

1.0 Introduction

- 1.1 This Technical Note has been prepared to address the latest set of comments received from the Local Highway Authority (LHA), in their letter correspondence dated 22nd July 2024, with Highway Reference Number 2024/0484/04/H. A full copy of the LHA response is included as **Appendix A**. MAC will respond to each point below, in the order that they were presented.

2.0 Site Access

- 2.1 The LHA have requested that 2m wide footways be provided on either side of the site access road. This has been included within the updated site access drawing enclosed in **Appendix B**.
- 2.2 To demonstrate suitability of the proposed site access design, the LHA have requested vehicle tracking of a refuse collection vehicle to Hinckley & Bosworth Borough Council dimensions (Phoenix 2 Series – Smooth Body RCV, EURO 5i – WIDE TRACK refuse collection vehicle), arriving and departing from the site access. A copy of the technical data sheet for the refuse collection vehicle (RCV) is enclosed in **Appendix C**.
- 2.3 Vehicle tracking has been completed for the proposed site access and copies of the associated drawings are enclosed in **Appendix D** (RCV arrivals) and **Appendix E** (RCV departures).
- 2.4 It should be noted that the geometry required to accommodate the anticipated manoeuvres of the RCV, whilst another vehicle is waiting to turn out has resulted in the access needing to be widened beyond the adoptable standard that is suitable for a residential proposal of up to 33 dwellings. The standard currently used stems from DMRB publication '**CD123 – Geometric design of at-grade priority and signal-controlled junctions**', which recommends a 15m radius followed by a corner taper of 1:10 over 25m.
- 2.5 The widened geometry will ensure that there is no overhang over the centreline of either the site access road or main carriageway, when entering or exiting the site using a forward gear speed of 10mph. As such, there should be no concern with regards to potential conflicts of opposing vehicle movements, or vehicles over riding kerbs/ verge area, where one vehicle is giving way.

3.0 Stage 1 Road Safety Audit (RSA1)

- 3.1 Two access proposals were submitted and reviewed for a Stage 1 Road Safety Audit (RSA1). One access strategy is reliant on approved developments to the west being constructed; whereas the other can be delivered even if the approved sites are not pursued. MAC prepared a Designer's Response to the RSA1, which was subsequently reviewed by the LHA. Although most of the responses were acknowledged to be acceptable, the LHA had concerns regarding vehicle tracking of the proposed access junction and the potential for constructing a refuge island within Leicester Road.
- 3.2 For MAC's comments on vehicle tracking, please refer to **Section 2.0**. For comments regarding the access strategy, see the paragraphs which follow.
- 3.3 In a pre-application response dated 12th January 2024 (ref 2023/5566/04/HEN), the LHA stated that the Applicant needed to consider changes that could be implemented on Leicester Road, because of approved developments to the west that are expected to come forward. The LHA mentioned the proposed development could be considered remote from Earl Shilton and that pedestrian connectivity would be via a narrow, unlit footway alongside Leicester Road, which is of concern to the LHA.
- 3.4 The combined access strategy for the approved developments to the west will result in the upgrade of the narrow, unlit footway alongside Leicester Road. It is considered that the LHA views the construction of the approved sites being beneficial for the application site; hence, the request to consider how proposed road changes could impact site access. However, it is acknowledged that a suitable crossing point would be required to enable future users of the proposed development to take advantage of the upgraded footway, which would be located on the opposite side of Leicester Road.
- 3.5 The submitted site access proposal which is reliant on the approved sites to the west, includes the construction of a pedestrian refuge island within Leicester Road. This access strategy requires future pedestrians to cross Leicester Road and travel south along the widened pedestrian provision for approximately 120m, before crossing back over to the eastern side of the carriageway just upstream of the Church Street, road junction. From here, pedestrians would need to cross Church Street to access the central areas of the town. The alternative proposal provides a new 2m wide footway along the eastern side of Leicester Road, having a direct connection with Church Street i.e. eliminating the need to cross Leicester Road twice, when travelling between the proposed development and Earl Shilton.
- 3.6 The LHA raised concerns with the access design which incorporates a refuge island, as this would involve it being located within a road which exceeds a 40mph speed limit. This contradicts principles defined within the DMRB publication '**CD143 – Designing for walking, cycling and horse-riding**'. A change in speed limit can be addressed, subject to the approval of a Traffic Regulation Order (TRO). However, this process is separate to planning and is not guaranteed.

- 3.7 The only way in which a refuge island is accepted on a road where the speed limit is greater than 40mph, is if it is incorporated into Single Lane Dualling (SLD). Following a review of CD 123, the minimum through lane width at SLD junction should be 4m wide exclusive of hard strips and the minimum width of the central reserve needs to be 10m where right turns are permitted from the minor road. Even the minimum design criteria for SLD would result in an overengineered design Leicester Road, especially if the only benefit to the proposed development is the fact that it can be used as part of a two-stage pedestrian crossing, which is not the main reason to pursue SLD.
- 3.8 In the most recent LHA response (**Appendix A**), they comment on the Site Access Strategy (MAC drawing number 923-TA10B), whilst referring to the Designer's Response (MAC report 923-TN-01-0), used to address concerns raised in the Road Safety Audits. Based on the LHA comments, it was considered best to revisit the site access design which incorporates a refuge island, from first principles. Section 3.2 of the submitted Transport Statement comprises a PV2 Assessment to identify the most appropriate type of crossing for Leicester Road between the application site and the approved sites to the west. The PV2 Assessment concludes a formal crossing is not required. Therefore, the only suitable option that MAC feels can be pursued for Leicester Road, considering the design constraint presented by the enforceable speed limit of 50mph; is to remove the refuge island altogether.
- 3.9 If a refuge island is not provided as part of the site access strategy, it can be appreciated that an informal, uncontrolled crossing point would only be considered suitable for a portion of future residents/site users. More vulnerable pedestrians such as young children, the elderly or persons with impairments that make it challenging to travel by footway, would be reliant on an alternative connection route to/ from Earl Shilton. As a result, the removal of the pedestrian refuge island, makes the need for a new 2m wide footway along the eastern side of Leicester Road even more important.
- 3.10 Reconsidering the design constraints, alongside the intention to demonstrate a safe and viable connection with Earl Shilton, has resulted in a single access proposal and is enclosed in **Append B**. The proposal comprises a 2m wide footway provision along the eastern side of Leicester Road, which connects into the existing infrastructure on Church Road. The new footway along Leicester Road will be constructed with a full height kerb edge. More able pedestrians can cross Leicester Road at any point along the length of new footway, if it is safe to do so. Dropped kerbs and tactile paving have not been proposed along the edge of the footway, so as to discourage those who are visually impaired and would better benefit from a two-stage crossing point.
- 3.11 The proposal enclosed in **Appendix B**, is considered the most suitable arrangement whether the approved sites to the west come forward or not. Furthermore, the LHA's concern regarding connectivity between the application site and Earl Shilton are not only addressed, but the proposals would also result in a far improved situation.

4.0 Conclusion

- 4.1 Based on the 2 outstanding points raised in the LHA's letter regarding site access and RSA1, it is considered that this Technical Note has sufficiently responded to both points in full. This Note demonstrates that the proposed site could be safely accessed by all road users and that future residents of the site would have safe and convenient access to existing facilities and services by sustainable modes.



Appendix A

Local Highway Authority Response

Substantive response of the Local Highway Authority to a planning consultation received under The Development Management Order.



Response provided under the delegated authority of the Director of Environment & Transport.

APPLICATION DETAILS

Planning Application Number: 24/00484/OUT

Highway Reference Number: 2024/0484/04/H

Application Address: Land East Of Leicester Road Earl Shilton Leicestershire

Application Type: Outline (with access)

Description of Application: Outline planning application (some matters reserved except for means of access and scale) for the erection of up to 33 dwellings, including affordable housing, public open space, landscape planting, sustainable drainage system and new access arrangements from the unnamed Road.

GENERAL DETAILS

Planning Case Officer: Sullivan Archer

Applicant:

County Councillor: Richard Allen

Parish: Earl Shilton

Road Classification: Class C

Substantive Response provided in accordance with article 22(5) of The Town and Country Planning (Development Management Procedure) (England) Order 2015:

The Local Highway Authority does not consider that the application as submitted fully assesses the highway impact of the proposed development and further information is required as set out in this response. Without this information the Local Highway Authority is unable to provide final highway advice on this application.

Advice to Local Planning Authority

Background

The Local Highway Authority (LHA) has been consulted on a planning application at Land East Of Leicester Road Earl Shilton Leicestershire for the outline planning application (some matters reserved except for means of access and scale) for the erection of up to 33 dwellings, including affordable housing, public open space, landscape planting, sustainable drainage system and new access arrangements from the unnamed Road.

Site Access

Details of the proposed access arrangements are provided on page 24 of the submitted Design and Access Statement, dated May 2024. The site access is proposed from the unnamed road off Leicester Road Earl Shilton which is a C classified road subject to the national speed limit. The Applicant has proposed a 5.5m wide carriageway with a 6m wide junction radii which is indicated on the drawing titled 'Proposed Site Access Strategy', drawing no. 923-TA10 Revision B. However,

2m wide pedestrian footways on either side of the site access road have not been indicated, therefore, the LHA the Applicant should submit an amended drawing indicating this.

The Applicant has detailed the findings from two Automatic Traffic Counter (ATC) speed surveys within the submitted Transport Statement, dated May 2024. ATC site 1 was located to the west of the proposed access and ATC site 2 was located to the east of the proposed access.

The LHA note that heading eastbound towards the site access, ATC Site 1 recorded an 85th percentile of 19.5mph, which is equivalent to a stopping sight distance of 24m. Heading westbound towards the site access, ATC Site 2 recorded an 85th percentile of 26.2mph, which is equivalent to a stopping sight distance of 36m. The LHA note that the Proposed Access Strategy drawing enclosed in Appendix G of the submitted Transport Statement, illustrates the principal site access for vehicles, with 43m visibility splays either side being achievable. Therefore, the LHA is satisfied that the Applicant has provided adequate visibility for the proposed access.

The LHA request that the Applicant submits a drawing demonstrating vehicle tracking of a refuse collection vehicle to Hinckley & Bosworth Borough Council dimensions (Phoenix 2 Series - Smooth Body RCV, EURO 5i - WIDE TRACK refuse collection vehicle) arriving and departing from the site access. The LHA will require swept paths at junctions to be undertaken at a minimum vehicle speed of 10mph to provide a more realistic swept path and the speed of the vehicle should be detailed on the drawing.

Stage 1 Road Safety Audit (RSA)

The Applicant has undertaken two RSA's to reflect the two possible footway options in order for pedestrians to access the site. MAC drawing number 923-TA10 Rev. B details the proposed access strategy subject to the access works for application 21/00135/OUT (Land north of Hill Top Farm, Earl Shilton – 140 dwellings) being completed, while MAC drawing number 923-TA11 Rev. A details the access strategy should this not be in place.

The RSA highlights a number of problems. The LHA has reviewed the listed responses and is satisfied that problems 3.1, 3.3, 3.4, 3.5, 3.6 and 3.8, can be dealt with during the detailed design phase.

In response to problem 3.2 of the RSA, the LHA request that vehicle swept paths be provided as part of the application as detailed further above.

The LHA would highlight for problem 3.7 that Design Manual for Roads and Bridges (DMRB) CD143 states that refuge islands shall not be provided where the speed limit is greater than 40mph except where the refuge island is incorporated into a single lane dualling design. Whilst the visibility splays provided are satisfactory, the refuge is still against the guidance of the DMRB. Therefore the Applicant should give this further consideration.

The LHA highlight that whilst response for problem 3.9 is acceptable, it needs to be ensured that the carriageway running lane widths at the refuge are in accordance with Local Transport Note 1/20 Clause 7.2.5 which states that lanes should not be between 3.2m and 3.9m wide as they could encourage unsafe overtaking of cyclists by vehicles.

The LHA are now satisfied that the tactile paving shown on the drawings is in accordance with Department for Transport guidance.

The LHA also highlight that Traffic Signs Manual Chapter 5 requires 150mm clearance between the road markings and the edge of the traffic island kerbs, however no lateral clearance is shown on the drawing 923-TA10B.

As a further note, Dimensions should be shown for the right turn lane in accordance with Table 5.22 of the DMRB CD123. These should include the lane widths, turning length, deceleration length and the direct taper length. This will help with getting the best size and location of the pedestrian refuge that is being proposed.

Highway Safety

The LHA note that two Personal Injury Collisions (PICs) have been recorded in the locality in the last five years that occurred within 500 metres in either direction of the proposed access. One PIC was classified as 'slight' in severity and the other serious in severity. The LHA has considered the circumstances of the above PICs and is satisfied that the development proposal would not exacerbate the likelihood of further such incidents occurring.

The acceptability of the proposals would, however, be contingent on the delivery of a safe and suitable access as required by the National Planning Policy Framework (2023).

Trip Generation

The Transport Statement indicates that the TRICS database has been interrogated to obtain the following trip rates:

Table 4.2: Person Trip Rates - Mean

Use	Morning Peak (0800-0900)			Afternoon Peak (1700-1800)		
	Arr	Dep	Total	Arr	Dep	Total
03 – Residential	0.244	0.772	1.016	0.538	0.322	0.860

The Applicant was also able to calculate the predicted number of person trips generated by each mode of transport. The proposed trips by mode is shown in Table 4.4 below:

Table 4.4: Trip Numbers by Mode

Mode	Morning Peak (0800-0900)			Afternoon Peak (1700-1800)		
	Arr	Dep	Total	Arr	Dep	Total
Underground, metro, light rail or tram	0	0	0	0	0	0
Train	0	0	0	0	0	0
Bus, minibus or coach	0	1	2	1	0	1
Taxi	0	0	0	0	0	0
Motorcycle, scooter or moped	0	0	0	0	0	0
Driving a car or van	7	21	28	15	9	24
Passenger in a car or van	1	2	2	1	1	2
Bicycle	0	1	1	0	0	1
On foot	1	2	2	1	1	2
Other method of travel to work	0	0	0	0	0	0
Total	9	27	36	19	11	30

The proposed development is therefore predicted to generate 28 vehicle trips in the morning peak and 24 trips in the evening peak. The LHA is satisfied that this number of additional vehicles will not result in significant adverse impact on the surrounding highway network and that capacity assessments of nearby junctions are not required.

Proposed Footways

The LHA the two remote footways internally would not appear to be adoptable if not connected to adopted / adoptable carriageway.

The footway indicated on the drawing titled 'Proposed Site Access Strategy Without Approved Sites to the West' drawing no. 923-TA11 Revision A, along Leicester Road would likely be adoptable, due to it falling within the highway extent. The Applicant would need to enter into a s278 agreement to carry out these works.

Internal Layout

The internal layout of the development is not for consideration at this stage and has therefore not been considered in detail by the LHA.

Off-site Implications

Given the unnamed road is used for parking, the Applicant has undertaken a parking beat survey to determine precisely how much of the available parking provision along this carriageway is used. The parking beat survey that was completed along the unnamed road consisted of Zone A (southern side of carriageway) and Zone B (northern side of carriageway). The surveys recorded data in 30-minute snapshot intervals, over the full 24- hour period for each day the survey was carried out. Results were recorded on Thursday 8th February and Saturday 10th February 2024, to identify the existing parking behaviour for a neutral weekday and weekend respectively.

The results of the survey indicate that for the Thursday survey, a maximum of 3 vehicles were recorded simultaneously within the parking bays. For the Saturday survey, a maximum of 2 vehicles were recorded simultaneously within the parking bays.

The results of the survey confirmed that no vehicles were observed to park in Zone B on either survey day. Therefore, the LHA are satisfied that the proposed development is expected to have a negligible impact on the existing parking behaviour on the adjacent road.

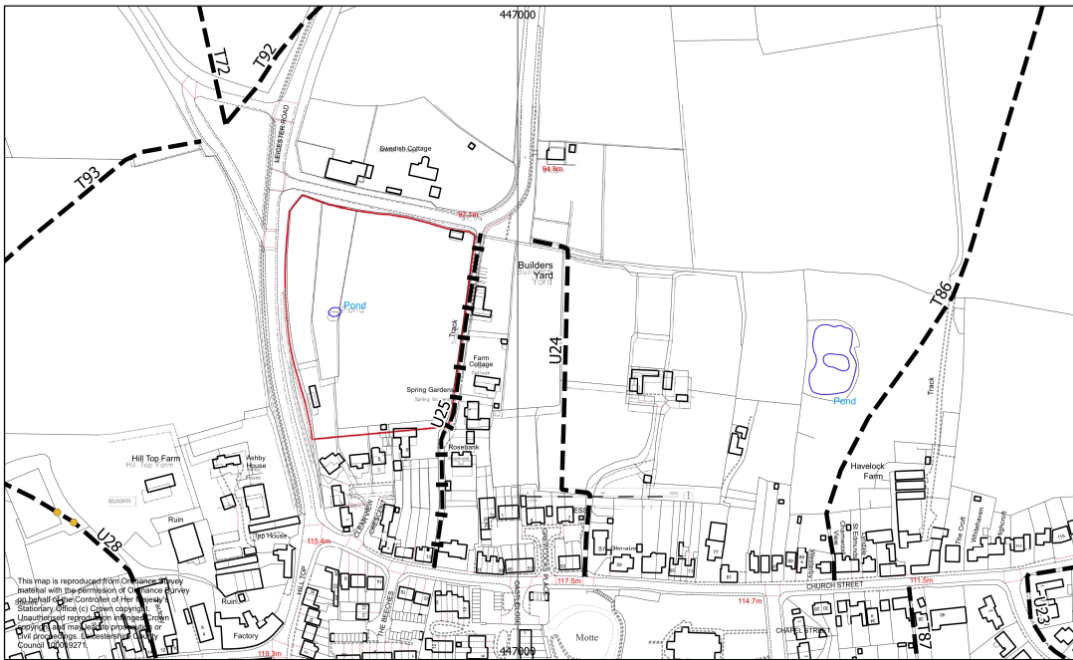
Transport Sustainability

The LHA note that Earl Shilton town centre is located within walking distance of the site offering access to shops and schools. There are also frequently serviced bus stops into Leicester City Centre located some 400m from the site access.

Public rights of Way

Public Bridleway U25 runs adjacent to the proposed development. An extract from the Definitive Map of Public Rights of Way, with overlay, is provided below for information.

 **Leicestershire
County Council**
Scale 1:2500

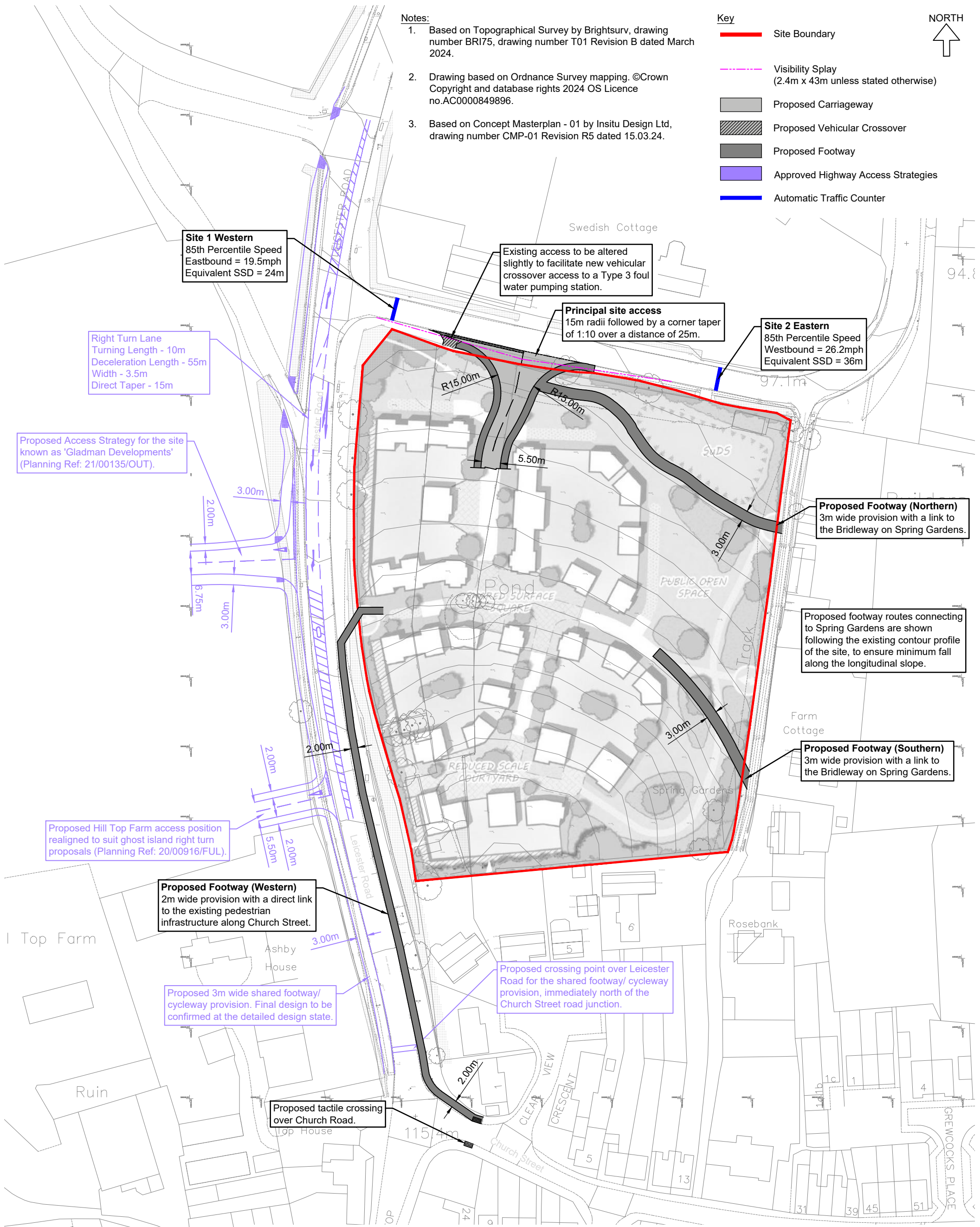


Date Issued
22 July 2024



Appendix B

Proposed Access Strategy
MAC drawing 923-TA14



- Notes:
- Based on Topographical Survey by Brightsurv, drawing number BRI75, drawing number T01 Revision B dated March 2024.
 - Drawing based on Ordnance Survey mapping. ©Crown Copyright and database rights 2024 OS Licence no.AC0000849896.
 - Based on Concept Masterplan - 01 by Insitu Design Ltd, drawing number CMP-01 Revision R5 dated 15.03.24.

- Key
- Site Boundary
 - Visibility Splay (2.4m x 43m unless stated otherwise)
 - Proposed Carriageway
 - Proposed Vehicular Crossover
 - Proposed Footway
 - Approved Highway Access Strategies
 - Automatic Traffic Counter



Site 1 Western
85th Percentile Speed
Eastbound = 19.5mph
Equivalent SSD = 24m

Right Turn Lane
Turning Length - 10m
Deceleration Length - 55m
Width - 3.5m
Direct Taper - 15m

Proposed Access Strategy for the site
known as 'Gladman Developments'
(Planning Ref: 21/00135/OUT).

Existing access to be altered
slightly to facilitate new vehicular
crossover access to a Type 3 foul
water pumping station.

Principal site access
15m radii followed by a corner taper
of 1:10 over a distance of 25m.

Site 2 Eastern
85th Percentile Speed
Westbound = 26.2mph
Equivalent SSD = 36m

Proposed Footway (Northern)
3m wide provision with a link to
the Bridleway on Spring Gardens.

Proposed footway routes connecting
to Spring Gardens are shown
following the existing contour profile
of the site, to ensure minimum fall
along the longitudinal slope.

Proposed Footway (Southern)
3m wide provision with a link to
the Bridleway on Spring Gardens.

Proposed Footway (Western)
2m wide provision with a direct link
to the existing pedestrian
infrastructure along Church Street.

Proposed 3m wide shared footway/
cycleway provision. Final design to be
confirmed at the detailed design state.

Proposed crossing point over Leicester
Road for the shared footway/ cycleway
provision, immediately north of the
Church Street road junction.

Proposed tactile crossing
over Church Road.



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Martin Andrews Consulting Ltd

- Transport Assessments
- Flood Risk Assessments
- Highway Advice
- Access Design
- Drainage Strategies
- Vehicle tracking

Client: Manor Oak Homes		Project: Leicester Road Earl Shilton	
Title: Proposed Site Access Strategy		Date: 21.08.24	
		Drw: AN	
Drawing No: 923-TA14		Chk: AN	
		Scale: 1:1000	
Revision: -		Size: A3	



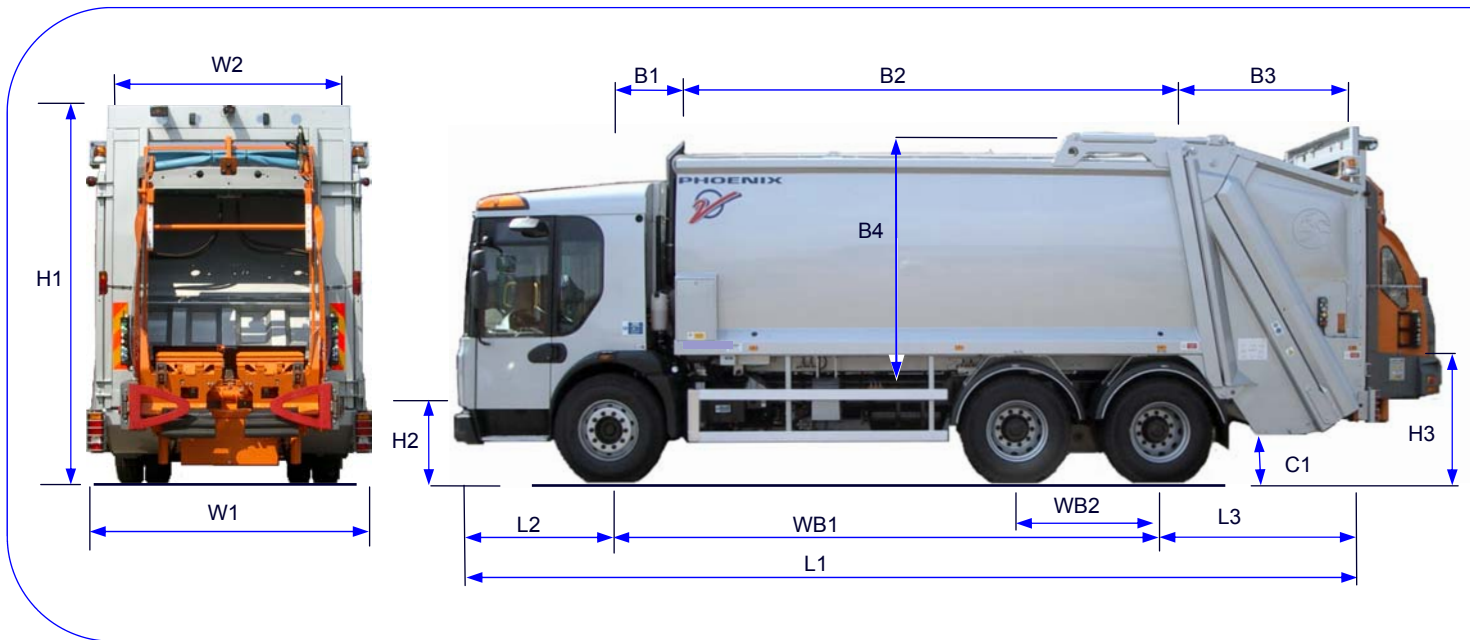
Appendix C

Hinckley & Bosworth Borough Council
RCV Dimensions

Phoenix 2 Series - Smooth Body RCV

EURO 5i - WIDE TRACK

6 x 4 Wide



Vehicle Model		Phoenix 2-18W 6x4	Phoenix 2-20W 6x4	Phoenix 2-23W 6x4
Compacting Body volume (m ³)		19.45	22.20	24.07
Chassis type		Elite 2 6x4	Elite 2 6x4	Elite 2 6x4
Maximum GVW (kgs)		26000	26000	26000
Unladen weight - no options (kgs) (a)		12720	13180	13280
Front axle Plated Weight		7100 kgs *	8000 kgs	8000 kgs
Rear Bogie Plated Weight		19000 kgs	19000 kgs	19000 kgs
WB1	Wheelbase	4750	5300	5600
WB2	Axle 2 to 3	1385	1385	1385
TWB	Theoretical Wheelbase	4200	4670	4840
L1	Overall Length (excluding binlift)	8490	9090	9390
	Overall length - tailgate raised	9620	10220	10520
L2	Front overhang		1665	
L3	Rear overhang		2125	
	Rear overhang - tailgate raised		3255	
W1	Overall width		2530	
W2	Width inside hopper		2200	
H1	Overall height at exhaust tip		3500 (nominal)	
	Overall height - tailgate raised		5050	
	Overall height - at RCV body		3420	
H2	Floor height (inside cab)		790	
H3	Manual loading height - open-back		1050	
B1	Axle 1 to front of RCV body		650	
B2	Body floor length	4660	5260	5660
B3	Tailgate length		1515	
B4	RCV body height from chassis		2455	
C1	Ground Clearance - Rear unladen		410	
	Approach angle		15.5°	
	Departure angle		16°	
	Turning Circle - metres (b)	16.5	18.9	19.9

(a) Typical bin-lifting equipment will add up to 900kg

(b) Turning circles quoted are kerb-to-kerb with standard tyres, for wall-to-wall figures add 1600mm.

* In open-back form front axle plating at 8000kg required with 315/80R 22.5 tyres.

Optional Cycle guards shown for illustration purposes only

NOTE: Unless otherwise stated, all dimensions are nominal, in mm and represent an unladen condition. All specifications are subject to manufacturers tolerances. An allowance of +/- 2% should be made for all weights. All weights are in kgs and include AdBlue, 50 litres of fuel, oil and water. Additional equipment may alter dimensions and weights quoted. Weight data is based on Volvo D7E 290 bhp engine and Allison MD3000 series gearbox.



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Euro 5i

Phoenix 2 Series - Smooth Body RCV

EURO 5i - WIDE TRACK

6 x 4 Wide

Compacting Body

- Constructed from high tensile steel one piece rolled side sheets and braced by front and rear hoops, with pressed integral channels and 'keel' type floor.
- Fitted with under-floor sump to prevent liquid seepage and to allow clean discharge of any liquid content.

Hopper

- Optimised 2.8m³ swept volume capacity, resulting in fewer packing cycles, giving the benefits of reduced wear, fuel consumption and noise.
- Full 2.2m uncluttered loading width.
- Low rake rail height for manual loading and versatile binlift mounting with bolt-on rake rail adaptor for binlifts.
- Sides and floor manufactured from high tensile abrasion resistant steel.
- Substantial pressed side plates form integrated channels to guide the packing mechanism.
- Integral full height body/hopper seal fitted to prevent liquid leakage from bottom edge and hopper sides.
- Reduced overhang for improved weight distribution and manoeuvrability.

Packing Mechanism

- Proven two-plate fabricated packer / sweeper design.
- Manufactured using high tensile abrasion resistant steel.
- Slides within hopper channels on low friction self lubricating bearings.
- Heavy duty packer and sweeper cylinders.
- Nominal 21 second cycle time.

Refuse Ejection Barrier

- Barrier face is manufactured from high tensile abrasion resistant steel, forming a smooth and unobstructed discharge surface.
- Ertalon LFX bearings guide the barrier along rails within the body.
- Multi-staged double acting hydraulic cylinder enables efficient ejection and retraction.

Electrical System

- Fully integrated CANBus system logic.
- Simple display unit in cab for body controls and diagnostics.
- Fully water-proofed side mounted junction box contained within a locker allowing easy access for diagnostics and maintenance via laptop.
- Number and colour coded wiring for easy identification, maintenance and fault finding.
- Weatherproof switch, plug and socket connectors.
- Circuit designed to enhance Health & Safety features, and installation of binlifts. (EN1501-1 compliant)

Hydraulic System

- Quiet, PTO mounted close-coupled standard pump delivers 88 litres/minute at 1000 rpm.
- Body mounted tank with remote pressure fill.
- Full flow 10 micron return line filter controls contaminant levels.
- Engine speed is maintained by electronic throttle control system when hydraulic power consumption increases.
- Separate 2 spool electro-pneumatic operated valves control all system functions.
- Heavy duty inverted sweeping cylinders fitted with maintenance free spherical bearings.
- Heavy duty inverted packing cylinders mounted outside the hopper, clear of the loading area.
- Roof mounted hopper lift cylinders

Safety

-  Approved. Safe by design.
- Two-plate design, automatic body/hopper locks and clean discharge remove the need to approach moving parts.
- Interlocks prevent the mechanism from working unless the hopper is fully lowered.
- Automatic gearbox interlocks enhance safe operations.
- Hopper lift rams are fitted with integral pilot operated load holding valves so that even if a hose fails, or is removed, the hopper cannot descend unless positively powered downwards.
- Indicator lights show the driver when the mechanism is in operation, and when the hopper is out of its locks.
- In cab discharge controls as standard, with external hopper lower controls for optimised safety.
- High level auxiliary rear lights.
- Interlocked access door for safe maintenance operations.

Options

A range of compatible proprietary binlifts and our own Beta 2 trade-lifter are available, for more details of specifications and further standard options please consult a Dennis Eagle Sales representative.

Euro 5i

Dennis Eagle Ltd. (the company) reserves the right to change the specification, design, material, procedures and dimensions of the vehicles described herein without prior notice at any time in the future, in accordance with the company's constant product improvement policy.

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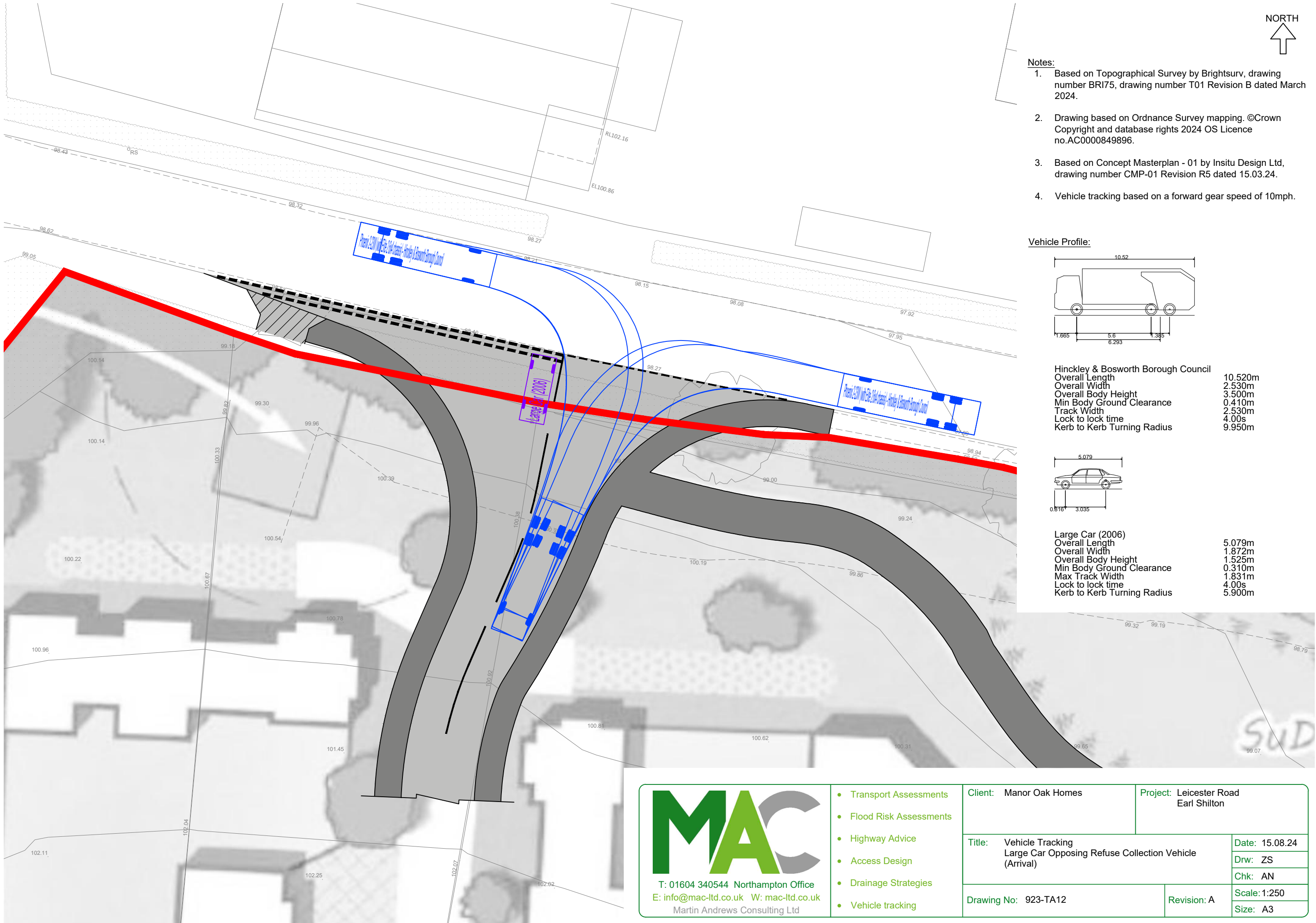


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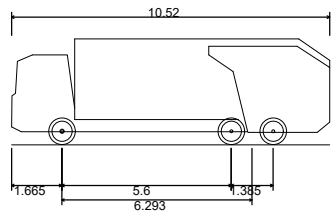
Appendix D

Vehicle Tracking, Large Car Opposing RCV (Arrival)
MAC drawing 923-TA12A

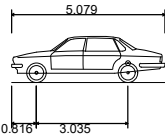


- Notes:
1. Based on Topographical Survey by Brightsurv, drawing number BRI75, drawing number T01 Revision B dated March 2024.
 2. Drawing based on Ordnance Survey mapping. ©Crown Copyright and database rights 2024 OS Licence no.AC0000849896.
 3. Based on Concept Masterplan - 01 by Insitu Design Ltd, drawing number CMP-01 Revision R5 dated 15.03.24.
 4. Vehicle tracking based on a forward gear speed of 10mph.

Vehicle Profile:



Hinckley & Bosworth Borough Council
Overall Length 10.520m
Overall Width 2.530m
Overall Body Height 3.500m
Min Body Ground Clearance 0.410m
Track Width 2.530m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 9.950m



Large Car (2006)
Overall Length 5.079m
Overall Width 1.872m
Overall Body Height 1.525m
Min Body Ground Clearance 0.310m
Max Track Width 1.831m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 5.900m



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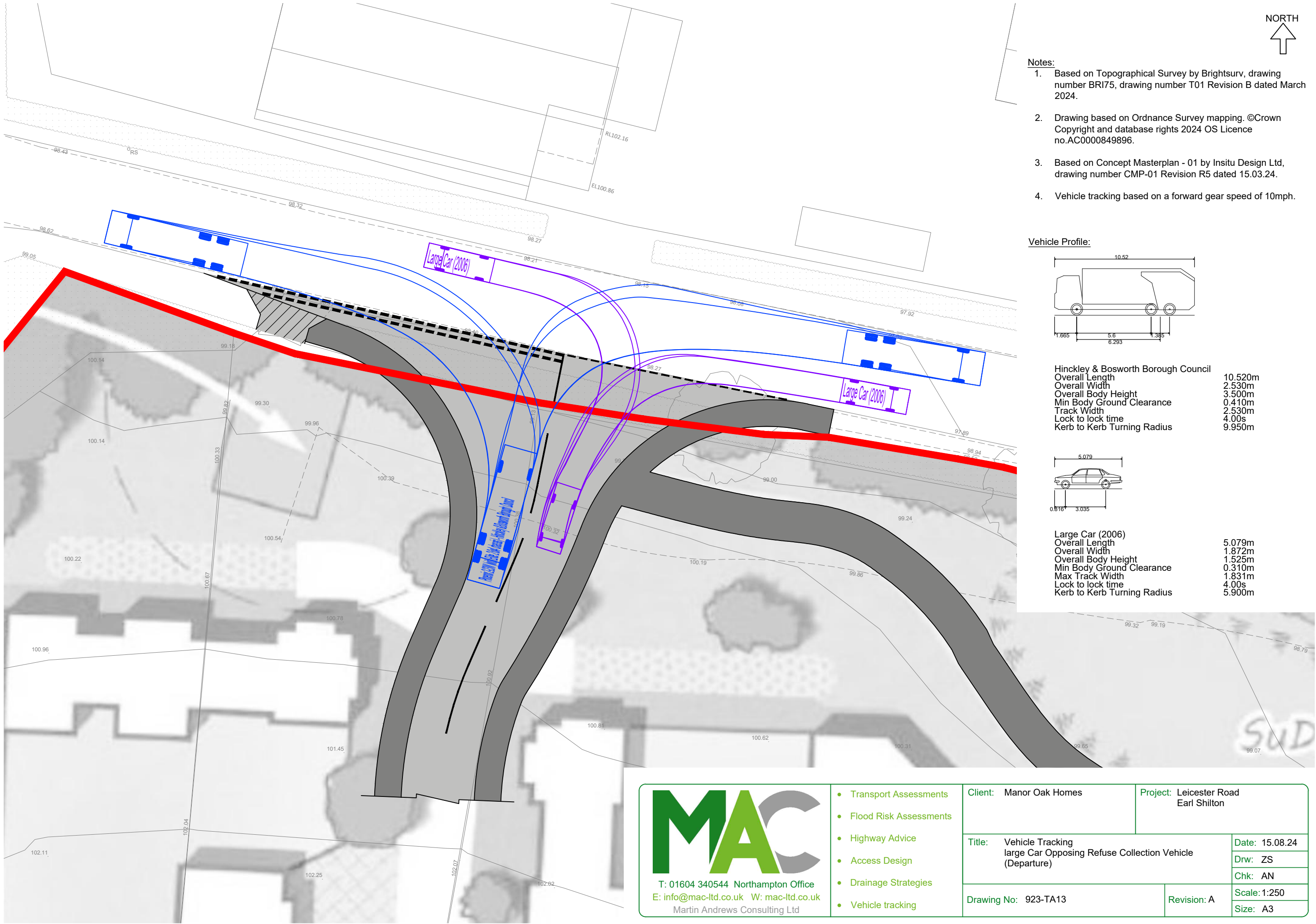
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Client: Manor Oak Homes		Project: Leicester Road Earl Shilton	
Title: Vehicle Tracking Large Car Opposing Refuse Collection Vehicle (Arrival)		Date: 15.08.24	
		Drw: ZS	
		Chk: AN	
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		Size: A3	



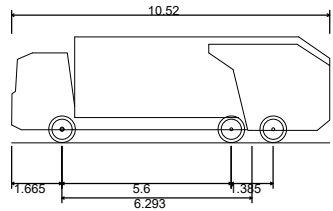
Appendix E

Vehicle Tracking, Large Car Opposing RCV (Departure)
MAC drawing 923-TA13B

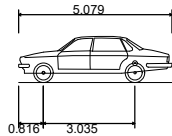


- Notes:
1. Based on Topographical Survey by Brightsurv, drawing number BRI75, drawing number T01 Revision B dated March 2024.
 2. Drawing based on Ordnance Survey mapping. ©Crown Copyright and database rights 2024 OS Licence no.AC0000849896.
 3. Based on Concept Masterplan - 01 by Insitu Design Ltd, drawing number CMP-01 Revision R5 dated 15.03.24.
 4. Vehicle tracking based on a forward gear speed of 10mph.

Vehicle Profile:



Hinckley & Bosworth Borough Council	
Overall Length	10.520m
Overall Width	2.530m
Overall Body Height	3.500m
Min Body Ground Clearance	0.410m
Track Width	2.530m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.950m



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m



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- Transport Assessments
- Flood Risk Assessments
- Highway Advice
- Access Design
- Drainage Strategies
- Vehicle tracking

Client: Manor Oak Homes		Project: Leicester Road Earl Shilton	
Title: Vehicle Tracking large Car Opposing Refuse Collection Vehicle (Departure)		Date: 15.08.24	
		Drw: ZS	
		Chk: AN	
Drawing No: 923-TA13		Revision: A	
		Scale: 1:250 Size: A3	