

PROPOSED RESIDENTIAL DEVELOPMENT

3 PIGEON MOUNTAIN ROAD HALF MOON BAY

TRAFFIC IMPACT ASSESSMENT

Prepared By:
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April 2026
Reference: 220803

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1.0 INTRODUCTION

This report examines and describes the traffic and parking effects of a residential development at 3 Pigeon Mountain Road, Half Moon Bay. The site is located within the Residential – Mixed Housing Suburban Zone under the Auckland Unitary Plan (AUP) and is shown in **Figure 1**.

This report provides an updated assessment following Section 92 discussions with Auckland Council and a revised design.

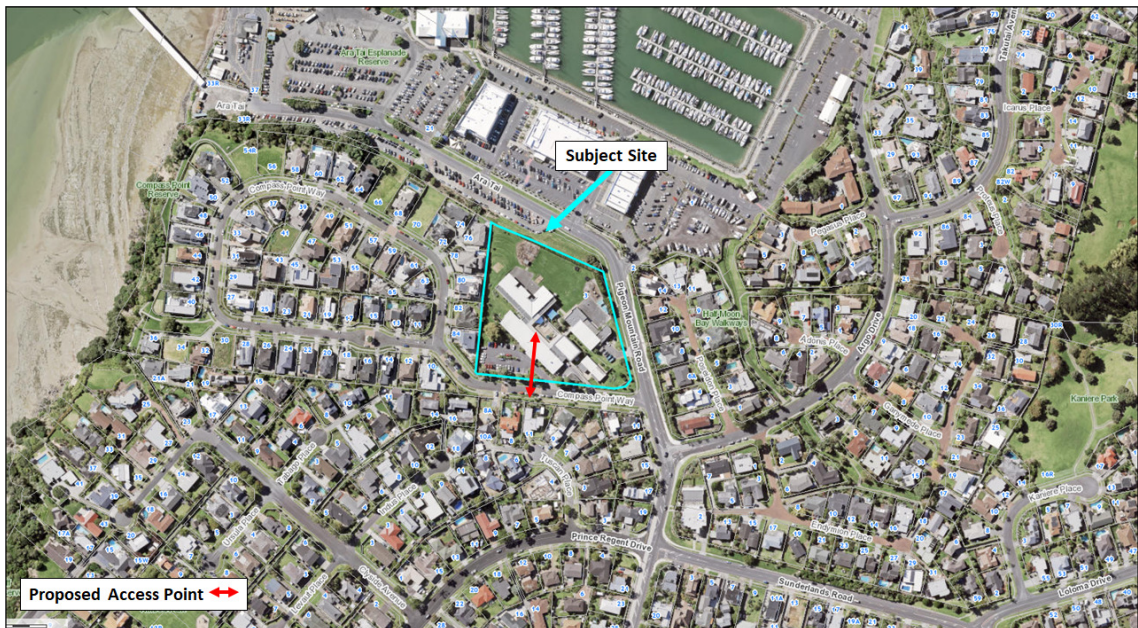


Figure 1: Site Location

Source: Geomaps, Auckland Council

The proposal is described in more detail within the resource consent application. The proposal consists of removing the existing buildings on the site and constructing 62 residential dwellings. Each dwelling will be provided with at least one parking space each, accessed via one vehicle crossing onto Compass Point Road.

This report describes the nature of the local transport environment around the site; sets out the transport characteristics of the proposal and assesses its likely impacts on the surrounding transport environment. It also reviews any mitigation measures that are necessary to minimise those impacts and considers the application in terms of the relevant AUP standards. This report provides an updated assessment of a revised design following discussions with Auckland Council.

2.0 EXISTING TRANSPORT ENVIRONMENT

2.1 The Surrounding Road Network

The site is bounded by Ara Tai to the north, Pigeon Mountain Road to the east and Compass Point Way to the west and the south.

2.1.1 Pigeon Mountain Road

Pigeon Mountain Road is a collector road that runs along the eastern boundary of the site, generally with commercial and residential activities present along its extent. It continues as Ara Tai to the north and terminates at an intersection with Pakuranga Road at its southern extent within Highland Park.

Near the subject site Pigeon Mountain Road generally has one continuous lane in each direction with a width of some 10.0 metres, with a short section of a second lane provided in a southbound direction serving Argo Drive. Traffic signals are provided for southbound traffic only directly adjacent to the site where it is understood they are activated by queues onto Sunderlands Road.

Within the site vicinity, on-street parking is prohibited along the western side of the carriageway and permitted intermittently along the eastern side where broken yellow lines are not marked. Footpaths measuring approximately 1.4 – 2.0 metres in width are provided along both sides of Pigeon Mountain Road.

The most recent traffic counts on Pigeon Mountain Road between Ara Tai and Compass Point Way were carried out by Auckland Transport in December 2012. Details of the traffic count are summarised in **Table 1**.

Table 1: Traffic Counts on Pigeon Mountain Road

Direction	Weekday	Saturday	Sunday	Weekday		
				AM Peak	Midday Peak	PM Peak
Both	7,657	6,160	6,162	604	599	869

It should be noted that more recent traffic counts are available on Pigeon Mountain Road (5-day ADT of the order of 6,800 vpd), however, they were recorded further away from the site along Pigeon Mountain Road where they were not considered to provide a realistic review of traffic in the vicinity of the site.

Mobileroad was also reviewed which shows an ADT of 7,820 vehicles per day in June 2025.

2.1.2 Compass Point Way

Compass Point Way is a local road which runs in a general east west direction past the site. It forms an intersection with Pigeon Mountain Road at its eastern end and forms a loop arrangement at its southern end.

Near the subject site Compass Point Way has a carriageway width of some 7.4 metres providing one traffic lane in each direction. On-street parking is prohibited along the northern side and permitted along the southern side of the carriageway. Footpaths measuring approximately 1.4 metres in width are provided along both sides of the carriageway.

There is no traffic counts data available for Compass Point Way within Auckland Transport Database. Information from Mobileroad indicates an ADT of some 750 vehicle per day in June 2025.

2.2 Traffic Safety

Information from the New Zealand Transport Agency's Crash Analysis System for the most recent available ten-year+ period from January 2013 to December 2025 (subject to reporting delays), indicates that no crashes were reported. The crash study area is shown in **Figure 2**.

Therefore, there is no information which would suggest an inherent safety issue related to the unsafe operation of vehicle accesses within the vicinity of the site's proposed access and the nearby intersection with Pigeon Mountain Road.

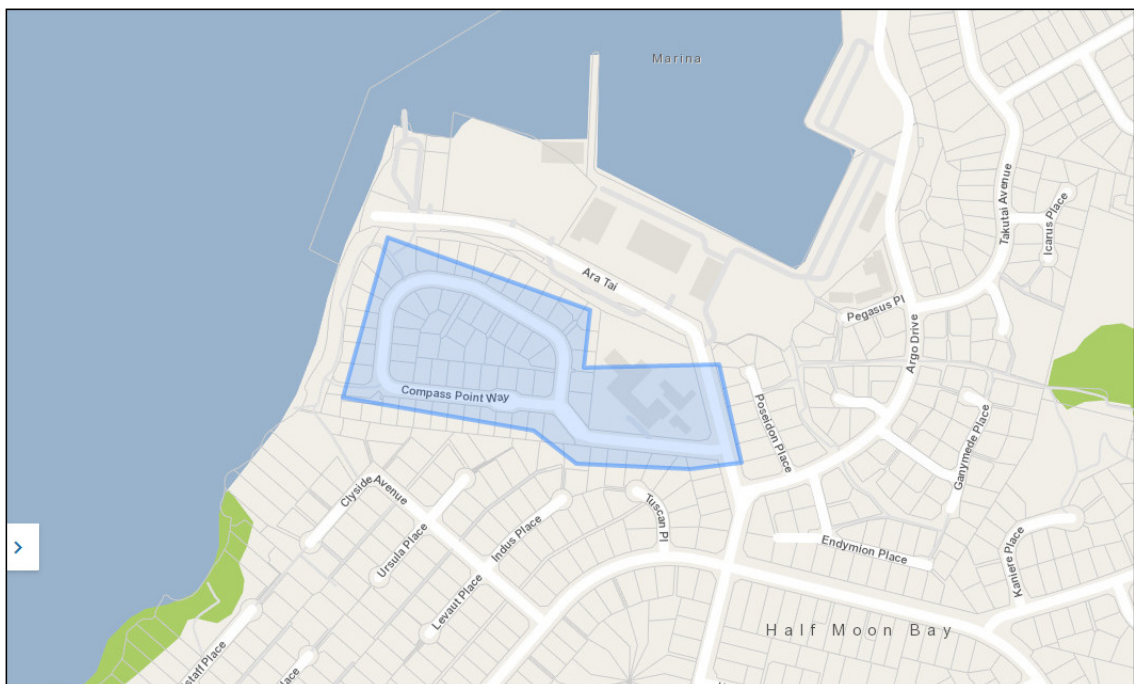


Figure 2: Site Vicinity Crash Study Area

Source: NZTA CAS

2.3 Pedestrian Facilities

Footpaths are currently available on all existing streets surrounding the site linking the streets to the wider road network. The main pedestrian activities occur towards the north of site relating to the commercial/retail activities and the Half Moon Bay transportation hub located north of the site on Ara Tai.

2.4 Cyclist Facilities

The Auckland Transport Cycleway Map shown in **Figure 4** indicates that a shared path is located towards the west of the site connecting the Half Moon Bay Bus and Ferry Terminal which further joins the dedicated cycleways in Panmure.

3.0 THE PROPOSAL

3.1 General Description / Site Layout

The proposal involves the removal of the existing childcare facility/NGO activity on-site and the construction of 62 residential dwellings on-site, each dwelling with at least one parking space each. Access to the site will be provided via one vehicle crossing onto Compass Point Way with a series of JOAL's within the site.

A pedestrian route will be provided through the site providing a link to Ara Tai, with direct pedestrian access proposed to individual Lots to the public footpath network where fronting Pigeon Mountain Road/Compass Point Road. A network of footpaths will also be provided internal to the site connecting Lot's entrances, parking areas and frontage roads. The layout used for the basis of this assessment is shown in **Figure 5**.



Figure 5: Proposed Layout

Source: ASC Architects

3.2 Vehicle Access

Vehicle access to the site will be provided via a single 5.5-metre-wide vehicle crossing onto Compass Point Way. The vehicle crossing will have a separation of more than 10.0 metres from the adjacent property's vehicle crossing.

The vehicle crossing will be located more than 50.0 metres from the Pigeon Mountain Road/Compass Point Way intersection.

All JOAL's within the site will have a width of at least 5.5 metres sufficient for two-way vehicle movement.

Accessway Gradients

At the site boundary, a vehicle platform will be provided for 4.0 metres in length with a maximum gradient of 1 in 20 (5.0%), which is compliant with the AUP standards. The rest of the JOAL's will have gradients no steeper than 1 in 8 (12.5%) where providing for vehicle manoeuvring.

Pedestrian Access

For those dwellings fronting Compass Point Way and Pigeon Mountain Road individual direct pedestrian access points will be provided to the public footpath network.

From Compass Point Way, a 1.8 metre-wide vertically separated pedestrian footpath will be provided adjacent to JOAL 1 which continues through the linear park (1.8 metres wide minimum) and through the site to the north between units 7 and 8 connecting to Ara Tai. From JOAL 1, a 1.5 metre-wide vertically separated footpath continues in an east-west direction connecting to Pigeon Mountain Road between units 41 and 46.

Overall, the site will provide good pedestrian connectivity between building entrances, parking areas and the public footpath network.

Sight Distances

In respect of sight distance for the proposed access point, the appropriate standard to use is the Land Transport Safety Authority publication 'Guidelines for Visibility at Driveways' (RTS 06). There are two components to the sight distance measurement the first being the sight distance requirement and the second being the lines of clear sight. The sight distance/lines of clear sight required is dependent upon the traffic generation of the proposal, the 85th percentile speed of the vehicles on the frontage road and also, the classification of the frontage road.

In this instance, the frontage road for the proposed site access is a local road and the forecasted number of vehicle movements at the vehicle crossing will be more than the rating threshold of 200 vehicle trips per day, such that the access is defined as 'high volume' according to RTS 06. The 85th percentile speeds are expected to be no more than 50 km/hr due to urban residential environment, presence of speed tables and on-street parking along Compass Point Way. For this speed a minimum sight distance of 40 metres is required.

Sight distances were confirmed to be more than 40.0 metres in both directions from the vehicle crossing onto Compass Point Way, providing acceptable sight distances. **Figure 6** illustrates the indicative sight distances for Compass Point Way.

Overall, the proposed vehicle access arrangement is considered acceptable within the current traffic environment.



Figure 6: Compass Point Way Indicative Sight Distances

Source: Traffic Planning Consultants Ltd.

3.3 Vehicle Parking

A mixture of parking provisions is proposed with at least one parking space per dwelling, either within garages or open parking spaces. Under the AUP, there is no parking minimum or maximum requirement for this site.

Units 48-51 will be served via four 90-degree angled open parking spaces located immediately north-west of the respective units. The 90-degree angled parking spaces will have a width of 2.7 metres, a depth of 5.0 metres and a manoeuvring depth of at least 5.9 metres. Immediately west of Units 47/48 two parallel parking spaces are proposed, both associated with Unit 47. The parallel parking spaces will have a depth of 7.3 metres, depth of 2.1 metres from a kerb and a manoeuvring depth of at least 3.7 metres.

Immediately north of Unit 49 one 90-degree angled parking space and one parallel parking space are proposed as visitor spaces. Both spaces will have dimensions consistent with the adjacent open spaces as discussed above.

All other units will be served via garages. All single garages across the site will have a door width of at least 2.7 metres, an internal width of 3.0 metres, internal depth of at least 5.4 metres and a manoeuvring depth of at least 5.9 metres. All double garages will have a door width ranging from 5.0 metres wide to 5.6 metres wide. Internally, the double garages will be 6.0 metres and at least 5.4 metres deep with manoeuvring depths between 5.9 metres and at least 7.1 metres compliant with the relevant AUP requirements.

The stacked parking spaces for Units 7, 52, 53 and 55 will have a maximum gradient of up to 1 in 10 (10%) where 1 in 20 (5%) is permitted. Further assessment of this non-compliance is provided later in this reporting. All other parking spaces will be formed with gradients no steeper than 1 in 20 (5.0%). The gradients of the manoeuvring areas will be no steeper than 1 in 8 (12.5%).

All other stacked parking spaces associated with Units 4, 5, 6, 8, 9 and 54 are proposed with compliant gradients.

Parking has also been configured so that all vehicle movements to and from the JOAL's can be undertaken in a forward gear. Vehicle tracking curves illustrating vehicles manoeuvring on-site has been included in **Attachment 1**.

3.4 Bicycle Parking

The site has a total of 62 dwellings proposed, 58 of which are proposed with garages. Under the AUP, one visitor bicycle parking shall be provided per 20 dwellings, and one secure bicycle parking shall be provided for dwellings without a garage. Therefore, five secure bicycle parking spaces and three visitor bicycle parking spaces are required, which are proposed across the site (secure spaces near open parking spaces and visitor stands within the linear park).

3.5 Refuse Collection & Deliveries

The proposal is expected to be serviced predominantly on-site by private refuse collection on a regular basis and to a lesser extent by larger trucks shifting furniture to and from the residential dwellings or performing deliveries. Those units fronting Compass Point Way will be serviced by public refuse collection.

Custom design refuse bin areas have been incorporated into the site for private collection. Vehicle tracking at **Attachment 1** demonstrates that a medium rigid truck can enter, turn on-site, and exit in a forward direction and utilise the proposed on-site loading bay. The loading bay is proposed directly west of Unit 52 adjacent to JOAL 3 with a width of 8.0 metres and a depth of 3.5 metres compliant with the relevant AUP requirements.

The proposed gradient design of the accessways (JOAL's) will generally be no steeper than 1 in 8 (12.5%) which is suitable for truck manoeuvring, except for a short section along JOAL 1 where a gradient of 1 in 6.7 (15.0%) for some 10 metres, about 5.0 metres from the site boundary. Further assessment of this non-compliance is provided later in the reporting.

Vehicle tracking in **Attachment 1** demonstrates a truck circulating around the site and two-way vehicular flow within the site where the access permits two-way vehicular movements.

3.6 Trip Generation

Under section E27 of the Auckland Unitary Plan Standards, any residential developments with less than 100 dwellings within Residential – Mixed Housing Suburban zone are not subject to a trip generation assessment. Nevertheless, it is important to understand the potential trip generation to understand its effect and ensure an appropriate access strategy is provided.

An indication of the trip generation for the proposal can be derived from survey data set out in the Roads and Traffic Authority (RTA), New South Wales – ‘Guide to Traffic Generating Developments’ publication. The trip generation rates of residential dwellings can vary depending on the type of dwelling and location of the development. The RTA publication provides trip generation rates for medium-density residential developments:

- For medium-density three-bedroom+ dwellings, it indicates a daily traffic generation rate of 5.0 to 6.5 vehicle movements per day (vpd) per dwelling and a peak hour rate of 0.5 to 0.65 vehicle movements per hour (vph) per dwelling; and
- For larger standalone four-bedroom+ residential dwellings, it indicates a daily traffic rate of 9 vehicle movements per day (vpd) per dwelling and a peak hour rate of 0.85 vehicle movements per hour (vph) per dwelling.

Table 2 summarises the results of the daily and peak hour trips generated by the proposed 62 dwellings.

Table 2: Site Estimated Trip Generation

Dwelling Size	Number of Dwellings	Daily Generation Rate	Estimated Daily Trip Generation	Peak Hour Generation Rate	Estimated Peak Hour Trips Generation
3-bed	7	6.5	45.5 (46)	0.65	4.55 (5)
4-bed	34	9	315	0.85	29.75 (30)
5-bed	21	9	189	0.85	17.85 (18)
Total	62	–	550	–	53

The result shows that the proposed 62 dwellings will generate some 550 vehicle movements per day and 53 vehicle movements per hour during the AM and PM peak commuter periods which equates to less than one additional vehicle movement per minute. It is anticipated that this level of trip generation can be accommodated on the existing wider transport network with minimal impact on the performance of the Pigeon Mountain Road/Compass Point Way intersection and the surrounding local road environment.

4.0 TRANSPORTATION EFFECTS OF THE PROPOSAL

4.1 Walking and Cycling Effects

The establishment of high-quality JOAL's and traffic calming measures (a combination of surface treatment in line with E27 requirements and 90-degree bends in the JOAL's) within the site will ensure that a high standard of pedestrian safety and amenity is provided, and cycling can be accommodated.

Pedestrian connections to both Ara Tai, Pigeon Mountain Road and Compass Point Way will link the site to the existing public footpath network in the surrounding area.

The implementation of such measures within the site will ensure that pedestrian and cycling activity in the area will not be adversely affected and will promote an increase in active travel. Furthermore, the proposal does not require any infrastructure changes to the road network and is anticipated to have minimal detrimental effect on the operation and safety on existing and future walking and cycling activity past the site.

4.2 Effects on Public Transport

No changes to the current bus stop locations or services are proposed or considered necessary as a direct result of the proposed development.

Connections and crossing points to and from bus stops are available on Ara Tai and Pigeon Mountain Road. Accessibility to public transport infrastructure is therefore well catered for and no additional infrastructure is required. Bus stops near the site will have a mixture of shelters, road markings and signage.

The site is within a suburban area which is currently designed to cater for public transport, and whilst the introduction of additional people living within the area will increase the public transport demand, it is expected the demands can be catered for by existing services.

4.3 Safety Impacts

Development of the site, completion of the internal JOAL's and the creation of the new vehicle crossing should have no detrimental impact on general road safety. The following key points are noted about the proposal:

- The adoption of high-quality designed JOALs and traffic calming measures will promote the safe use of the new JOALs and intersections;
- The historical crash statistics of the roads adjacent to the site do not indicate a pattern of crashes that will be exacerbated by the introduction of additional vehicle movements relating to the proposal;
- A sight distance analysis indicates that the new vehicle crossing will provide lines of clear sight, compliant with RTS-6; and
- The introduction of pedestrian facilities to assist people movement will promote greater awareness and a safer environment for pedestrians.

4.4 Construction Related Traffic Impacts

The need to introduce truck and other vehicle movements during the construction phases of any development always has a potential to impact on the surrounding area and road network, but a certain degree of impact for what is normally a relatively short period of time (at least in the context of the life of the proposed development) is inevitable and should not normally be a reason for restricting development.

What is important however, is that measures must be put in place to minimise the potential impacts of construction traffic, and this is generally achieved through the requirement for a traffic management plan to be prepared and approved prior to work commencing. Where necessary, this seeks to control the times of operation (e.g., avoiding peak periods), routes used, and other matters to minimise potential impact.

In terms of capacity, the adjacent road network can accommodate the traffic volumes associated with the construction phases, and the application of a traffic management plan will ensure that any potential impact on the surrounding area is minimised.

5.0 AUCKLAND UNITARY PLAN REQUIREMENTS

5.1 Operative E27 Standards

Section E27 of the Auckland Unitary Plan sets out the development standards relating to transport. **Table 3** lists the relevant standards that apply to this development and comments on compliance. Where there is non-compliance, further assessment has been undertaken against the criteria set out in Section E27.8.2 of the AUP.

Table 3: Transport Development Controls

Standard	Requirement/Details	Comment				
E27.6.1 Traffic Generation	<p>Sets the threshold for when resource consent as a restricted discretionary activity is required.</p> <p>New development and subdivision thresholds for residential developments.</p> <table border="1"> <tr> <td>Threshold 1</td> <td>40 dwellings</td> </tr> <tr> <td>Threshold 2</td> <td>100 dwellings</td> </tr> </table>	Threshold 1	40 dwellings	Threshold 2	100 dwellings	<p>This development includes 62 residential dwellings proposed and as such reaches the TA1 threshold. It is considered that this reporting provides sufficient assessment of the safe and efficient operation of the network as required - complies</p>
Threshold 1	40 dwellings					
Threshold 2	100 dwellings					
E27.6.2 (1) Number of Parking Spaces	<p>Defines the minimum and the maximum number of parking spaces for new developments.</p>	<p>There is no minimum or maximum parking requirement for this site – does not apply</p>				
E27.6.2 (6) Bicycle Parking	<p>Defines the number of bicycle parks required for new developments.</p> <p>Residential Development of 20 or more dwellings:</p> <table border="1"> <tr> <td>Visitor spaces</td> <td>1 per 20 for developments of 20 or more dwellings</td> </tr> <tr> <td>Secure spaces*</td> <td>1 per dwelling without a dedicated garage or basement carpark</td> </tr> </table> <p>For residential developments, long-stay/secure* bicycle parking must be designed and located in a manner that is:</p> <ul style="list-style-type: none"> Not part of the required outdoor living space Sheltered from the weather Lockable and secure <p>For avoidance of doubt, the required secure long-stay bicycle parking may be located within a dwelling.</p>	Visitor spaces	1 per 20 for developments of 20 or more dwellings	Secure spaces*	1 per dwelling without a dedicated garage or basement carpark	<p>58 units will have bicycle parking in their garage – complies</p> <p>Five units will be provided with secure and sheltered bicycle parking - complies</p> <p>Three visitor bicycle stands will be provided across the site – complies</p>
Visitor spaces	1 per 20 for developments of 20 or more dwellings					
Secure spaces*	1 per dwelling without a dedicated garage or basement carpark					
E27.6.2 (7) End Trip Facilities	<p>End trip facilities to be provided for any office, education or hospital facilities.</p>	<p>The proposal is for residential development – does not apply</p>				

Standard	Requirement/Details	Comment																				
<p>E27.6.2 (8) Number of Loading Spaces</p>	<p>Outlines the minimum loading space requirements for new developments. A small loading space is now required for all residential activities where the development gains its access from an arterial road.</p> <table border="1" data-bbox="523 488 1050 1032"> <thead> <tr> <th data-bbox="523 488 826 562">Gross Floor Area (GFA)/No. of dwellings</th> <th data-bbox="826 488 1050 562">Minimum rate</th> </tr> </thead> <tbody> <tr> <td data-bbox="523 562 826 696">Developments where all dwellings have individual access directly from a public road</td> <td data-bbox="826 562 1050 696">No requirement</td> </tr> <tr> <td data-bbox="523 696 826 831">Up to 9 dwellings without individual pedestrian access directly from the public road</td> <td data-bbox="826 696 1050 831">No requirement</td> </tr> <tr> <td data-bbox="523 831 826 958">10 or more dwellings up to 5,000m² without individual pedestrian access directly from a public road</td> <td data-bbox="826 831 1050 958">1 required</td> </tr> <tr> <td data-bbox="523 958 826 1032">Greater than 5,000m² of GFA</td> <td data-bbox="826 958 1050 1032">NA</td> </tr> </tbody> </table> <p>A standard loading bay is required for the following residential activity:</p> <table border="1" data-bbox="523 1167 1050 1541"> <thead> <tr> <th data-bbox="523 1167 788 1240">Gross Floor Area (GFA)</th> <th data-bbox="788 1167 1050 1240">Minimum rate</th> </tr> </thead> <tbody> <tr> <td data-bbox="523 1240 788 1279">Up to 5,000m²</td> <td data-bbox="788 1240 1050 1279">No requirement</td> </tr> <tr> <td data-bbox="523 1279 788 1352">Greater than 5,000m² up to 20,000m²</td> <td data-bbox="788 1279 1050 1352">1</td> </tr> <tr> <td data-bbox="523 1352 788 1426">Greater than 20,000m² up to 90,000m²</td> <td data-bbox="788 1352 1050 1426">2</td> </tr> <tr> <td data-bbox="523 1426 788 1541">Greater than 90,000m²</td> <td data-bbox="788 1426 1050 1541">3 spaces plus 1 for every additional 40,000m²</td> </tr> </tbody> </table>	Gross Floor Area (GFA)/No. of dwellings	Minimum rate	Developments where all dwellings have individual access directly from a public road	No requirement	Up to 9 dwellings without individual pedestrian access directly from the public road	No requirement	10 or more dwellings up to 5,000m ² without individual pedestrian access directly from a public road	1 required	Greater than 5,000m ² of GFA	NA	Gross Floor Area (GFA)	Minimum rate	Up to 5,000m ²	No requirement	Greater than 5,000m ² up to 20,000m ²	1	Greater than 20,000m ² up to 90,000m ²	2	Greater than 90,000m ²	3 spaces plus 1 for every additional 40,000m ²	<p>One standard loading space is proposed where one is required – complies</p>
Gross Floor Area (GFA)/No. of dwellings	Minimum rate																					
Developments where all dwellings have individual access directly from a public road	No requirement																					
Up to 9 dwellings without individual pedestrian access directly from the public road	No requirement																					
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Gross Floor Area (GFA)	Minimum rate																					
Up to 5,000m ²	No requirement																					
Greater than 5,000m ² up to 20,000m ²	1																					
Greater than 20,000m ² up to 90,000m ²	2																					
Greater than 90,000m ²	3 spaces plus 1 for every additional 40,000m ²																					
<p>E27.6.3.1 (1) Size and Location of Parking Spaces</p>	<p>Defines the size, use and location of parking spaces as set out in Table E27.6.3.1.1.</p>	<p>All spaces will be located within the same site, will not be used for any other purposes, and will be available at all times – complies</p> <p>The 90-degree angled open parking spaces will have a width of 2.7 metres, a depth of 5.0 metres and a manoeuvring depth of 7.3 metres - complies</p> <p>The parallel parking spaces will have a depth of at least 6.0 metres, depth of 2.1 metres from</p>																				

Standard	Requirement/Details	Comment								
		<p>a kerb and a manoeuvring depth of at least 3.7 metres - complies</p> <p>All single garages across the site will have a door width of at least 2.7 metres, an internal width of 3.0 metres, internal depth of at least 5.4 metres and a manoeuvring depth of at least 5.9 metres - complies</p> <p>All double garages will have a door width ranging from 5.0 metres wide to 5.6 metres wide. Internally, the double garages will be 6.0 metres and at least 5.4 metres deep with manoeuvring depths between 5.9 metres and at least 7.1 metres compliant with the relevant AUP requirements - complies</p>								
E27.6.3.2 Size and Location of Loading Spaces	Defines the size, use and location of loading space as set out in Table E27.6.3.2.1	The loading space will have a width of 8.0 metres and a depth of 3.5 metres – complies								
E27.6.3.2 (A) Number and Design of Accessible Parking	<p>In residential zones, accessible parking must be provided for the development of 10 or more dwellings, and the required number of parking spaces must be as follows:</p> <table border="1" data-bbox="523 1234 1050 1438"> <thead> <tr> <th data-bbox="523 1234 751 1272">No. of dwellings</th> <th data-bbox="751 1234 1050 1272">No. of accessible spaces</th> </tr> </thead> <tbody> <tr> <td data-bbox="523 1272 751 1310">10-20</td> <td data-bbox="751 1272 1050 1310">Not less than 1</td> </tr> <tr> <td data-bbox="523 1310 751 1348">21-50</td> <td data-bbox="751 1310 1050 1348">Not less than 2</td> </tr> <tr> <td data-bbox="523 1348 751 1438">For every additional 50 dwellings</td> <td data-bbox="751 1348 1050 1438">Not less than 1</td> </tr> </tbody> </table>	No. of dwellings	No. of accessible spaces	10-20	Not less than 1	21-50	Not less than 2	For every additional 50 dwellings	Not less than 1	Four accessible parking spaces will be required under this standard, however no accessible parking is proposed – does not comply
No. of dwellings	No. of accessible spaces									
10-20	Not less than 1									
21-50	Not less than 2									
For every additional 50 dwellings	Not less than 1									
E27.6.3.3 Access and Manoeuvring for Parking	Defines the requirements for design vehicles, driveways, manoeuvring area and stacked parking allowances.	All parking spaces will have a dedicated access aisle to accommodate a B85 design vehicle's tracking, as shown in Attachment 1 – complies								

Standard	Requirement/Details	Comment												
E27.6.3.4 Reverse Manoeuvring	Defines the conditions under which reversing manoeuvring is prohibited at and from a site. Reverse manoeuvring is not permitted under the following conditions: <table border="1" data-bbox="523 450 1042 819"> <tr> <td data-bbox="523 450 1042 521">Four or more parking spaces are served by a single access</td> </tr> <tr> <td data-bbox="523 521 1042 593">There is more than 30m between the parking spaces and the road boundary of the site</td> </tr> <tr> <td data-bbox="523 593 1042 665">Access would be from an arterial road or otherwise within a vehicle access restriction zone</td> </tr> <tr> <td data-bbox="523 665 1042 819">Where heavy vehicles are required to access a site in a residential zone, sufficient space must be provided on-site so that an 8m heavy vehicle can turn around with a maximum reversing distance of 12m.</td> </tr> </table>	Four or more parking spaces are served by a single access	There is more than 30m between the parking spaces and the road boundary of the site	Access would be from an arterial road or otherwise within a vehicle access restriction zone	Where heavy vehicles are required to access a site in a residential zone, sufficient space must be provided on-site so that an 8m heavy vehicle can turn around with a maximum reversing distance of 12m.	Parking is configured such that no reverse manoeuvring is required to/from public roads, and no reverse distance of heavy trucks is longer than 12m – complies								
Four or more parking spaces are served by a single access														
There is more than 30m between the parking spaces and the road boundary of the site														
Access would be from an arterial road or otherwise within a vehicle access restriction zone														
Where heavy vehicles are required to access a site in a residential zone, sufficient space must be provided on-site so that an 8m heavy vehicle can turn around with a maximum reversing distance of 12m.														
E27.6.3.5 Vertical Clearance	Defines the minimum overhead clearance for vehicles to pass safely under overhead structures (car parking and access). <table border="1" data-bbox="523 969 1042 1294"> <thead> <tr> <th data-bbox="523 969 882 1041">Activity</th> <th data-bbox="882 969 1042 1041">Vertical Clearance (m)</th> </tr> </thead> <tbody> <tr> <td data-bbox="523 1041 882 1077">Residential (for cars)</td> <td data-bbox="882 1041 1042 1077">2.1</td> </tr> <tr> <td data-bbox="523 1077 882 1113">All other activities (for cars)</td> <td data-bbox="882 1077 1042 1113">2.3</td> </tr> <tr> <td data-bbox="523 1113 882 1149">Accessible parking</td> <td data-bbox="882 1113 1042 1149">2.5</td> </tr> <tr> <td data-bbox="523 1149 882 1220">Residential activity where a small loading space is required.</td> <td data-bbox="882 1149 1042 1220">2.8</td> </tr> <tr> <td data-bbox="523 1220 882 1294">All activities where heavy vehicle access is required.</td> <td data-bbox="882 1220 1042 1294">3.8</td> </tr> </tbody> </table>	Activity	Vertical Clearance (m)	Residential (for cars)	2.1	All other activities (for cars)	2.3	Accessible parking	2.5	Residential activity where a small loading space is required.	2.8	All activities where heavy vehicle access is required.	3.8	A minimum vertical clearance of 2.1 metres will be provided for garage doors – complies No overhead structures are proposed within the vehicle circulating areas – complies
Activity	Vertical Clearance (m)													
Residential (for cars)	2.1													
All other activities (for cars)	2.3													
Accessible parking	2.5													
Residential activity where a small loading space is required.	2.8													
All activities where heavy vehicle access is required.	3.8													
E27.6.3.6 Formations and Gradients	Defines the formation and gradients for all parking spaces and manoeuvring areas. <table border="1" data-bbox="523 1402 1042 1641"> <thead> <tr> <th data-bbox="523 1402 730 1438">Parking Type</th> <th data-bbox="730 1402 1042 1438">Maximum permitted Gradient</th> </tr> </thead> <tbody> <tr> <td data-bbox="523 1438 730 1473">Standard</td> <td data-bbox="730 1438 1042 1473">1 in 20 (5.0%)</td> </tr> <tr> <td data-bbox="523 1473 730 1509">Accessible</td> <td data-bbox="730 1473 1042 1509">1 in 25 (4.0%)</td> </tr> <tr> <td data-bbox="523 1509 730 1545">Manoeuvring</td> <td data-bbox="730 1509 1042 1545">1 in 8 (12.5%)</td> </tr> <tr> <td data-bbox="523 1545 730 1581">Loading Bay</td> <td data-bbox="730 1545 1042 1581">1 in 50 (2.0%)</td> </tr> <tr> <td data-bbox="523 1581 730 1641">Manoeuvring</td> <td data-bbox="730 1581 1042 1641">1 in 8 (12.5%)</td> </tr> </tbody> </table>	Parking Type	Maximum permitted Gradient	Standard	1 in 20 (5.0%)	Accessible	1 in 25 (4.0%)	Manoeuvring	1 in 8 (12.5%)	Loading Bay	1 in 50 (2.0%)	Manoeuvring	1 in 8 (12.5%)	All parking areas will be formed, drained, with all-weather surfaces – complies The stacked parking spaces for Units 7, 52, 53 and 55 will have a maximum gradient of up to 1 in 10 (10%) where 1 in 20 (5%) is permitted – does not comply All other parking spaces will have gradients no steeper than 1 in 20 (5.0%) – complies Gradients within manoeuvring areas will not exceed 1 in 8 (12.5%) – complies
Parking Type	Maximum permitted Gradient													
Standard	1 in 20 (5.0%)													
Accessible	1 in 25 (4.0%)													
Manoeuvring	1 in 8 (12.5%)													
Loading Bay	1 in 50 (2.0%)													
Manoeuvring	1 in 8 (12.5%)													
E27.6.3.7 Lighting	Lighting is required where there are 10 or more parking spaces and associated pedestrian routes used in the hours of darkness.	Suitable lighting will be provided – complies												

Standard	Requirement/Details	Comment					
<p>E27.6.4.1 Vehicle Access Restrictions</p>	<p>Defines the acceptable locations of access points in relation to strategic roads and intersections.</p> <p>Vehicle Crossings must not be constructed or used to provide vehicle access across that part of a site:</p> <table border="1" data-bbox="523 517 1050 734"> <tr> <td data-bbox="523 517 1050 595">Located within 10m of any intersection as measured from the property boundary.</td> </tr> <tr> <td data-bbox="523 595 1050 674">Has frontage to an arterial road as identified on the planning maps.</td> </tr> <tr> <td data-bbox="523 674 1050 734">Located closer than 30m from a railway level crossing limit line.</td> </tr> </table>	Located within 10m of any intersection as measured from the property boundary.	Has frontage to an arterial road as identified on the planning maps.	Located closer than 30m from a railway level crossing limit line.	<p>Compass Point Way is not classified as an arterial road – does not apply</p> <p>The proposed vehicle crossing will be located more than 50.0 metres from any nearby intersection – does not apply</p>		
Located within 10m of any intersection as measured from the property boundary.							
Has frontage to an arterial road as identified on the planning maps.							
Located closer than 30m from a railway level crossing limit line.							
<p>E27.6.4.2 Width and Number of Vehicle Crossings</p>	<p>Defines the maximum number of vehicle crossings, proximity to others and permitted widths as set out in Table E27.6.4.2.1 and E27.6.4.3.2.</p>	<p>One vehicle crossing is proposed for the site – complies</p> <p>The vehicle crossing will be provided with a width of 5.5 metres serving more than 10 parking spaces – complies</p> <p>The vehicle crossing will be located more than 10.0 metres away from the adjacent property’s vehicle crossing – complies</p>					
<p>E27.6.4.3 Width of Vehicle Access, Queuing and Speed Management</p>	<p>Defines the standards for vehicle access width requirements for on-site parking. Every on-site parking and loading space must have access from a road, with the vehicle access complying with the following:</p> <table border="1" data-bbox="523 1357 1050 1641"> <tr> <td data-bbox="523 1357 1050 1435">Passing bays are provided in accordance with Table E27.6.4.3.1</td> </tr> <tr> <td data-bbox="523 1435 1050 1514">Meet the minimum formed access width specified in Table E27.6.4.3.2</td> </tr> <tr> <td data-bbox="523 1514 1050 1641">Meeting the minimum speed management measures spacing specified in Table E27.6.4.3.3, where the length of the access exceeds 30m and serves four or more dwellings in a residential zone.</td> </tr> </table> <p>Speed management measures should be provided:</p> <table border="1" data-bbox="523 1765 1050 1877"> <tr> <td data-bbox="523 1765 1050 1809">Within 10m of the site boundary with a legal road</td> </tr> <tr> <td data-bbox="523 1809 1050 1877">Thereafter, not more than 30m spacing between speed management measures.</td> </tr> </table>	Passing bays are provided in accordance with Table E27.6.4.3.1	Meet the minimum formed access width specified in Table E27.6.4.3.2	Meeting the minimum speed management measures spacing specified in Table E27.6.4.3.3, where the length of the access exceeds 30m and serves four or more dwellings in a residential zone.	Within 10m of the site boundary with a legal road	Thereafter, not more than 30m spacing between speed management measures.	<p>All JOAL’s will have a width of at least 5.5 metres serving more than 10 parking spaces– complies</p> <p>Speed calming devices are provided along the access in line with requirements - complies</p>
Passing bays are provided in accordance with Table E27.6.4.3.1							
Meet the minimum formed access width specified in Table E27.6.4.3.2							
Meeting the minimum speed management measures spacing specified in Table E27.6.4.3.3, where the length of the access exceeds 30m and serves four or more dwellings in a residential zone.							
Within 10m of the site boundary with a legal road							
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Standard	Requirement/Details	Comment																			
<p>E27.6.4.4 Gradient of Vehicle Access</p>	<p>Defines the gradients of circulating aisles for vehicle movements. The gradient of the vehicle access must be as follows:</p> <table border="1" data-bbox="523 416 1046 689"> <thead> <tr> <th>Access type</th> <th>Max. permitted gradient</th> </tr> </thead> <tbody> <tr> <td>Serving one residential rear site</td> <td>1 in 4 (25.0%)</td> </tr> <tr> <td>Serving any other residential activities (including rear site)</td> <td>1 in 5 (20.0%)</td> </tr> <tr> <td>Used by heavy vehicles</td> <td>1 in 8 (12.5%)</td> </tr> <tr> <td>Serving all other activities</td> <td>1 in 6 (16.7%)</td> </tr> </tbody> </table> <p>All vehicles must be designed so that where the access adjoins the road, there is a platform on-site for vehicles to stop prior to existing as per the following:</p> <table border="1" data-bbox="523 887 1046 1070"> <thead> <tr> <th>Activity</th> <th>Platform length (m)</th> <th>Max. permitted platform gradient</th> </tr> </thead> <tbody> <tr> <td>Residential</td> <td>4</td> <td>1 in 20 (5.0%)</td> </tr> <tr> <td>All other activities</td> <td>6</td> <td>1 in 20 (5.0%)</td> </tr> </tbody> </table>	Access type	Max. permitted gradient	Serving one residential rear site	1 in 4 (25.0%)	Serving any other residential activities (including rear site)	1 in 5 (20.0%)	Used by heavy vehicles	1 in 8 (12.5%)	Serving all other activities	1 in 6 (16.7%)	Activity	Platform length (m)	Max. permitted platform gradient	Residential	4	1 in 20 (5.0%)	All other activities	6	1 in 20 (5.0%)	<p>A 10-metre-long section of JOAL 1 (from 5 metres into the site) is designed with a gradient of 1 in 6.7 (15.0%) where a maximum gradient of 1 in 8 (12.5%) is permitted for heavy vehicles – does not comply</p> <p>The vehicle access will have gradients no steeper than 1 in 20 (5.0%) over 4.0 metres adjoining the road boundary – complies</p>
Access type	Max. permitted gradient																				
Serving one residential rear site	1 in 4 (25.0%)																				
Serving any other residential activities (including rear site)	1 in 5 (20.0%)																				
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All other activities	6	1 in 20 (5.0%)																			
<p>E27.6.5 Design and Location of Pedestrian / Cycle Facilities</p>	<p>Defines the requirements for the design and location of off-road pedestrian and cycle facilities.</p> <table border="1" data-bbox="523 1200 1046 1480"> <tbody> <tr> <td>The design and location of the proposed facility shall provide connections to existing pedestrian and cycling routes and facilities</td> </tr> <tr> <td>The width of the path is designed to accommodate the anticipated number and type of users</td> </tr> <tr> <td>The surface of the path is designed to safely provide for the anticipated number and type of users</td> </tr> </tbody> </table>	The design and location of the proposed facility shall provide connections to existing pedestrian and cycling routes and facilities	The width of the path is designed to accommodate the anticipated number and type of users	The surface of the path is designed to safely provide for the anticipated number and type of users	<p>The pedestrian facilities on site are considered to meet the requirements of this standard – complies</p>																
The design and location of the proposed facility shall provide connections to existing pedestrian and cycling routes and facilities																					
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The surface of the path is designed to safely provide for the anticipated number and type of users																					

Standard	Requirement/Details	Comment															
<p>E27.6.6 Pedestrian Access</p>	<p>Sets out the requirement for a “physically separated” primary pedestrian access within developments with two or more dwellings in a residential zone, where dwellings are without road frontage or direct pedestrian access from a road, as per the following:</p> <table border="1" data-bbox="523 510 1050 779"> <tr> <td data-bbox="523 510 1050 589">150mm high, non-mountable vertical kerbs to primary pedestrian access</td> </tr> <tr> <td data-bbox="523 589 1050 678">Minimum 1m wide landscape buffer between primary pedestrian access and vehicle access, manoeuvring or parking areas</td> </tr> <tr> <td data-bbox="523 678 1050 779">Wheel stops or similar barriers positioned to avoid vehicle access onto or over an adjacent primary pedestrian access</td> </tr> </table> <p>The primary pedestrian path must be provided to each dwelling, and the following applies to the full length of the pedestrian access:</p> <table border="1" data-bbox="523 936 1050 1352"> <thead> <tr> <th data-bbox="523 936 651 1032">No. of dwellings</th> <th data-bbox="651 936 842 1032">Path adjacent to vehicle access and parking area</th> <th data-bbox="842 936 1050 1032">Path not adjacent to vehicle access or parking area</th> </tr> </thead> <tbody> <tr> <td data-bbox="523 1032 651 1088">2-5</td> <td data-bbox="651 1032 842 1088">No requirement</td> <td data-bbox="842 1032 1050 1088">Min. formed width of 1.8m.</td> </tr> <tr> <td data-bbox="523 1088 651 1223">6-19</td> <td data-bbox="651 1088 842 1223">Min. formed width of 1.4m and physically separated</td> <td data-bbox="842 1088 1050 1223">Min. formed width of 1.8m.</td> </tr> <tr> <td data-bbox="523 1223 651 1352">20+</td> <td data-bbox="651 1223 842 1352">Min. formed width of 1.8m and physically separated</td> <td data-bbox="842 1223 1050 1352">Min. formed width of 1.8m.</td> </tr> </tbody> </table>	150mm high, non-mountable vertical kerbs to primary pedestrian access	Minimum 1m wide landscape buffer between primary pedestrian access and vehicle access, manoeuvring or parking areas	Wheel stops or similar barriers positioned to avoid vehicle access onto or over an adjacent primary pedestrian access	No. of dwellings	Path adjacent to vehicle access and parking area	Path not adjacent to vehicle access or parking area	2-5	No requirement	Min. formed width of 1.8m.	6-19	Min. formed width of 1.4m and physically separated	Min. formed width of 1.8m.	20+	Min. formed width of 1.8m and physically separated	Min. formed width of 1.8m.	<p>All units with road frontage will be provided with separate pedestrian access points onto the public footpath network - complies</p> <p>A separate 1.8 metre-wide pedestrian access is proposed adjacent to JOAL 1 - complies</p> <p>A 1.5 metres footpath is provided where not adjacent to the access between Units 41-46 to Pigeon Mountain Road) – does not comply</p>
150mm high, non-mountable vertical kerbs to primary pedestrian access																	
Minimum 1m wide landscape buffer between primary pedestrian access and vehicle access, manoeuvring or parking areas																	
Wheel stops or similar barriers positioned to avoid vehicle access onto or over an adjacent primary pedestrian access																	
No. of dwellings	Path adjacent to vehicle access and parking area	Path not adjacent to vehicle access or parking area															
2-5	No requirement	Min. formed width of 1.8m.															
6-19	Min. formed width of 1.4m and physically separated	Min. formed width of 1.8m.															
20+	Min. formed width of 1.8m and physically separated	Min. formed width of 1.8m.															

Standard	Requirement/Details	Comment			
<p>E27.6.6(4) Clear Width/Height Requirement for Emergency Responders</p>	<p>Sets out the requirements for emergency responders in relation to primary access.</p> <p>Where primary pedestrian access is adjacent to a vehicle access on the same site, no additional clear width/height requirement applies beyond the primary pedestrian access requirements in E27.6.6(3).</p> <p>Where primary pedestrian access is not adjacent to a vehicle access, the following further requirements apply in addition to those in E27.6.6(3):</p> <table border="1" data-bbox="523 689 1050 1070"> <tr> <td data-bbox="523 689 1050 730">Minimum clear width of 3.0 metres</td> </tr> <tr> <td data-bbox="523 730 1050 770">Minimum clear height of 2.1 metres</td> </tr> <tr> <td data-bbox="523 770 1050 1070"> <p>The clear width may include the minimum formed primary pedestrian access width of 1.8m required in E27.6.6(3), but shall be free of permanent obstructions and spaces within which vehicles may park, with the exception of:</p> <ul style="list-style-type: none"> - Soft/frangible landscape treatment with a maximum mature height of 600mm - Wall-mounted, fence-mounted or building-mounted lighting infrastructure </td> </tr> </table>	Minimum clear width of 3.0 metres	Minimum clear height of 2.1 metres	<p>The clear width may include the minimum formed primary pedestrian access width of 1.8m required in E27.6.6(3), but shall be free of permanent obstructions and spaces within which vehicles may park, with the exception of:</p> <ul style="list-style-type: none"> - Soft/frangible landscape treatment with a maximum mature height of 600mm - Wall-mounted, fence-mounted or building-mounted lighting infrastructure 	<p>The primary pedestrian path will be provided within a 3.0 metres wide corridor– complies</p>
Minimum clear width of 3.0 metres					
Minimum clear height of 2.1 metres					
<p>The clear width may include the minimum formed primary pedestrian access width of 1.8m required in E27.6.6(3), but shall be free of permanent obstructions and spaces within which vehicles may park, with the exception of:</p> <ul style="list-style-type: none"> - Soft/frangible landscape treatment with a maximum mature height of 600mm - Wall-mounted, fence-mounted or building-mounted lighting infrastructure 					
<p>E27.6.7 Electric Vehicle Charging</p>	<p>Any new dwelling with undercover car parking (excluding detached dwellings) must provide each undercover car park with the capability to install electric vehicle supply equipment with a designated space for necessary conduit, circuit and metering between the car park and an electrical distribution board on the same building storey, or ground level (if at ground level).</p>	<p>It is understood all units with garages will provide provisions for electric vehicle charging, if required - complies</p>			

5.2 Auckland Unitary Plan Assessment Criteria

Section E27.8.2 of the Auckland Unitary Plan sets out the assessment criteria when there is non-compliance from the development controls for a proposed development. For this proposal, the following items require consent:

- E27.6.4.4 – Gradient of the Vehicle Access (Criteria 8);
- E27.6.3.6 – Formations and Gradients (Criteria 8);
- E27.6.3.2 – Accessible Parking (Criteria 4A); and
- E27.6.6 – Pedestrian Access (Criteria 17).

The following lists the relevant assessment criteria for these infringements and comments as applied to this development.

8. Any activity or development which infringes the standards for the design of parking and loading areas or access under Standard E27.6.3, E27.6.4.2, E27.6.4.3, and E27.6.4.4:

- (a) *effects on the safe and efficient operation of the adjacent transport network having regard to:*
 - (i) *the effect of the modification on visibility and safe sight distances;*
 - (ii) *existing and future traffic conditions including speed, volume, type, current accident rate and the need for safe manoeuvring;*
 - (iii) *existing pedestrian numbers, and estimated future pedestrian numbers having regard to the level of development provided for in this Plan; or*
 - (iv) *existing community or public infrastructure located in the adjoining road, such as bus stops, bus lanes, footpaths, and cycleways.*
- (b) *effects on pedestrian amenity or the amenity of the streetscape, having regard to:*
 - (i) *the effect of additional crossings or crossings which exceed the maximum width; or*
 - (ii) *effects on pedestrian amenity and the continuity of activities and pedestrian movement at street level in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone and Business – Local Centre Zone.*
- (c) *the practicality and adequacy of parking, loading and access arrangements having regard to:*
 - (i) *site limitations, configuration of buildings and activities, user requirements and operational requirements;*
 - (ii) *the ability of the access to accommodate the nature and volume of traffic and vehicle types expected to use the access. This may include considering whether a wider vehicle crossing is required to:*
 - *comply with the tracking curve applicable to the largest vehicle anticipated to use the site regularly;*
 - *accommodate the traffic volumes anticipated to use the crossing, especially where it is desirable to separate left and right turn exit lanes;*
 - *the desirability of separating truck movements accessing a site from customer vehicle movements;*
 - *the extent to which reduced manoeuvring and parking space dimensions can be accommodated because the parking will be used by regular users familiar with the layout, rather than by casual users;*
 - (iv) *any use of mechanical parking installation such as car stackers or turntables does not result in queuing beyond the site boundary; or*
 - (v) *any stacked parking is allocated and managed in such a way that it does not compromise the operation and use of the parking area.*

Comments (E27.6.4.4) – Gradient of the Vehicle Access [Criteria 8]

The reason for consent under this standard relates to the gradient provided for a section of the accessway where a gradient of 1 in 6.7 (15.0%) is proposed for some 10 metres approximately 5.0 metres into the site on JOAL 1, where a maximum gradient of 1 in 8 (12.5%) is permitted for an accessway which is used by heavy vehicles under the AUP. The followings points are made in support of this non-compliance:

- The non-complying grade is provided only for a short section of the accessway (10.0 metres), and the rest of the site is designed with complying grades;
- The non-compliant grade is where a truck will be traversing in a general straight alignment, with no manoeuvring required;
- To provide a complying gradient the accessway will need an excessive retaining wall that would negatively impact on other amenities provided on-site;
- The site is anticipated to have a low frequency of truck movements to/from the site (approximately two to three refuse collections per week);
- Refuse collection will be facilitated by a reputable provider with professional drivers and the drivers will be regular users and familiar with the site layout and will exercise caution;
- It has been confirmed with the refuse collection providers that the custom design truck will be able to traverse the proposed 1 in 6.7 (15.0%) gradient;, and
- Refuse collection will occur outside of peak hours for the site, minimising the potential for conflict with other vehicles and pedestrians along the access or on Compass Point Way;

Therefore, the proposed gradient of vehicle access will have less than a minor effect on the surrounding road environment and is considered acceptable.

Comments (E27.6.4.4) – Formations and Gradients (Criteria 8)

The reason for consent under this standard relates to the gradient of the proposed stacked parking spaces associated with Units 7, 52, 53 and 55 having a gradient of up to 1 in 10 (10%), where a maximum gradient of 1 in 20 (5%) is permitted. The following points are made in support of the parking space gradient:

- Public on-street parking spaces are permitted a gradient of up to 12.5%, demonstrating that the proposed gradients are acceptable for parking;
- The gradients are not considered to be excessive, such that there would be a risk of vehicles slipping or losing control when manoeuvring to/from parking space;
- The gradient is sloping down towards the access where users will be exiting from stationary, and given parking is located immediately within the subject lots it is unlikely to effect their speeds when doing so;
- Suitable forward visibility to/from the spaces will be available; and
- The parking spaces will be associated with the residents of the subject units who will be aware of the arrangement.

For these reasons, the proposed parking space gradients will have a minimal effect on the surrounding road environment and is therefore considered acceptable.

(4A) any activity or development that provides less than the required number of accessible parking spaces under Standard E27.6.3.2.(A):

- (a) the trip characteristics of the proposed activities on the site requiring accessible parking spaces;
- (b) the extent to which it is physically practicable to provide the required accessible parking spaces on the site including in terms of the existing location of buildings, the type of the existing building(s) site dimensions, topography and the availability of access to the road;
- (c) the availability and capacity of alternative accessible parking in the immediate vicinity, including on street and other public accessible car parking, with an accessible route to and from the building designed in accordance with New Zealand Standard for Design for Access and Mobility – Buildings and Associated Facilities (NZS: 4121-2001), to provide the additional parking sought for the proposal;
- (d) mitigation measures to provide accessible parking which may include measures such as by entering into a shared accessible parking arrangement with another site or sites in the immediate vicinity
- (e) the availability of alternatives to private vehicle trips in the immediate vicinity with access to public transport by an accessible route designed in accordance with New Zealand Standard for Design for Access and Mobility – Buildings and Associated Facilities (NZS: 4121-2001) and a maximum distance of 200m.

Comment E27.6.3.2(A) – Accessible Parking

The reason the design is not considered consistent with this standard under E27 relates to the provision of no accessible parking spaces on-site, where four will be required. The following points are made in support the design:

- Where units have double width driveways, their design could accommodate an effective accessible parking space width;
- Any future tenants would be aware of the parking arrangement before purchasing a property and if they require accessible parking, they are unlikely to occupy a house in this proposal; and
- Given the sites proximity to future public transport facilities within the vicinity of the site it is considered that users could travel via means other than a private car.

For these reasons, the proposed parking arrangement will have no effect on the adjacent road network and is therefore considered acceptable.

17. Activity A23: Primary pedestrian access which infringes the width, obstructions/clear height, gradient and slip resistant standards in Standard E27.6.6(3):

- (a) Whether the proposed design of the primary pedestrian access will meet the safety and practical needs of a range of users, taking into account:

 - (i) the number of units served and the site's characteristics, including all weather use, the transportation of rubbish bins and household items and the ability for cyclists to safely access any private and shared cycle storage areas;

- (ii) (the extent to which the design incorporates Universal Design principles, including where the primary pedestrian access is not adjacent to vehicle access and includes steps, whether a footpath and/or ramps as specified in NZS 4121:2001 Design for access and mobility: Buildings and associated facilities can be provided;*
- (iii) the extent to which the location and nature of any obstruction(s) or reduced clear height would adversely affect the practicality and safety of pedestrian access;*
- (iv) the safety and functionality of emergency responder access.*

Comment E27.6.6 – Pedestrian Access

The first reason the design is not considered consistent with this standard under E27 under this standard relates to the pedestrian routes where not adjacent to an access (between Units 36 and 41) is 1.5 metres wide and 1.8 metres wide is required for footpaths not adjacent to an access under PC79. The following points are made in support of the design:

- Where widths of 1.5 metres are proposed, the footpaths are adjacent to landscaping such that in the event of two-way interaction, the effect is no different to a 1.8 metre-wide footpath, which is considered a compliant scenario;
- The subject route is not considered the primary pedestrian access of the overall site, such that its effect is considered minimal;
- All units with road frontage will have individual pedestrian points to their respective road frontages, and the subject route will serve as primary pedestrian access for those internal units without road frontages, and with three separate routes available for users via Ara Tai Road/Pigeon Mountain Road/Compass Point Way various options are available for users;
- Providing a compliant width in the areas noted would likely result in other non-compliances across the site, and lower amenity for users which was considered a worse outcome for the site.
- In the subject sections of footpath, the design is generally straight in alignment such that good sightlines will be available in the unlikely event of two-way pedestrian interaction;
- Any effect, which is considered likely to be minimal, will be internal to the site and not impact upon the surrounding road environment; and
- Users would be primarily residents and as such regular users who would be familiar with the layout.

For these reasons, the proposed pedestrian provision is considered acceptable.

6.0 CONCLUSIONS

Based on the analyses described in this report, the following conclusions can be made in respect of the proposal to establish a residential subdivision consisting of 62 dwellings at 3 Pigeon Mountain Road in Half Moon Bay:

- The estimated traffic generation of the proposal is likely to be about 550 traffic movements per day with peak hour traffic generation of about 53 traffic movements per hour;
- The traffic generated by the proposal is expected to be accommodated on the wider road network with little or no effect;
- The proposed internal vehicle and pedestrian circulating areas are configured to an appropriate standard and will operate in a manner that minimises any potential impacts on safety.
- A review of the transport standards has identified four items requiring consent under the E27 standards of the Auckland Unitary Plan. The effect of these is considered acceptable.
- Vehicle and pedestrian access to the site is designed to a suitable standard such that the infringement will not have an adverse effect on the surrounding road network or to the safety of pedestrians and vehicles using the site.

Overall, it is considered that the traffic engineering effects of the proposal can be accommodated on the road network without compromising its function, capacity, or safety. Therefore, from a traffic engineering perspective it is considered that the proposal will have an acceptable impact.

Prepared by

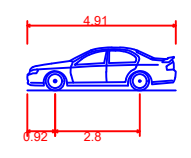
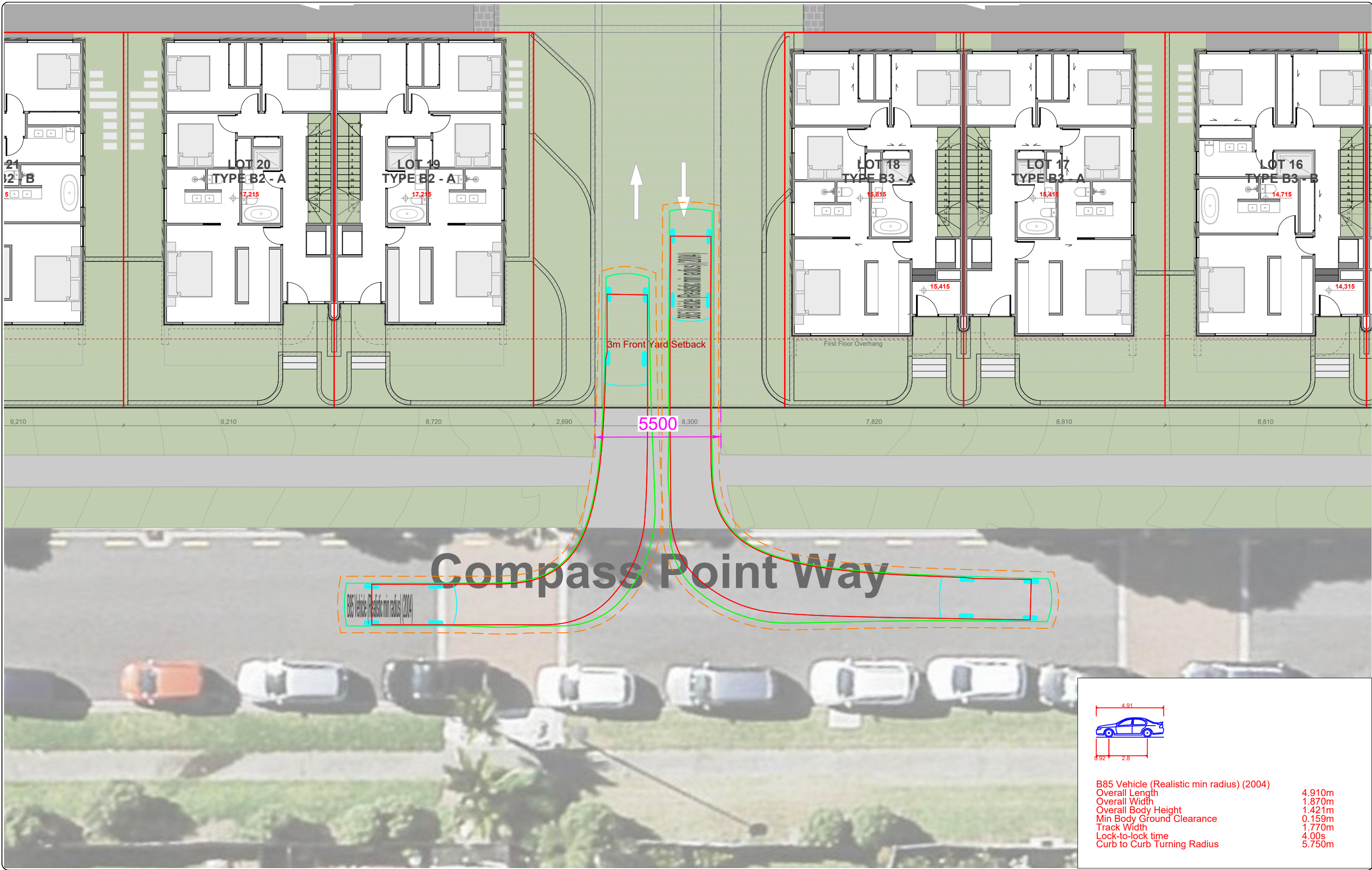


Thomas Kear
Associate

ATTACHMENT – 1

VEHICLE TRACKING DIAGRAMS

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B85 Vehicle (Realistic min radius) (2004)	
Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m

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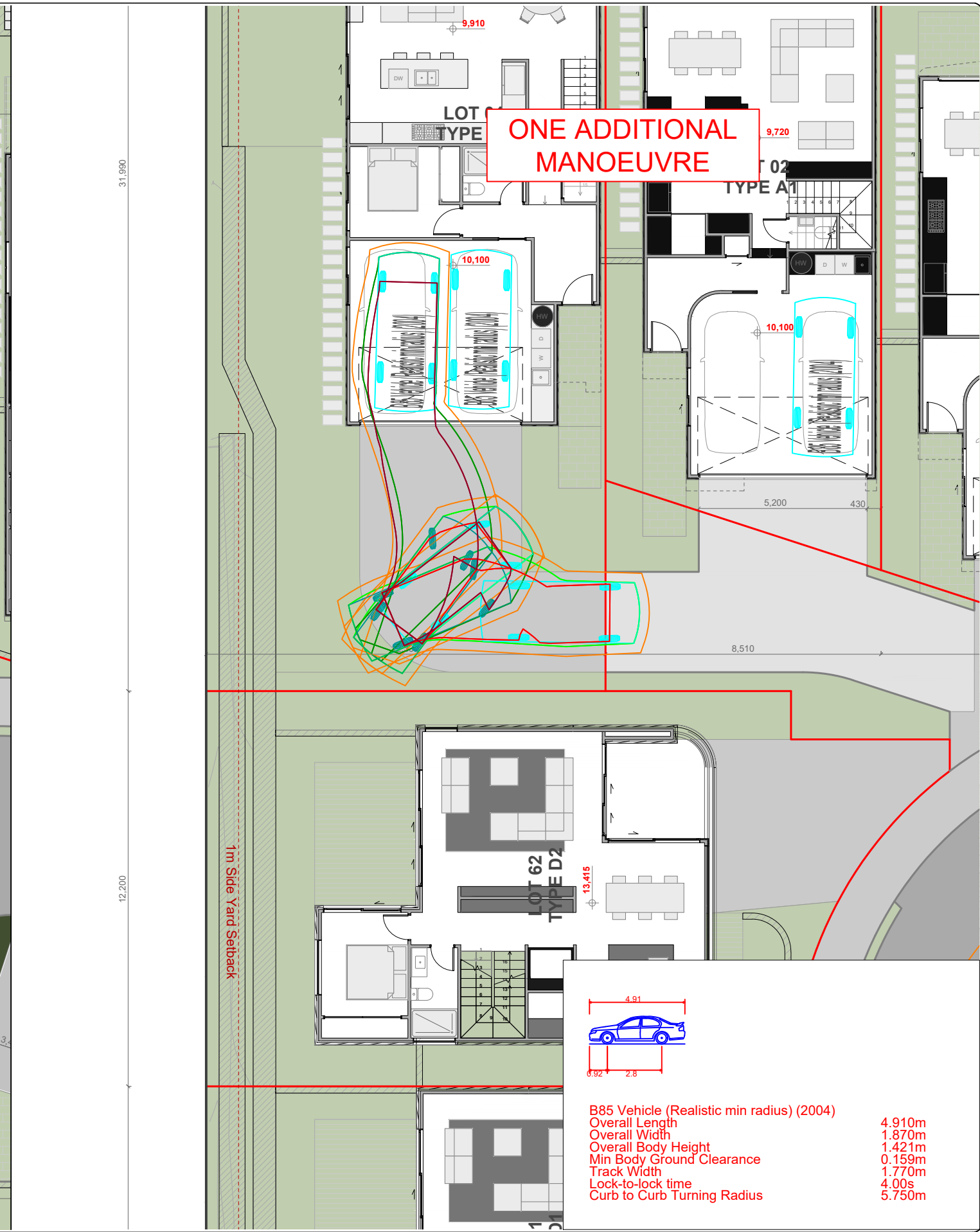
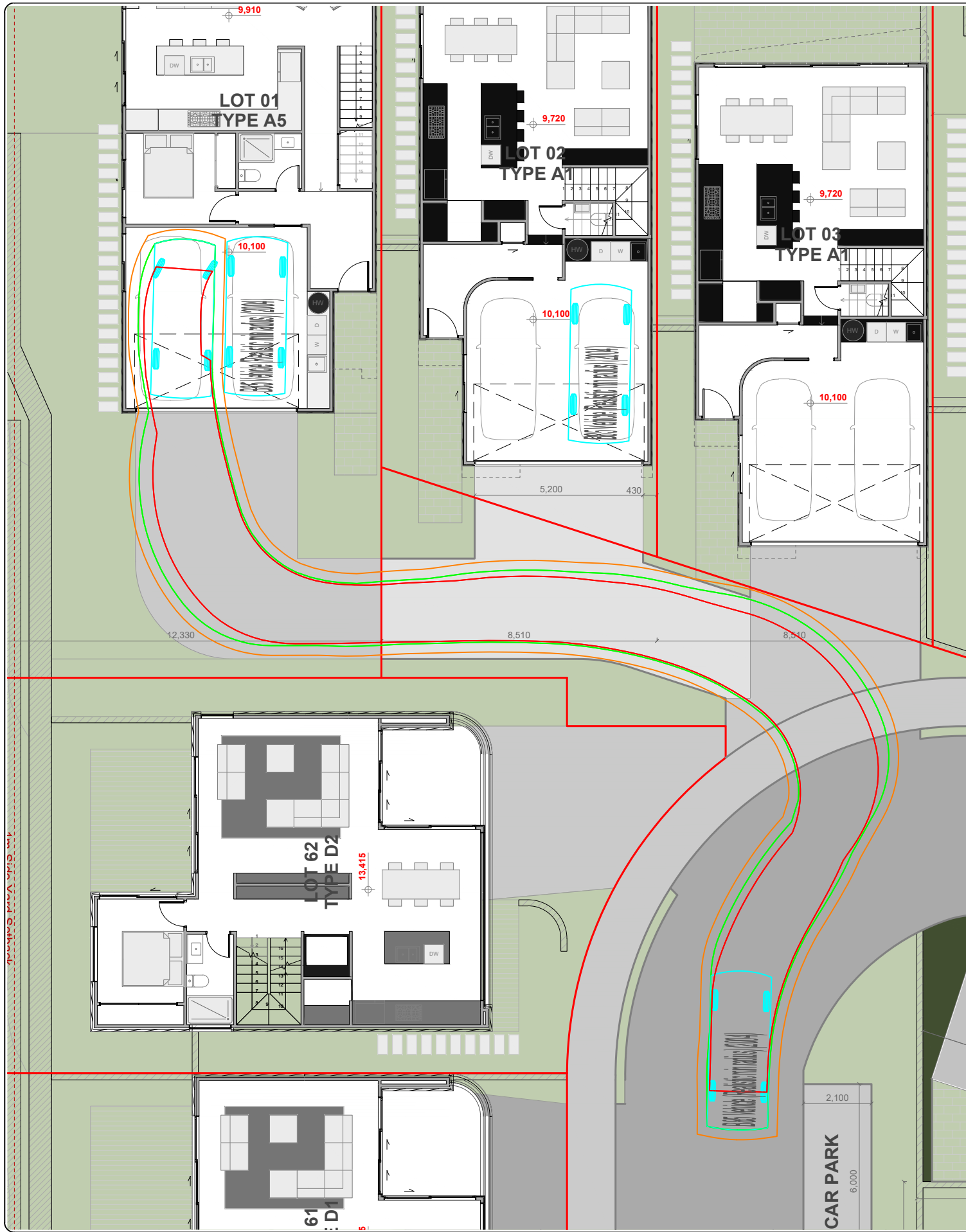
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Sheet Title
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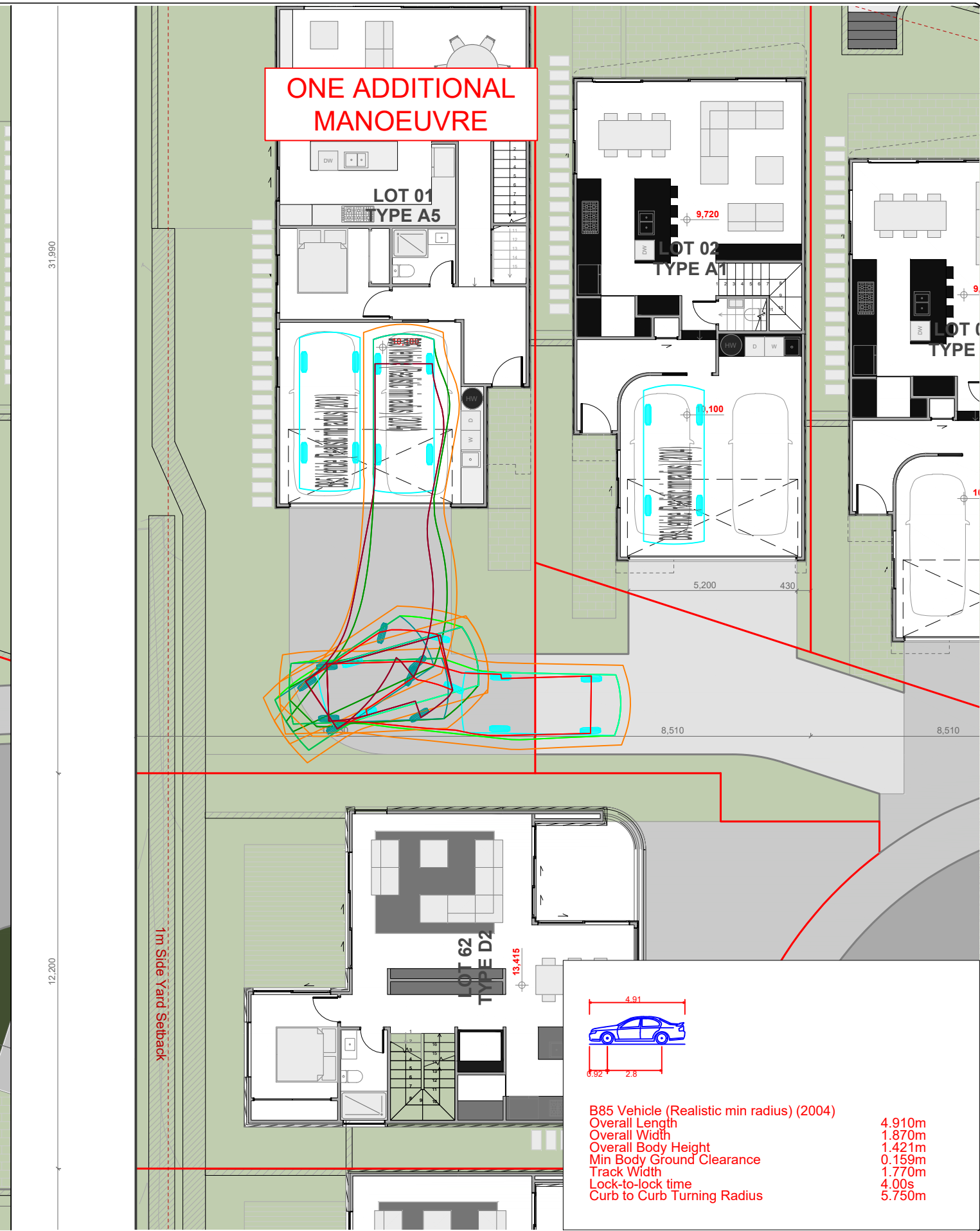
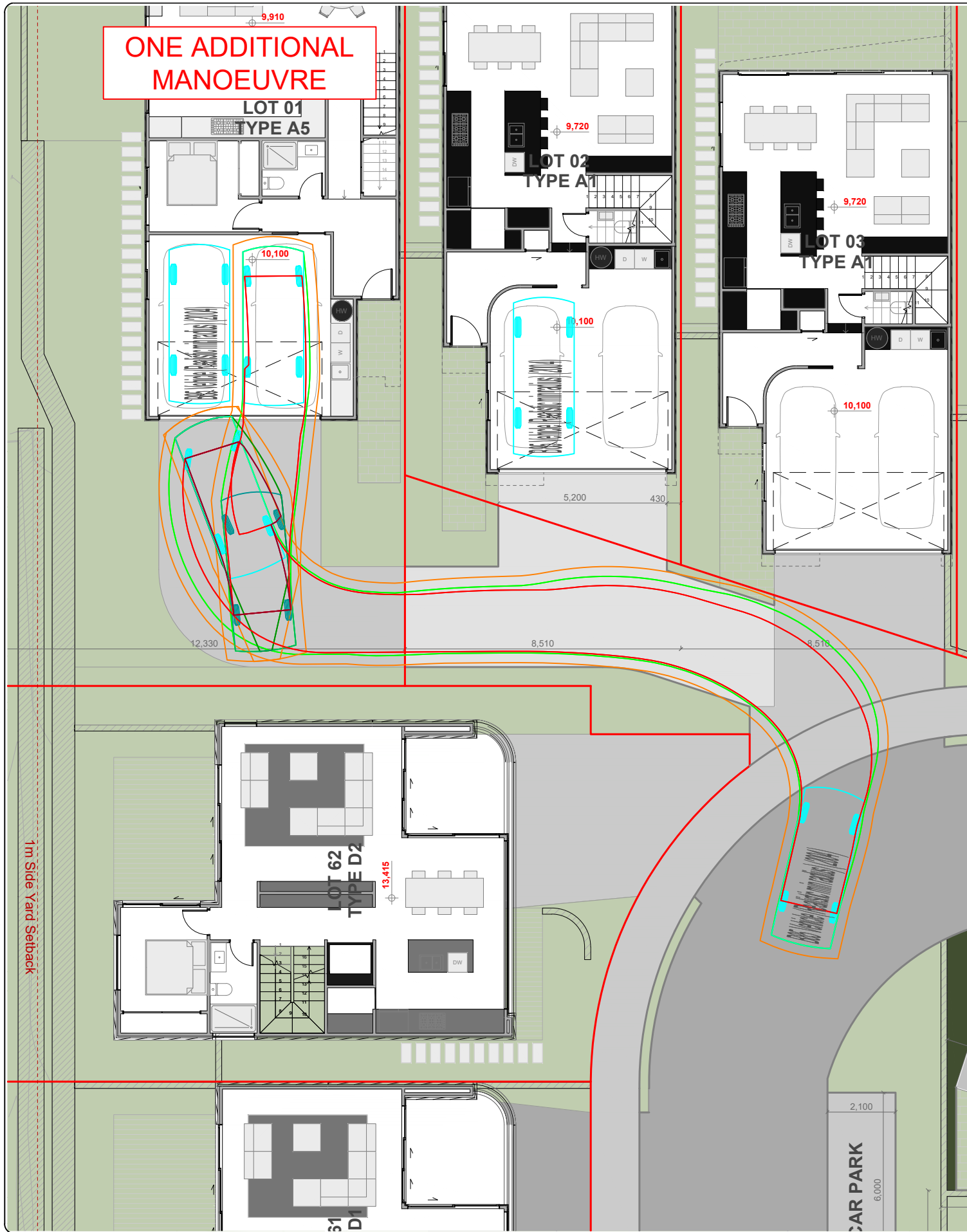
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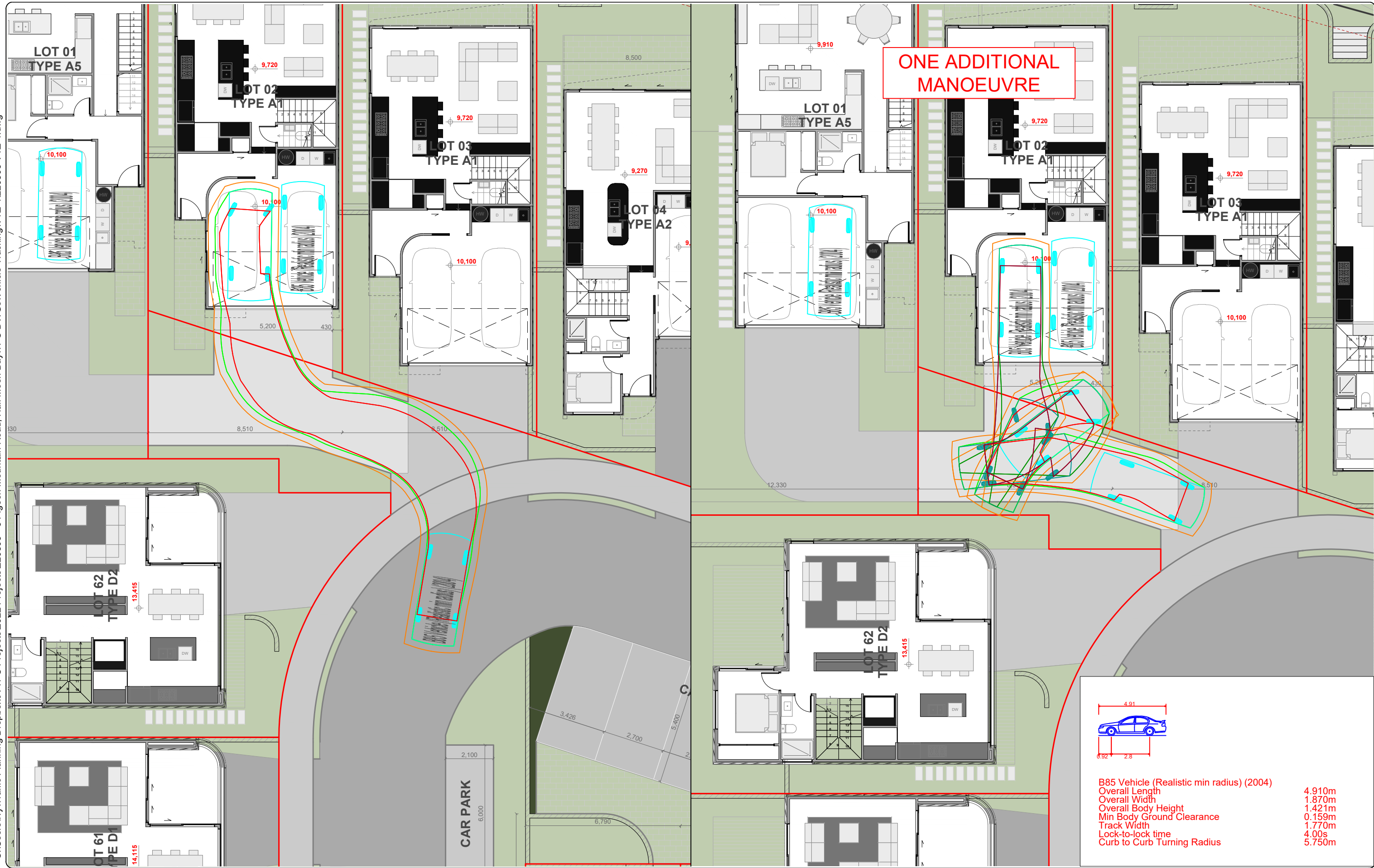
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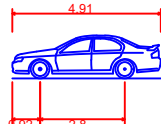
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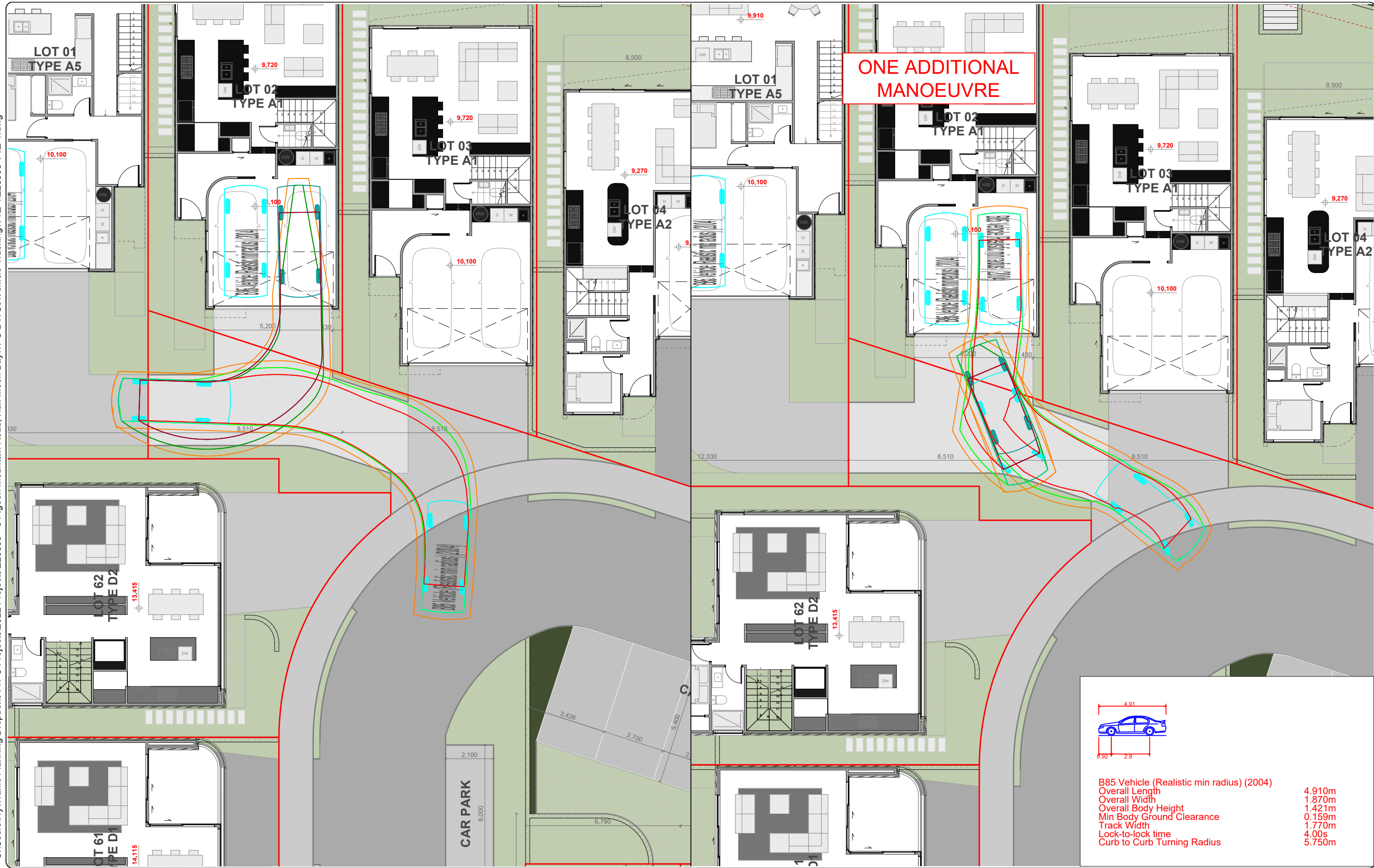
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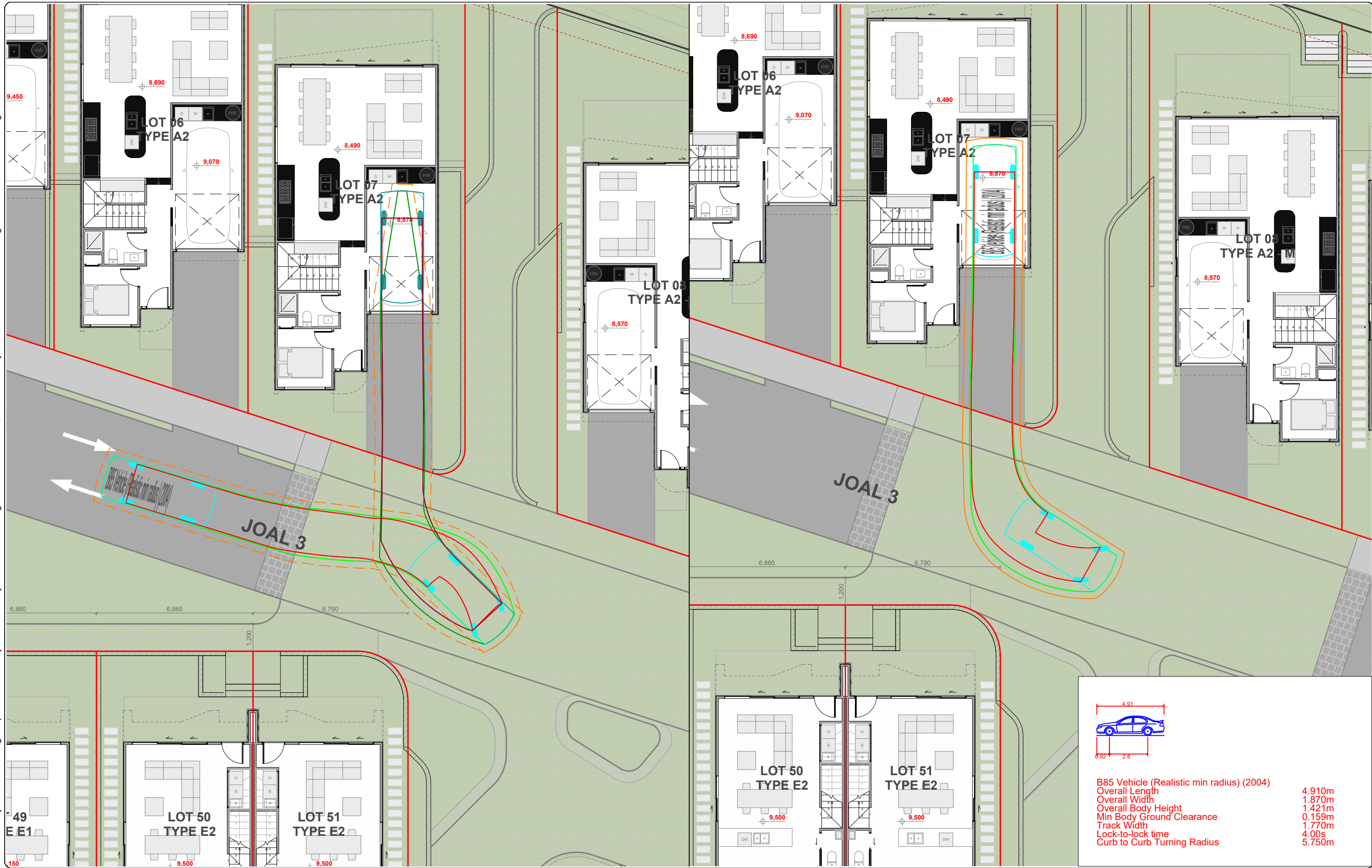
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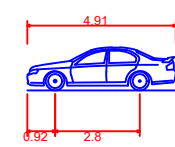
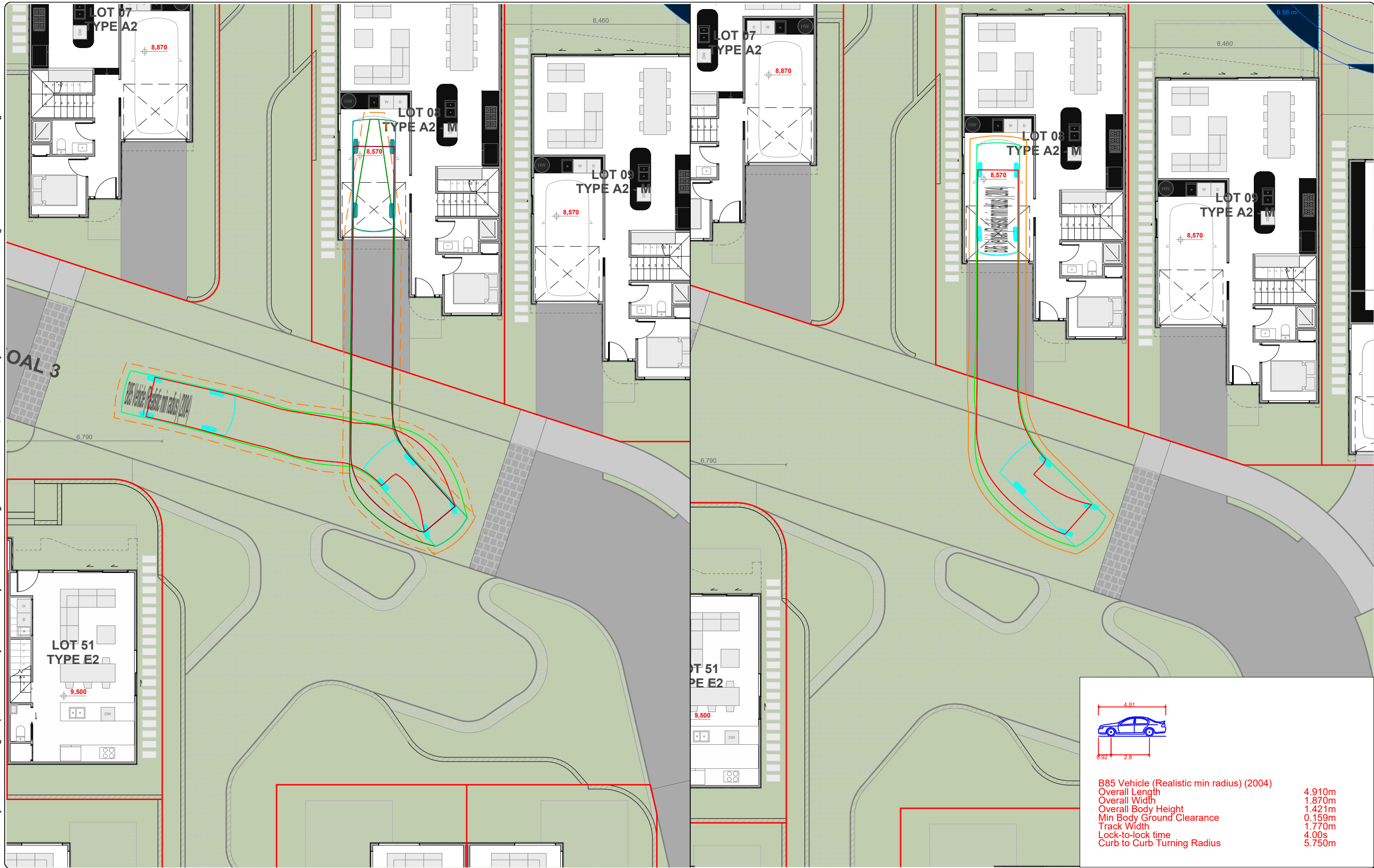
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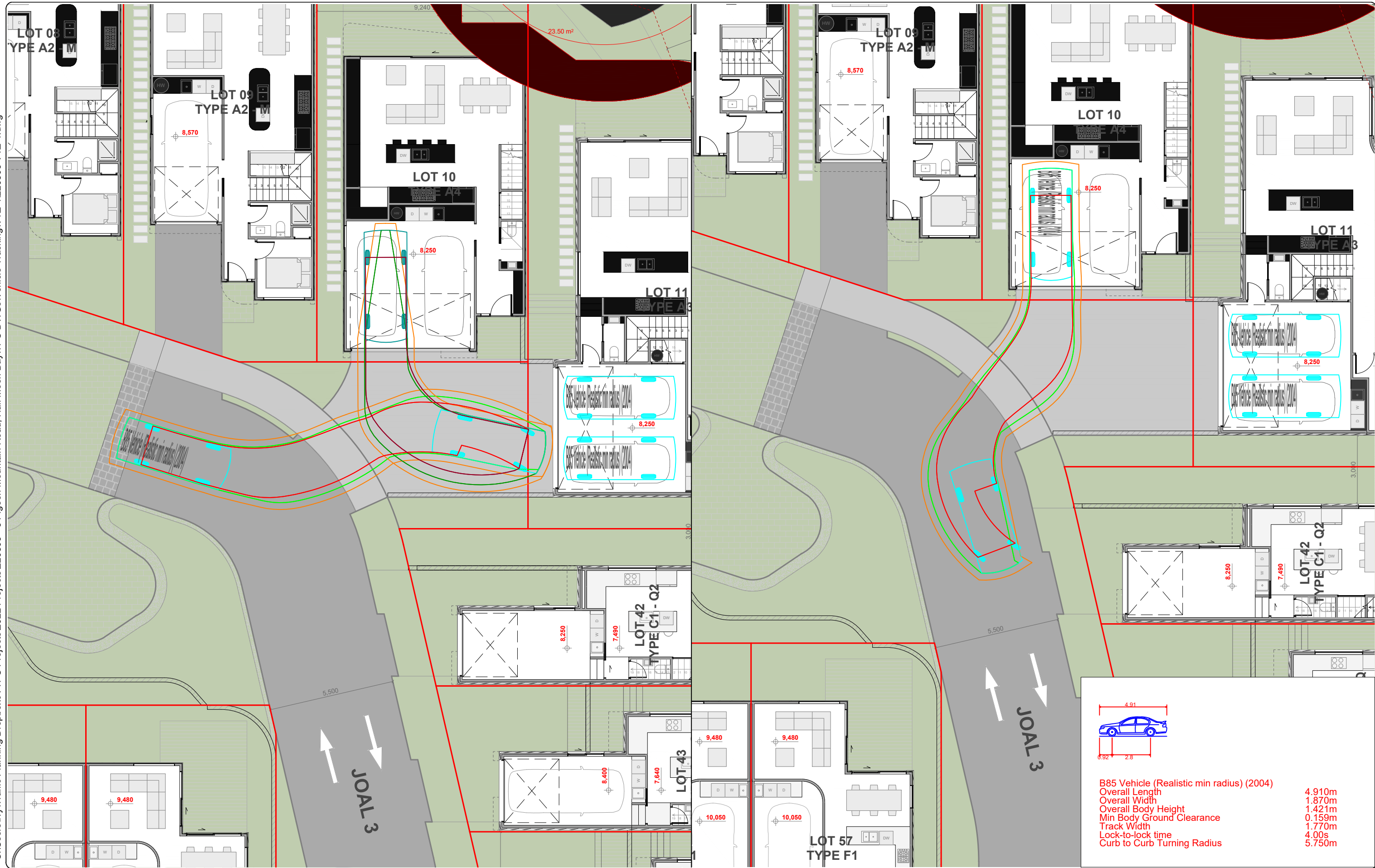
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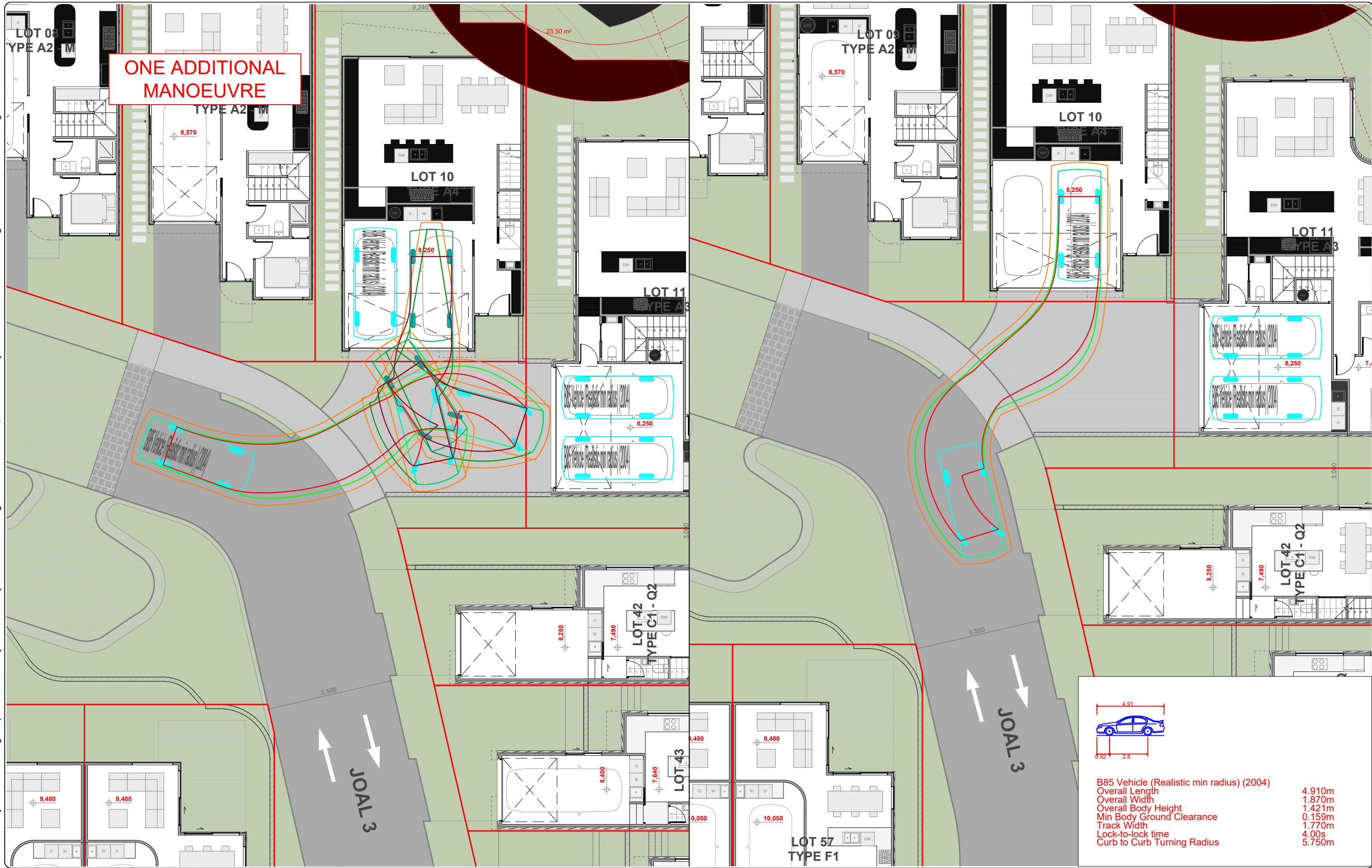
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ONE ADDITIONAL
MANOEUVRE

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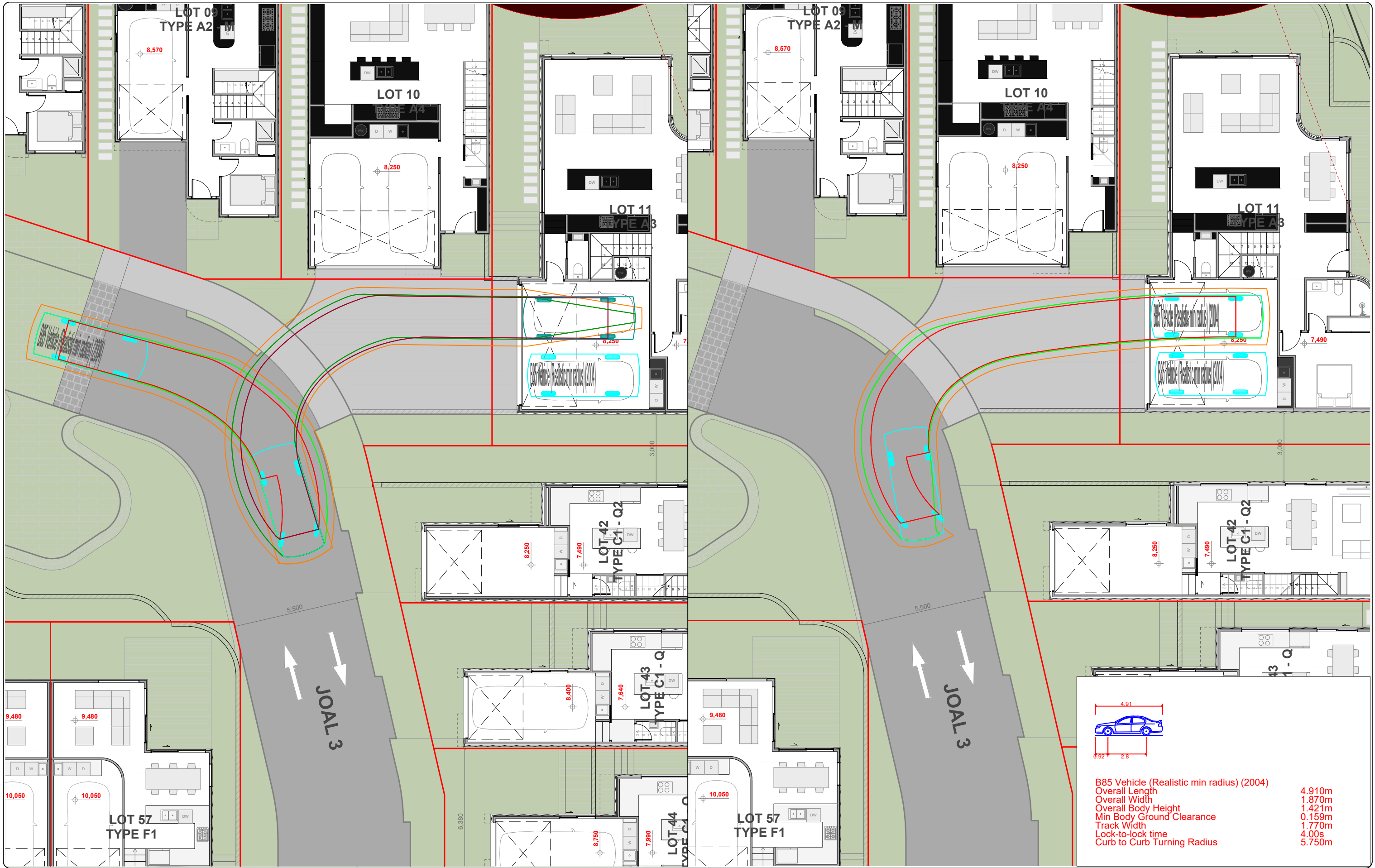
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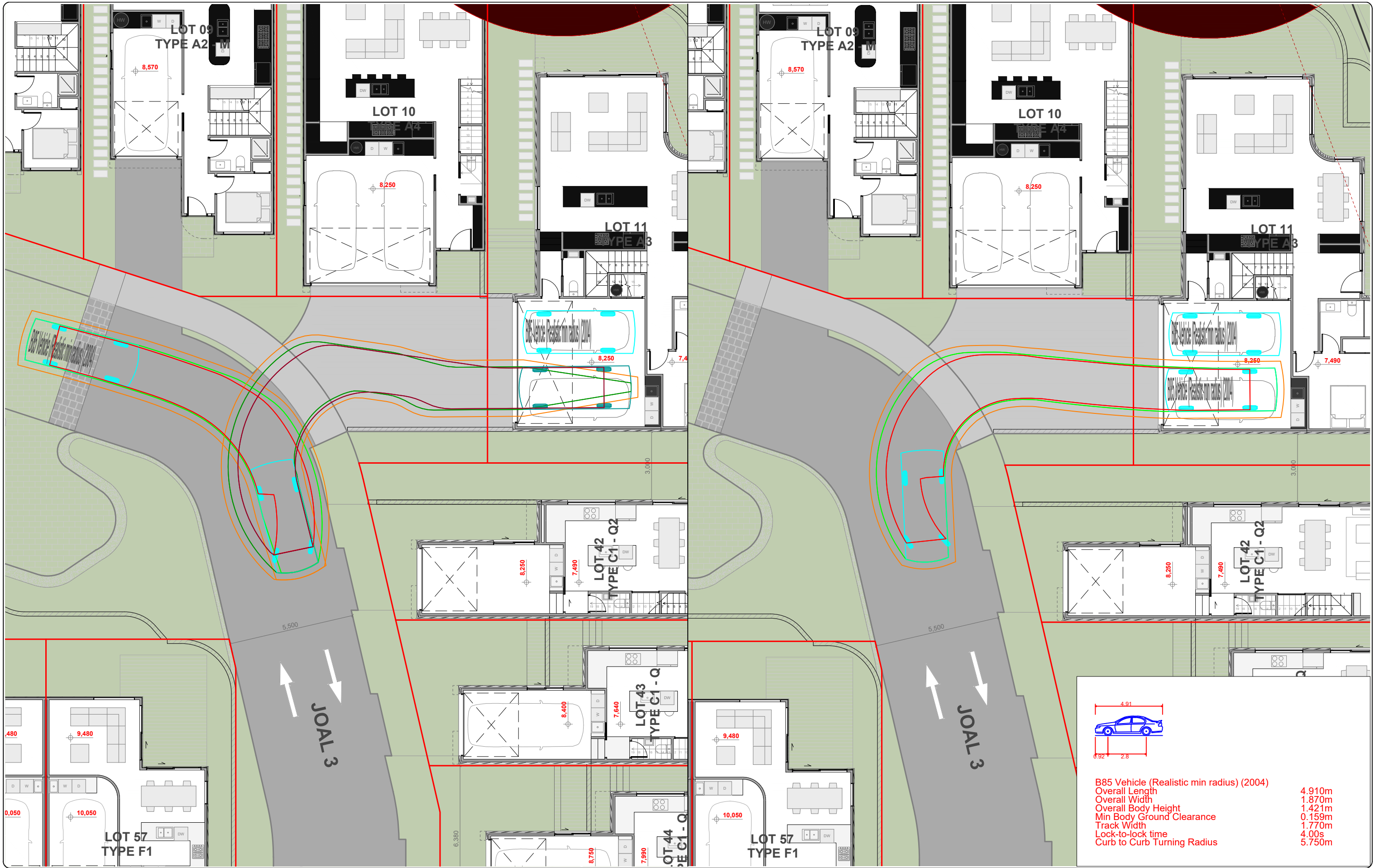
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Sheet Title
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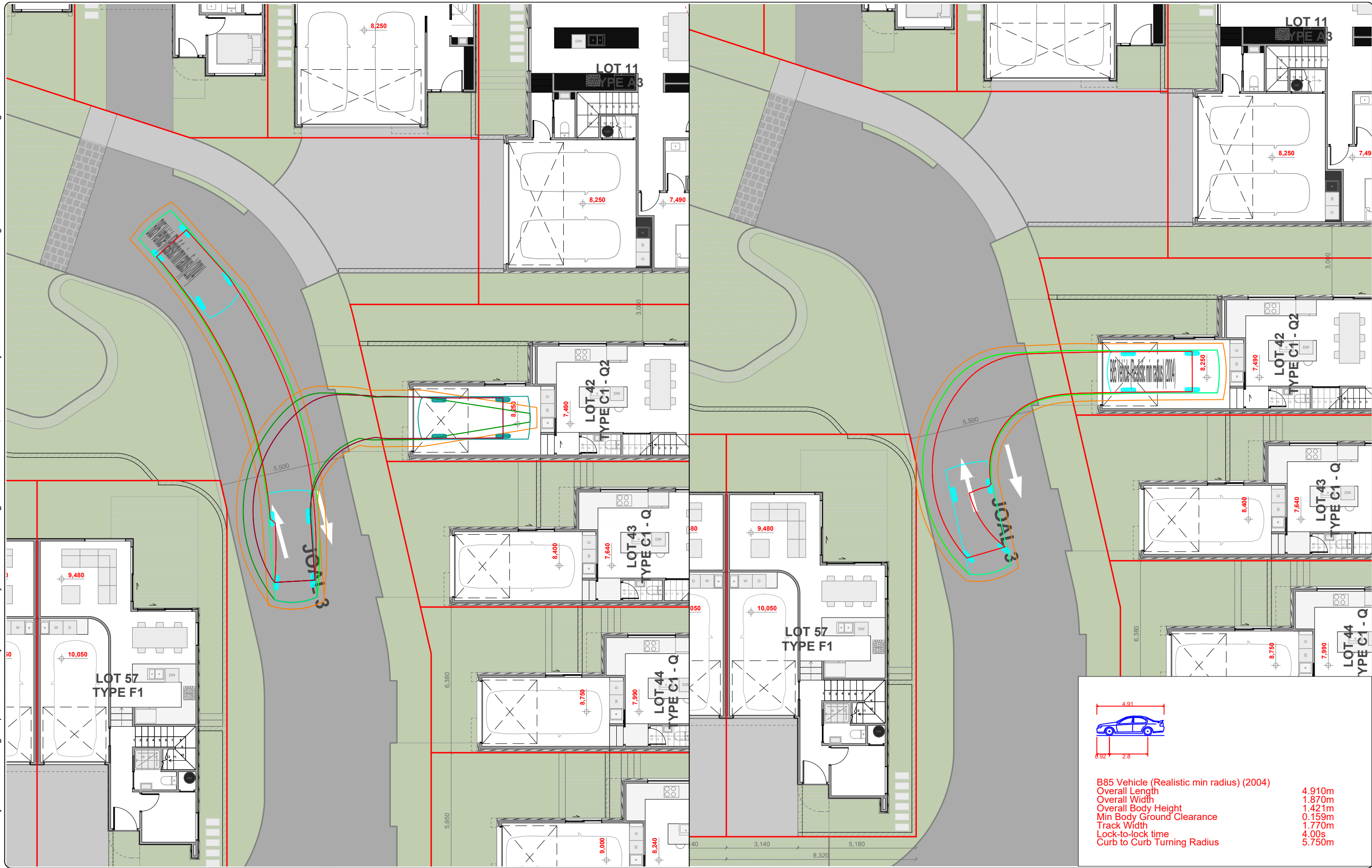
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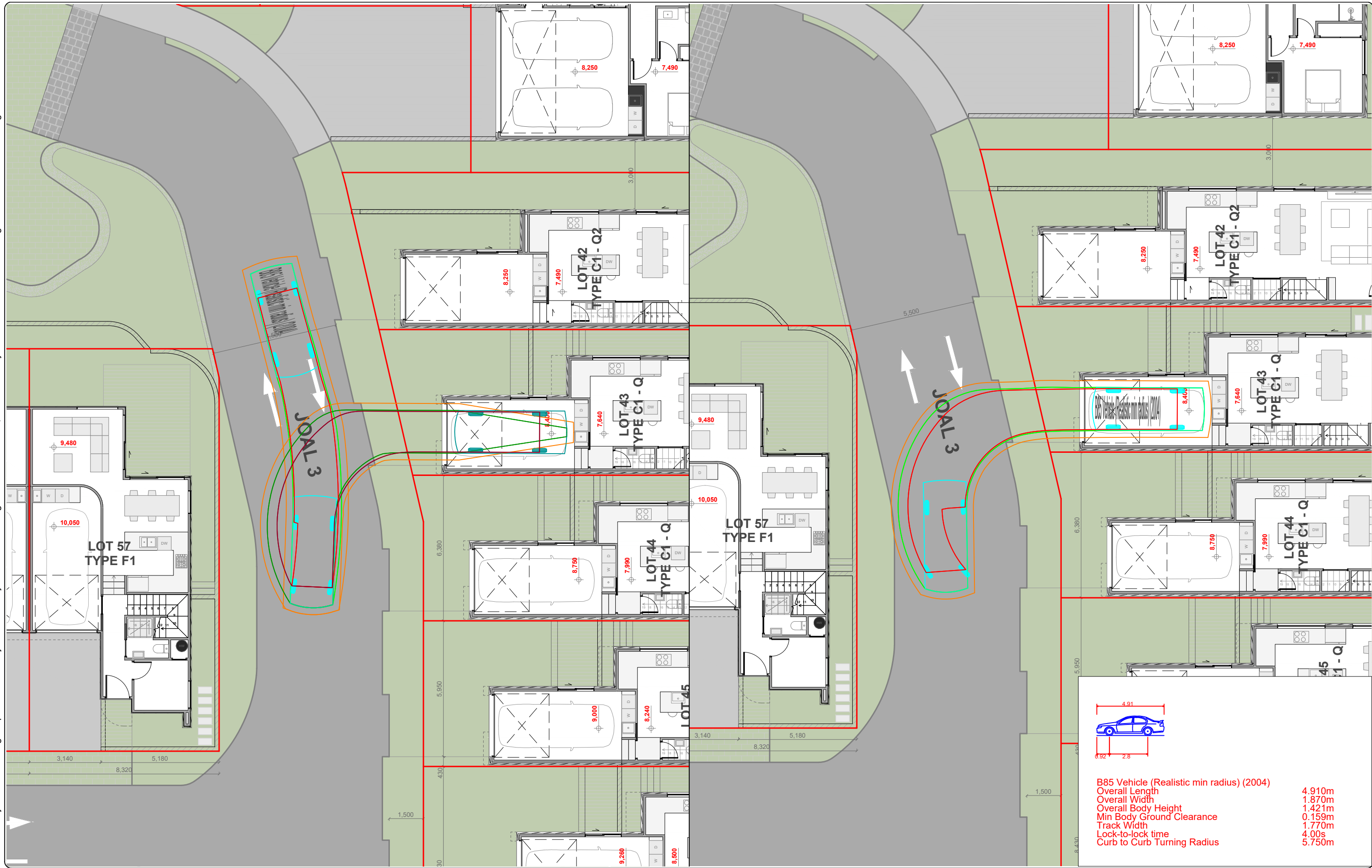
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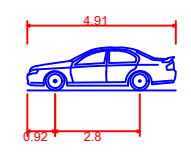
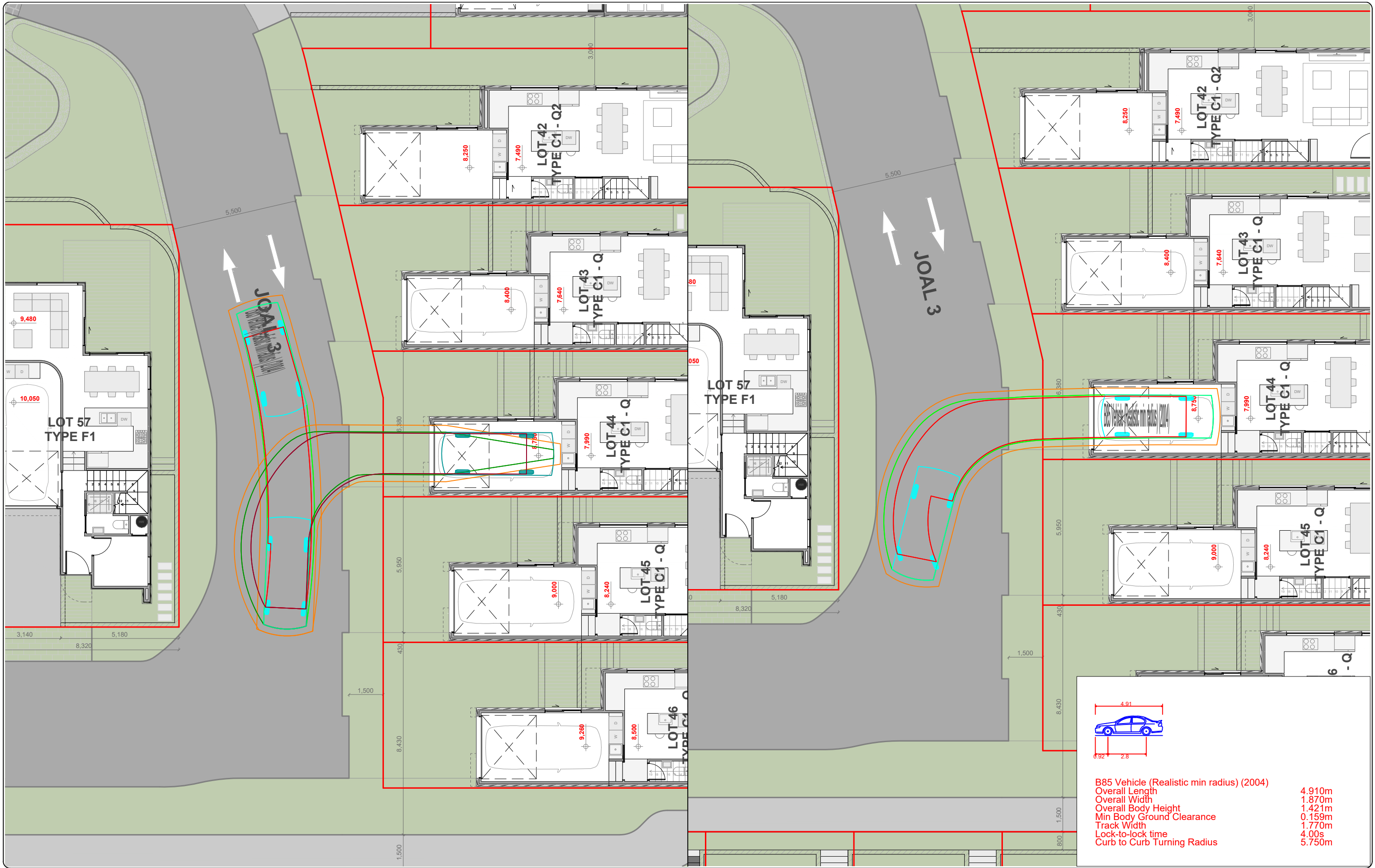
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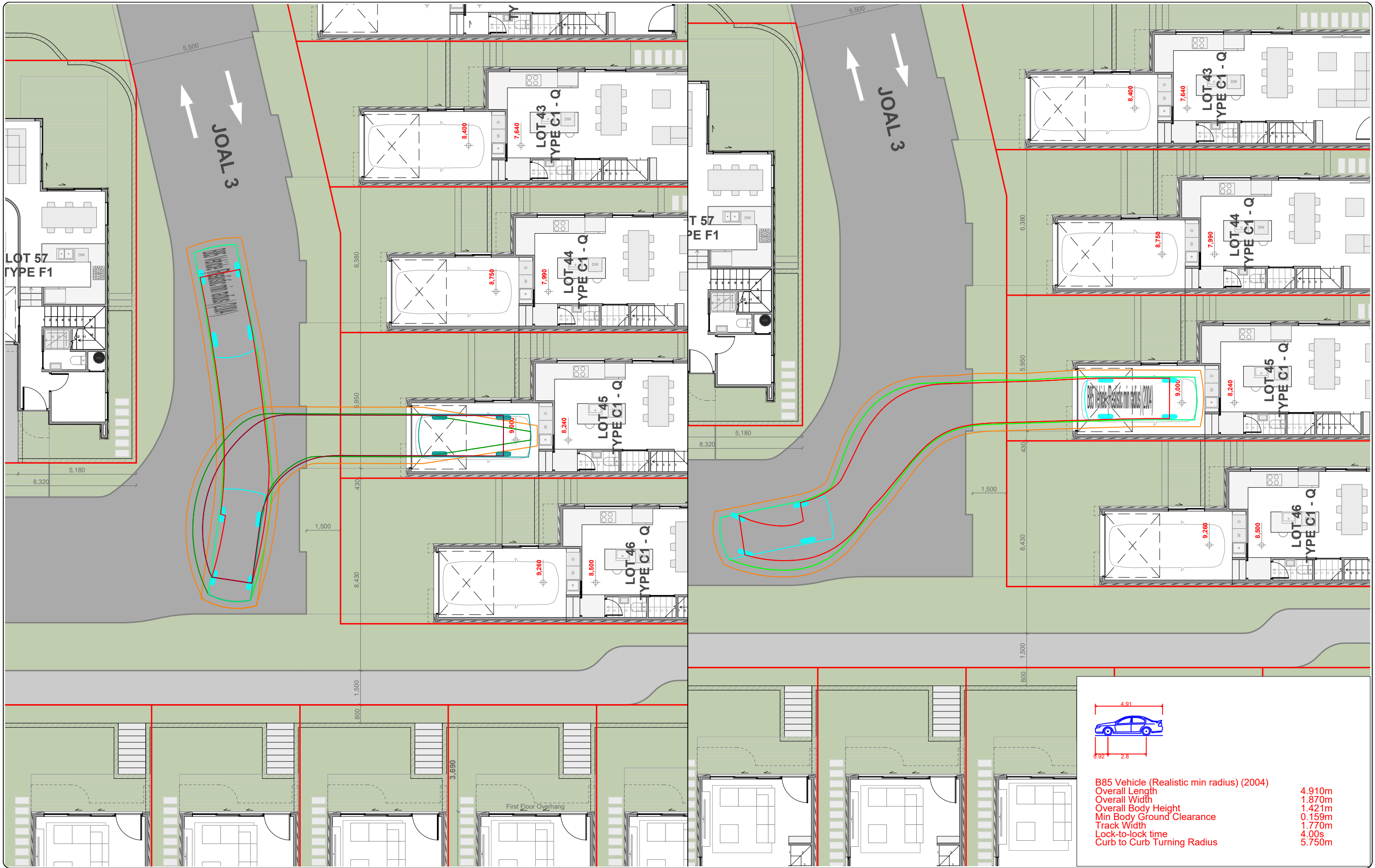
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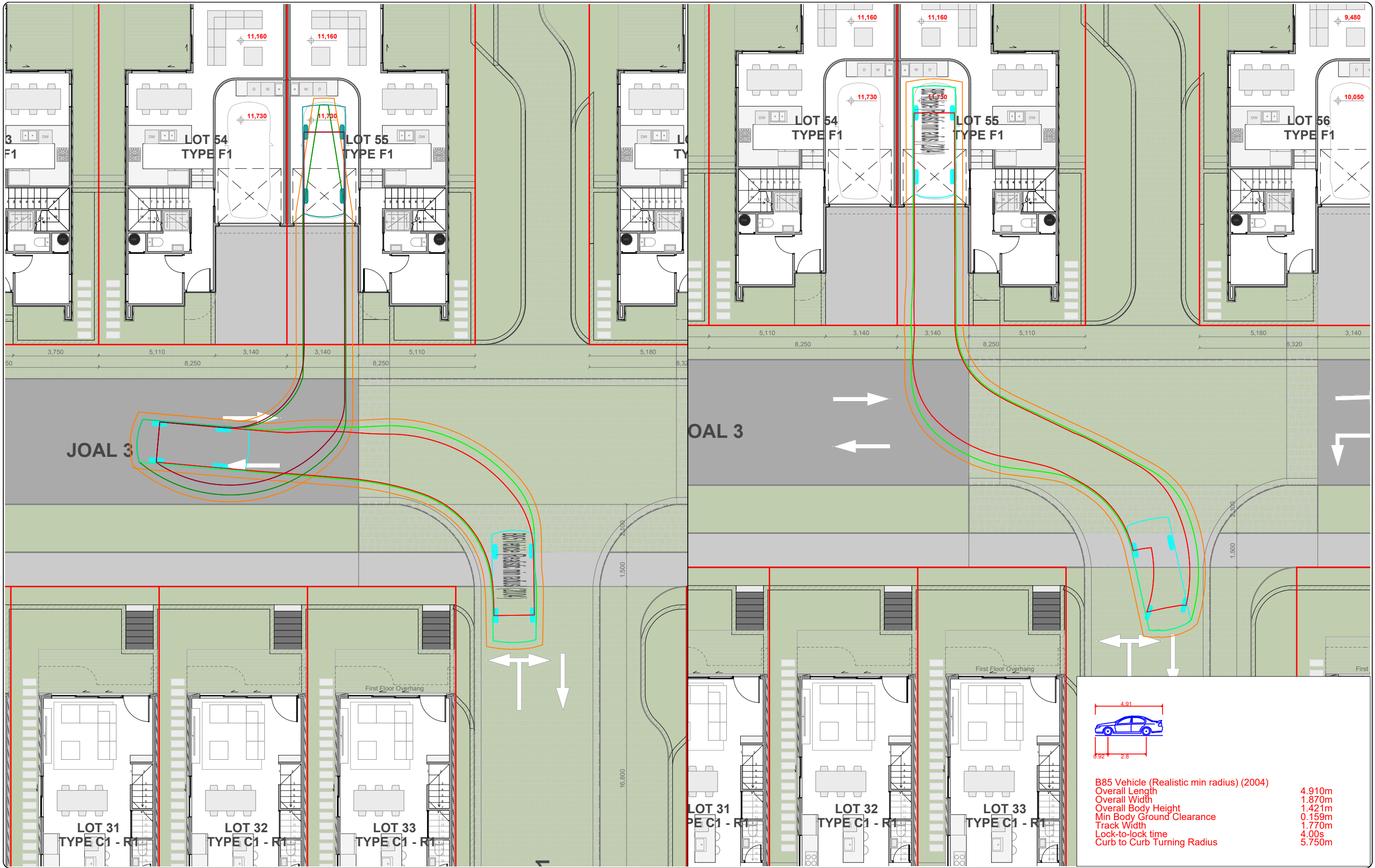
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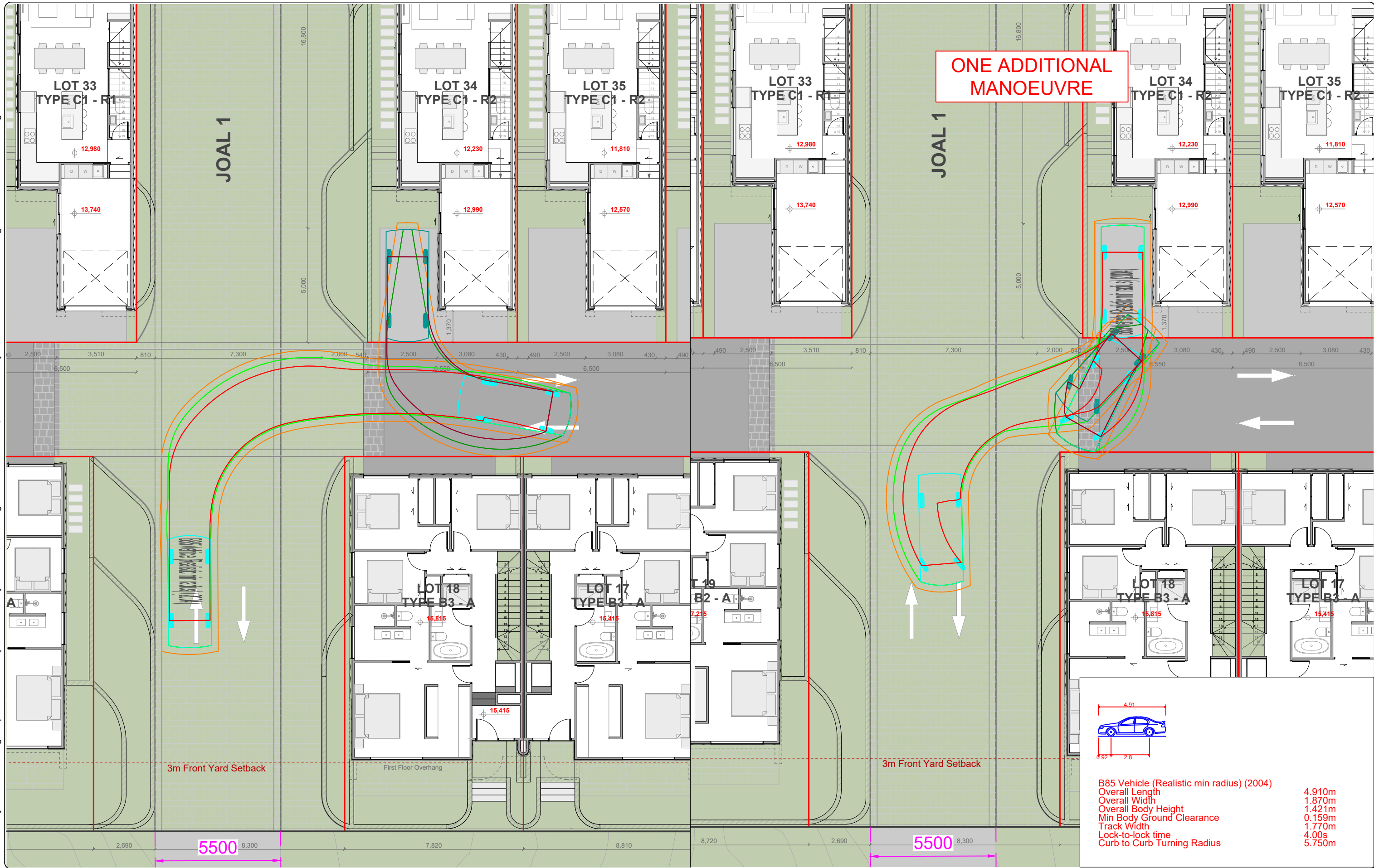
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Rev	Revisions	By	Date

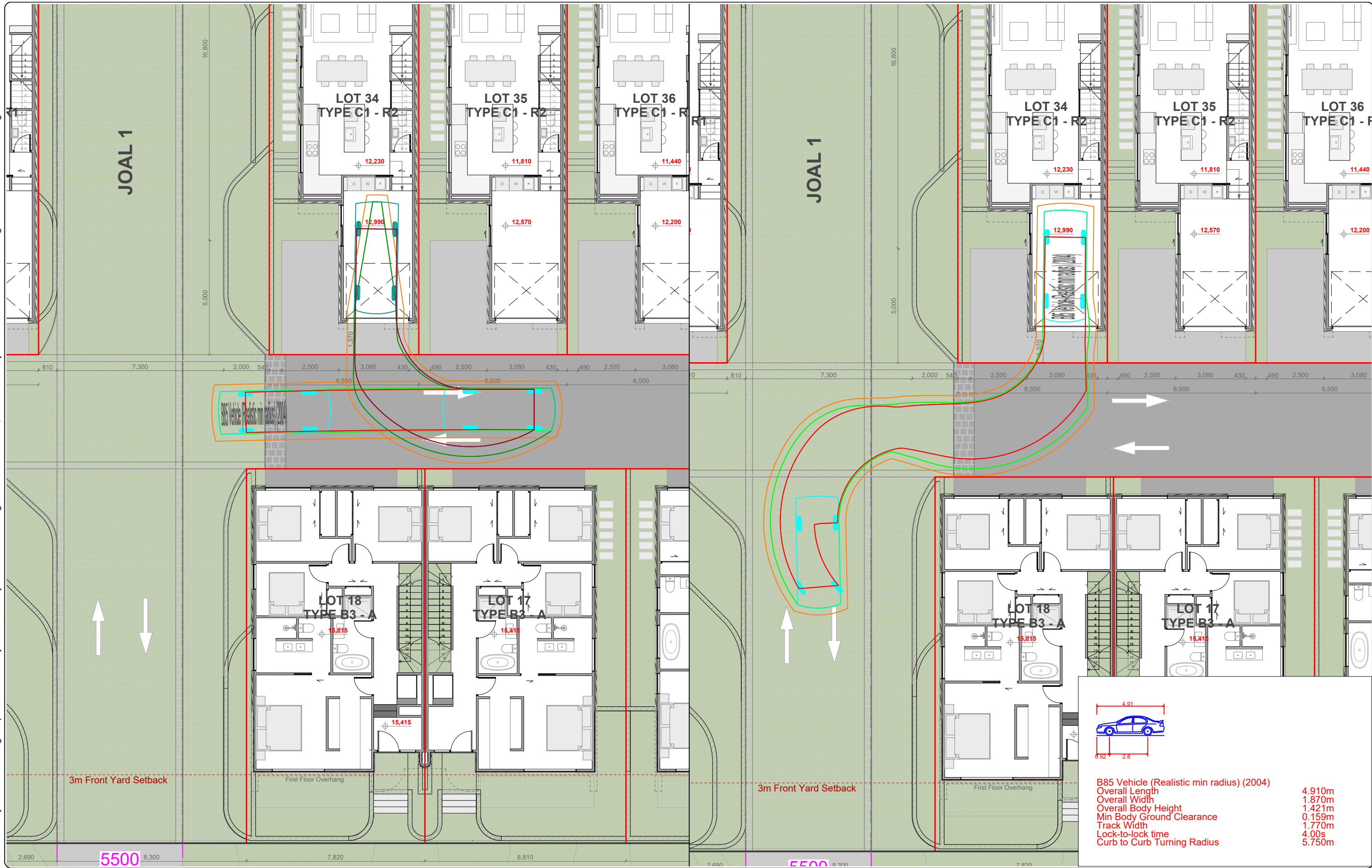
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 Phone: 09 817-2500 www.trafficplanning.co.nz

Project Title: Proposed Development
 3 Pigeon Mountain Road, Half Moon Bay

Sheet Title: Vehicle Tracking - B85 Design Vehicle

Designed	IY	Drawn	IY	Project No - (Sheet No)	Scales	1:150 (A3)
Checked	TK	Approved	TL	220803 VTZ-4 - (17)	Date	19.03.26

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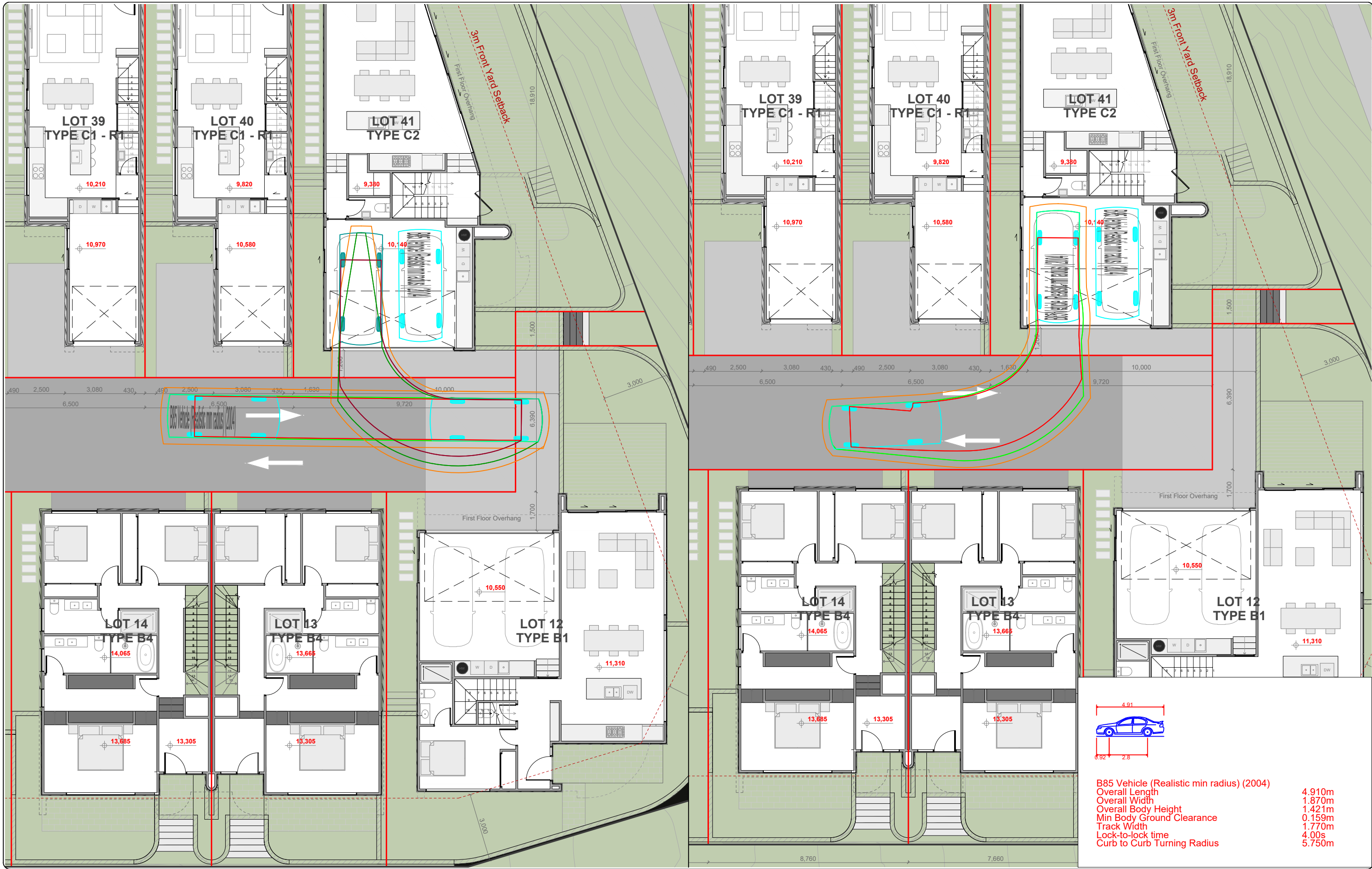
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Project Title
Proposed Development
3 Pigeon Mountain Road, Half Moon Bay

Sheet Title
Vehicle Tracking - B85 Design Vehicle

Designed	IY	Drawn	IY	Project No - (Sheet No)	Scales	1:150 (A3)
Checked	TK	Approved	TL	220803 VTZ-4 - (18)	Date	19.03.26

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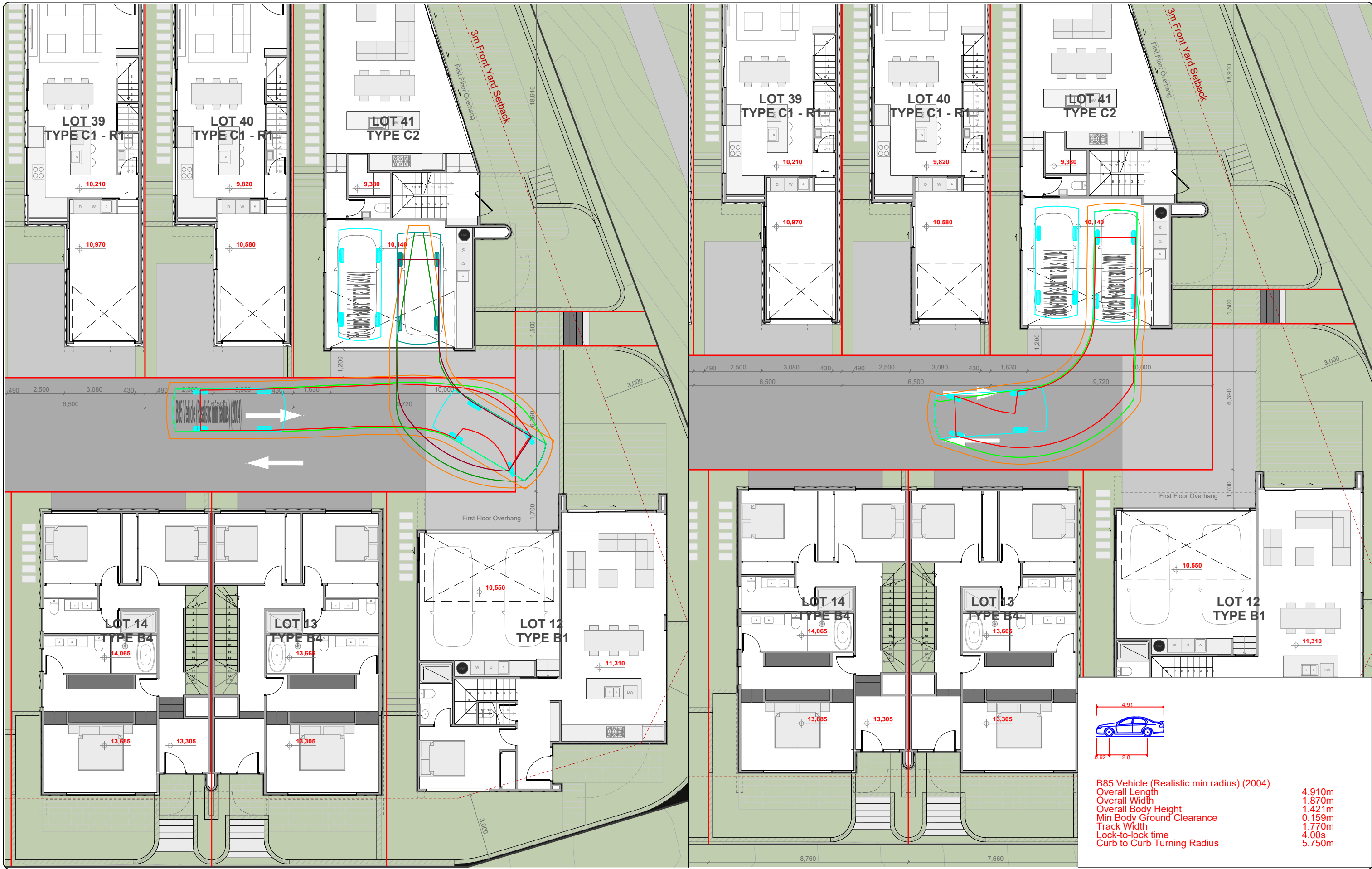
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Project Title Proposed Development
 3 Pigeon Mountain Road, Half Moon Bay

Sheet Title Vehicle Tracking - B85 Design Vehicle

Designed	IY	Drawn	IY	Project No - (Sheet No)	Scales	1:150 (A3)
Checked	TK	Approved	TL	220803 VTZ-4 - (19)	Date	19.03.26

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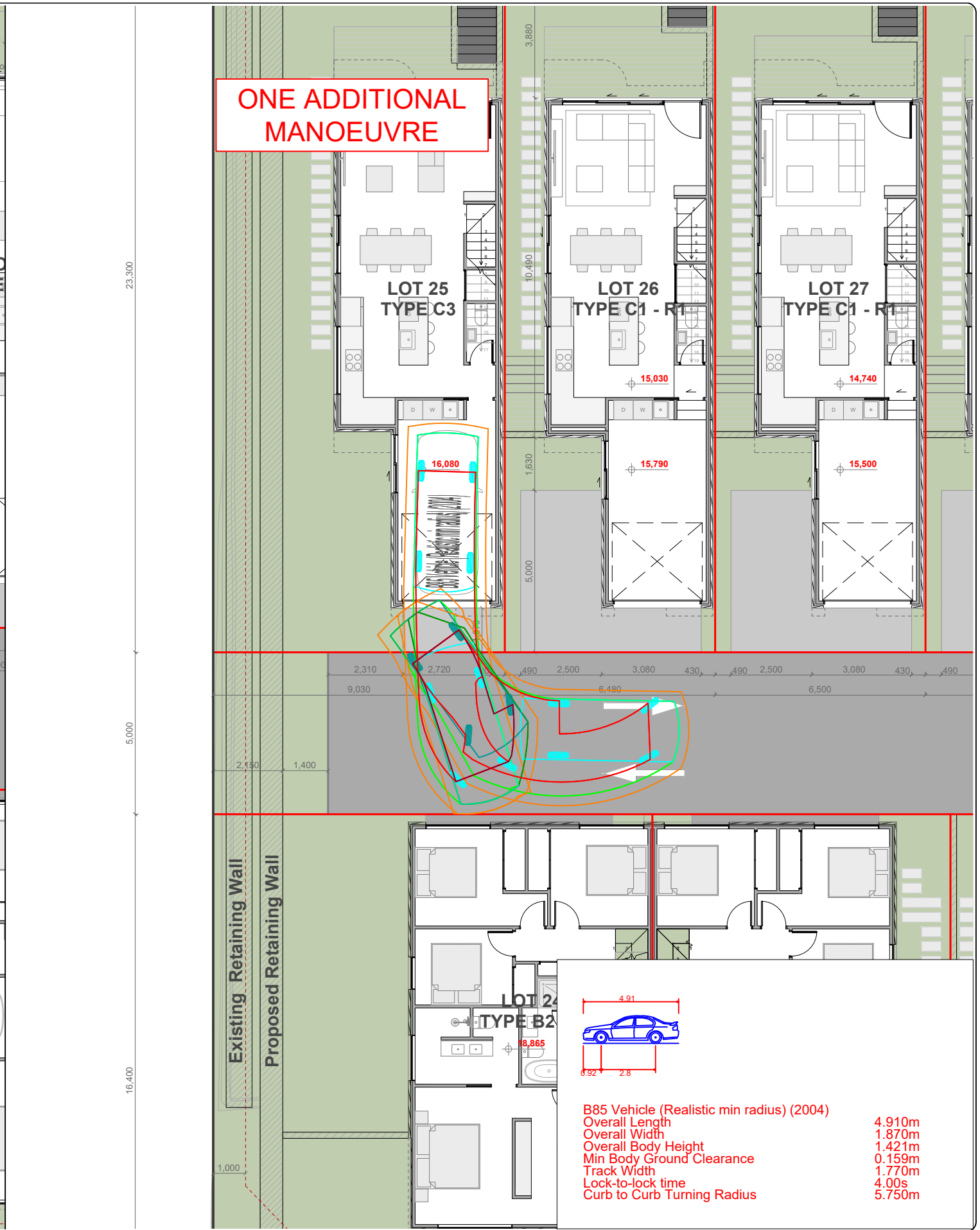
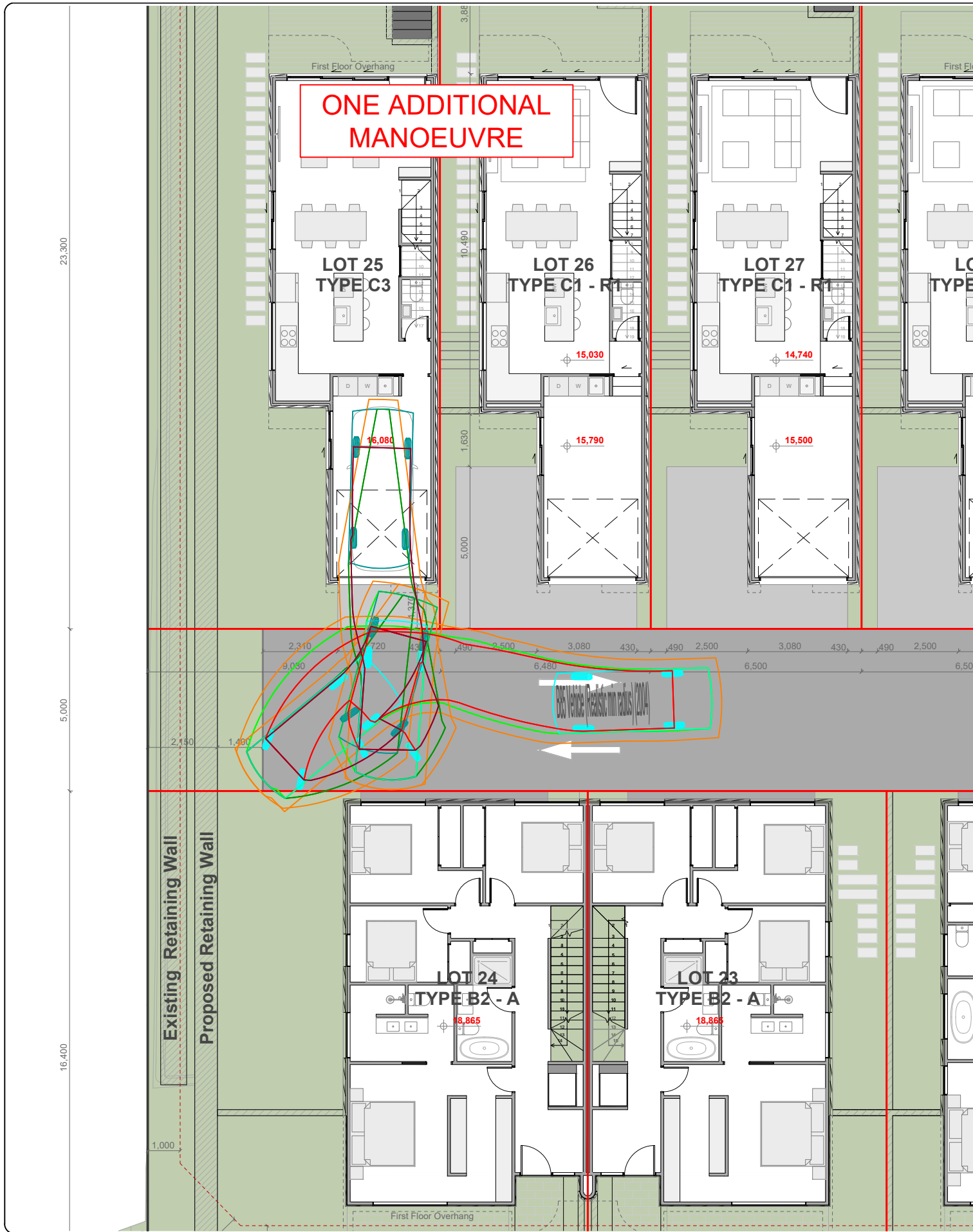
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Project Title
 Proposed Development
 3 Pigeon Mountain Road, Half Moon Bay

Sheet Title
 Vehicle Tracking - B85 Design Vehicle

Designed	IY	Drawn	IY	Project No - (Sheet No)	Scales	1:150 (A3)
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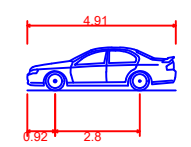
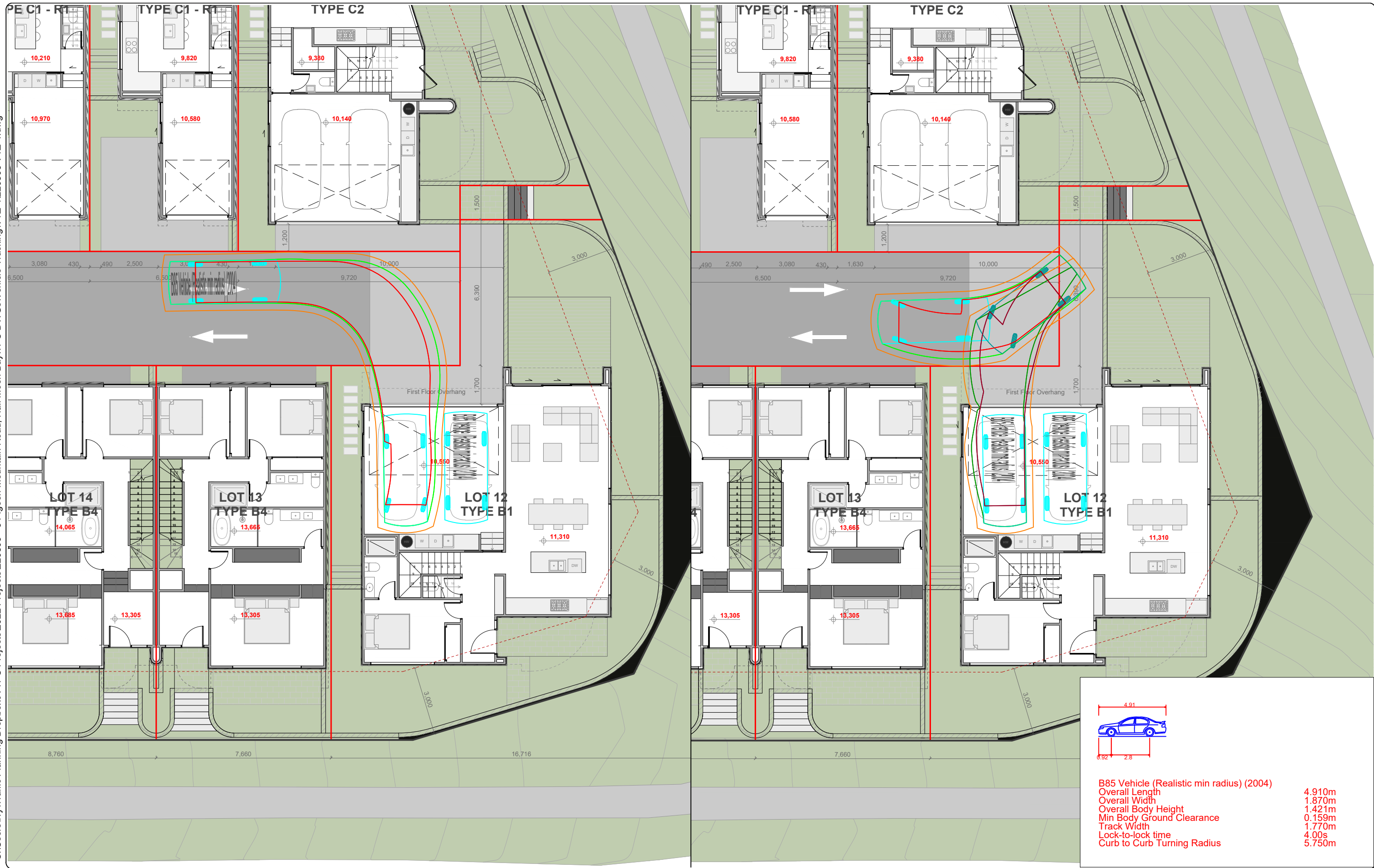
Project Title Proposed Development
 3 Pigeon Mountain Road, Half Moon Bay

Sheet Title Vehicle Tracking - B85 Design Vehicle

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B85 Vehicle (Realistic min radius) (2004)
 Overall Length 4.910m
 Overall Width 1.870m
 Overall Body Height 1.421m
 Min Body Ground Clearance 0.159m
 Track Width 1.770m
 Lock-to-lock time 4.00s
 Curb to Curb Turning Radius 5.750m

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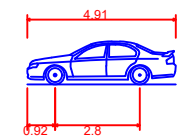
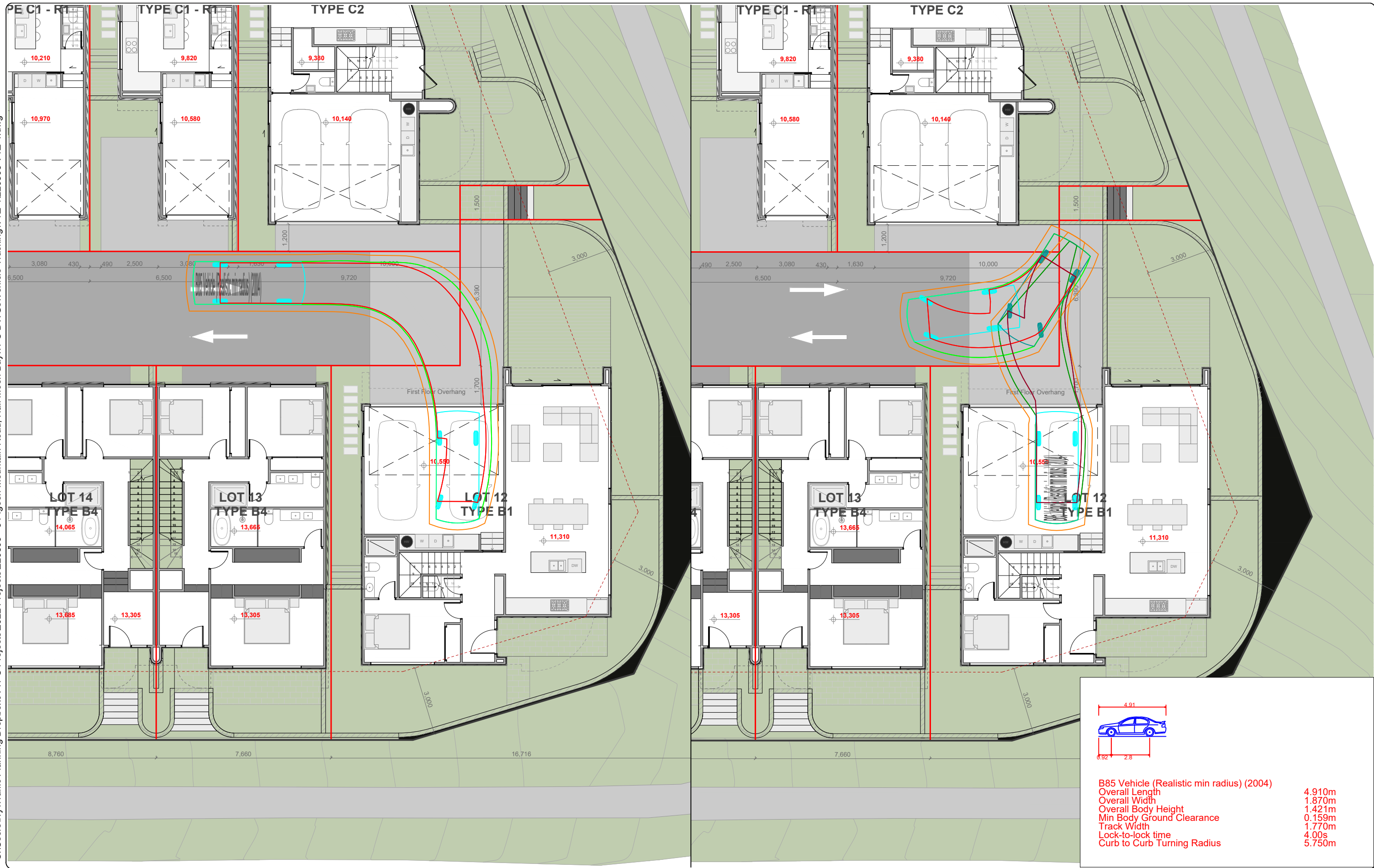
Project Title
 Proposed Development
 3 Pigeon Mountain Road, Half Moon Bay

Sheet Title
 Vehicle Tracking - B85 Design Vehicle

Designed	IY	Drawn	IY	Project No - (Sheet No)	Scales	1:150 (A3)
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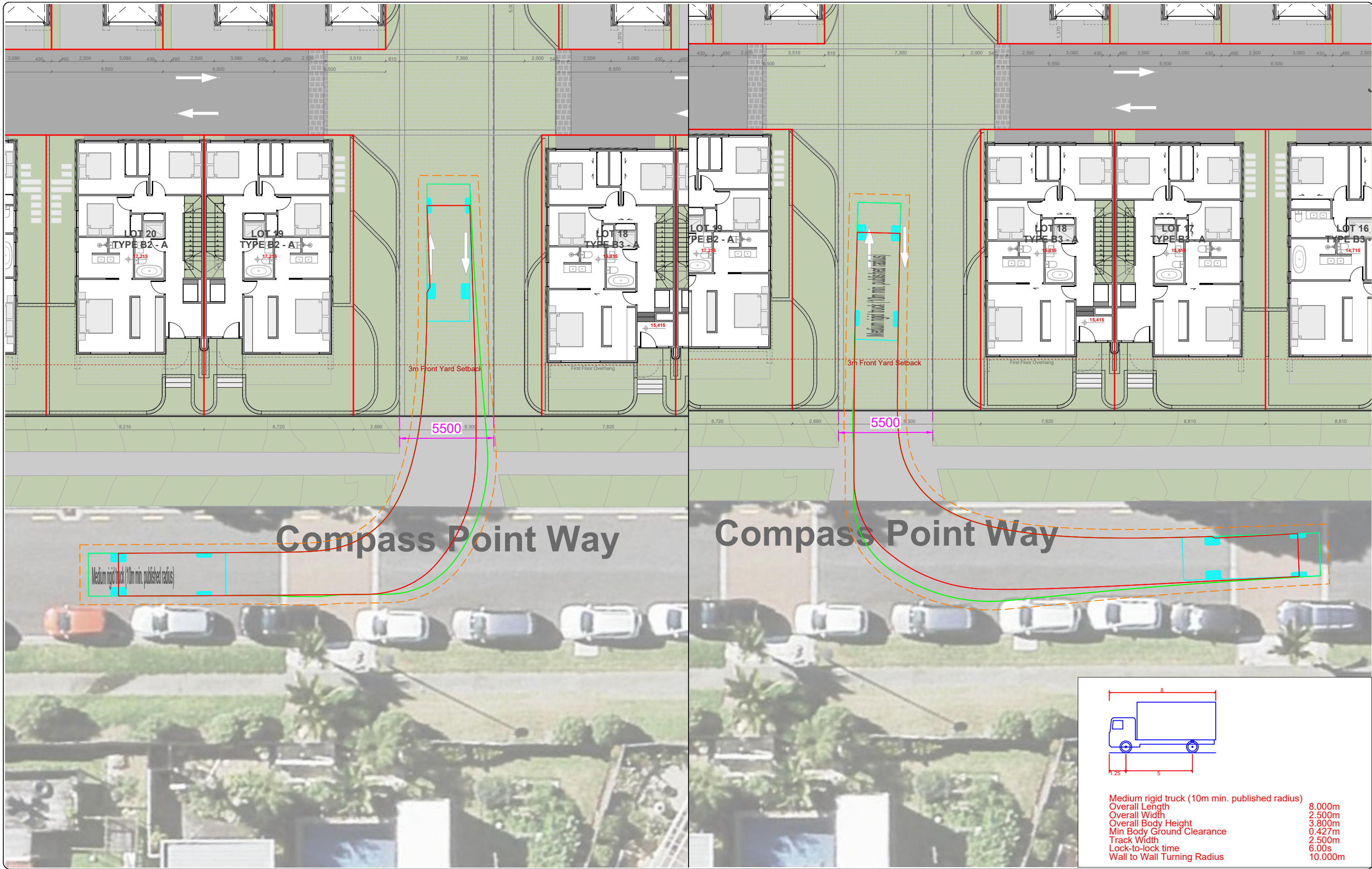
Project Title Proposed Development
 3 Pigeon Mountain Road, Half Moon Bay

Sheet Title Vehicle Tracking - B85 Design Vehicle

Designed	IY	Drawn	IY	Project No - (Sheet No)	Scales	1:150 (A3)
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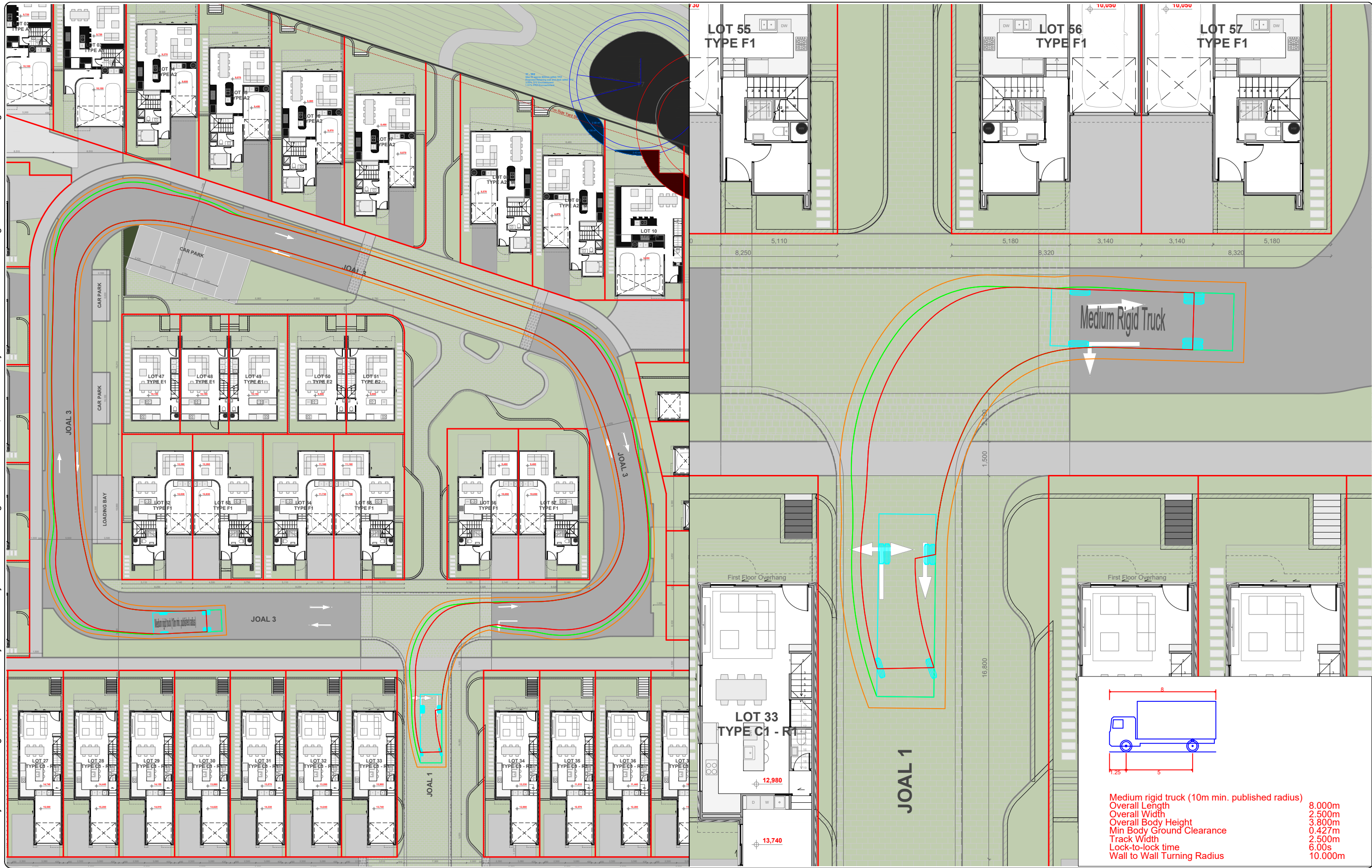
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Project Title
 Proposed Development
 3 Pigeon Mountain Road, Half Moon Bay

Sheet Title
 Vehicle Tracking - Medium Rigid Truck

Designed	IY	Drawn	IY	Project No - (Sheet No)	Scales	1:200 (A3)
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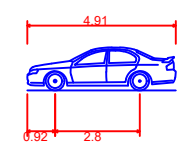
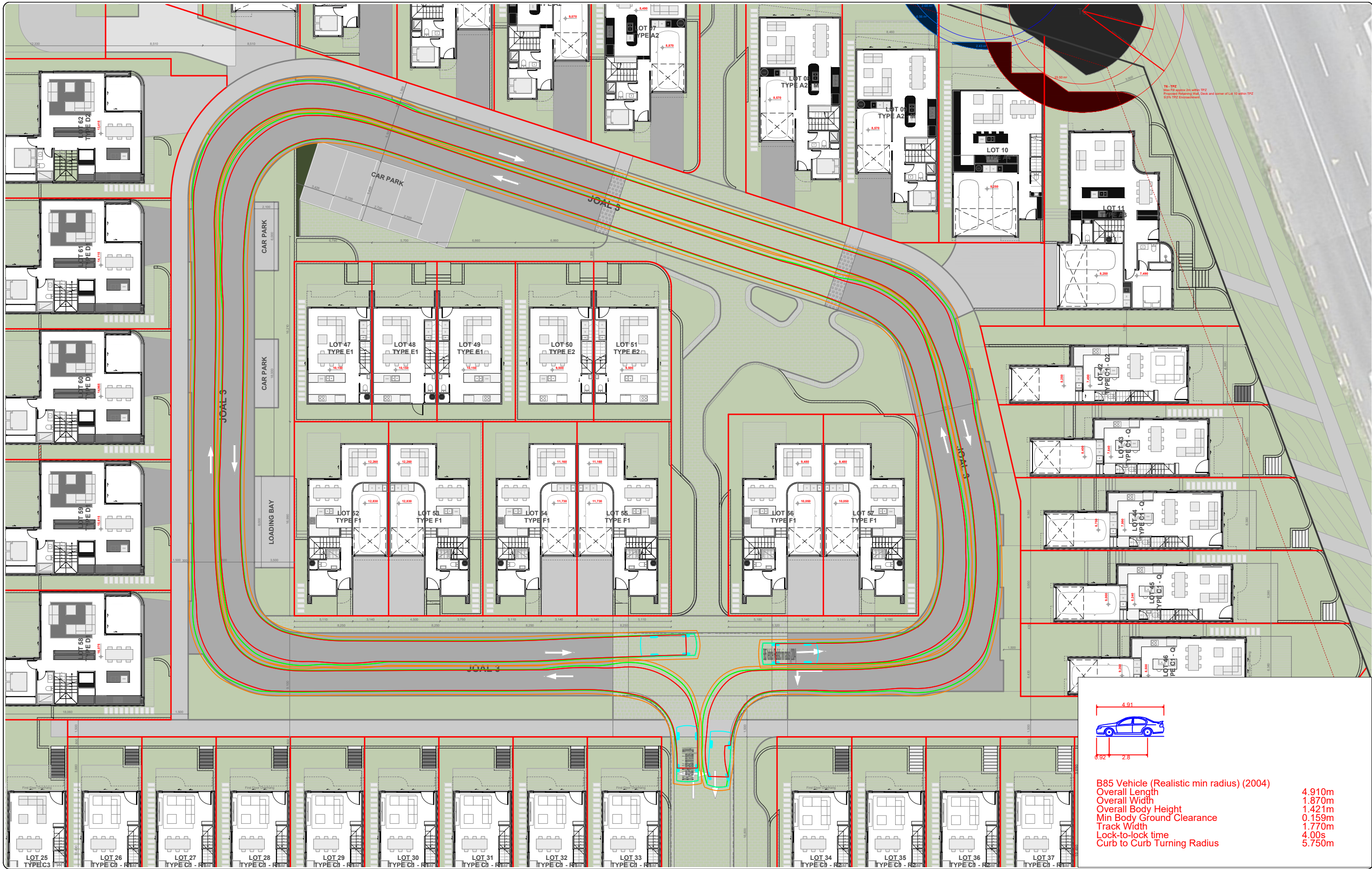
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Project Title
Proposed Development
 3 Pigeon Mountain Road, Half Moon Bay

Sheet Title
Vehicle Tracking - Medium Rigid Truck

Designed	IY	Drawn	IY	Project No - (Sheet No)	Scales	1:150 (A3)
Checked	TK	Approved	TL	220803 VTZ-4 - (25)	Date	19.03.26

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Rev	Revisions	By	Date

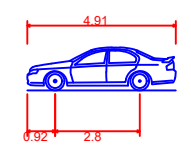
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Project Title Proposed Development
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Sheet Title Vehicle Tracking - B85 Design Vehicle

Designed IY	Drawn IY	Project No - (Sheet No)	Scales 1:300 (A3)
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Project Title Proposed Development
 3 Pigeon Mountain Road, Half Moon Bay

Sheet Title Vehicle Tracking - B85 Design Vehicle

Designed	IY	Drawn	IY	Project No - (Sheet No)	Scales	1:150 (A3)
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Project Title
 Proposed Development
 3 Pigeon Mountain Road, Half Moon Bay

Sheet Title
 Vehicle Tracking - B85 Design Vehicle

Designed	IY	Drawn	IY	Project No - (Sheet No)	Scales
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