



Response to Further Information Request - Item no. 2 (Ref. SD22A/0066)

Date:

26th August 2022

Distribution:

Client

**SDCC Planning
Department**

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ILTP Project Code & Reference: **LucanPames**

1 INTRODUCTION

1.1 Purpose of Report

1.1.1 ILTP Consulting were requested to prepare a response a Request for Further Information (RFI) in respect to a proposed small scale residential infill development on Dispensary Lane, Lucan, (Ref: SD22A/0066).

1.1.2 The development consists of three residential dwellings, on the site of an existing residential development on Dispensary Lane. The proposed development is located in Lucan Village and is well served by existing bus services in the area. The proposal is for an infill development in an established residential area that will also result in a densification of development in an urban setting. In principle the proposed development is fully consistent with good planning practice and supported by policy at local and national levels.

1.2 Site Assessment

1.2.1 ILTP undertook a site visit on 12th July 2022 to familiarise itself with the area and with the prevailing traffic and movement conditions in the area. Dispensary Lane is accessed off Main Street, Lucan and in traffic terms is now a cul-de-sac. The access route therefore only serves Dispensary Lane and the Lucan Health centre which is located immediately east of the proposed development site.

1.2.2 Dispensary Lane, while closed to through traffic, is open to through movement of pedestrians and cyclists. The site is immediately adjacent to Lucan Road, where there are existing bus stops located. Access to Lucan Road is provided by steps and ramps immediately opposite the proposed development.

1.2.3 In terms of accessibility the site is excellently located, close to the urban centre and associated services, and is well served by walk, cycle and public transport routes.

- 1.2.4 In respect to visibility splays it is noted that this is an infill development on a cul-de-sac, which terminates approximately 40m to the east of the eastern end of the proposed development. There is only a single access point off Dispensary Lane immediately to the east of the proposed development. This access is located immediately east of the proposed development and serves Lucan Health Centre. Therefore traffic movement passing the proposed development is minimal. Also due the location of only one access on this section of the Cul-de-Sac traffic speeds passing the proposed development will be exceptionally low.
- 1.2.5 The existing access to the proposed development lands is shown in Figure 1.1. There are also double yellow lines on both sides of Dispensary Lane at this location.
- 1.2.6 Views of Dispensary Lane in both directions in the vicinity of the proposed development site are shown in Figures 1.2 and 1.3.



Figure1.1: Existing Access to Development Lands

- 1.2.7 Figure 1.2 shows the cul-de-sac on Dispensary Lane to the east of the proposed development. This shows the closure to through traffic located to the east of the Lucan Health Centre. There are double yellow lines located to the north of the road. There is some uncontrolled car parking located on the opposite side of the road in this location.

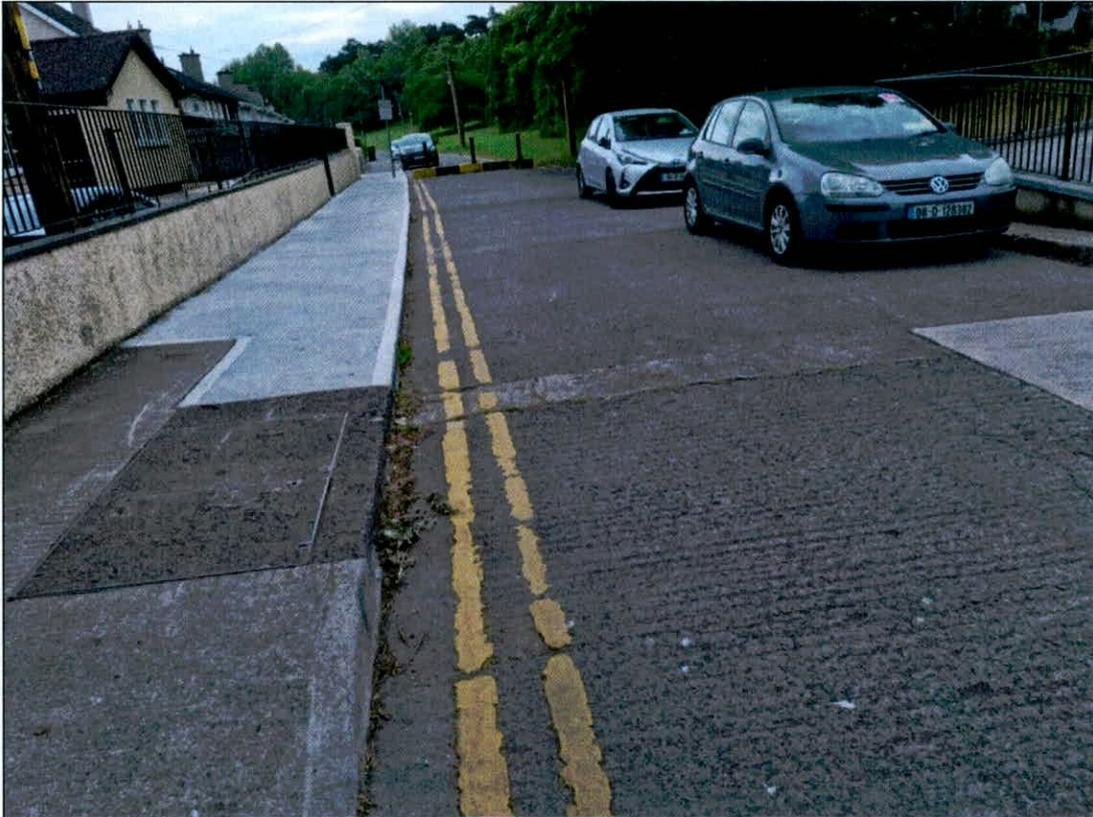


Figure1.2: View of Cul-de-Sac Beyond Development

- 1.2.8 Approaching from the east there is an existing tree on the footway in front to the Lucan Health Centre. This also has resulted in some damage to the existing footway locally as illustrated in Figure 1.3. The boundary Pier also protrudes into the existing footway, but not to the same extent as the tree.



Figure1.3: View of Cul-de-Sac showing existing Tree and Boundary Pier

1.3 RFI Items Addressed in this Report

1.3.1 ILTP were specifically requested to address Item 2 of the RFI which states:

“The applicant is requested to provide:

- 1. A visibility splay drawing demonstrating visibility in both directions.*
- 2. An AutoTRAK drawing demonstrating access and egress to site.*
- 3. A revised drawing showing 6m clearance from building line to public footpath.”*

1.4 Response to RFI Item 2. 1

- 1.4.1 Forward Visibility, also referred to as Forward Sight Distance (FSD), is the distance along the street ahead which a driver of a vehicle can see. The results of research carried out by Transport Research Laboratory UK (TRL) for the UK Manual for Streets (2007) found that reducing forward visibility is one of the most effective measures used to increase driver caution and to reduce speeds. The minimum level of forward visibility required along a street for a driver to stop safely, should an object enter its path, is based on the Stopping Sight Distances (SSD). The SSD has 3 constituent parts:
- Perception Distance: The distance travelled before the driver perceives a hazard.
 - Reaction Distance: The distance travelled following the perception of a hazard until the driver applies the brakes.
 - Braking Distance: The distance travelled until the vehicle decelerates to a halt.
- 1.4.2 The perception and reaction distances are generally taken as a single parameter based on a combined perception and reaction time.
- 1.4.3 Visibility splays are included at junctions to provide sight lines along the intersected street to ensure that drivers have sufficient reaction time should a vehicle enter their path. Visibility splays are applied to priority junctions where drivers must use their own judgement as to when it is safe to enter the junction. Junction visibility splays are composed of two elements: the X distance and the Y distance.
- The X distance is the distance along the minor arm from which visibility is measured. It is normally measured from the continuation of the line of the nearside edge of the major arm, including all hard strips or shoulders.
 - The Y distance is the distance a driver exiting from the minor road can see to the left and right along the major arm. It is normally measured from the nearside kerb or edge of roadway where no kerb is provided.
- 1.4.4 The procedure for checking visibility splays at junctions as set out in DMURS is reproduced as Figure 1.4. An additional check is made by drawing an additional sight line tangential to the kerb, or edge of roadway, to ensure that an approaching vehicle is visible over the entire Y distance.
- 1.4.5 For this reason, priority junctions in urban areas should be designed as Stop junctions, and a maximum X distance of 2.4 metres should be used. In difficult circumstances this may be reduced to 2.0 metres where vehicle speeds are slow and flows on the minor arm are low.
- 1.4.6 However, the use of a 2.0 metre X distance may result in some vehicles slightly protruding beyond the major carriageway edge and may result in drivers tending to nose out cautiously into traffic. This however is common for single accesses in urban areas.
- 1.4.7 The Y distance along the visibility splay should correspond to the SSD for the design speed of the major arm, while also making adjustments for those streets which are frequented by larger vehicles.
- 1.4.8 In general, junction visibility splays should be kept clear of obstructions, however, objects that would not be large enough to wholly obscure a vehicle, pedestrian or cyclist may be acceptable providing their impact on the overall visibility envelope is not significant.
- 1.4.9 Slim objects such as signs, public lighting columns and street trees may be provided, but designers should be aware of their cumulative impact.

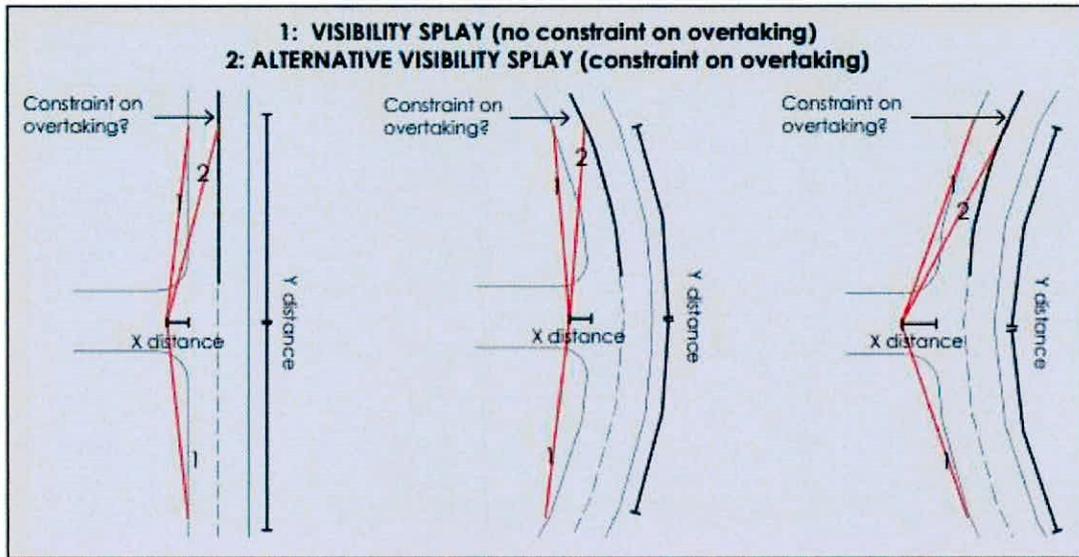


Figure 1.4: DMURS Visibility Splay Standards

1.4.10 The sightlines were measured in accordance with DMURS methodology.

1.4.11 The required sightlines are dependent on the main road/street speeds and these are set out in Figure 1.5.

SSD STANDARDS			
Design Speed (km/h)	SSD Standard (metres)	Design Speed (km/h)	SSD Standard (metres)
10	7	10	8
20	14	20	15
30	23	30	24
40	33	40	36
50	45	50	49
60	59	60	65
Forward Visibility		Forward Visibility on Bus Routes	

Figure 1.5: DMURS SSD Standards Reflective of Travel Speeds

1.4.12 Based on the site assessments undertaken it is clear that the traffic speed approaching from the right of the car parking spaces will be higher than those approaching from the left due to the cul-de-sac arrangement. In terms of traffic approaching from the right ILTP have use a 30kph approach speed to car park space number 1, which is 23m as set out in DMURS.

1.4.13 Traffic exiting the Lucan Medical Centre to the east of the proposed development will be coming from a stop position and will therefore be travelling at speeds lower than 10kph.

1.4.14 The sightlines required to the left of car parking spaces are only 7m due to the cul-de-sac and location of the sole exit from the Lucan health centre immediately to the east. The required sightlines are shown in Figure 1.6 and also attached as Appendix A.



Figure 1.6: Recommended Sightlines to Right and Left of Car Parking Spaces (Source of Background Mapping: PAMES)

- 1.4.15 As set out earlier there is an existing tree on the footpath and a boundary pier to the east of car parking space no:6. However, the sightline is not interfered with by either the tree or pier as illustrated in Figure 1.6.
- 1.4.16 ILTP are satisfied that the proposed sightlines as set out in Figure 1.6 are appropriate for the proposed location of the development and in accordance with DMRUS.
- 1.4.17 It the planning authority so wishes they could remove the tree as it's on the public footway. This will result in a widening of the footway at this point, which is beyond the site boundary. It would also remove the need for footway repairs due to root expansion in this area.

1.5 Response to RFI Item 2.2

1.5.1 ILTP have undertaken an assessment of access and egress to the proposed car parking for the development using the AutoTURN software. This was undertaken for both of the end car parking spaces.



Figure 1.8: AutoTURN Assessment

1.5.2 The results of the AutoTURN assessment demonstrates that cars can readily access and egress the proposed car parking spaces off Dispensary Lane.

1.6 Response to RFI Item 2.3

1.6.1 ILTP advised that the applicant provide a 2.0m wide footway along the street frontage and to provide a set-back of 6.0m from the back edge of the footway to the dwellings to facilitate 2 no. car parking spaces for each residential unit.



1.7 Summary and Conclusions

- 1.7.1 ILTP have undertaken a detailed on-site appraisal of the proposed development. Given the location of the proposed development the appropriate DMURS sightlines and turning movement to and from the proposed car parking can be achieved. In addition the applicant is proposing to include a 2.0m wide footway and a 6.0m setback of the development as requested.
- 1.7.2 ILTP see no traffic or road safety reason for not permitting the proposed development. Indeed the proposed development would provide an appropriate densification of development in the centre of an urban area, which is supported by planning policy at local and national levels.

LucanPames



A APPENDIX A

A.1 Sightline and AutoTURN Assessment Drawings

Recommended Sightlines

Telecommunication Complex

Health Centre

Lucan Methodist Church



23m Visibility Splay (30kph)

2.0m 'X' Distance

7m Visibility Splay (10kph)

Bollard Location



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Notes

Legend

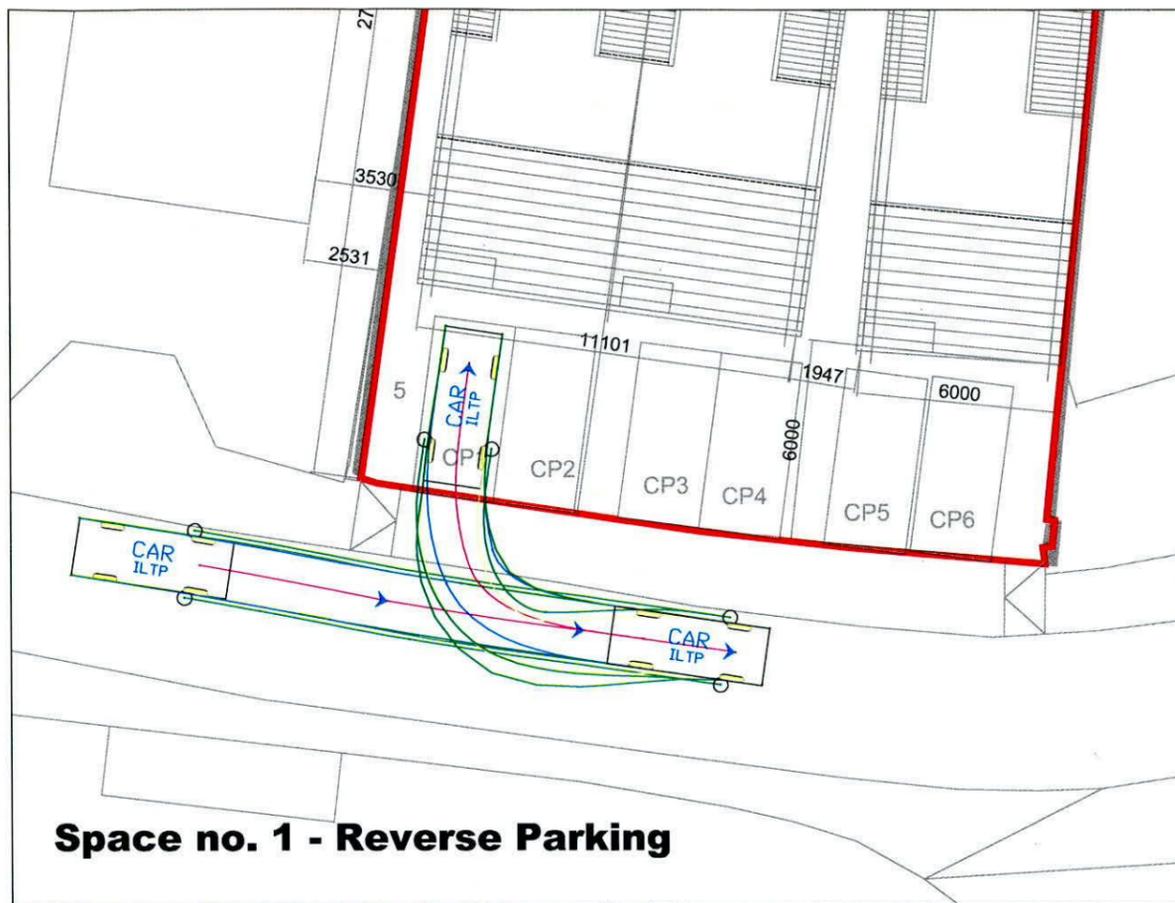


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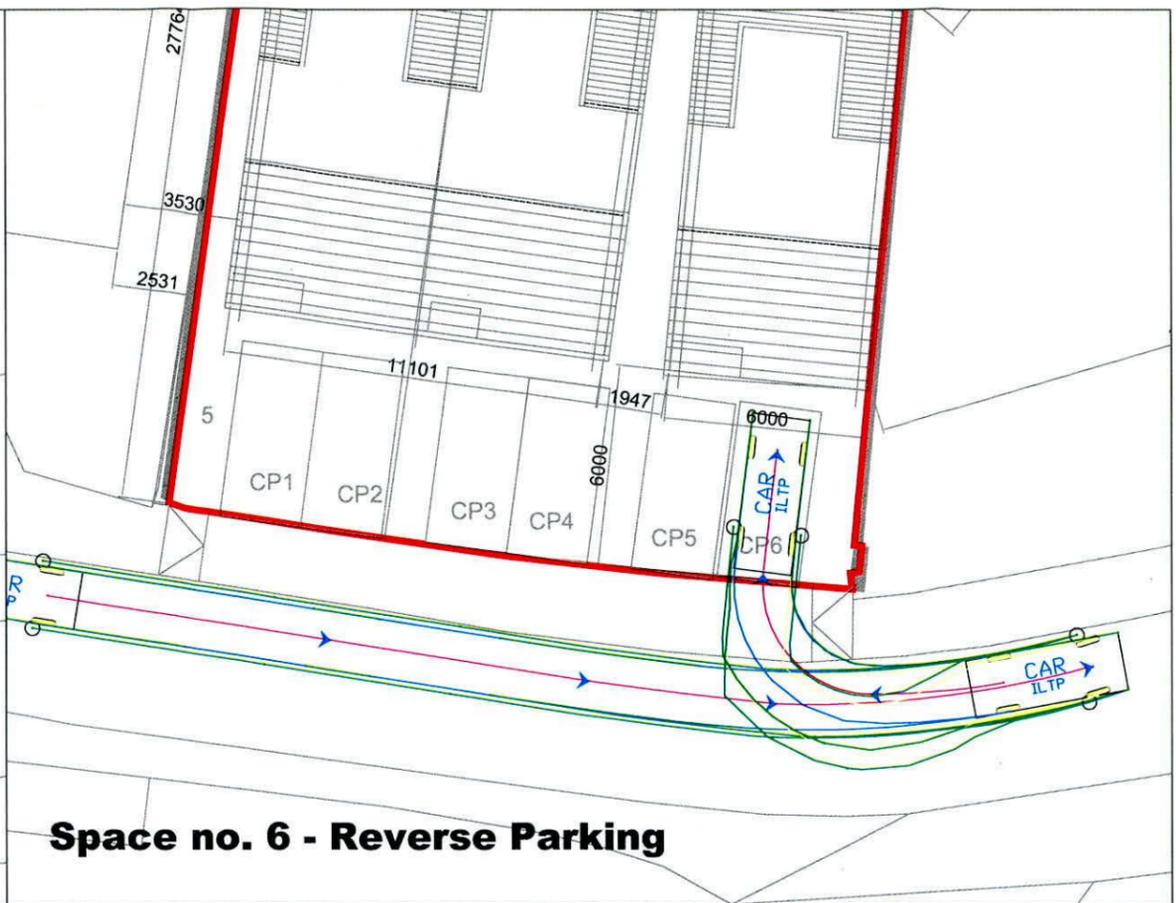
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 as per DMURS (2.0m
 'X' Distance)**

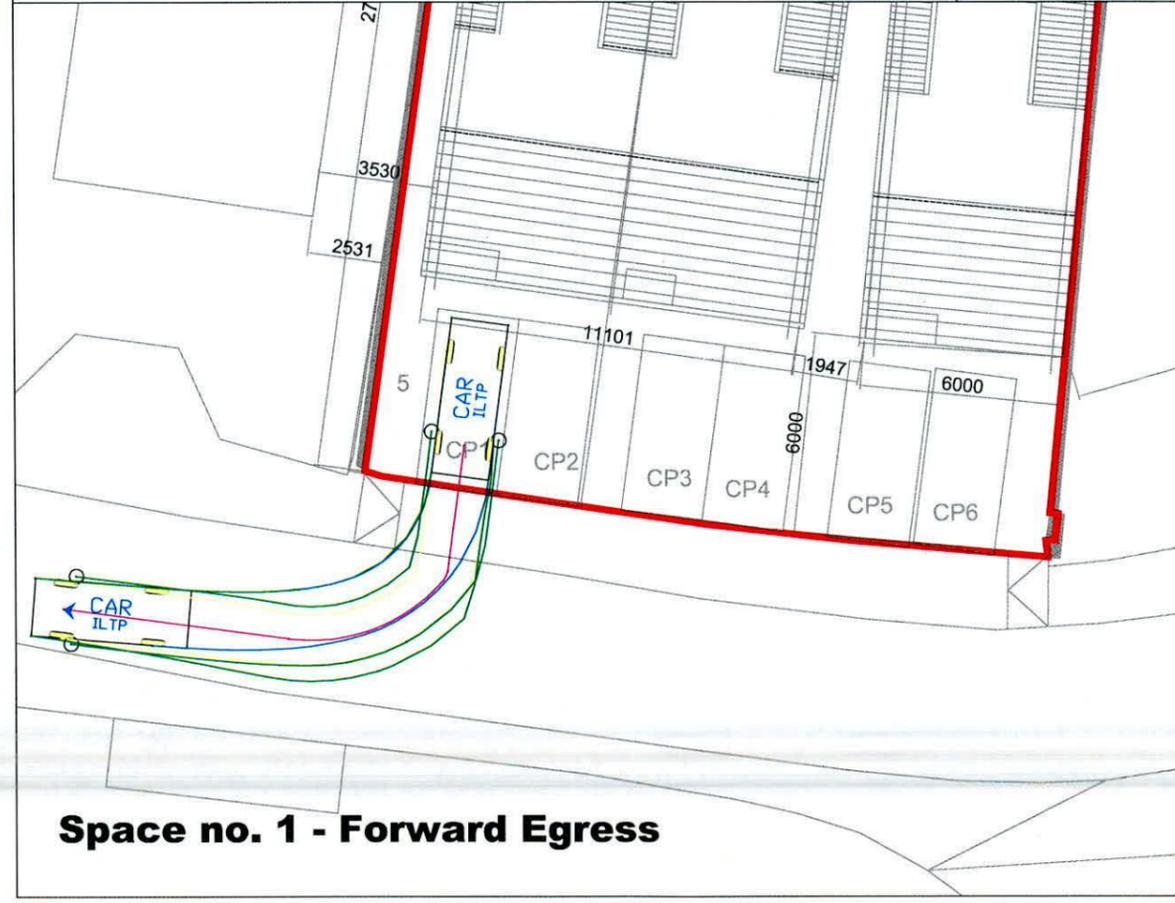
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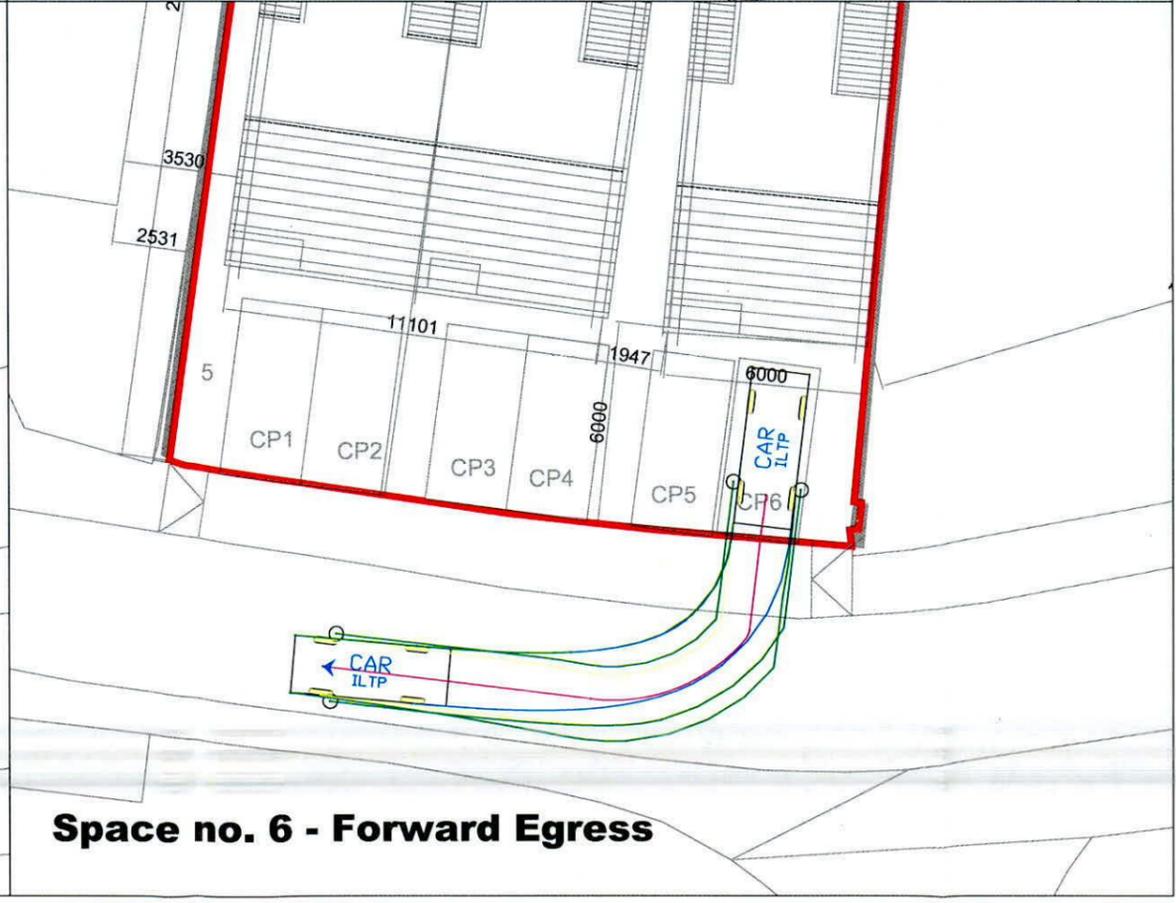
Space no. 1 - Reverse Parking



Space no. 6 - Reverse Parking



Space no. 1 - Forward Egress



Space no. 6 - Forward Egress



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Notes



Legend



Drawing Revision Detail

Rev	Detail's
001	Drawing Created

Drawing Title:

**AutoTURN
 Assessment - Car**

Project Ref: LucanPames	Drawing No: 001(B)
Rev: 001	Date: 09/08/2022
Drawn By: BW	Checked By: COS
Approved By: COS	Scale: 1 : 100 @ A1 1 : 200 @ A3