As per the considerations provided in this report, the proposed boarding house will not have any material impact on traffic along Pittwater Road or the surrounding road network.

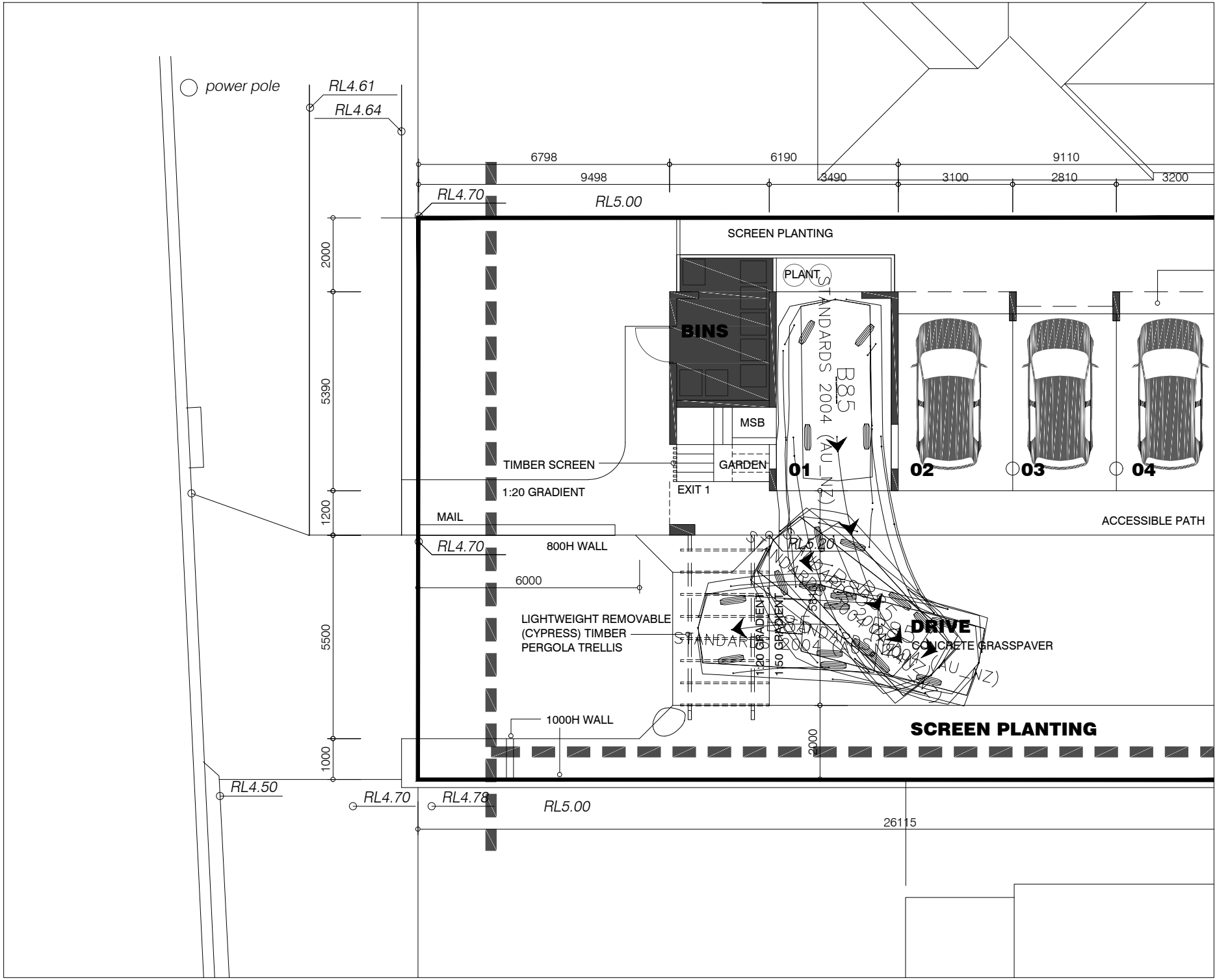
The car park layout adheres to the design and manoeuvrability requirements of AS2890.1:2004 Part 1: Off-street car parking and AS2890.6:2009 Part 6: Off-street parking for people with disabilities.

If you have any questions, please ring me on 0406 437 681 or email me at traffic@mltraffic.com.au.

Yours sincerely,

Sonja Hayes
Senior Traffic Engineer

APPENDIX A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SCREEN PLANTING
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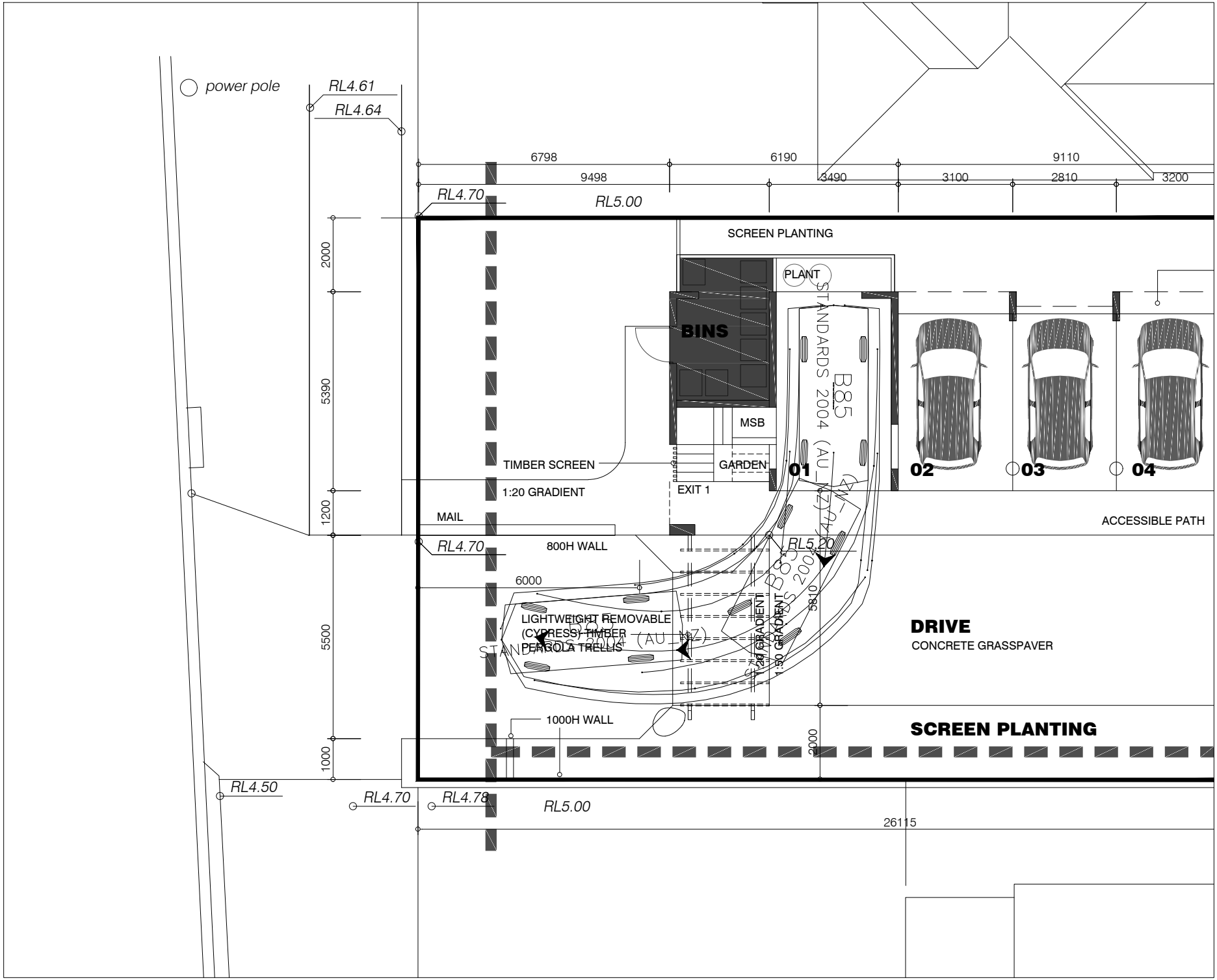
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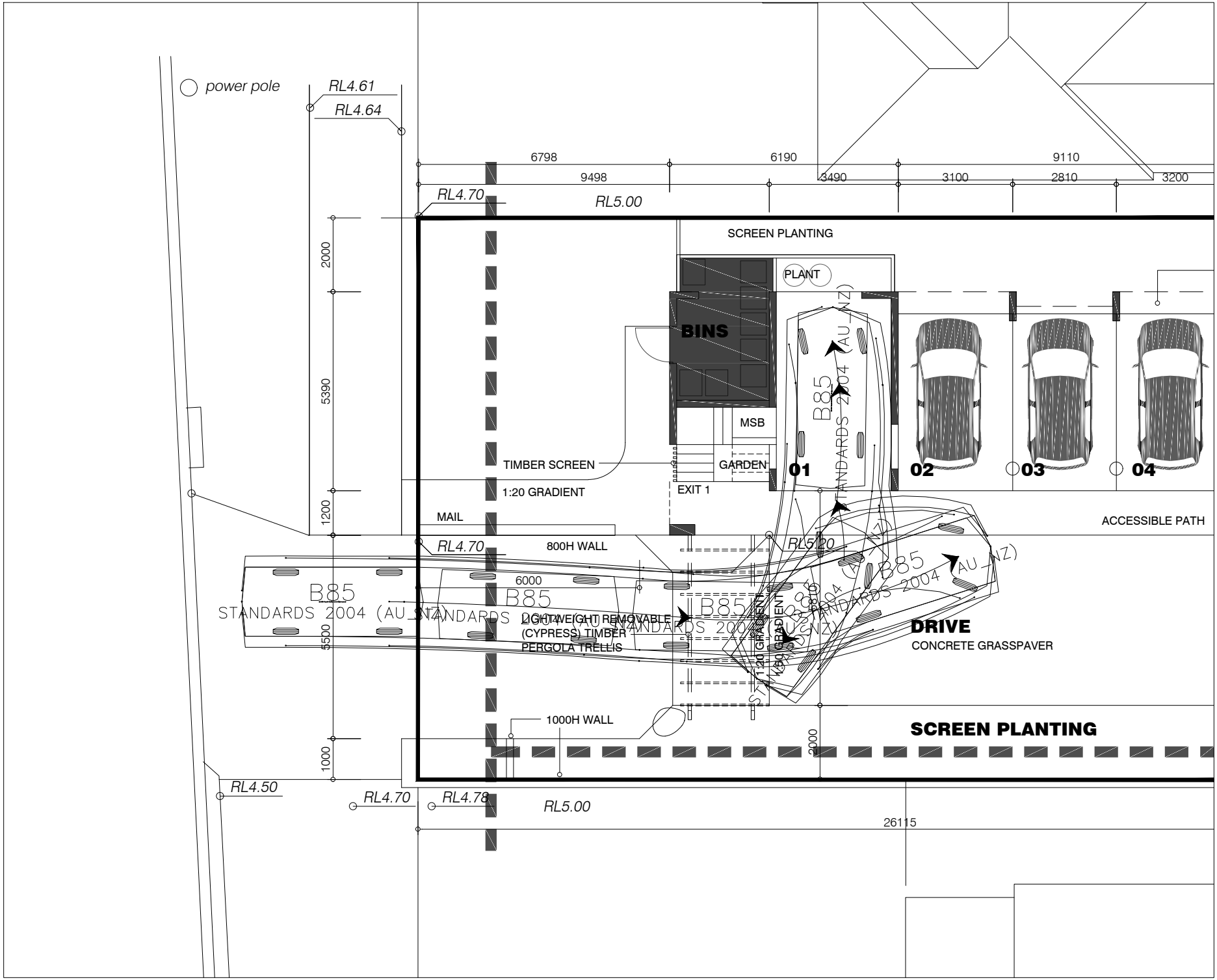
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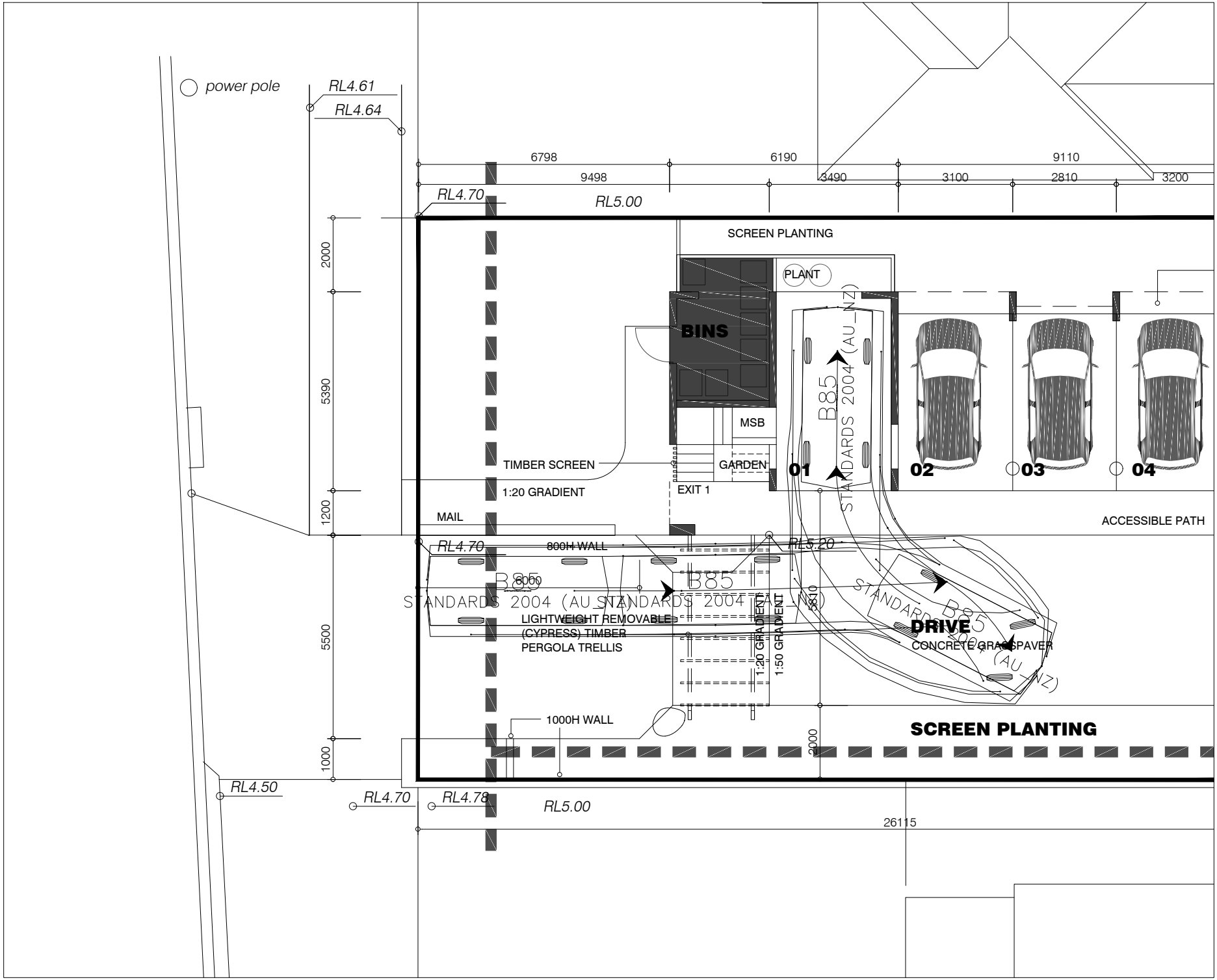
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