



**Proposed Residential
Development At Chapel Gate,
Laindon Link, Basildon**

Delivery and Servicing Plan

on behalf of

Sempra Homes Ltd

April 2021

INTERMODAL TRANSPORTATION

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IT2178



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1 INTRODUCTION

- 1.1 Intermodal Transportation Ltd (ITL), an independent Consultancy specialising in highway engineering and transportation planning, have been appointed by Sempra Homes Limited to produce this Delivery and Servicing Plan (DSP) to support a planning application for a residential development, comprising 217 flats and 16 houses, on land to the south of Laindon Link in Basildon, Essex.
- 1.2 As part of the development proposal, the vehicular access arrangements to the site would be via the existing signal controlled four arm junction between Laindon Link, great Knightleys and the access to the site. This DSP has been produced in order to set out how the proposed residential development would be serviced for deliveries and refuse collection when operational. It should be noted that a separate Construction Logistics Plan has been prepared to consider how construction deliveries and activities would be managed.
- 1.3 In producing this plan, representatives of ITL have visited the site and have considered the guidance contained within relevant guidance.
- 1.4 In the light of the above this DSP:
- Demonstrates, through the use of vehicle tracking, that service vehicles can acceptably access the site;
 - Identifies the number of service vehicles likely to access the site on a daily basis; and
 - Identifies the characteristics of the service vehicles likely to visit the site.



2 SITE LOCATION AND LOCAL ROAD NETWORK

Site Location

- 2.1 The site is located within the town of Basildon in the administrative area of Basildon Council. The entire site covers an area of 2.38 hectares and is located adjacent to the south-west corner of the centre of Basildon, which lies on the opposite (eastern) side of the important A176 Nether Mayne.
- 2.2 Drawing IT2178/TA/01 shows the site location in the local and wider context. The site is bounded to the north by Laindon Link and to the east by Nether Mayne. To the south of the site there is the main railway line from Basildon to London Fenchurch Street. To the west, the site narrows and is bounded by small linear area of green public open space separating Laindon Link from the railway line. The Architect's proposed site layout is contained at Appendix A

Local Road Network

- 2.3 Laindon Link, which is part of the B1007 road, runs adjacent to the site's northern boundary on an east to west alignment. It is typically 9.5m wide to the west of the application site but widens along the site frontage to provide two separate carriageways on the approach to the site access junction. Laindon Link is subject to a 40mph speed limit and has street lighting along both sides of the road carriageway. There is a combined footway and a cycleway running along the northern side of the carriageway while a grass verge runs along the south side. Vehicular access to the application site would retain the existing access that was previously used to serve the car park. The access forms a four arm signal controlled junction with Laindon Link and Great Knightleys
- 2.4 To the northeast of the site, Laindon Link forms a roundabout junction with the A176 Nether Mayne and Roundacre (called Southernhay to the east of the access to Basildon railway station). The A176, is subject to a 30mph speed limit and is approximately 10m wide with four traffic lanes under the adjacent railway bridge.
- 2.5 Roundacre / Southernhay is subject to a 30mph speed limit and runs in an easterly direction from the roundabout, passing around the south side of Basildon town centre and turning northwards at the eastern edge of the town centre to connect with Broad Mayne, which runs east to west along the north side of the town centre.



- 2.6 The A176 runs in a north south alignment through Basildon and it joins the A13 (trunk road) Stanford le Hope Bypass at its southern end. The southern junction consists a grade separated interchange with the A176, High Road and B1464 meeting at a 'dumbbell' junction above the A13 with roundabouts to the north and south side of the main carriageway and an overbridge joining the two roundabouts.
- 2.7 To the north side of Basildon, and approximately 2km north of the development site, the A176 joins the A127 at another grade separated junction. The A127 and A13 join the M25 motorway at junctions 29 and 30 respectively, north of the Dartford crossing. Hence the site is well connected to the wider strategic road network.
- 2.8 All vehicles must enter and leave the site at the signal controlled junction from Laindon Link. Swept path analyses has been undertaken at the access junction to confirm that the largest vehicles regularly needing to access the site are able to do so comfortably. The swept paths are contained at Appendix.B.



3 SWEPT PATH ASSESSMENT

- 3.1 The proposed development is entirely residential comprising 16 houses and 217 flats situated in five blocks. It is therefore expected that the largest service vehicles that visit the site on a regular basis would be Refuse Collection Vehicles (RCV) visiting the site once per week to collect refuse and recycling waste. In addition there would be occasional removals HGVs and frequent deliveries would be expected to be made by couriers and parcel delivery firms using large panel vans up to about 7.2m in length. All vehicles would access and egress the site via the signal controlled junction from Laindon Link. The proposed site layout plan is contained at Appendix A, showing the access junction and internal road system. The route for service vehicles to access the site from the strategic highway network is shown on drawing IT2178/DSP/02.
- 3.2 Swept path sketches demonstrating that the above mentioned design vehicles would be able to access the site in a forward gear, turn within the site and then exit the site in a forward gear are contained at Appendix B of this document.
- 3.3 Each Block of flats would be provided with a ground floor bin store for residents to dispose of their refuse and recycling. The RCV would manoeuvre to the position relative to each bin store and the bins would be wheeled to the RCV. The relevant bins would be moved to the RCV for disposal and then wheeled back into the building. For all blocks the distance from the nearest point that the RCV can reach is small and bins could be moved out whilst the RCV is waiting.
- 3.4 Refuse collection from the houses located at the western end of the site would be by roadside collection, where possible, or residents would be responsible for taking bins to a collection point where the RCV is able to access satisfactorily. Guidance contained within Manual for Streets (MfS) suggests that householders should not be required to transport their bins more than 30m to any collection point and that refuse collection operatives should not be expected to move bins more than 25m to where the RCV can reach. Therefore the site layout has been configured to ensure that the RCV can reach a point no further than 55m from each house. In the case of blocks of flats, more than one bin would be collected on each visit and therefore the distance over which the bins must be moved, from the bin store to the RCV, has been minimised as much as possible.
- 3.5 Smaller delivery vehicles would be able to access closer to individual houses and to each flat block entrance lobby, where parcels, letters and other individual small deliveries would be made.



- 3.6 Occasional visits by removals vans and HGVs would be expected, and these could access the points reached by the RCV for larger vehicles or to the entrance lobbies of the flat blocks for smaller vans. Such vehicle movements are relatively infrequent and professional house movers, for example, choose vehicle size according to location and type of accommodation. For flats this would generally be a smaller vehicle than for a house.



4 VEHICLE MOVEMENTS

- 4.1 It is anticipated that one visit per week would occur to collect refuse and recycling waste from the site. The RCV vehicle has been tracked using vehicle tracking software and the Architects' proposed site layout plan. The RCV could enter the site and stop adjacent to Block B, where the refuse store is located on the western side of the building. The distance from the refuse store to the kerbside is 10m, which is within the reasonable range for this operation. It is then expected that the vehicle would turn left into the first residential road and left again to reach Block E by a short reverse manoeuvre. The RCV would be able to reach a point very close to bin store for Block E, with a short (7m) distance to the vehicle.
- 4.2 It is proposed that the RCV would then drive back out and turn left at the first junction to then reverse into the access for the bin store at Block D. The distance from the bin store of Block D to the RCV waiting location is 14m.
- 4.3 From the collection point at Block D the RCV would move forward to the kerbside adjacent to Block C, where the distance from the bin store to the kerb is 6m. From this point the RCV would move forward to Block A, where the distance from the bin store to the road way is 12m and the site layout includes a space between car parking bays to allow the bins to be moved to the vehicle. From Block A the RCV would be able to move forwards to the housing blocks at the western end of the site.
- 4.4 The RCV is able to use the central court parking access to make a turn and allow collection of all bins for the house units. Householders would need to move bins to a collection point in some cases with the most distant being 25m.
- 4.5 With a significant volume of retail purchases now made over the internet the volume of delivery van traffic to residential properties has risen sharply in recent times. It is difficult to quantify how many van movements this may entail for the proposed development but it is likely to involve at least 5 to 10 courier / parcel deliveries per day in addition to the daily postal drop. Delivery vans would be able to access the residential parking area and deliver to the entrance lobby of the five blocks of flats. Delivery vans would also be able to access the parking areas proposed for the houses located on the western end of the site and these movements are shown in the vehicle tracking diagrams provided at Appendix B
- 4.6 A small number of larger delivery vehicles may be expected on an ad hoc basis delivering larger household items such as furniture and white goods. These vehicles would be able to access to the same areas that the RCV can reach within the site and



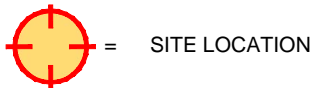
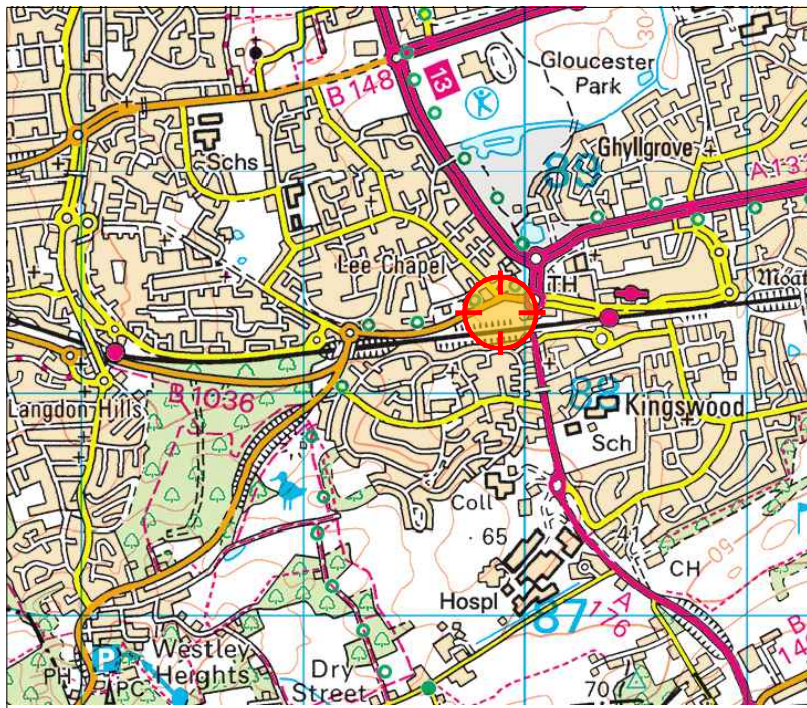
may involve some longer walking distances to reach individual properties. Such deliveries are usually equipped with wheeled apparatus to assist in moving large items.



5 CONCLUSIONS

- 5.1 Intermodal Transportation Ltd (ITL), an independent consultancy specialising in highway engineering and transportation planning, have been appointed by Sempra Group to produce this Delivery and Servicing Plan (DSP). It describes the delivery and servicing arrangements for the proposed residential development of Chapel Gate, off Laindon Link to the south-east of Basildon Town Centre.
- 5.2 This DSP has reviewed the likely size and number of service vehicle trips that would occur to the proposed new development located on the site. The level of servicing requirement for the proposal has been quantified and the vehicle movements to / from the site have been tracked. Daily trips by delivery vans and postal deliveries would be expected and the largest vehicles to visit the site regularly would be the Refuse Collection Vehicle (RCV) making weekly collections of recyclable materials and waste.
- 5.3 In addition, this DSP has demonstrated, with reference to AutoTrack swept path analyses, that the expected service vehicles that would visit the site on a regular basis would be able to access the site in a forward gear to reach all areas of the site as required, turn within the site and then exit the site in a forward gear,.
- 5.4 Service vehicles would all arrive and depart the site via the existing signal controlled junction with Laindon Link and Great Knightleys.
- 5.5 This DSP demonstrates that the servicing requirement for the proposed residential development would not cause significant disruption to the usual pattern of traffic on the local road network. All deliveries and refuse collection would be able to take place on the site within the internal road network. All vehicles would be able to access the site, turn around and exit the site in forward gear. It is concluded that there should be no reasons relating to site servicing why the proposed development should be prevented at the application site and should therefore be considered as acceptable.

DRAWINGS



Drawing Title:
SITE LOCATION IN THE LOCAL AND WIDER CONTEXT

IT Project:
CAR PARK 14, BASILDON

Sheet 1 of 1

Rev	Description	Reviewer	Date
	Client: SEMPRA HOMES LTD		
	Drawn By: MK	Approved By: JB	
	Notes: Dimensions should not be scaled from this drawing. The contents of this drawing are confidential. Should you receive this drawing in error please return it to Intermodal Transportation at the address printed.		Reproduced from Ordnance Survey Superplan Data © Crown copyright (2020) All rights reserved. License No: 100033662

Client:
SEMPRA HOMES LTD

Drawn By:
MK

Approved By:
JB

Drawing No:
IT2178/DSP/01

CAD File:
IT2178_SK_01.dwg

A4

Date:
SEP 2020



Scale:
NTS



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Key	
	Site Location
	HGV Route

Rev	Description	Reviewer	Date
DRAWING TITLE			
SERVICE ROUTE PLAN			
Rev:	-		

IT Project:	CAR PARK 14, BASILDON
Sheet 1 of 1	

Client:	SEMPRA HOMES LTD
A3	

Drawing No:	IT2178/DSP/02	CAD File:	IT2178_SK.dwg
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Date:	MARCH 2021	Scale:	NTS
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Drawn By:	DS	Approved By:	SW
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**Intermodal
TRANSPORTATION**

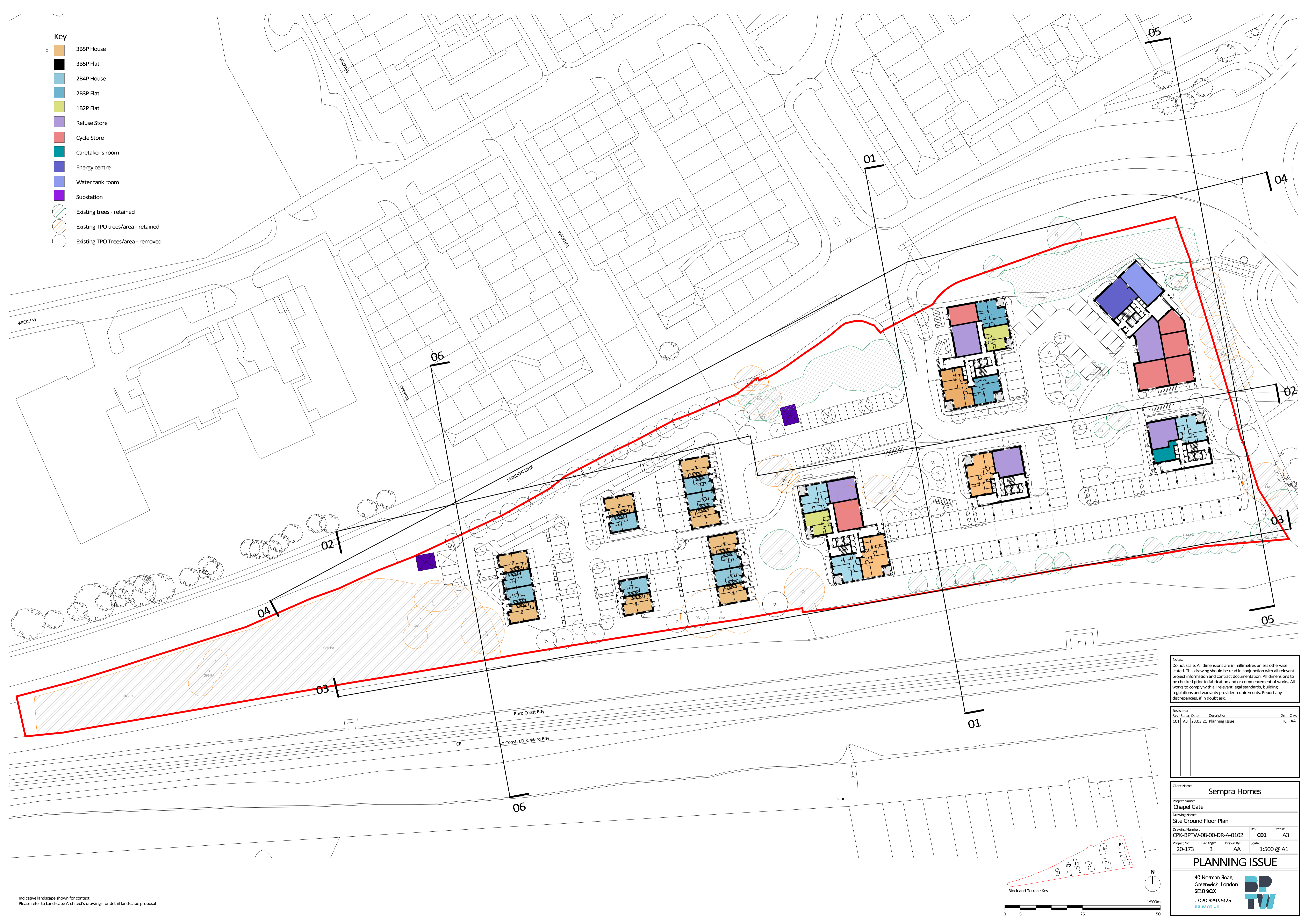
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APPENDIX A

SITE LAYOUT PLAN

- Key**
- 3B5P House
 - 3B5P Flat
 - 2B4P House
 - 2B3P Flat
 - 1B2P Flat
 - Refuse Store
 - Cycle Store
 - Caretaker's room
 - Energy centre
 - Water tank room
 - Substation
 - Existing trees - retained
 - Existing TPO trees/area - retained
 - Existing TPO Trees/area - removed



Indicative landscape shown for context
Please refer to Landscape Architect's drawings for detail landscape proposal

Notes:
Do not scale. All dimensions are in millimetres unless otherwise stated. This drawing should be read in conjunction with all relevant project information and contract documentation. All dimensions to be checked prior to fabrication and or commencement of works. All works to comply with all relevant legal standards, building regulations and warranty provider requirements. Report any discrepancies, if in doubt ask.

Revisions	Rev	Status	Date	Description	Dim	Chkd
CD1	A3		23.03.21	Planning Issue	TC	AA

Client Name: **Sempra Homes**

Project Name: **Chapel Gate**


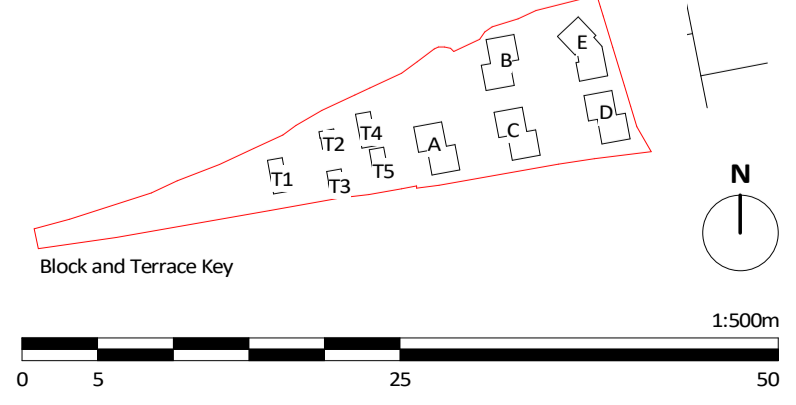
Drawing Name: **Site Ground Floor Plan**

Drawing Number: **CPK-BPTW-08-00-DR-A-0102** Rev: **C01** Status: **A3**

Project No: **20-173** RIBA Stage: **3** Drawn By: **AA** Scale: **1:500 @ A1**

PLANNING ISSUE

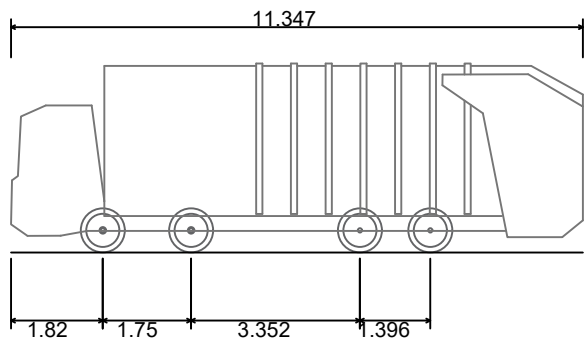
40 Norman Road,
Greenwich, London
SE10 9GX
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APPENDIX B

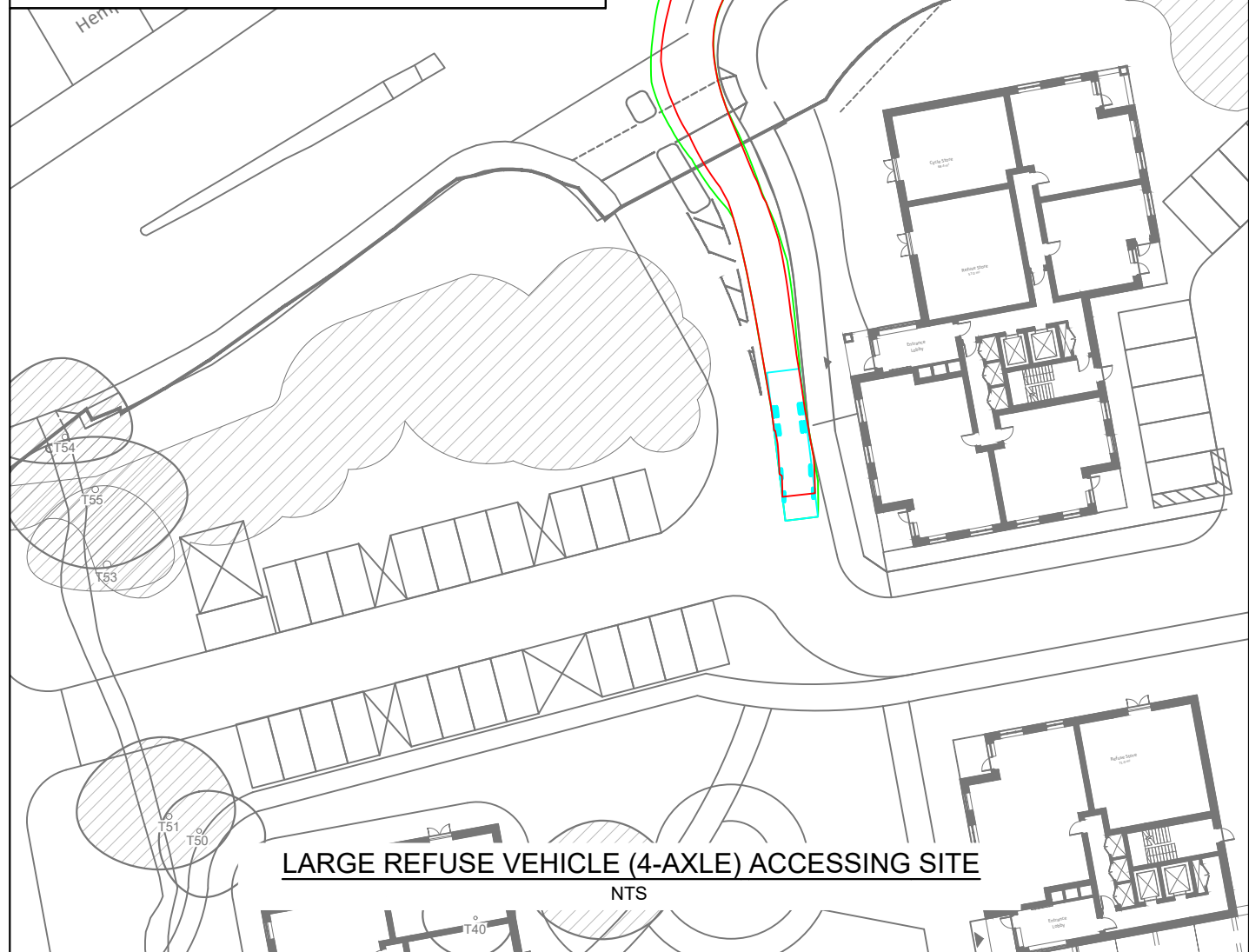
SWEPT PATH SKETCHES

TA-ATR001



Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m



LARGE REFUSE VEHICLE (4-AXLE) ACCESSING SITE

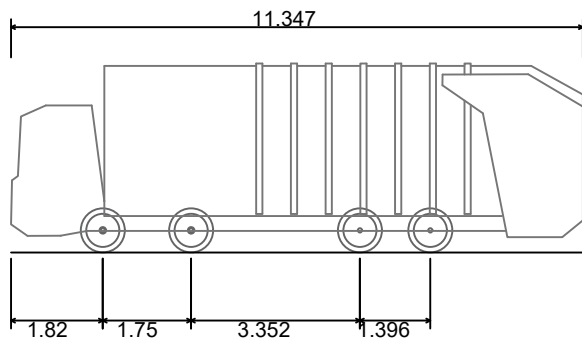
NTS



LARGE REFUSE VEHICLE (4-AXLE) EGRESSING SITE

NTS

TA-ATR002



Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m



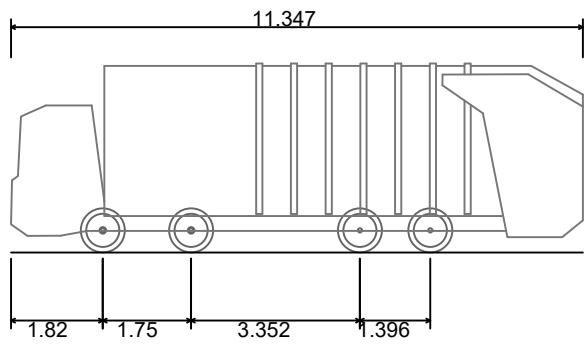
LARGE REFUSE VEHICLE (4-AXLE) EGRESSING BLOCK B AND ACCESSING BLOCK E

NTS

LARGE REFUSE VEHICLE (4-AXLE) EGRESSING BLOCK E AND ACCESSING BLOCK C

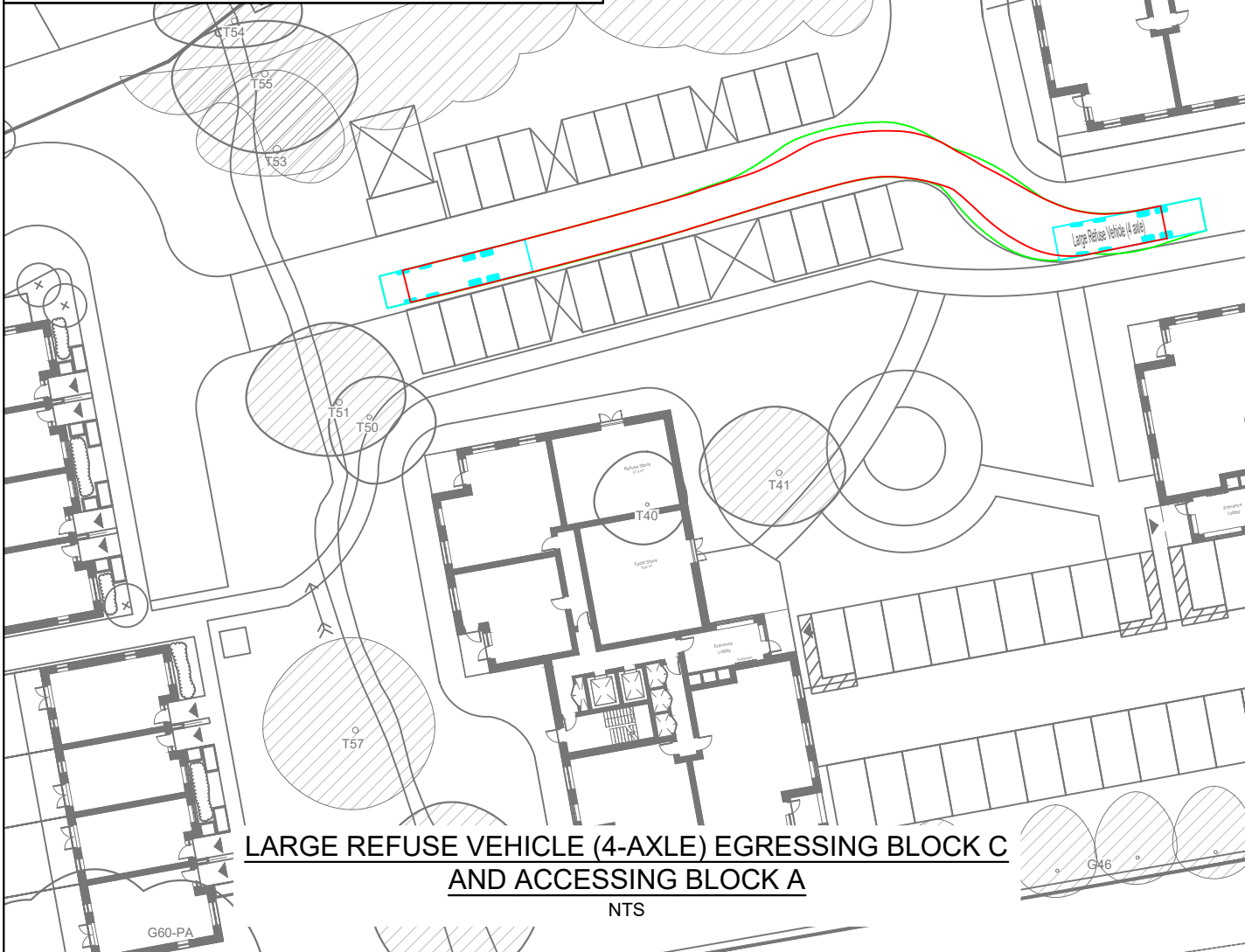
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G44-PA



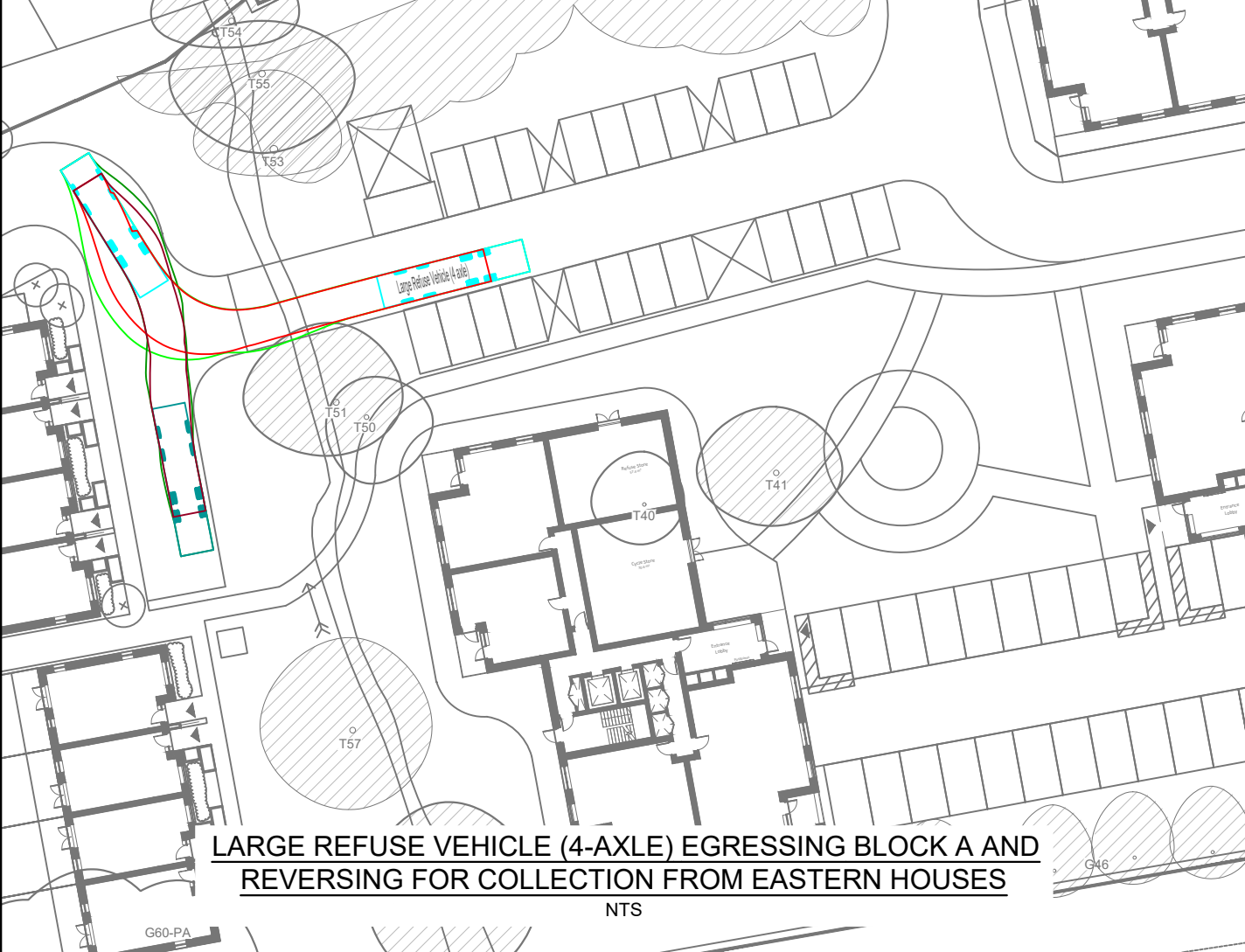
Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m



LARGE REFUSE VEHICLE (4-AXLE) EGRESSING BLOCK C AND ACCESSING BLOCK A

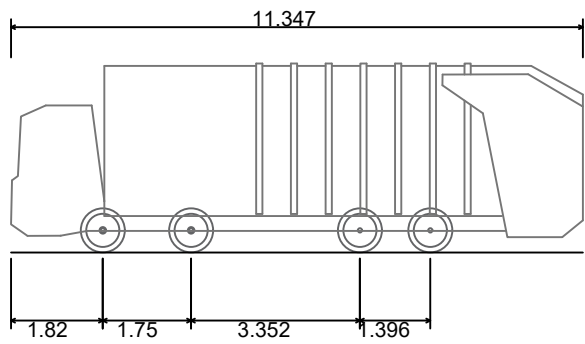
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LARGE REFUSE VEHICLE (4-AXLE) REVERSING FOR COLLECTION FROM EASTERN HOUSES

NTS

TA-ATR004



Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m

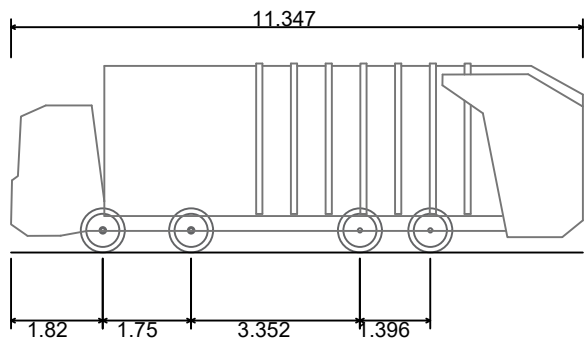


LARGE REFUSE VEHICLE (4-AXLE) EGRESSING EASTERN HOUSES AND ACCESSING CENTRAL HOUSES

NTS

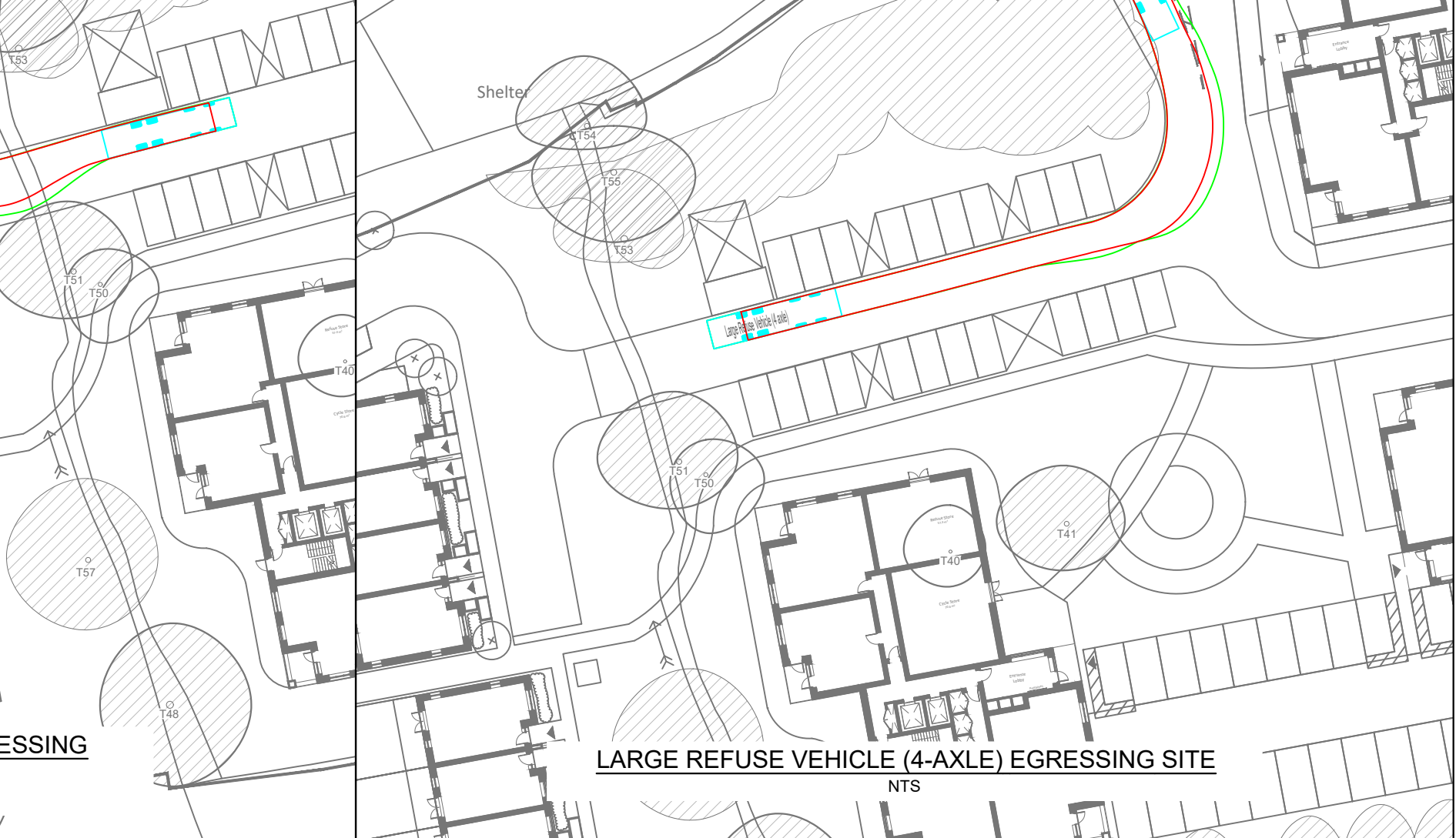
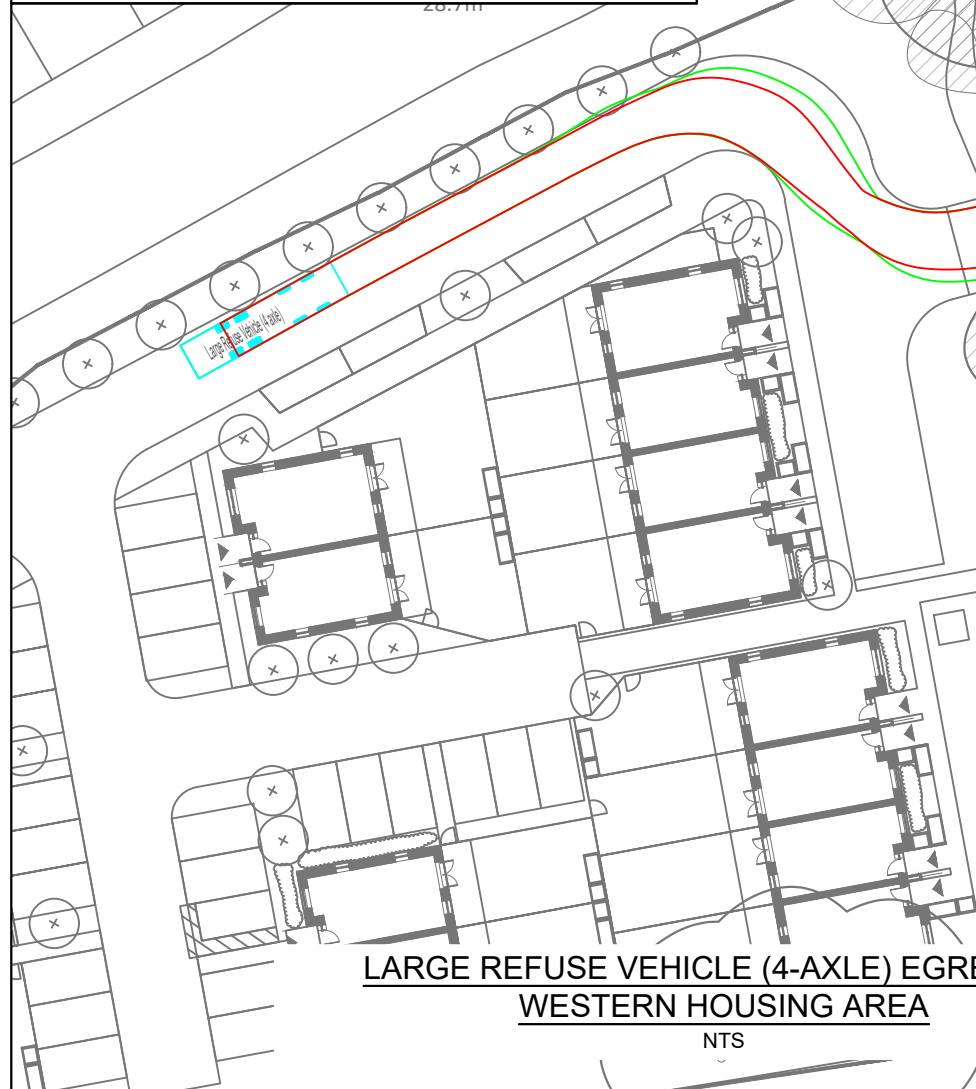
LARGE REFUSE VEHICLE (4-AXLE) EGRESSING CENTRAL HOUSES AND REVERSING FOR COLLECTION FROM WESTERN HOUSES

NTS

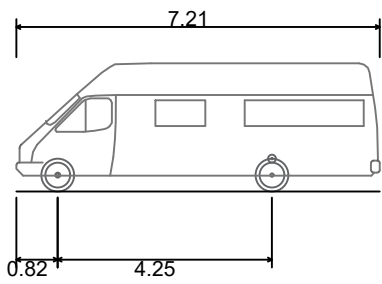


Large Refuse Vehicle (4 axle)

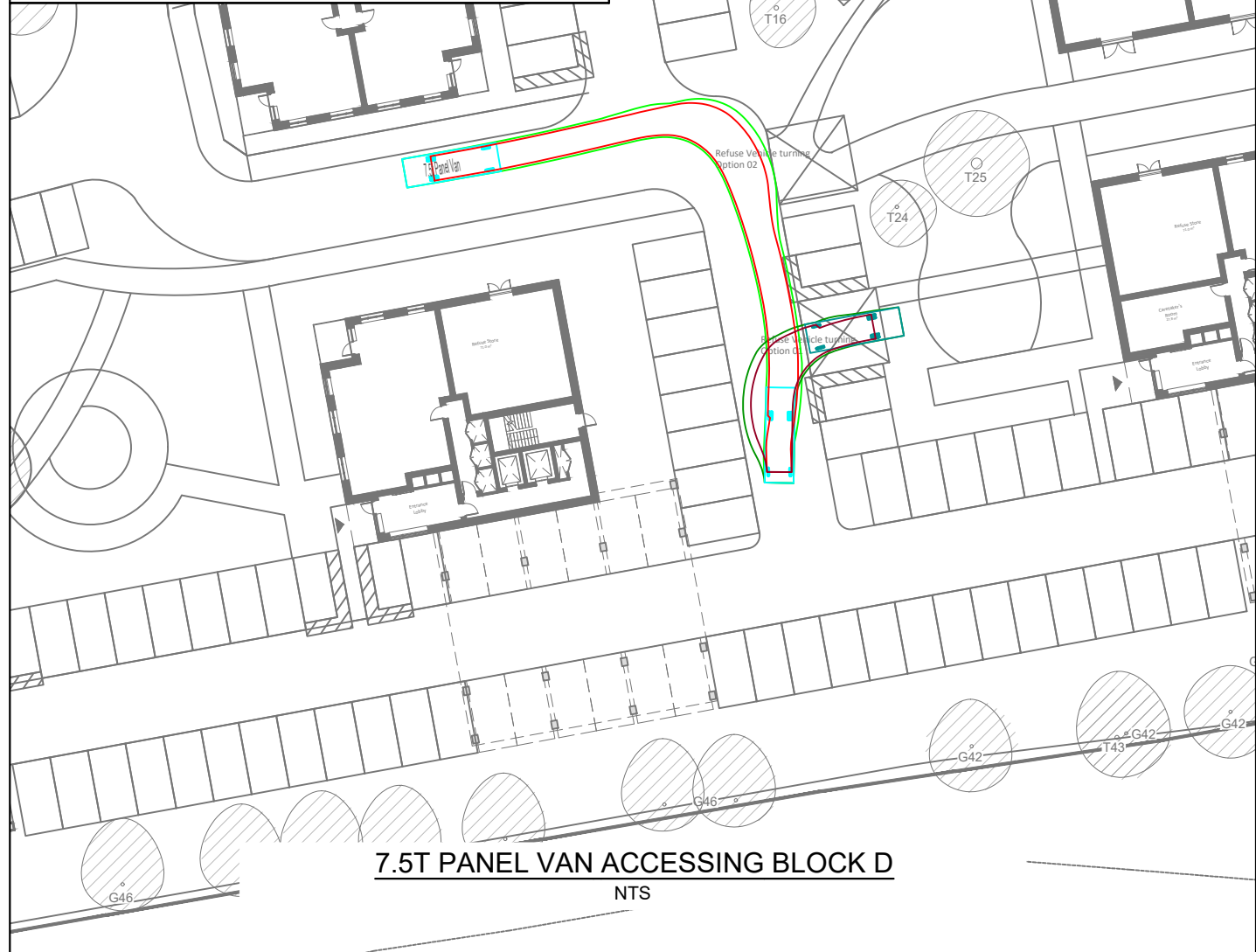
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Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m



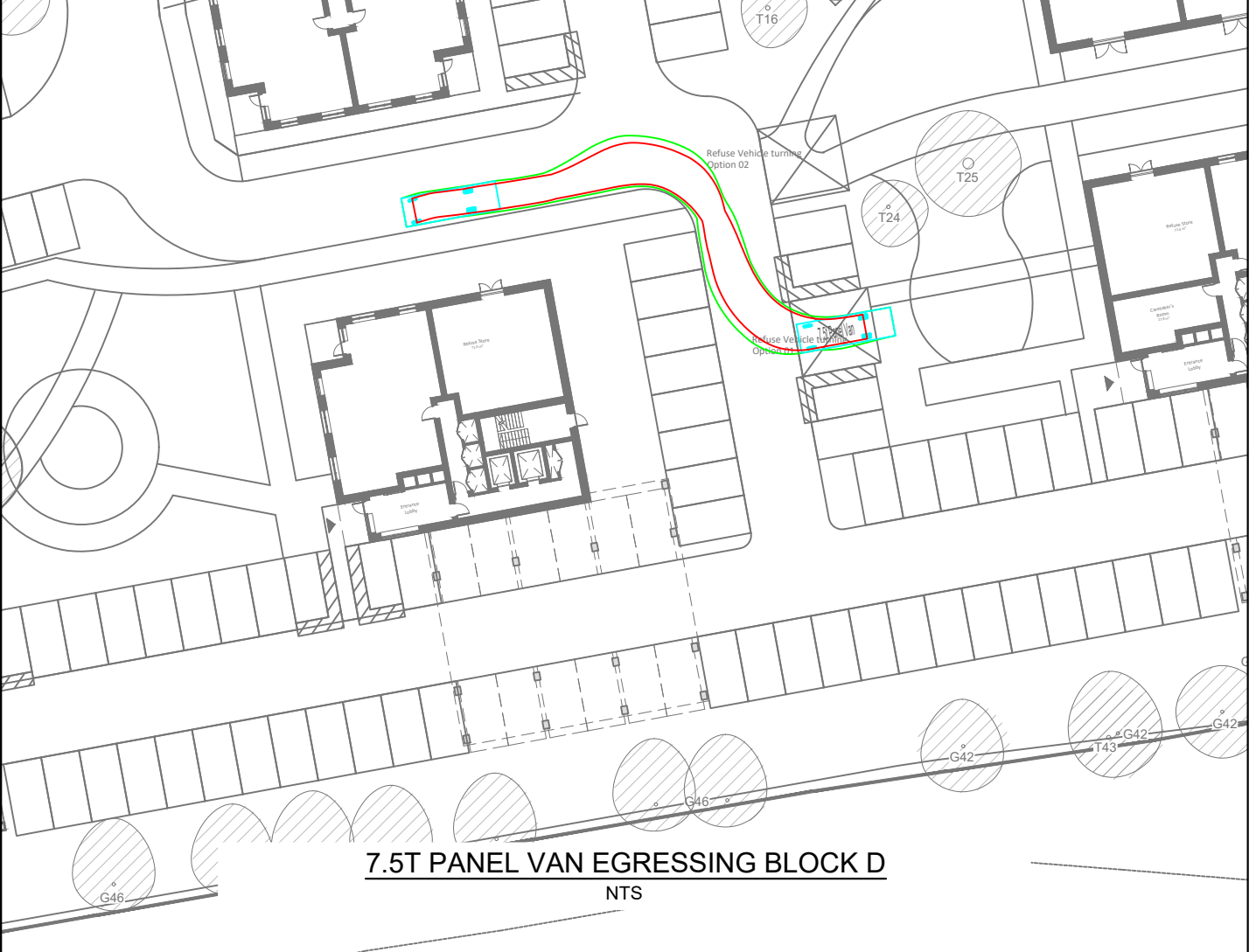
TA-ATR006



7.5t Panel Van	
Overall Length	7.210m
Overall Width	2.192m
Overall Body Height	2.544m
Min Body Ground Clearance	0.316m
Track Width	1.865m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

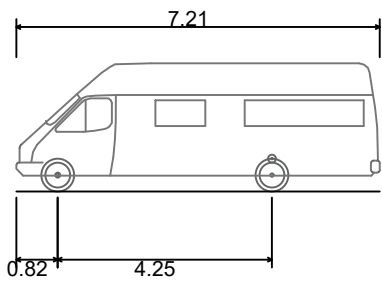


7.5T PANEL VAN ACCESSING BLOCK D
NTS



7.5T PANEL VAN EGRESSING BLOCK D
NTS

TA-ATR007



7.5t Panel Van	
Overall Length	7.210m
Overall Width	2.192m
Overall Body Height	2.544m
Min Body Ground Clearance	0.316m
Track Width	1.865m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

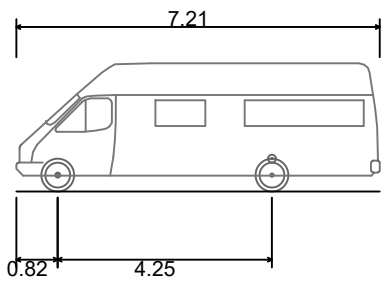


7.5T PANEL VAN ACCESSING CENTRAL HOUSES

NTS

7.5T PANEL VAN EGRESSING CENTRAL HOUSES

NTS



7.5t Panel Van	
Overall Length	7.210m
Overall Width	2.192m
Overall Body Height	2.544m
Min Body Ground Clearance	0.316m
Track Width	1.865m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

TA-ATR008

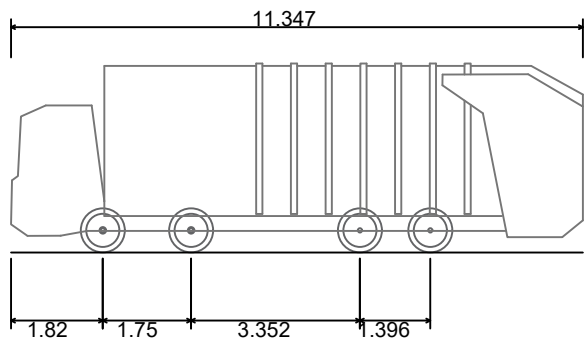


7.5T PANEL VAN ACCESSING WESTERN HOUSES
NTS



7.5T PANEL VAN EGRESSING WESTERN HOUSES
NTS

TA-ATR010



Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.330m



LARGE REFUSE VEHICLE (4-AXLE) ACCESSING BLOCK D

NTS

LARGE REFUSE VEHICLE (4-AXLE) EGRESSING BLOCK D

NTS