
Project: **WHEATHILL EQUESTRIAN CENTRE, NAYLOR'S ROAD, KNOWSLEY**

Title: - **PROPOSED CONVERSION TO FOUR RESIDENTIAL DWELLINGS
PLANNING APPLICATION REF: 23/02682/FUL**

HIGHWAYS TECHNICAL NOTE 1

Date: - **05 March 2023**

1.0 INTRODUCTION & SCOPE OF WORK

- 1.1 This Highways Technical Note (HTN) has been prepared by Focus Transport Planning on behalf of Mr Michael Rowland to provide a review of relevant highways and transport matters associated with residential redevelopment proposals at Wheathill Equestrian Centre, Knowsley. The proposals are subject to a live planning application (Planning Ref: 23/02682/FUL) which envisages the removal of the extant equestrian stables and equine training area and re-development of the site to deliver 4 * new 3-bedroom properties, along with ancillary landscaping, car parking and vehicle manoeuvring areas. The proposals have recently been the subject of amendments in response to comments from stakeholders to the initial planning submission and this HTN provides a comprehensive review of the internal vehicle manoeuvring and visibility elements of this updated scheme.
- 1.2 In addition, the note also seeks to respond to recent comments received from Liverpool City Council (in the role of highway authority for the adjacent Naylor's Road corridor) in relation to predicted future trip demand associated with the re-development proposals, via a comparison to realistic traffic demand levels for the extant equestrian centre land use.
- 1.3 The remainder of the note therefore sets out the following;
- *Section 2* provides a brief review of site location, planning history, existing site access arrangements and a review of realistic traffic demand associated with the reinstatement of the extant equestrian centre land use.

- *Section 3* provides an audit of the proposed internal site highway arrangements to serve the residential re-development, including vehicle swept path assessment and consideration of opportunities for vehicle passing places and associated visibility.
- *Section 4* considers the anticipated trip demand levels associated with the residential re-development scheme and how such traffic compares with vehicle movements for the extant equestrian centre land use.
- *Section 5* provides a summary and key conclusions.

2.0 SITE LOCATION, PLANNING HISTORY AND EXISTING ACCESS ARRANGEMENTS

2.1 Site Location

2.1.1 The application site represents land and buildings associated with the Wheathill Equestrian Centre off Naylor's Road, Knowsley. The strategic location of the site is illustrated in **Figure HTN1** to this report. This plan identifies the location of the site in the context of the built up areas of Netherley and Huyton.

2.1.2 **Figure HTN2** includes for an aerial image of the site and its local context, and illustrates the equestrian buildings currently in-situ on the site (see section 2.2 to this note). The aerial photograph was captured during the construction of the extension to the adjacent Lakeside School, which has since been completed, including the formation of a new / improved access junction connection to Naylor's Road, shared with the access track to the proposal site (see section 2.3 to this note).

2.2 Existing Land Use, Planning History & Extant Traffic Levels

2.2.1 As noted above, the application site represents land and buildings associated with equestrian centre land use. This equestrian centre use was established via the granting of planning consents in 2008 / 2009, viz:

➤ *Planning Reference: 08/000622/FUL* "Erection of stable block to provide accommodation for 14 horses, together with tack-room and feedstore (existing stables to be demolished)".

➤ *Planning Reference: 09/000141/FUL* "Erection of indoor exercise area with storage area (existing Nissan hut & stable to be removed)"

2.2.2 Details of submitted planning drawings and design statement for these consents are included as **Appendix HTN1** to this note for reference. These plans illustrate that the site would be accessed from the track connecting to Naylor's Road and that the internal site layout includes for parking for up to 9 cars (including 1 disabled bay) and space for the storage / parking of two further horse box / horse transporter vehicles.

2.2.3 These equestrian scheme elements have been constructed and remain in situ at the site. It is understood that there are no conditions to the planning consents as to the timing and use of the site or how the stables and exercise area are to be operated. This effectively allows for the site to operate either as a managed equestrian business, offering full livery services and equine management or to allow the leasing of individual stables to horse owners, who would visit the site daily to carry out welfare tasks.

2.2.4 At the time of preparation of this note, it is understood that equestrian operations are not taking place at the site, but could be resumed at short notice, without the need for additional planning consent. In order to estimate the potential traffic demand associated with equestrian centre use of the site, Focus TP have prepared an illustrative 'first principles' schedule of vehicle movements. This is based on experience of the operation of similar equestrian based sites and the generally welfare needs of horses stabled at the site. For the purpose of the estimate, it is assumed that half of the proposed stables would be operated as managed 'full livery', with the remainder of the stables leased directly to horse owners, who would undertake animal welfare tasks themselves (to provide a reasonable estimate of use of leased stables, it is assumed that the 7 stables available for lease, would be taken up by 4 individual owners.

- 7 stables under DIY livery = 2 trips p/day p/horse (4 * owners)
= 26 vehicle movements p/day (in + out)
- 7 stables under full livery = 4 staff trips per day (2 staff AM & 2 staff PM)
= 8 staff movements p/day (in + out)
(Plus 21 owner trips p/week (3 visits p/horse p/week))
- Other staff associated with horse training & management:
= 4 staff based on site. All could drive to site.
= minimum 8 staff movements p/day (in + out)
- Other visitor trips for demonstration / instruction:
= 10 scheduled visits per day.
= minimum 20 movements p/day (in + out)
- Horsebox movement = say 10 movements per busy summer weekend
& 5-6 per day on summer weekdays

2.2.5 In addition to these daily welfare and training related trips to the site, the site could also be expected to be accessed by regular delivery movements, providing

foodstuff and bedding. Based on typical animal welfare good practice guidance (per horse), one could also expect the following movements to take place.

- Hardfeed / Dengie = 36t per year
(4kg hardfeed / 1.5kg dengie p/day p/horse)
= 4 - 8 input p/year at 10t / 5t load
= 8 - 16 movements p/year (in+out)
- Haylage = 40.8t per year (8kg haylage p/day p/horse)
= 20 input p/year at 2t load
= 40 movements p/year (in+out)
- Bedding = 15t per year (3kg straw p/day p/horse)
= 7-8 inputs p/year at 2t load (circa 100 bales
per load)
= 14 movements p/year (in + out)
- Manure / Soiled Bedding = 150t per year
(12t manure p/horse per annum, with 1/3
composting)
= 11 - 22 exports p/year at 10t / 5t load
= 22 - 44 movements p/year (in + out)
- Farrier / Physio / Vet = 2 * trips p/service p/month
= 72 visits p/year
= 145 movements p/year (in+out)

2.2.6 Whilst it is acknowledged that many of these predicted site related trip movements, particularly deliveries of foodstuff and bedding, could be expected to take place during 'off-peak' hours, i.e. during core daytime periods, outside of busy rush hour periods or school drop-off / pick-up times, the majority of the livery / horse welfare movements and staff trips would typically take place during weekday AM & PM peak periods. Trips during weekday AM periods, both arrivals and departures to the site, are considered particularly likely to take place - associated with necessary animal care required following over-night stabling. Based on the above analysis it would not be unreasonable to expect at least 10 arrival movements to the site to take place during the period 07:00 - 09:00 and circa 6 - 8 departure movements. Daily trip demand levels easily reach levels over 30 arrival / 30 departure vehicle movements.

2.3 Site Access Arrangements

- 2.3.1 The application site is served via a private access track connecting to Naylor's Road at a T-junction arrangement shared with the new access serving Lakeside school. These shared access arrangements (see **Appendix HTN2**) were consented & delivered as part of the planning permission for the expansion of the Lakeside School site (Planning Ref: 21/000398/FUL "Demolition of existing buildings and erection of a new secondary school building, multi-use games area and associated car parking and landscaping") and replaced the previous parallel driveway arrangements, which allowed for separate access to / from the application site. The potential for continuing extant use of the application site for equestrian use was known to the planning authority at the time of the consenting of the new shared access arrangements.
- 2.3.2 The amended access arrangements were completed during 2023 to support the opening of the school site. The final constructed layout includes for kerbing at the application site access that requires vehicles exiting the application site to join the main give-way exit from the school and therefore avoids the potential for exiting vehicles from both sites to queue side by side. The shared access arrangements also mean that any 'arrival' movements to the application site must effectively drive across the school exit lane and therefore, in practice must wait for a gap in any school exit traffic demand in order to successfully complete an entry manoeuvre. This has the potential to lead to vehicles waiting to access the application site either stopping within the school entry junction bellmouth or waiting on the Naylor's Road carriageway for a suitable opportunity to cross the school exit lane.

3.0 AUDIT OF DEVELOPMENT PROPOSALS

3.1 Application Scheme Principles & Parking Arrangements

- 3.1.1 The planning application envisages the demolition of existing equestrian related buildings and the comprehensive re-development of the site to deliver 4 bespoke new 3-bedroom dwellings, set within ancillary landscaping and including for a shared vehicle manoeuvring area and in-curtilage parking.
- 3.1.2 All units would be served by 2 driveway parking spaces (minimum 2.5m by 5m dimensions for each space), plus a secure garage, allowing for additional vehicle parking or general storage.
- 3.1.3 The proposed general arrangement of the application scheme and details of individual plot floorplans are included as **Appendix HTN3** to this note for reference.

3.2 Internal Access Layout

- 3.2.1 Access to the redevelopment proposals (vehicle / cycle / foot) would be taken via the existing site access track linking to Naylor's Road at the shared school access. As part of the application scheme the internal sections of this track would be improved to deliver two defined passing places, with clear forward sightlines available between these passing points, to allow for safe and effective one-way shuttle operation. **Drawing J000504-VISI201** to **Appendix HTN4** sets out the proposed passing place arrangements and illustrates that a minimum of 6.2m carriageway space would be available at the passing points, with circa 45m sightlines between the passing facilities, more than adequate for anticipated operating speeds along the track. The northern passing point takes advantage of an existing natural widening of the track corridor, with the southern passing place being delivered by a new circa 15m long lay-by facility, including taper widening at both ends.
- 3.2.2 **Drawing J000504-ATR206** to **Appendix HTN4** illustrates example vehicle tracking for two-way movements for typical site service vehicles at these proposed passing places.

3.2.3 To the east of the main re-development area, the access track bends into the site (incorporating retained access to surrounding agricultural fields). This bend feature is designed to deliver a 10m centreline radius and includes for localised widening to allow for 6m carriageway width. This widening is suitable to allow for two-way car operation around the bend, as well as easy manoeuvring for large service / delivery vehicles (see **Drawings J000504-ATR205 & ATR205**). The layout of gardens / landscaping within the site will allow for a minimum 14m forward visibility envelope - suitable for 12mph operation, which is considered suitable for this low intensity private driveway location and the centreline radius of the bend (see **Drawing J000504-VIS1201**).

3.3 **Vehicle Servicing**

3.3.1 The internal site layout has been designed to allow for the turning of a range of residential scale servicing / delivery / emergency vehicles, including large refuse collection vehicle (RCV), rigid HGV delivery vehicle, large fire tender and 7.5t Box Van. In practice day-to-day deliveries could typically be expected to be undertaken by smaller transit van or box-van deliveries, but the site layout offers the flexibility to cater for occasional larger vehicles if required. Example swept path runs of the main turning area and access to individual plot parking zones are included as **Drawings J000504-ATR201, ATR202 and ATR203 to Appendix HTN5**.

4.0 REVIEW OF TRAVEL DEMAND ASSOCIATED WITH THE PROPOSALS

4.1 Predicted Traffic Demand to the Proposed New Dwellings

4.1.1 This section of the note seeks to identify the levels of traffic demand anticipated to be generated by the application scheme. Estimates have been calculated based on robust trip rates extracted from the TRICS database. Estimates have been calculated based on sites selected with locational factors similar to the application sites locality, viz:

- Edge of town sites only;
- Small development sites; and
- Not including sites in SE England, Greater London or the Republic of Ireland.

4.1.2 85th percentile trip rates per dwelling for the traditional AM & PM ‘rush hour’ time periods are illustrated in the table below (see also **Appendix HTN6**). These trip rates have been applied to the total new residential development size proposed at the application site (4 dwellings), with the results set out in **Table HTN4.1** below.

Table HTN4.1 - Residential Development Traffic (85th Percentile Trip Rates)

	Trip Rates (per dwelling)			Trip Demand for 5 dwellings		
	Arrival	Depart	Total	Arrival	Depart	Total
AM Peak (08:00-09:00)	0.488	0.496	0.984	2	2	4
PM Peak (17:00-18:00)	0.399	0.248	0.648	2	1	3
12h (07:00-19:00)	3.525	3.836	7.361	14	15	29

4.1.3 The above analysis demonstrates that the application scheme is not anticipated to generate a substantive level of travel demand at peak times, with maximum rush hour two-way (in + out) vehicle demand not anticipated to exceed 4 vehicles, or one vehicle trip every 12-15 minutes. Indeed, traffic demand over the whole core 12-hour weekday daytime period (07:00-19:00) is predicted to be of the order of only circa 37 vehicles (in + out).

4.2 Predicted 'Net' Traffic Effects & Relevant Supporting Case

- 4.2.1 It is not expected that the above identified levels of development traffic demand would result in a material or severe change in local highway network operational conditions. Indeed, based on the current consented use of the site as a commercial equestrian centre (supported by 11 parking / trailer spaces), it is reasonable to expect that the re-development for residential use would likely result in a reduction in overall site related traffic demand when compared to current permitted site use. - as demonstrated in the comparative analysis set out in **Table HTN4.2** below. This is particularly the case during the critical AM peak 'rush hour' period, when trip demand to / from the adjacent school site could be expected to be at its maximum. In practice future residential related vehicle trip demand associated with the re-development scheme could be realistically be only half that of the trip demand generated by the site should the existing commercial equestrian centre use be reinstated.

Table HTN4.2 - Comparison of Extant B1 Office Trip Demand and Proposed Residential Traffic Levels

	Predicted Trip Demand Extant B1 Office / Residential			Difference Residential v B1 Office		
	Arrival	Depart	Total	Arrival	Depart	Total
AM Peak (08:00-09:00)	5 / 2	4 / 2	9 / 4	-3	-2	-5
PM Peak (17:00-18:00)	4 / 2	5 / 1	9 / 3	-2	-4	-6
12h (07:00-19:00)	31 / 14	31 / 15	62 / 29	-17	-16	-33

- 4.2.2 It is therefore concluded that there are no grounds for objection to the proposed residential re-development scheme on the basis of development traffic demand, as in practice, residential re-use would generate lower traffic movements than retention of the existing commercial equestrian centre. In particular it is noted that the proposed residential use could be expected to generate limited levels of arrival trip demand in the AM peak (i.e. the movement that would typically conflict most with traffic exiting the adjacent school site), when compared to equestrian use, which typically generates a higher level of vehicle access at this time (associated with staff and animal welfare / livery movements).

5.0 SUMMARY AND CONCLUSIONS

- 5.1 This Highways Technical Note (HTN) has been prepared by Focus Transport Planning on behalf of Mr Michael Rowland to provide a review of relevant highways and transport matters associated with residential redevelopment proposals at Wheathill Equestrian Centre, Knowsley. The proposals are subject to a live planning application (Planning Ref: 23/02682/FUL) which envisages the removal of the extant equestrian stables and equine training area and re-development of the site to deliver 4 * new 3-bedroom properties, along with ancillary landscaping, car parking and vehicle manoeuvring areas.

Planning History of the Application Site

- 5.2 The application site currently represents land and buildings associated with extant equestrian centre land use. This equestrian centre use was established via the granting of planning consents in 2008 / 2009. Plans associated with these consents illustrate that under equestrian centre use, the site would be accessed from the track connecting to Naylor's Road and that the internal site layout was to include for parking for up to 9 cars (including 1 disabled bay) and additional space for the storage of two further horse box / horse transporter vehicles. Consented scheme elements have been constructed and remain in situ at the site.
- 5.3 At the time of preparation of this note, it is understood that equestrian operations are not taking place at the site, but could be resumed at short notice, without the need for additional planning consent. First principles estimates of traffic demand under reinstated commercial equestrian centre use demonstrate that it would not be unreasonable to expect at least 10 arrival movements to the site to take place during the AM period 07:00 - 09:00, alongside circa 6 - 8 departure movements. Daily trip demand levels could be over 30 arrival / 30 departure movements.

Existing Vehicle Access Arrangements

- 5.4 Vehicle access to the site is taken via a private access track connecting to Naylor's Road at a T-junction arrangement shared with the main access serving Lakeside school. These shared access arrangements were consented & delivered as part of the planning consent of the expansion of the Lakeside School site (and replaced

the previous parallel driveway arrangements, which allowed for separate access to / from the application site). The potential for continuing extant use of the application site for equestrian use was known to the planning authority at the time of the consenting of the new shared access arrangements.

Application Scheme Principles

- 5.5 The planning application envisages the demolition of existing equestrian related buildings at the site and the comprehensive re-development to deliver 4 bespoke new 3-bedroom dwellings, set within landscaping and including for a shared vehicle manoeuvring area and in-curtilage parking. All units would be served by 2 driveway parking spaces (minimum 2.5m by 5m dimensions for each space), plus a secure garage for additional vehicle parking or storage.
- 5.6 The planning application envisages the demolition of existing equestrian related buildings and the comprehensive re-development of the site to deliver 4 bespoke new 3-bedroom dwellings, set within ancillary landscaping and including for a shared vehicle manoeuvring area and in-curtilage parking. All units would be served by 2 driveway parking spaces (minimum 2.5m by 5m dimensions for each space), plus a secure garage, allowing for additional vehicle parking or general storage. To the east of the main re-development area, the access track bends into the site (incorporating retained access to surrounding agricultural fields). This bend feature has been designed to deliver a 10m centreline radius and includes for localised widening to allow for 6m carriageway width. This widening is suitable to allow for two-way car operation around the bend, as well as easy manoeuvring for large service / delivery vehicles.
- 5.7 The internal site layout has been designed to allow for the turning of a range of residential scale servicing / delivery / emergency vehicles, including large refuse collection vehicle (RCV), rigid HGV delivery vehicle, large fire tender and 7.5t Box Van.

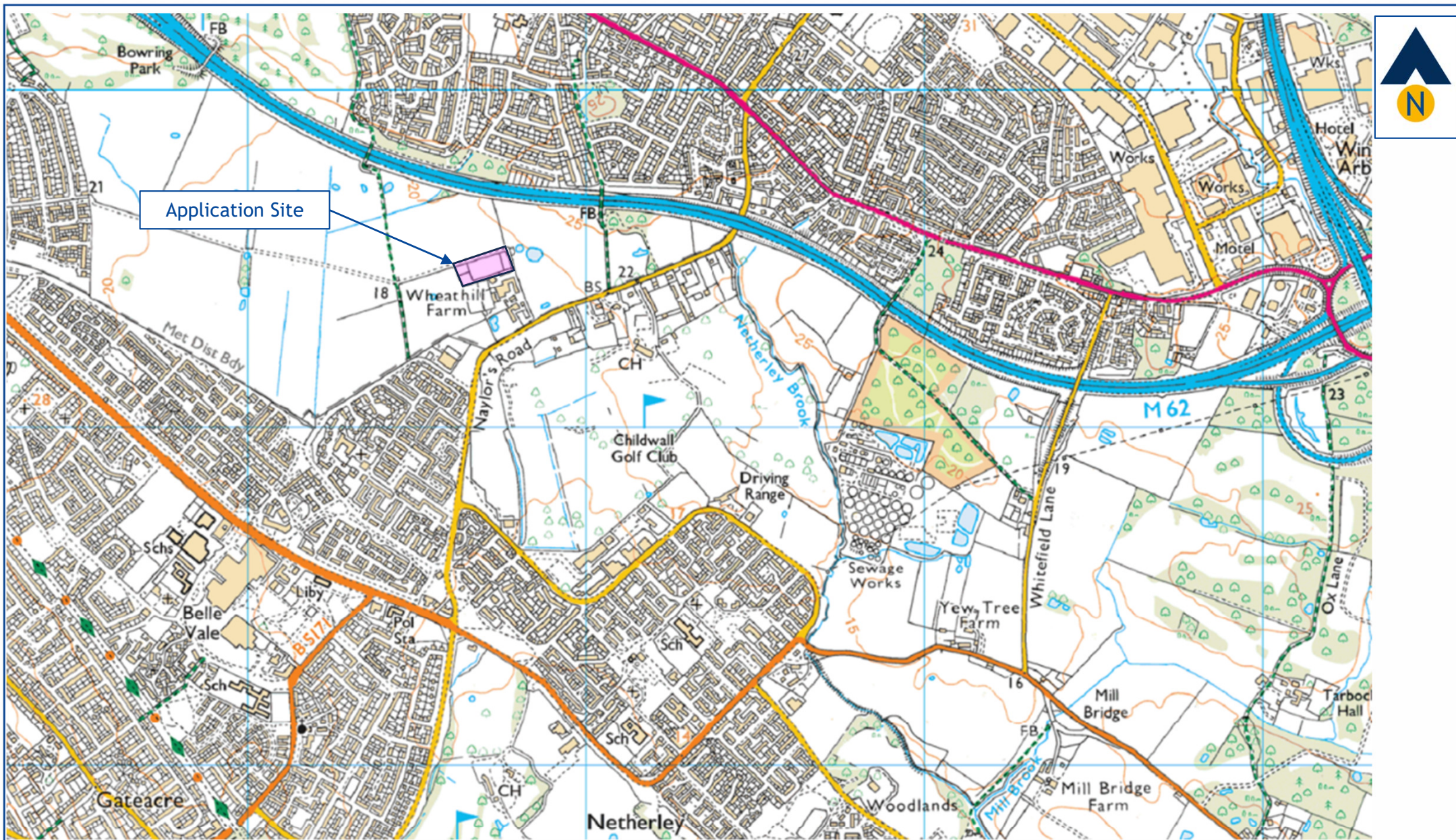
Predicted Development Traffic Demand

- 5.8 Future development traffic levels associated with the proposed residential scheme, have been calculated based on robust 85th percentile trip rates extracted

from the TRICS database and based on sites selected with locational factors similar to the application site's locality. This analysis demonstrates that the application scheme is not anticipated to generate a substantive level of travel demand at peak times, with maximum rush hour two-way (in + out) vehicle demand no greater than 4 vehicles per hour, or one vehicle trip every 12-15 minutes. Indeed, traffic demand over the whole core 12-hour weekday daytime period (07:00-19:00) is predicted to be only circa 37 vehicles (in + out). Such residential related vehicle trip demand would represent only circa half that likely to be experienced at the site should the existing commercial equestrian centre use be reinstated.

- 5.9 Based on this analysis it is therefore concluded that there are no grounds for objection to the residential redevelopment scheme on the basis of anticipated development traffic demand, as the proposed residential re-use would generate lower traffic movements than retention of the existing commercial equestrian centre.













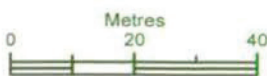
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WHEATHILL HOUSE
PROPOSED REPLACEMENT STABLE
BLOCK for
MR & MRS MICHAEL ROLAND

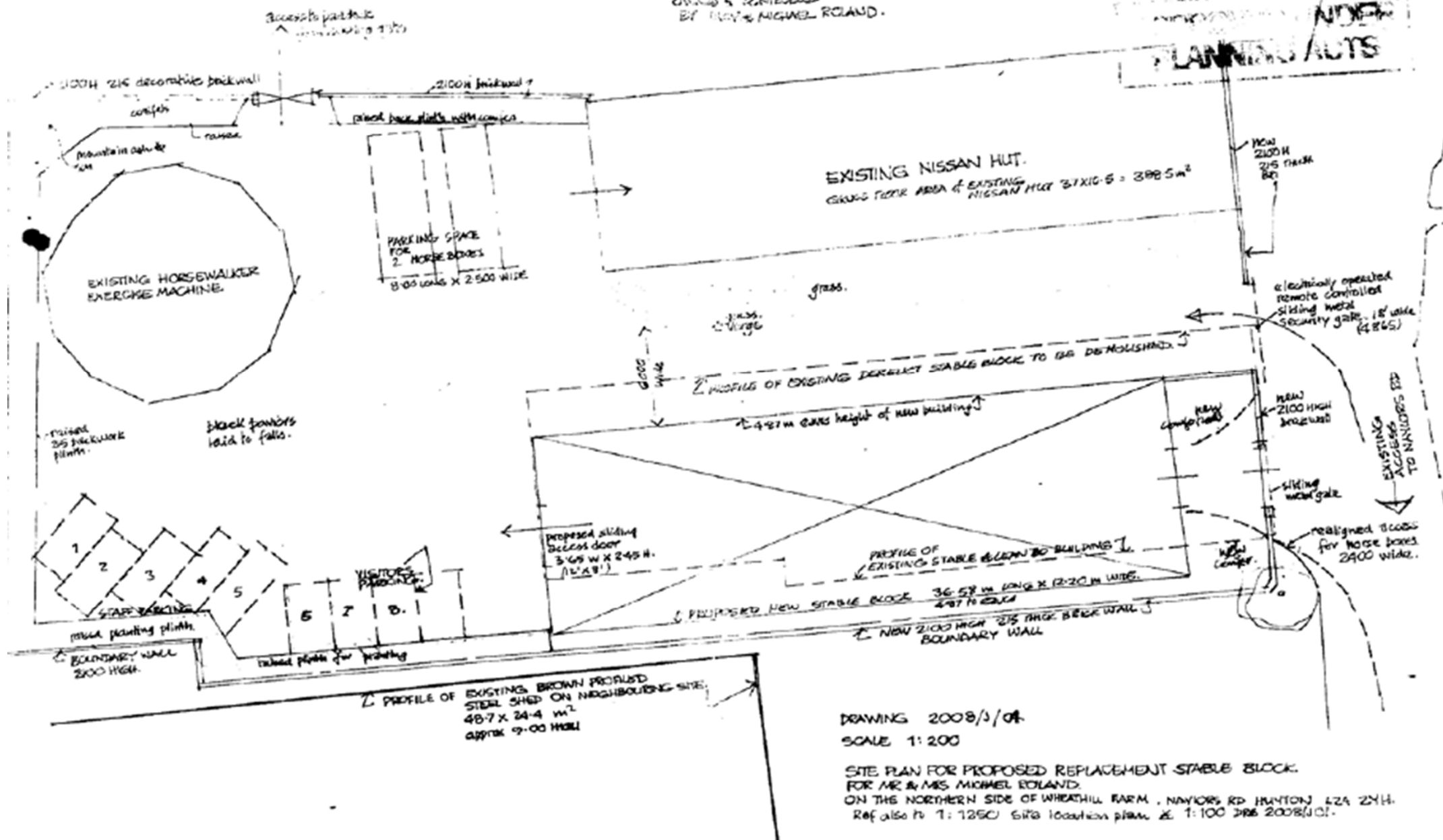
NAYLORS ROAD

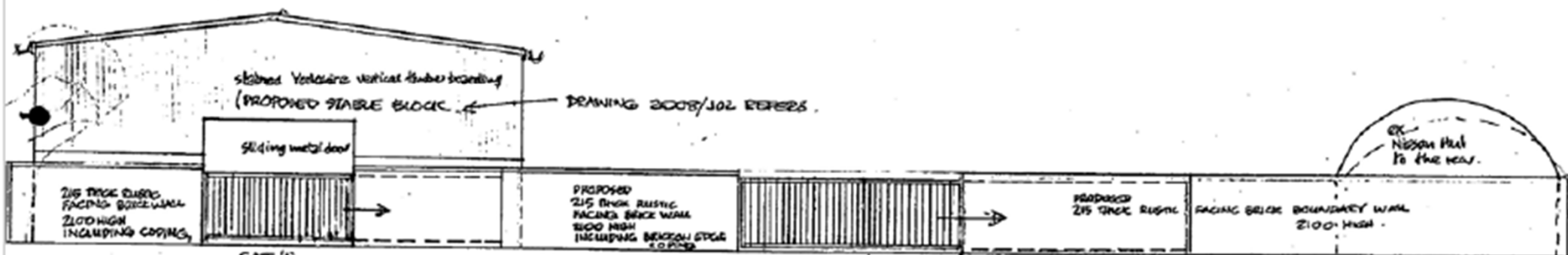
L24 2YH

544

PRODUCED
OWNED & CONTROLLED
BY MOY & MICHAEL ROLAND.

PLANNING ACTS





GATE 'A'
3450 WIDE X 2000 HIGH -
electronic

GATE 'B' electrically operated (supplier & manufacturer as yet undetermined
4963 W X 2000 HIGH
finished in black epoxy paint. typical frame section 75x38 mm, metal bolts/nuts 38x58 mm.

PROPOSED ELEVATION OF SLIDING METAL GATES (AS REQUESTED BY LIZ WRIGHT) KNOWLESLEY BC PLANNING

ELEVATION TO PROPOSED STABLE/RIDING BREEDING FACILITY FACING NORTHEAST

THIS DRAWING TO BE READ IN CONNECTION WITH Dwg 2008/104. ITC

PLANNING APPLICATION REF: 08/00622/FUL

PROPOSED STABLE BLOCK for MICHAEL ROLAND AT WHEATHILL FARM, NAYLORS RD, HUNTON

DWG NO 2008/112

SCALE: 1:100

PETER YOUNG ARCHITECT.



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Hazard Identification		
ref	hazard	date

DEVELOPMENT KEY

- Development Boundary
- Grasscrete
- Tarmac Road
- Herringbone blockwork
- Drop off zones and turning island
- Contrasting herringbone blockwork to turning island Drop off zones
- Block Paving
- Tarmac Road
- Tarmac Path
- Soft Landscaping
- Hardstanding
- Existing Primary School Building
- 2.4m High Anticlimb Fence PPC Green

- Bin Store
- Bicycle shelter. Provision for 10 long stay bicycles
- Double entrance gates to yard
- Electric vehicle charging

Note: Soft Landscaping shown indicatively, refer to Landscape Architect scheme drawing for detailed proposals

Existing Right of Way

Drop Kerb

Timber sided Cycle Store with timber roof

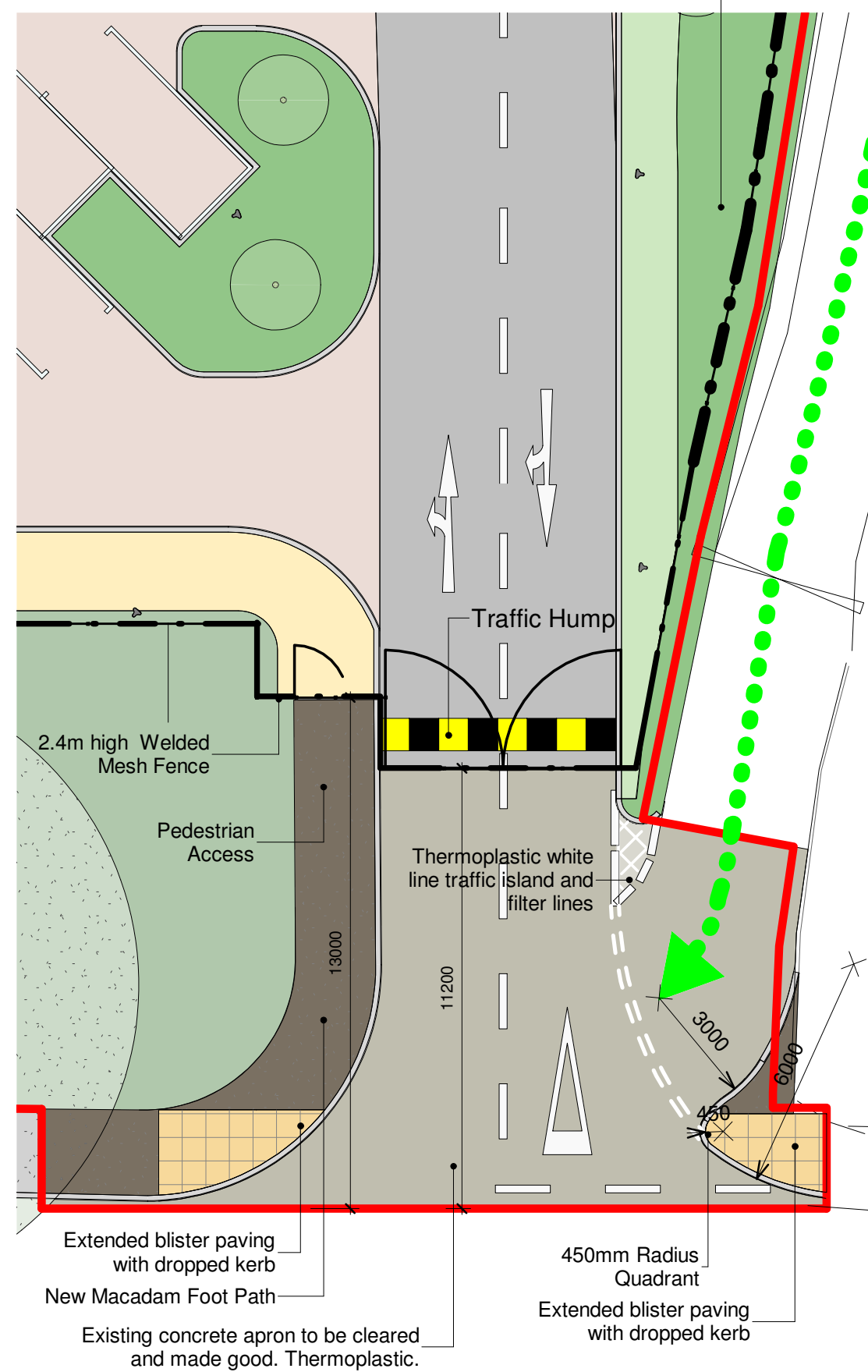
Timber eclosed Bin Store accessible from pick up zone

Drop Kerb and Tactile Paving

Drop Kerb

Pedestrian footpath to access Pick up zone parking

Designated low level planting area to aid traffic visibility. Low level maintained planting limited to max 0.9 high



P18	Main entrance gate moved 11.2m from carriageway	DR	15.09.21	JP
P17	Kneel railings and info. removed	DR	13.09.21	JP
P16	Bike Shelter Structure Amended	AW	07.09.21	JP
P15	Blister Paving Areas Amended	AW	06.09.21	JP
P14	Site Entrance Pavement Area Amended	AW	06.09.21	JP
P13	Bin Store/Bike Shelter Location Amended, Drop Off, Side Parking and Main Entrance Area Amended	AW	03.09.21	JP
P12	Bike Shelter Relocated to the Side entrance, Parking & Landscape Design Amended	AW	25.08.21	JP
P11	Red Line Boundary Amended	AW	07.06.21	JP
P10	Entrance to the Site Surface Material Amended	AW	26.04.21	JP
P9	Ownership Line Removed	AW	19.04.21	JP
P8	GIA Area and Volume Identification Schedules Amended	AW	16.04.21	JP
P7	Tactile Paving Area Amended	AW	15.04.21	JP
P6	Bike Store Relocated, Fencing and Bike Store Specification Amended, Red Line Boundary Amended, Traffic Hump Added, Paving near the Main Entrance Extended, Tarmac Area near the Main Entrance to the Site Extended	AW	14.04.21	JP
P5	Landscape Design Amended, Path around Football Pitch Added, Fencing Line Amended, Gates to the Primary School Relocated, Paving near the South-West Entrance to the Existing Primary School Building Added, Trees and Trees Protection Zone Amended	AW	07.04.21	JP
P4	Parking Grasscrete Area Amended	AW	30.03.21	JP
P3	Red Line Amended, Secondary School Drop off Area Amended, Roundabout Added, Electric Charging Bays Area Added	AW	26.03.21	JP
P2	Amended Following Comments	AW	26.03.21	JP
P1	First Issue of Drawing	AW	25.03.21	JP
Rev	Revision Details	Drawn	Date	Checked

C4 Projects
Quayside, Wilderspool Business Park, Stockton Heath, Warrington, Cheshire, WA4 6HL
t: 01852 751 852
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Client Witherslack Group

Project Lakeside School Liverpool

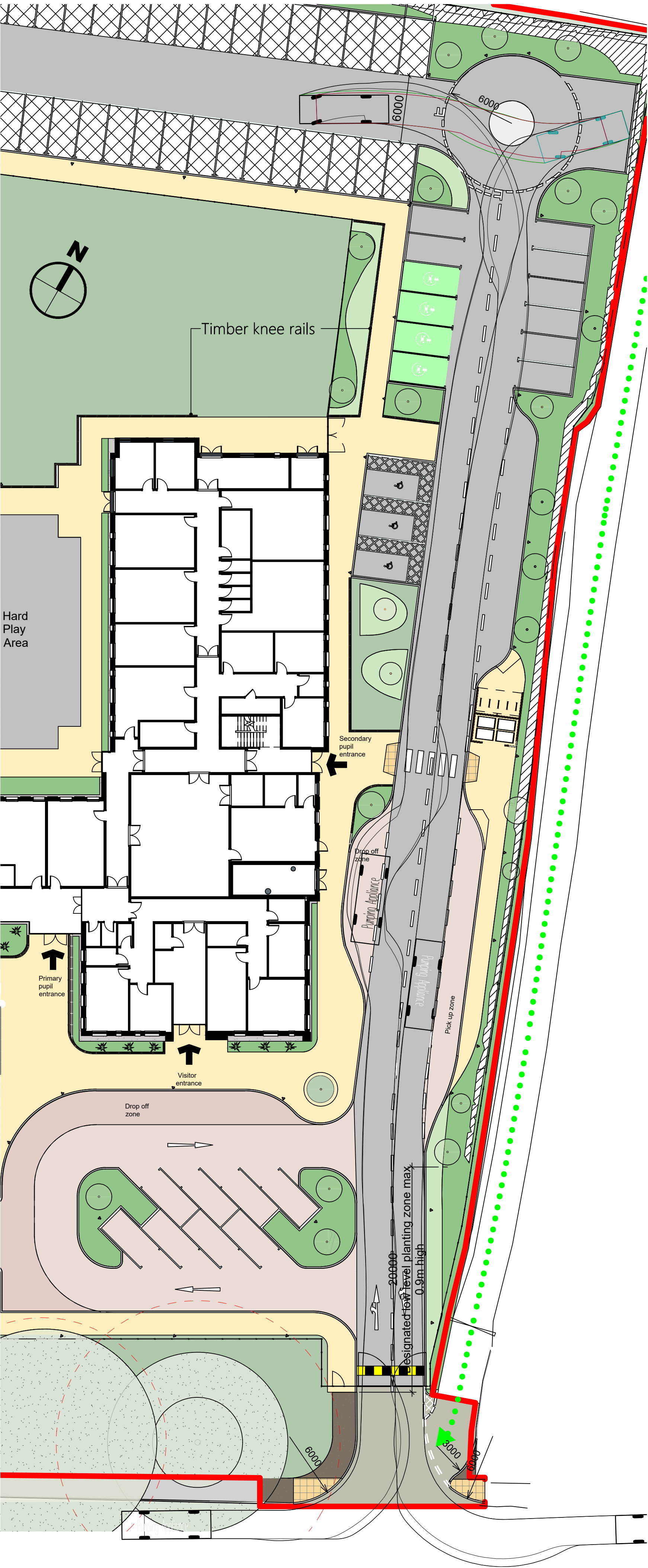
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Site Plan As Proposed

Status Purpose of Issue
S2 SUITABLE FOR INFORMATION

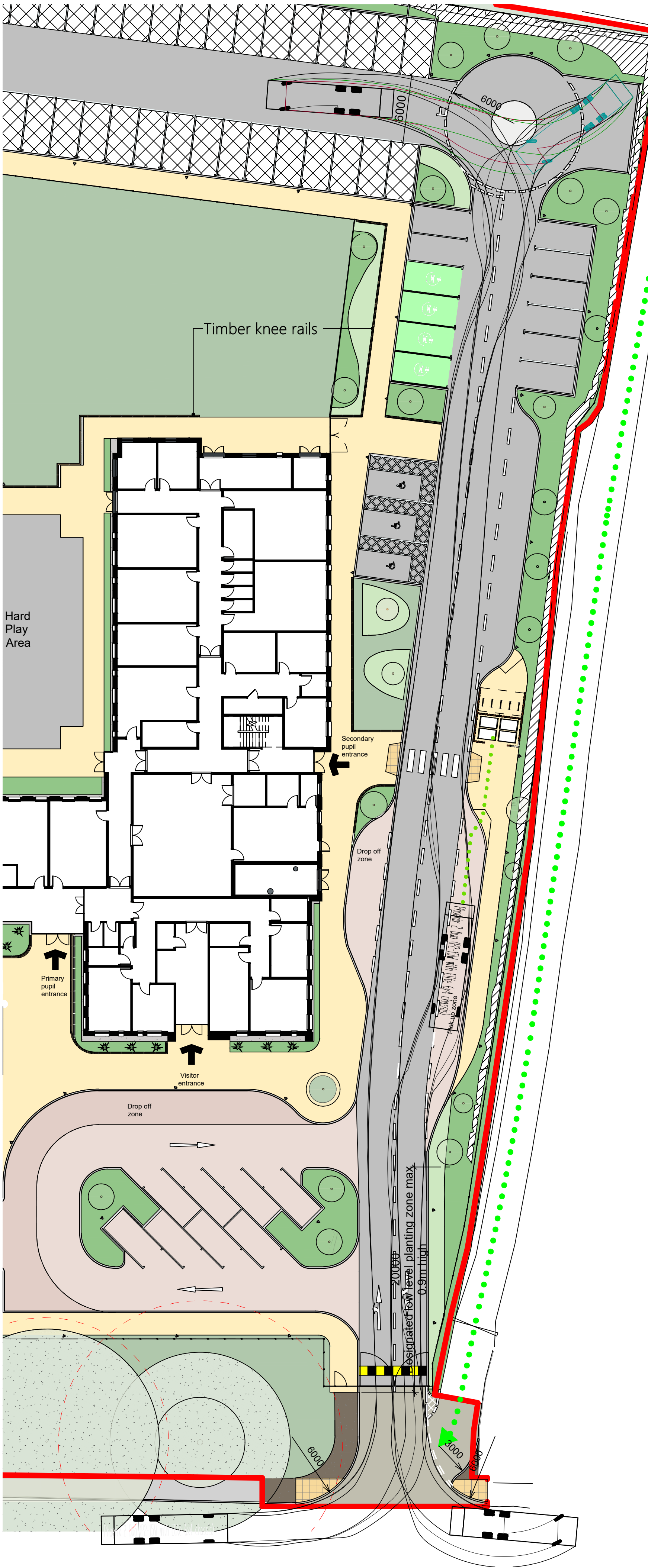
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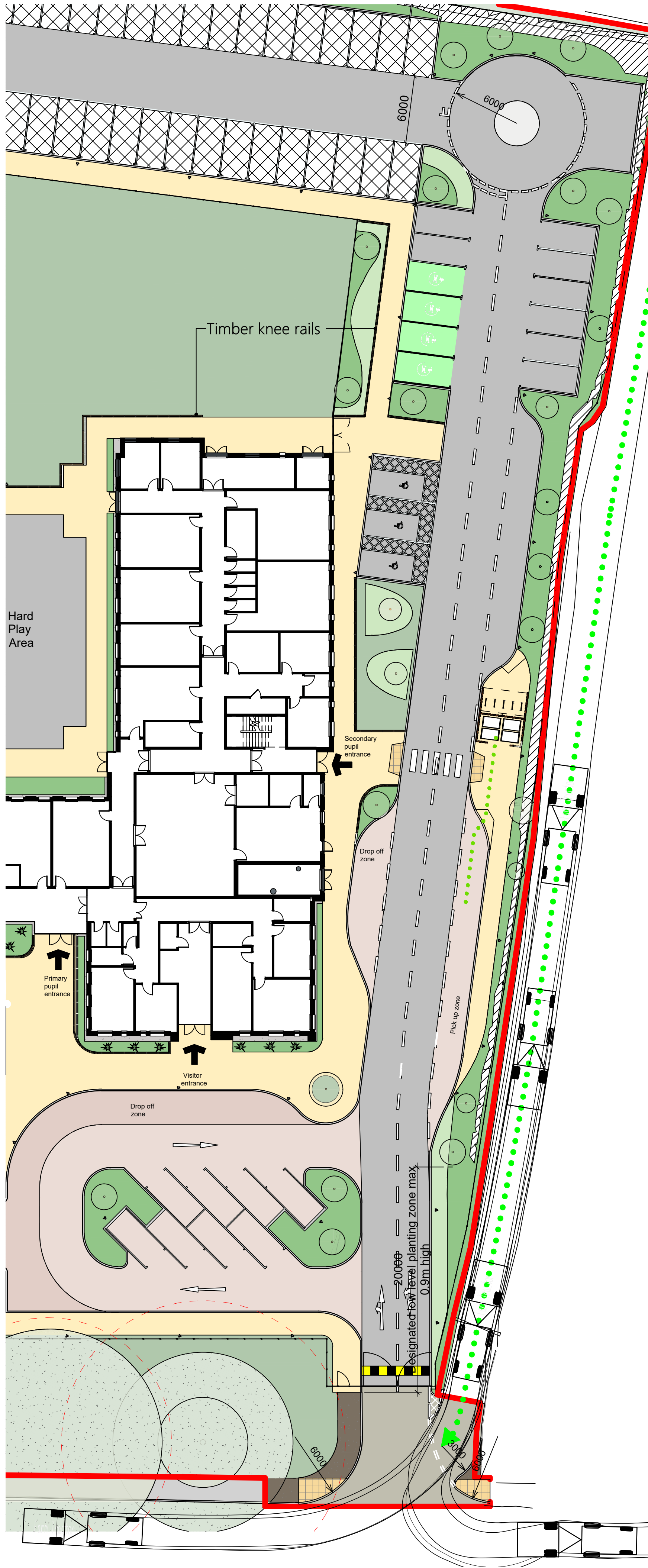
Drg no. 20034-C4P-V1-00-DR-A-0510 **Rev** P18



7.9m Fire Appliance - Layby and Turning Head



11.2m Refuse Vehicle - Collection from Pick Up Layby



Tractor & Trailer - Retained Agricultural Access

Drawing Status

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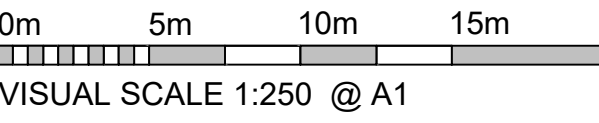
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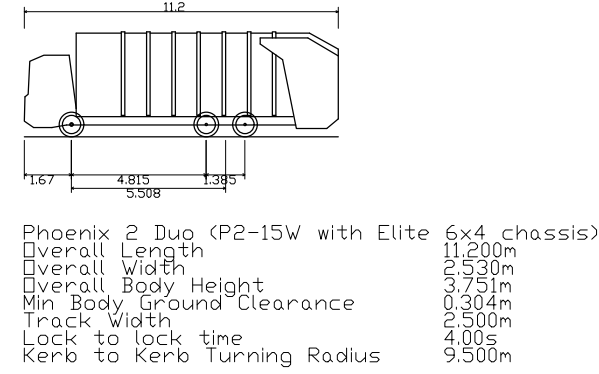
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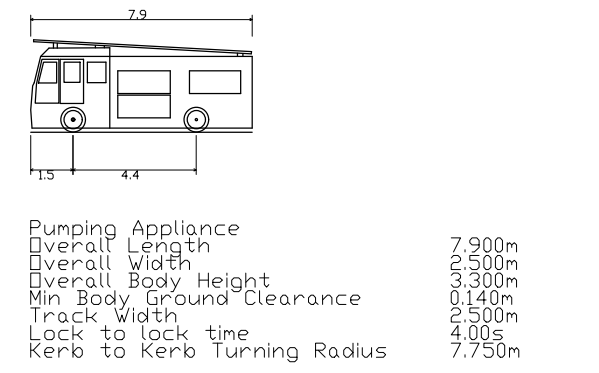
Hazard Identification		
ref	hazard	date



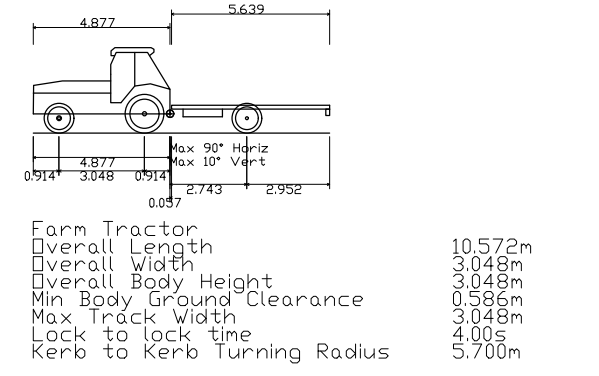
11.2m Refuse Vehicle



7.9m Fire Appliance



Tractor & Trailer



P2	Tractor & Trailer tracking added.	JEP	16.09.21	-
P1	First Issue of Drawing	JEP	05.09.21	-

Rev	Revision Details	Drawn	Date	Checked

C4 Projects

Quayside, Widnespool Business Park, Stockton Heath, W44 6RL
t: 01925 751 852
e: info@c4projects.co.uk
www.c4projects.co.uk

Project Management • Architecture • Building Surveying • Cost Consultancy

Client Witherslack Group

Project Lakeside School Liverpool

Drawing Title
Vehicle Access & Turning Strategy - Service Vehicles

Status Purpose of Issue
S2 SUITABLE FOR INFORMATION

Drawn by	JEP	Created	17.04.21
C4 Job no.	20-034	Scale	1:250 @ A1

Dwg no.	Rev
20034-C4P-AV-ZZ-DR-A-8102	P02





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Trees indicated for illustrative purposes only.

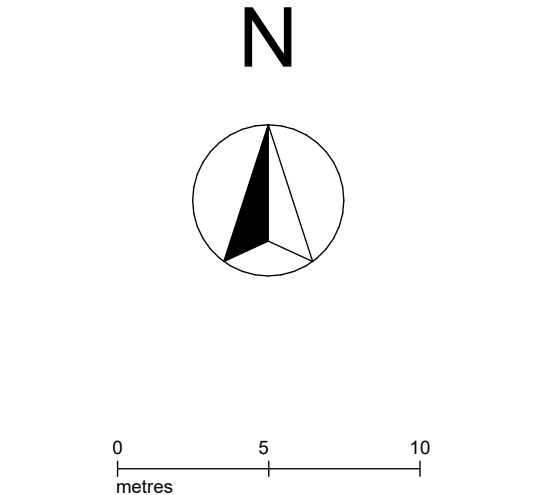
These drawings are not to be used for construction

rev.	notes	date
A	Generally revised	10.05.23
B	Generally revised	14.07.23
C	Generally revised	18.07.23
D	Minor amendment	12.09.23
E	Dimensions added	04.10.23
F	Amended to suit planners comments	22.02.24
G	Amended to suit planners comments	23.02.24
H	Amended to suit Highway consultant's comments	27.02.24

Schedule of Accommodation

Plot 1
3 Bedroom, 1.5 Storey house with integral garage
GIFA
Ground Floor 102.6m ²
Garage 18.9m ²
First Floor 39.58m ²
Total 161.08m ²
Plot 2
3 Bedroom, 1.5 Storey house with integral garage
GIFA
Ground Floor 81.4m ²
Garage 16.7m ²
First Floor 44.5m ²
Total 142.6m ²
Plot 3
3 Bedroom, 1.5 Storey house with integral garage
GIFA
Ground Floor 81.4m ²
Garage 20.4m ²
First Floor 47.88m ²
Total 149.68m ²
Plot 4
3 Bedroom, 1.5 Storey house with integral garage
GIFA
Ground Floor 100.0m ²
Garage 18.1m ²
First Floor 47.2m ²
Total 165.3m ²
Total Site
Plot 4no.
GIFA 618.66m ²
Parking 2no. per plot (plus garages)

- Key**
- 4no. Wheelie Bins per property
 - 1.8m high timber fence
 - 1.8m Timber gate
 - 1.8m high brick wall
 - New native species hedging
 - New native species trees
 - Electric Vehicle Charging Point is to be a wall mounted external blanking box with ducting from RCD, to with capacity to allow for the future installation of electric vehicle charging point. This will allow any brand of charging point to be installed at the appropriate time.
 - Shared access road, formed of black 'Tarmac', with conservation kerb stones
 - Footpaths and patio areas to be formed of Marshalls Fairstone Sawn Versuro paving, colour to be Antique Silver
 - Informal vehicle turning area and driveways and visitor parking space to be formed of block paving setts, colour to be silver grey, with conservation kerb stones
 - Grassed area, all new turf to be fine quality and laid in accordance with BS 3969 1990
 - Ornamental Mulch areas - All new trees shall be planted with 1m diameter of ornamental bark mulch around the base.



msaarchitects

msaarchitects
89 High Street
Newton-Le-Willows
WA12 9SL

T. 01925 299 881
F. 01925 299 455
E. info@msaarchitects.co.uk
www.msaarchitects.co.uk

Wheathill House, Naylors Lane,
Huyton
L27 2YA
Mr C. Henderson

Proposed Site Plan			
Project No.	Drawing No.	Rev No.	Size
1944	1944 PL 011	H	A1
Scale	Drawn By	Checked By	Date
1:250	JRN	KMS	27/02/2024

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rev.	notes	date
A	Generally revised	10.05.23
B	Generally revised	14.07.23
C	Generally revised	18.07.23
D	Minor amendment	12.09.23
E	Dimensions added	04.10.23
F	Amended to suit planners comments	22.02.24
G	Amended to suit planners comments	23.02.24
H	Amended to suit Highway consultant's comments	27.02.24

Schedule of Accommodation

Plot 1
3 Bedroom, 1.5 Storey house with integral garage
GIFA
Ground Floor 102.6m²
Garage 18.9m²
First Floor 39.58m²
Total 161.08m²

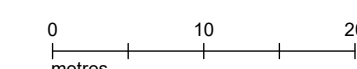
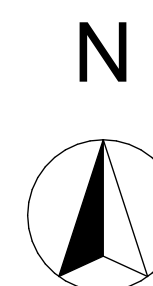
Plot 2
3 Bedroom, 1.5 Storey house with integral garage
 GIFA
 Ground Floor 81.4m²
 Garage 16.7m²
 First Floor 44.5m²
 Total 142.6m²

Plot 3
3 Bedroom. 1.5 Storey house with integral garage
GIFA

Ground Floor	81.4m ²
Garage	20.4m ²
First Floor	47.88m ²
Total	149.68m ²

Plot 4
3 Bedroom, 1.5 Storey house with integral garage
 GIFA
 Ground Floor 100.0m²
 Garage 18.1m²
 First Floor 47.2m²
 Total 165.3m²

Total Site	
PLOTS	4no.
GIFA	618.66m ²
Parking	2no. per plot (plus carages)



msaarchitects T. 01925 299 881
89 High Street F. 01925 299 455
Newton-Le-Willows E. info@msaarchitects.co.uk
WA12 9SL www.msaarchitects.co.uk

Wheathill House, Naylors Lane,
Huyton
L27 2YA
Mr C. Henderson

Proposed Block Plan

Project No. 1944	Drawing No. 1944 PL 010	Rev No. H	Sheet No. A
Scale 1:500	Drawn By JRN	Checked By KMS	Date 27/02/2021

PLANNING

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Architects Registration Board

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Chartered Practice

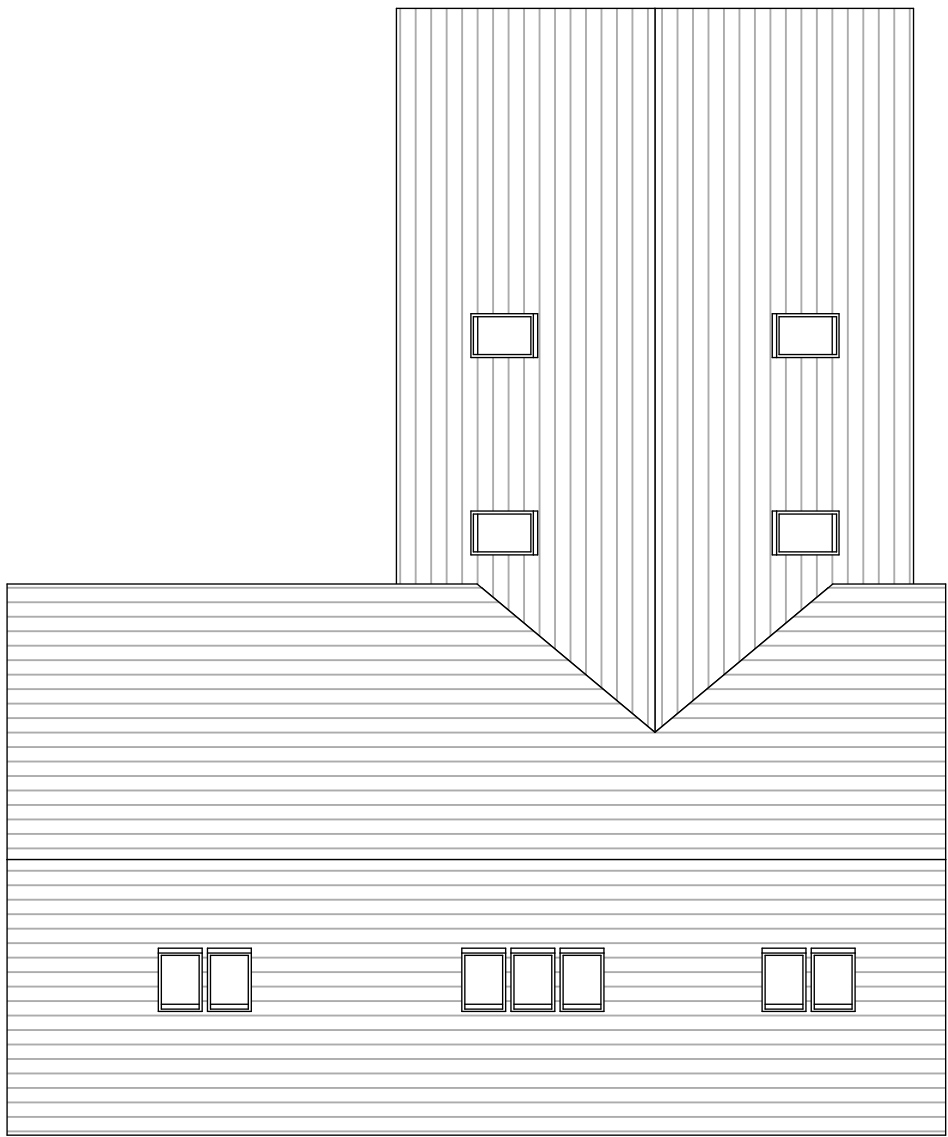
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rev.	notes	date
A	Addition of scale bars	06.02.23
B	Generally revised	10.05.23
C	Generally revised	14.07.23
D	Generally revised	18.07.23
E	Dimensions added	04.10.23



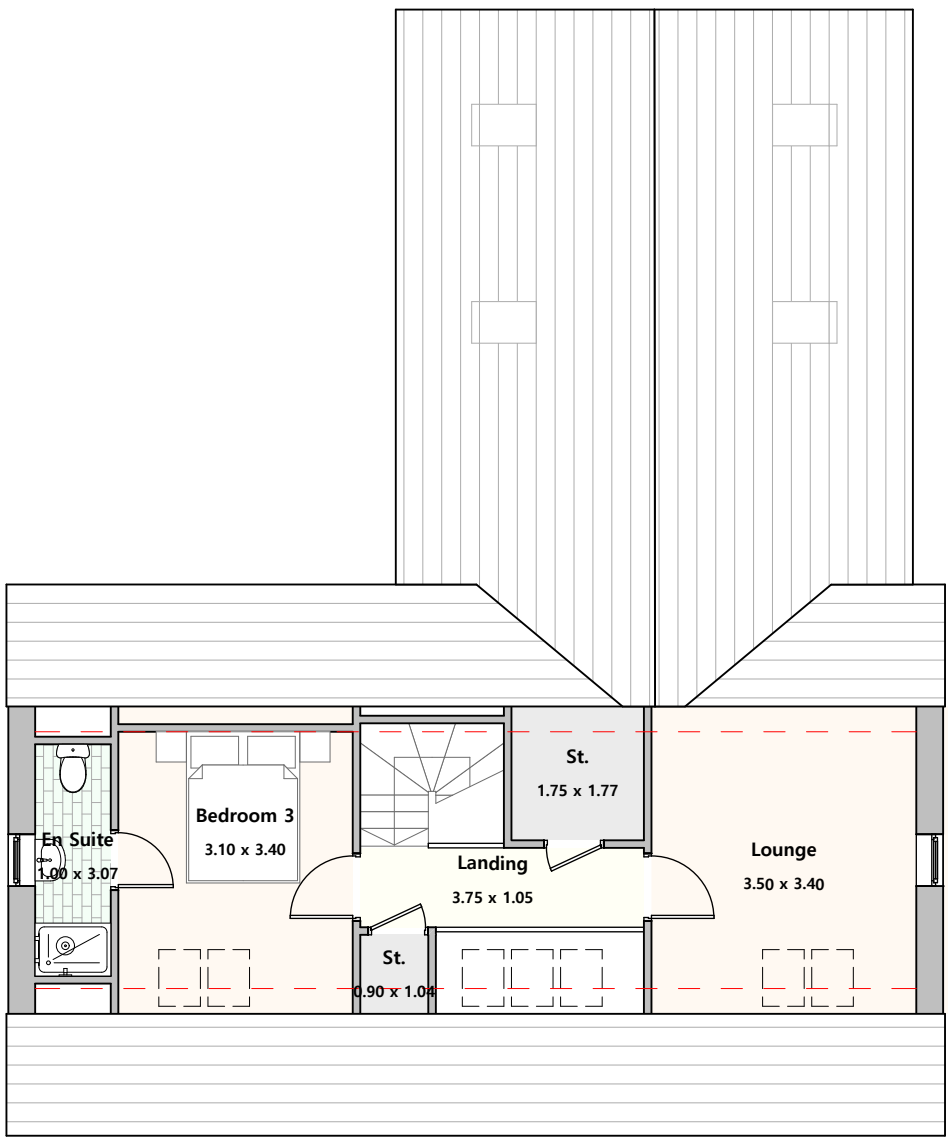
Roof Plan



North Elevation



West Elevation



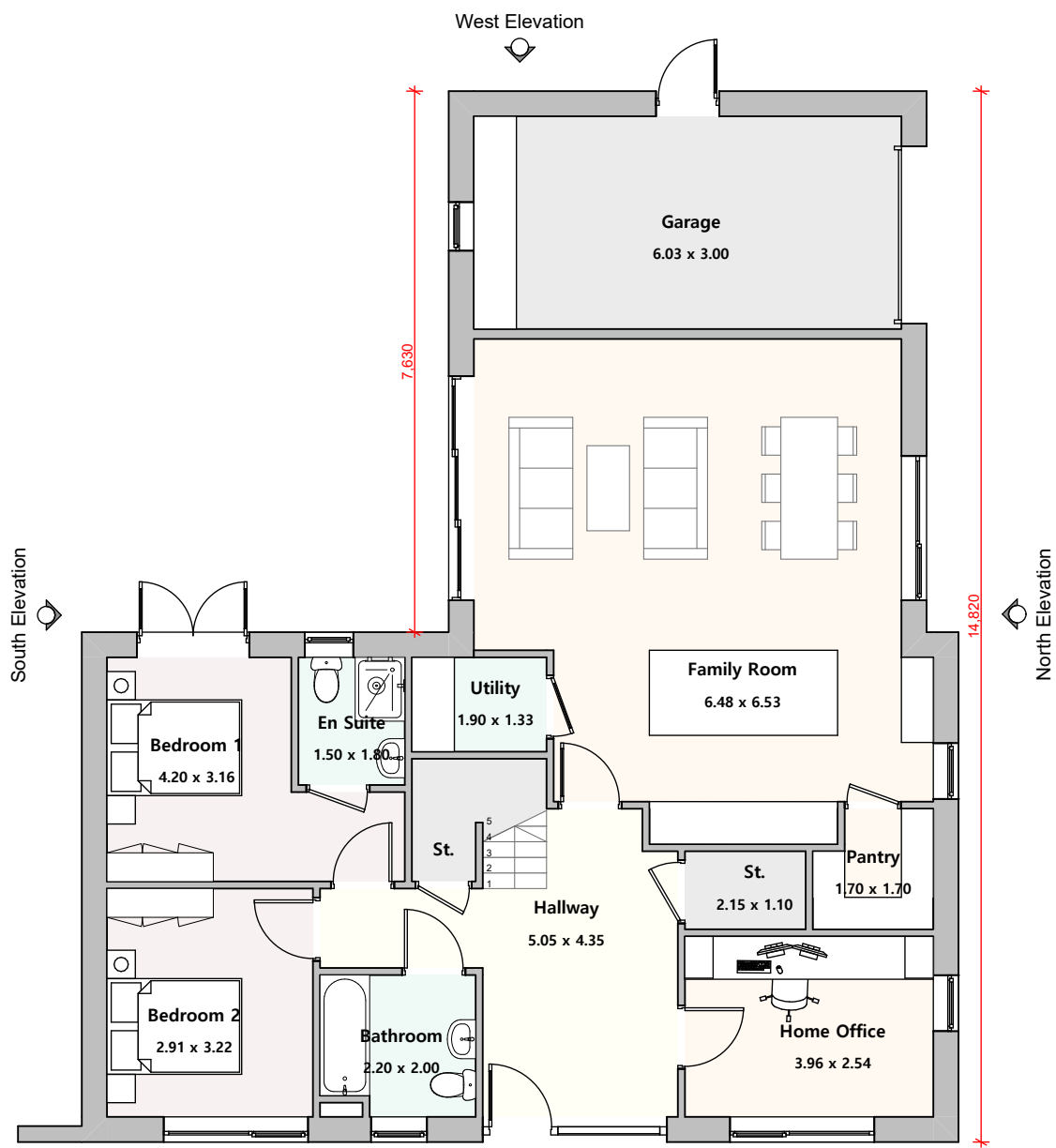
First Floor Plan



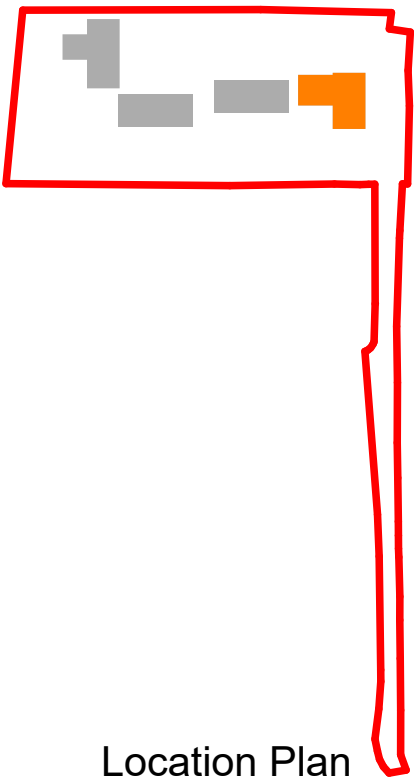
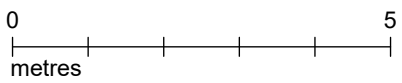
South Elevation



East Elevation



Ground Floor Plan



Materials

1. Angle stop end ridge tile
2. Natural slate roof tiles
3. Aluminium fascia, colour to be black
4. Verge trim to be PPC Aluminium, colour to be black
5. Facing bricks to be Red Stock Multi Facing brick to local authority satisfaction
6. Soldier course brick to form window head and sill detail
7. Vertical timber cladding to local authority satisfaction
8. Windows to be formed of metal frame and double glazing
9. Sliding doors to be of the metal glazing system as the windows
10. Entrance and patio doors to be glazed, to match window system
11. Aluminium 'Deepflow' profile with round downpipe, PPC finish, colour to be black. Leaf guard to be included
12. PPC aluminium roof lights
13. Garage door to be metal, roller shutter arrangement

msaarchitects

msaarchitects
89 High Street
Newton-Le-Willows
WA12 9SL

T. 01925 299 881
F. 01925 299 455
E. info@msaarchitects.co.uk
www.msaarchitects.co.uk

Wheathill House, Naylors Lane,
Huyton
L27 2YA
Mr C. Henderson

Proposed Plot 1

Project No.	Drawing No.	Rev No.	Size
1944	1944 PL 012	E	A1

Scale	Drawn By	Checked By	Date
1:100	JRN	KMS	04/10/2023

PLANNING

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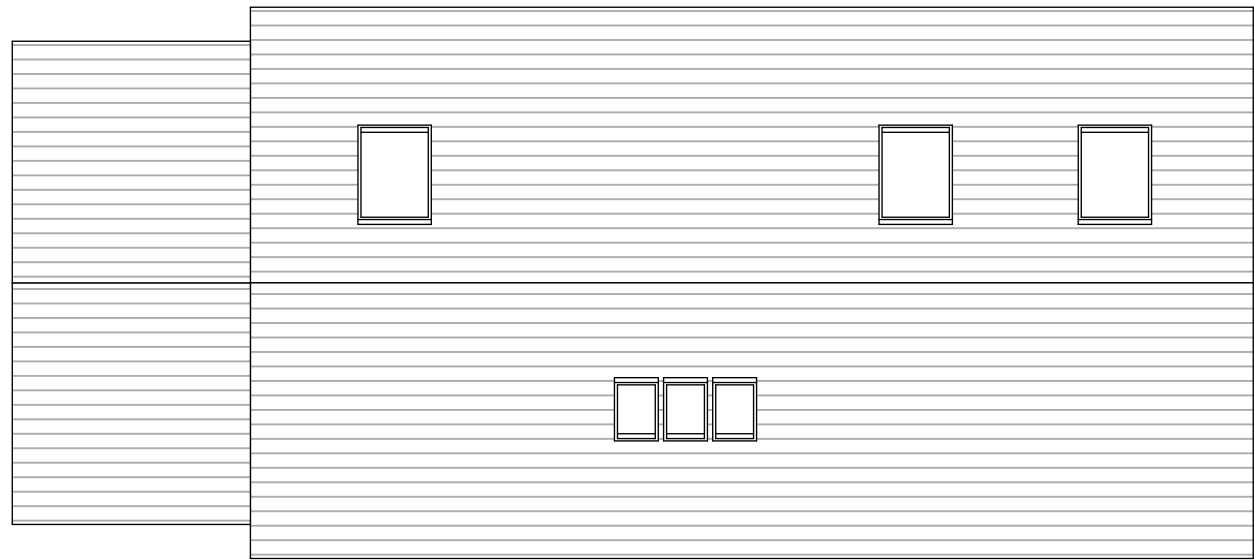
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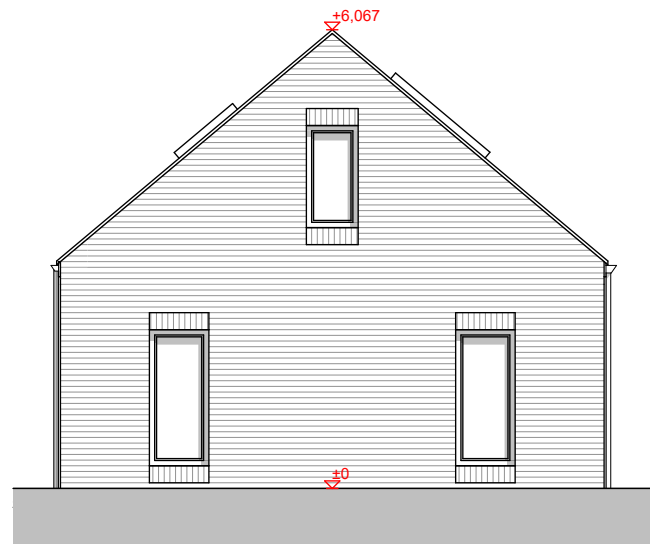
rev.	notes	date
A	Addition of scale bars	06.02.23
B	Generally revised	10.05.23
C	Generally revised	14.07.23
D	Generally revised	18.07.23
E	Dimensions added	04.10.23



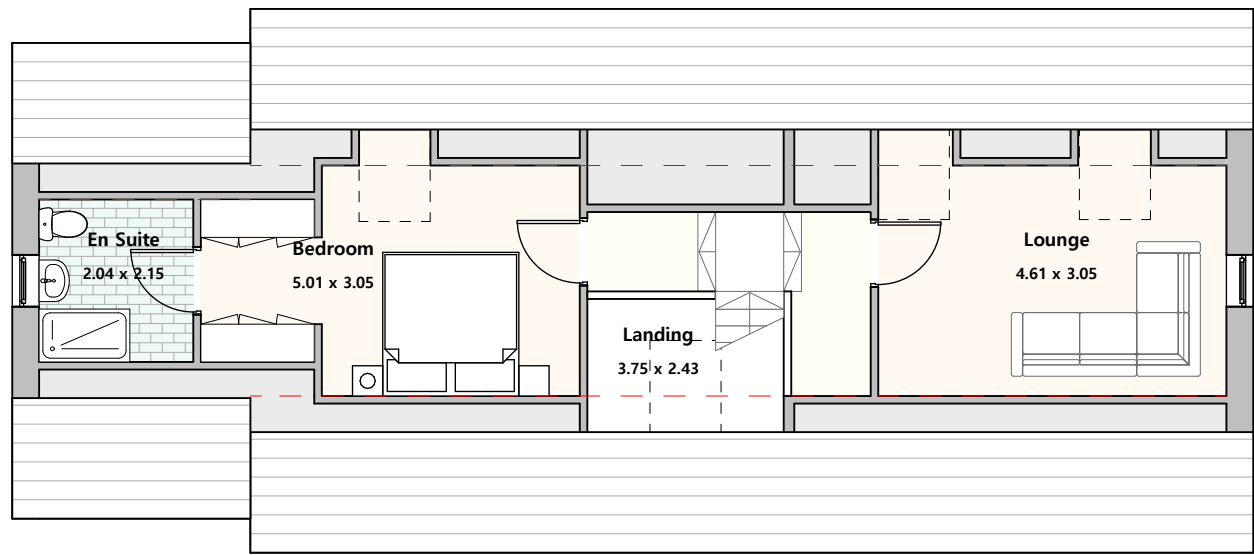
Roof Plan



North Elevation



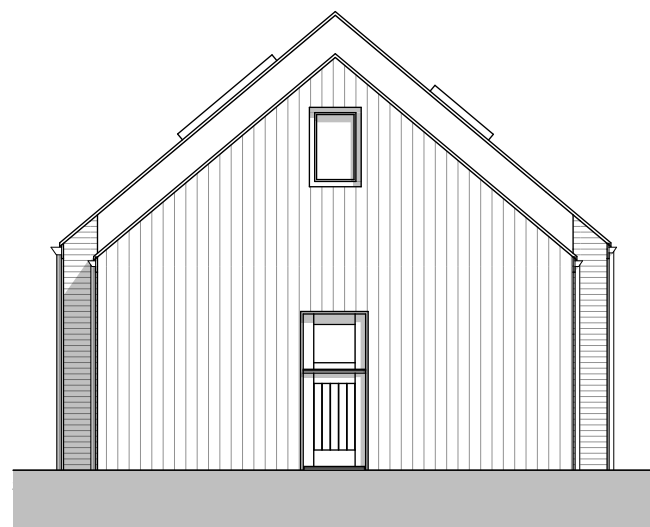
West Elevation



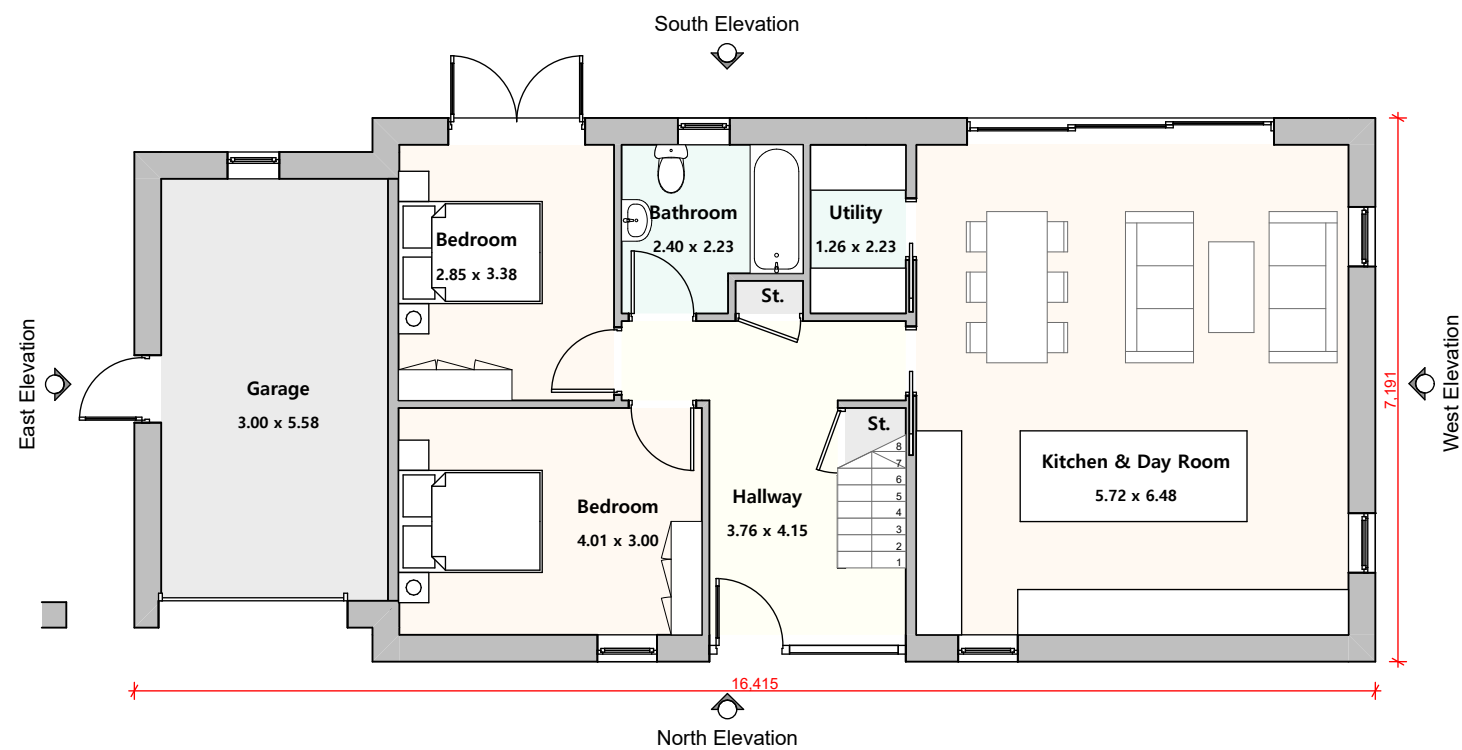
First Floor Plan



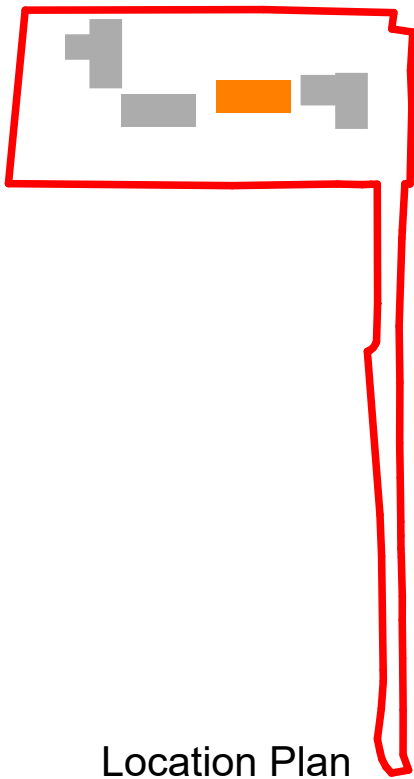
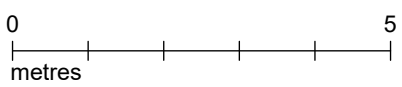
South Elevation



East Elevation



Ground Floor Plan



Materials

- Angle stop end ridge tile
- Natural slate roof tiles
- Aluminium fascia, colour to be black
- Vegete trim to be PPC Aluminium, colour to be black
- Facing bricks to be Red Stock Multi Facing brick to local authority satisfaction
- Soldier course brick to form window head and sill detail
- Vertical timber cladding to local authority satisfaction
- Windows to be formed of metal frame and double glazing
- Sliding doors to be of the metal glazing system as the windows
- Entrance and patio doors to be glazed, to match window system
- Aluminium 'Deepflow' profile with round downpipe, PPC finish, colour to be black. Leaf guard to be included
- PPC aluminium roof lights
- Garage door to be metal, roller shutter arrangement



msaarchitects
89 High Street
Newton-Le-Willows
WA12 9SL

T. 01925 299 881
F. 01925 299 455
E. info@msaarchitects.co.uk
www.msaarchitects.co.uk

Wheathill House, Naylors Lane,
Huyton
L27 2YA
Mr C. Henderson

Proposed Plot 2

Project No. 1944
Drawing No. 1944 PL 013
Rev No. E
Size A1

Scale 1:100
Drawn By JRN
Checked By KMS
Date 04/10/2023

PLANNING

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Location Plan

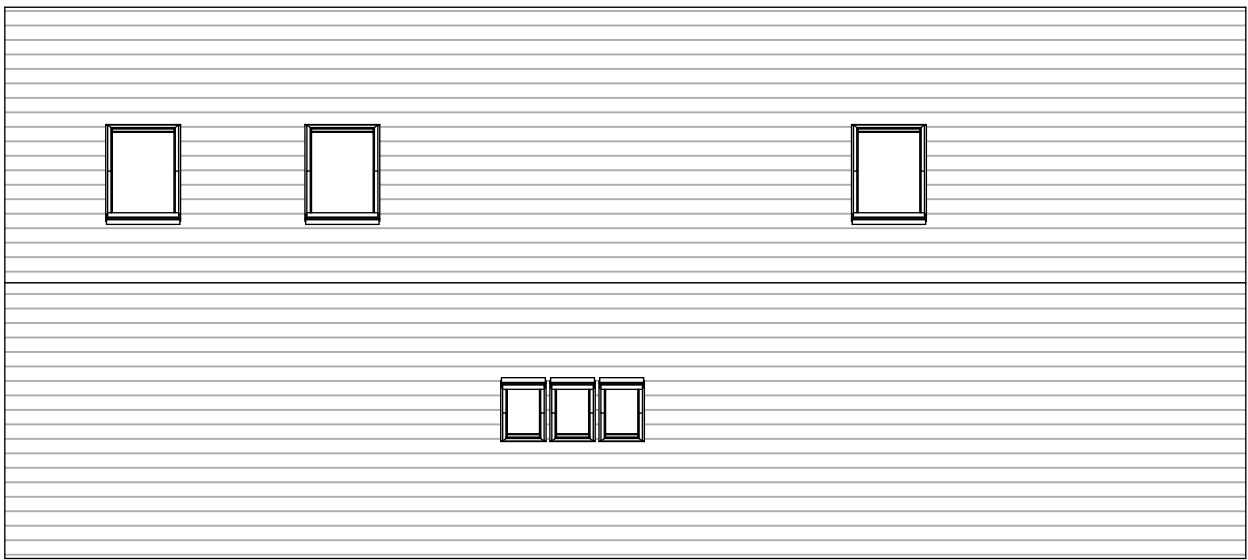
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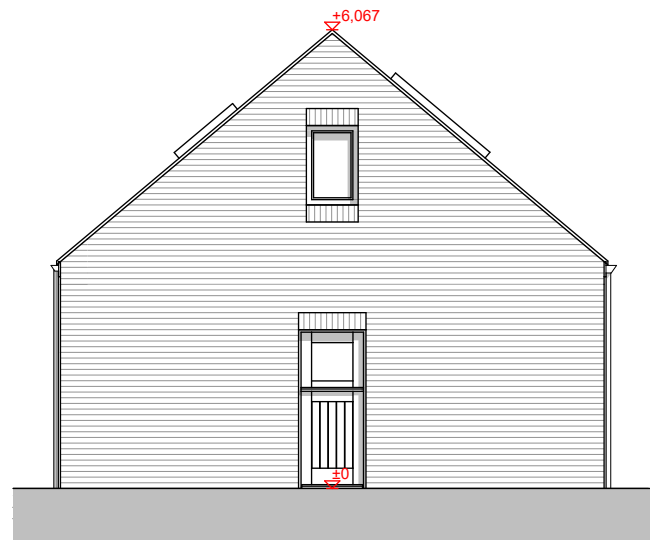
rev.	notes	date
A	Generally revised	14.07.23
B	Generally revised	18.07.23
C	Dimensions added	04.10.23
D	Amended to suit planners comments	22.02.24
E	Amended to suit planners comments	23.02.24



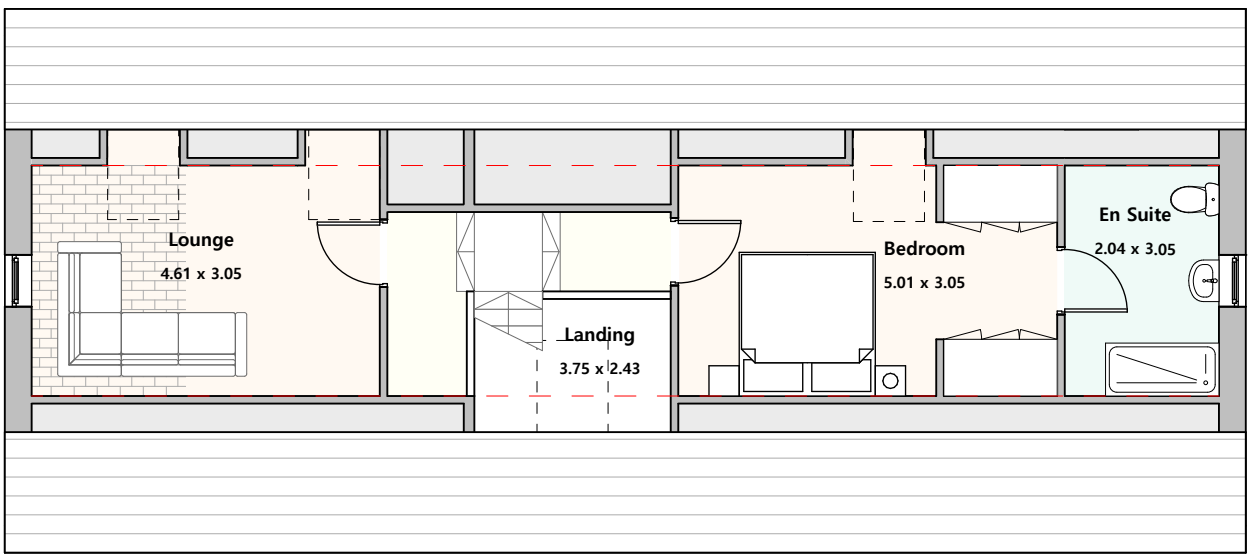
Roof Plan



North Elevation



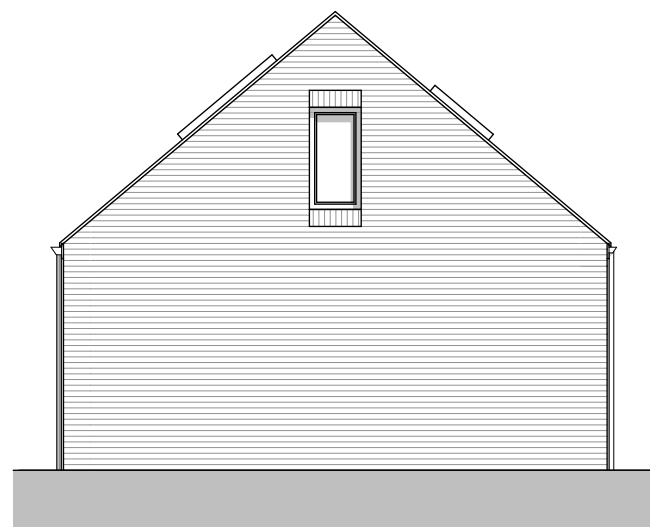
West Elevation



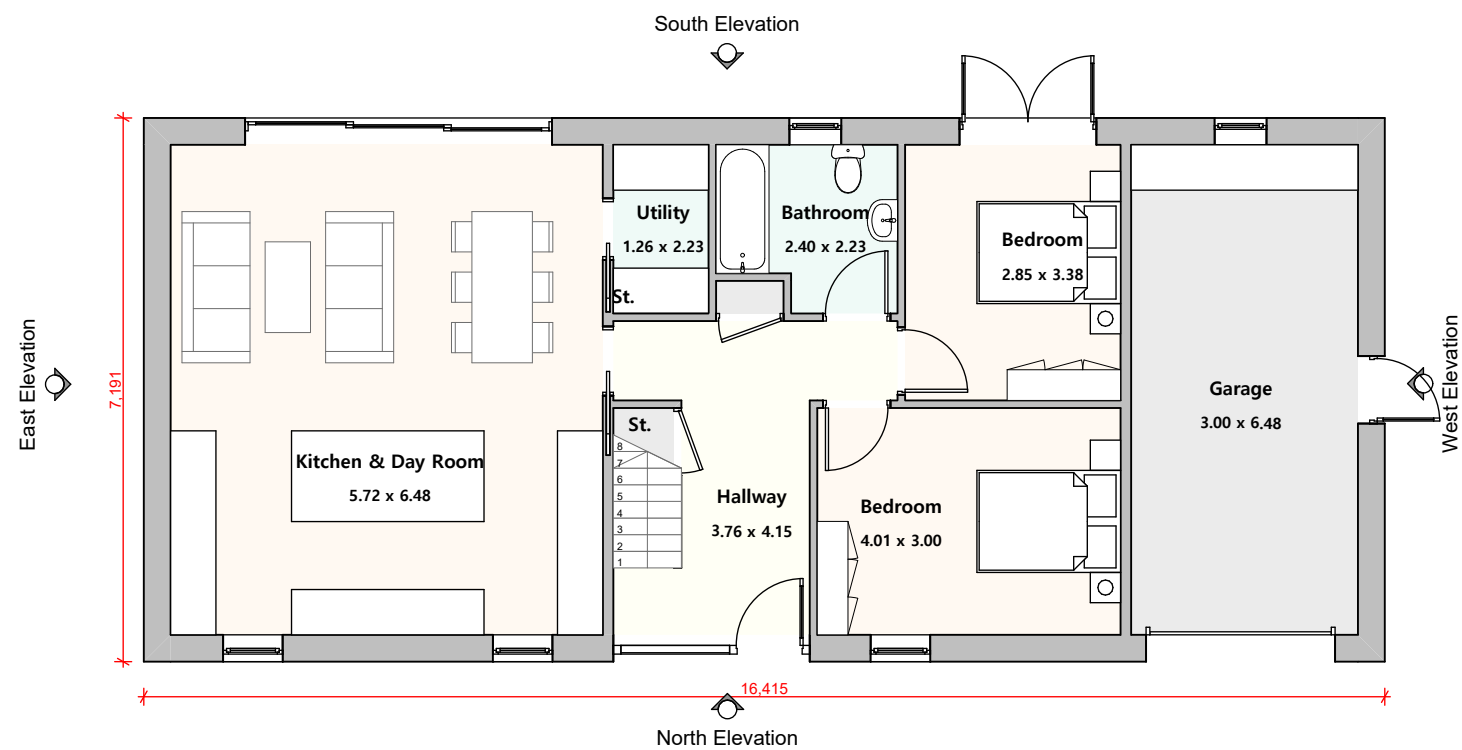
First Floor Plan



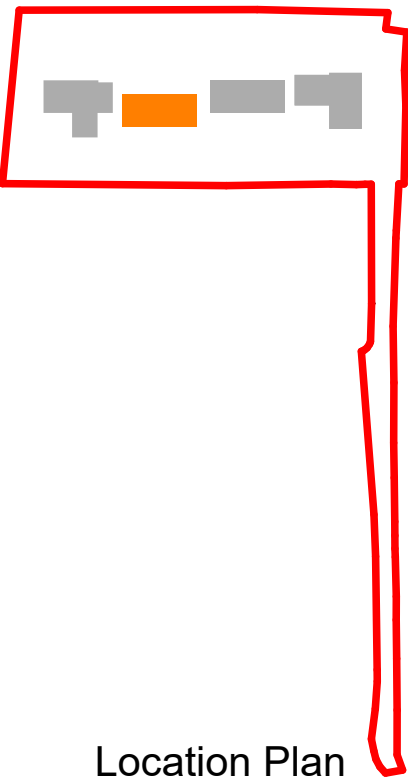
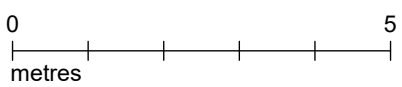
South Elevation



East Elevation



Ground Floor Plan



Materials

- Angle stop end ridge tile
- Natural slate roof tiles
- Aluminium fascia, colour to be black
- Vegetation to be PFC Aluminium, colour to be black
- Facing bricks to be Red Stock Multi Facing brick to local authority satisfaction
- Soldier course brick to form window head and sill detail
- Windows to be formed of metal frame and double glazing
- Sliding doors to be of the metal glazing system as the windows
- Entrance and patio doors to be glazed, to match window system
- Aluminium 'Deepflow' profile, with round downpipe, PFC finish colour to be black. Leaf guard to be included
- PFC aluminium roof lights
- Garage door to be metal, roller shutter arrangement



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89 High Street
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WA12 9SL

T. 01925 299 881
F. 01925 299 455
E. info@msaarchitects.co.uk
www.msaarchitects.co.uk

Wheathill House, Naylors Lane,
Huyton
L27 2YA
Mr C. Henderson

Proposed Plot 3

Project No. 1944
Drawing No. 1944 PL 014
Rev No. E
Size A1

Scale 1:100
Drawn By JRN
Checked By KMS
Date 23/02/2024

PLANNING

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Location Plan

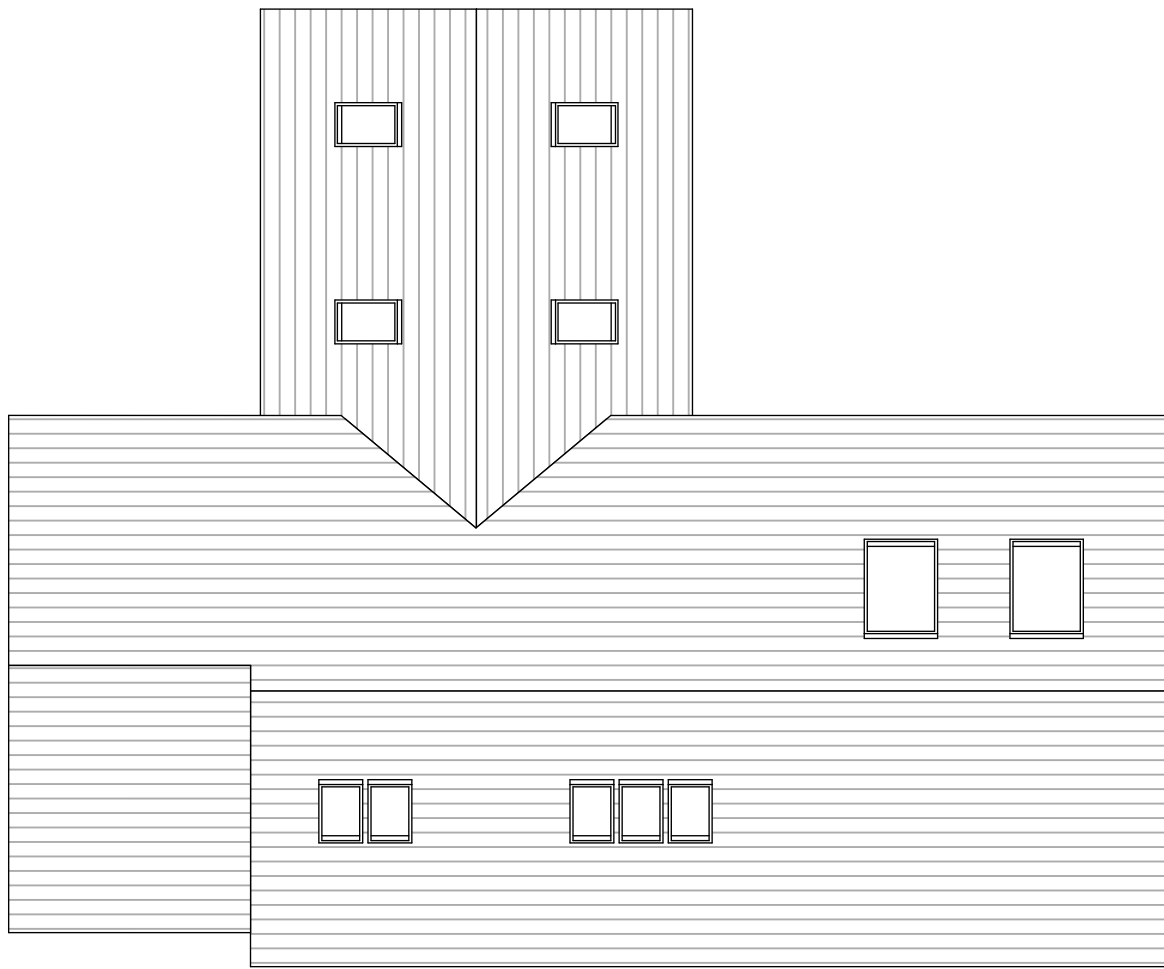
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rev.	notes	date
A	Generally revised	14.07.23
B	Generally revised	18.07.23
C	Dimensions added	04.10.23
D	Amended to suit planners comments	22.02.24



Roof Plan



South Elevation



West Elevation



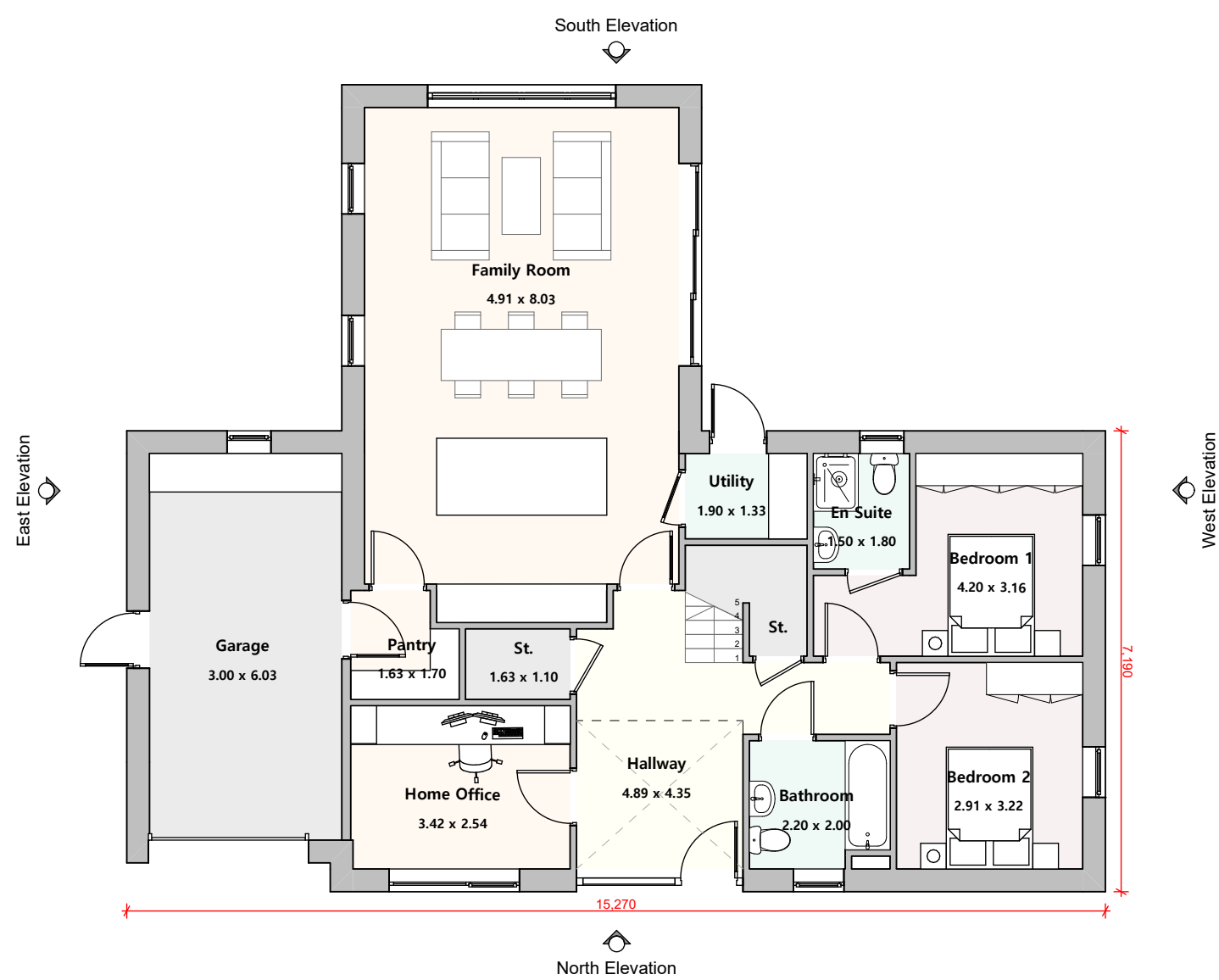
First Floor Plan



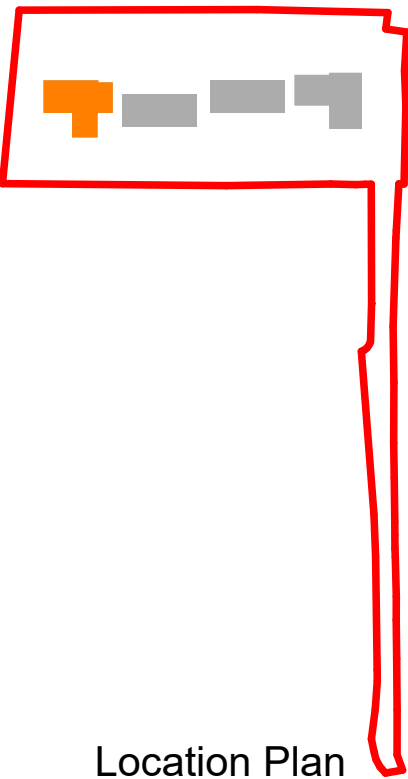
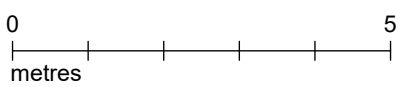
North Elevation



East Elevation



Ground Floor Plan



Materials

1. Angle stop end ridge tile
2. Natural slate roof tiles
3. Aluminium fascia, colour to be black
4. Verge trim to be PPC Aluminium, colour to be black
5. Facing bricks to be Red Stock Multi Facing brick to local authority satisfaction
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Newton-Le-Willows
WA12 9SL

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F. 01925 299 455
E. info@msaarchitects.co.uk
www.msaarchitects.co.uk

Wheathill House, Naylors Lane,
Huyton
L27 2YA
Mr C. Henderson

Proposed Plot 4

Project No.	Drawing No.	Rev No.	Size
1944	1944 PL 015	D	A1

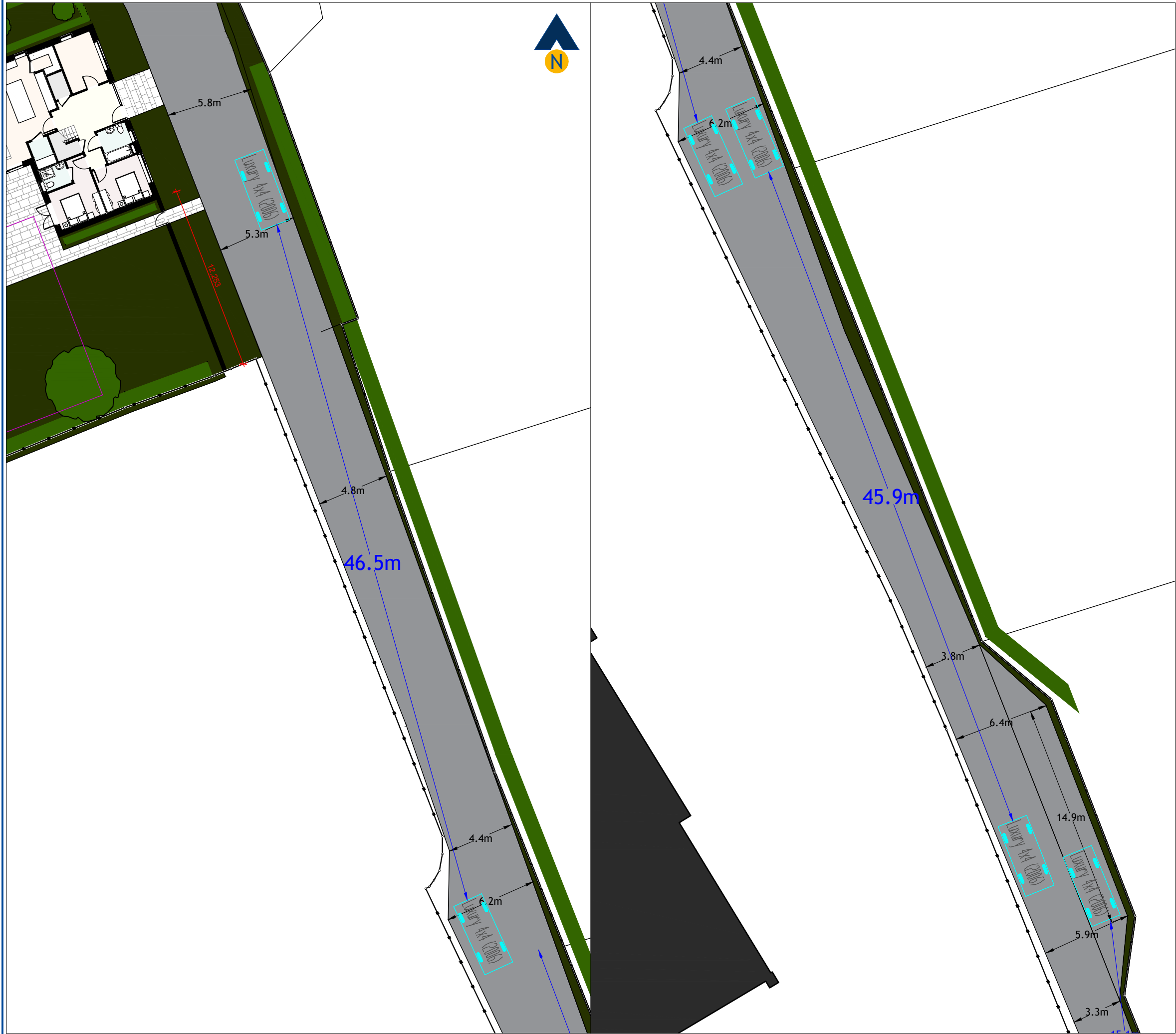
Scale	Drawn By	Checked By	Date
1:100	JRN	KMS	22/02/2024

PLANNING

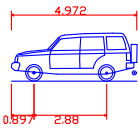
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Revision:	
A -	



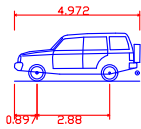
Luxury 4x4 (2006)	
Overall Length	4.972m
Overall Width	2.034m
Overall Body Height	1.905m
Min Body Ground Clearance	0.897m
Max Track Width	2.88m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.800m

Client:	Mr Michael Rowland
Project:	Proposed Residential Development Naylor's Road, Knowsley
Drawing Title:	Available Forward Sightlines Between Main Driveway Passing Places
Drawing Number:	J000504-VISI201
Date:	28/02/24
Drawn By:	APB
Revision:	-
Scale:	1:400@A3
Checked By:	-

Status:	Information
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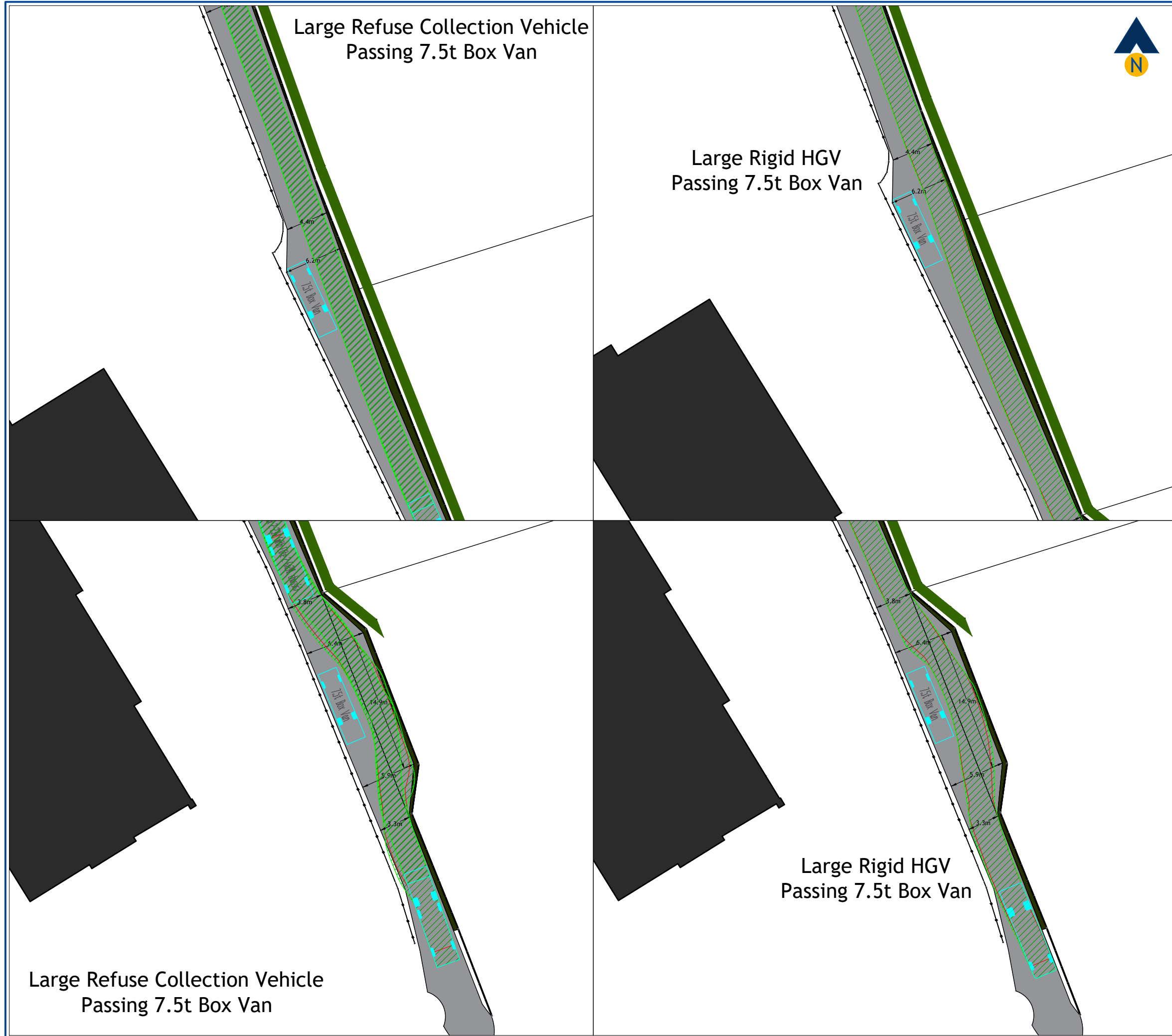
Revision:	
A	-



Luxury 4x4 (2006)	
Overall Length	4.972m
Overall Width	2.034m
Overall Body Height	1.905m
Min Body Ground Clearance	0.279m
Max Track Width	1.884m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.800m

Client:	Mr Michael Rowland
Project:	Proposed Residential Development Naylor's Road, Knowsley
Drawing Title:	Available Forward Visibility Around the Main Driveway Bend
Drawing Number:	J000504-VIS1202
Revision:	-
Date:	28/02/24
Scale:	1:100@A3
Drawn By:	APB
Checked By:	-

Status:	Information
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Revision:

A	-
---	---

Phoenix 2-23V (with Elite 2 6x2M_L chassis)
Overall Length 10.50m
Overall Width 2.50m
Overall Body Height 3.21m
Min Body Ground Clearance 0.215m
Track Width 2.50m
Lock to lock time 4.00m
Kerb to Kerb Turning Radius 10.250m

7.5t Box Van
Overall Length 8.010m
Overall Width 2.50m
Overall Body Height 2.50m
Min Body Ground Clearance 0.215m
Track Width 2.50m
Lock to lock time 4.00m
Kerb to Kerb Turning Radius 7.400m

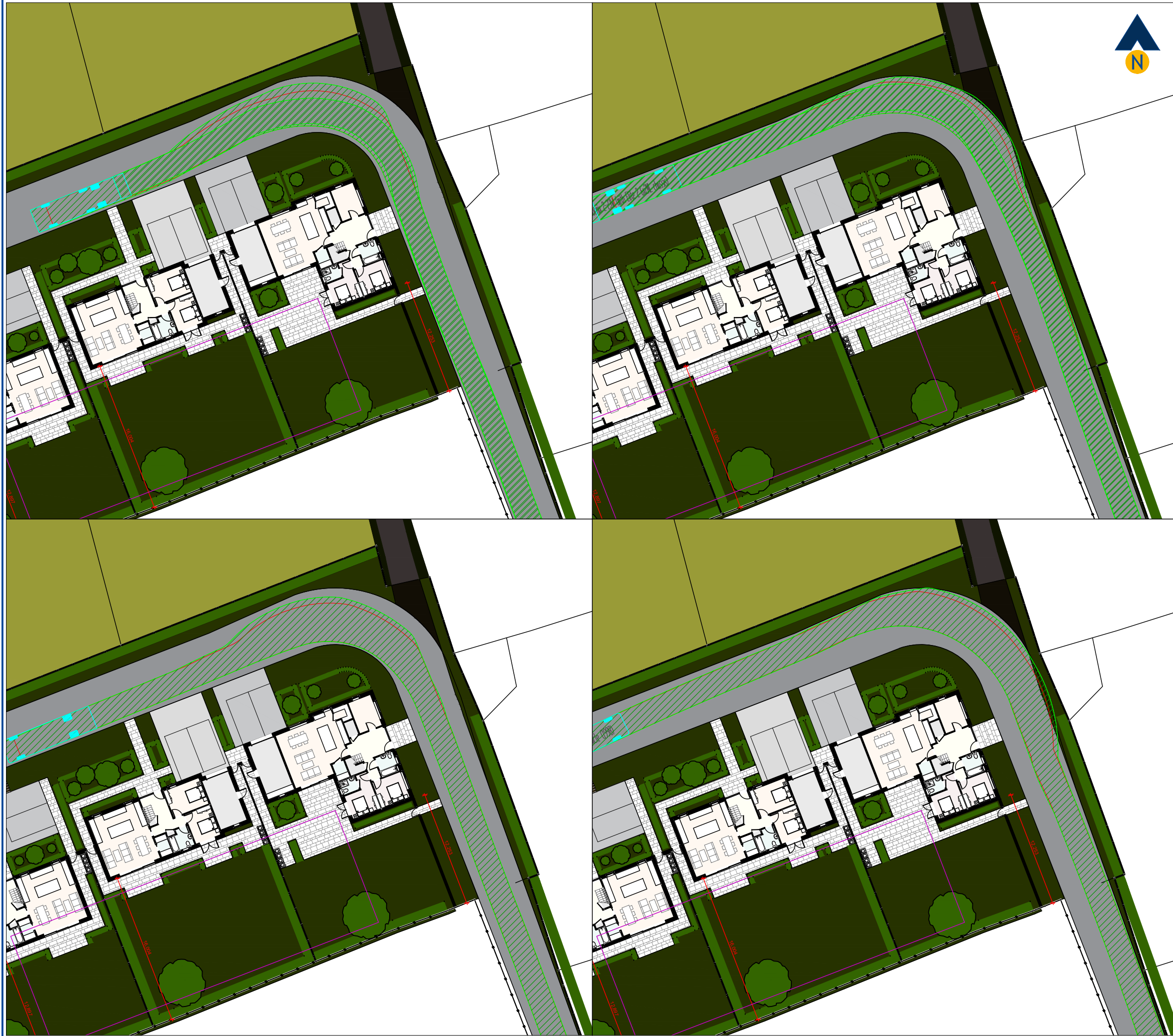
FTA Design HG Rigid Vehicle (1998)
Overall Length 10.000m
Overall Width 2.50m
Overall Body Height 2.50m
Min Body Ground Clearance 0.215m
Track Width 2.50m
Lock to lock time 4.00m
Kerb to Kerb Turning Radius 11.000m

Client:	Mr Michael Rowland
Project:	Proposed Residential Development Naylor's Road, Knowsley
Drawing Title:	Example Vehicle Swept Path Runs Large 4x4 Access to Plots 1 & 2
Drawing Number:	J000504-ATR203
Date:	28/02/24
Drawn By:	APB
Revision:	-
Scale:	1:400@A3
Checked By:	-
Status:	Information

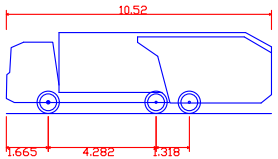
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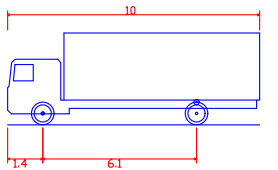
This drawing has been prepared for feasibility purposes and does not represent a construction plan. All design aspects to be confirmed at the appropriate detailed design stage.



Revision:
A -



Phoenix 2-23W (with Elite 2 6x2ML chassis)
Overall Length 10.520m
Overall Width 2.530m
Overall Body Height 3.211m
Min Body Ground Clearance 0.416m
Track Width 2.530m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 10.250m



FTA Design HG Rigid Vehicle (1998)
Overall Length 10.000m
Overall Width 2.500m
Overall Body Height 3.645m
Min Body Ground Clearance 0.440m
Track Width 2.470m
Lock to lock time 3.00s
Kerb to Kerb Turning Radius 11.000m

Client:
Mr Michael Rowland

Project:
Proposed Residential Development
Naylor's Road, Knowsley

Drawing Title:
Example Vehicle Swept Path Runs
Main Site Bend Feature
Large Service Vehicles

Drawing Number:
J000504-ATR204

Revision:
-

Date:
28/02/24

Scale:
1:400@A3

Drawn By:
APB

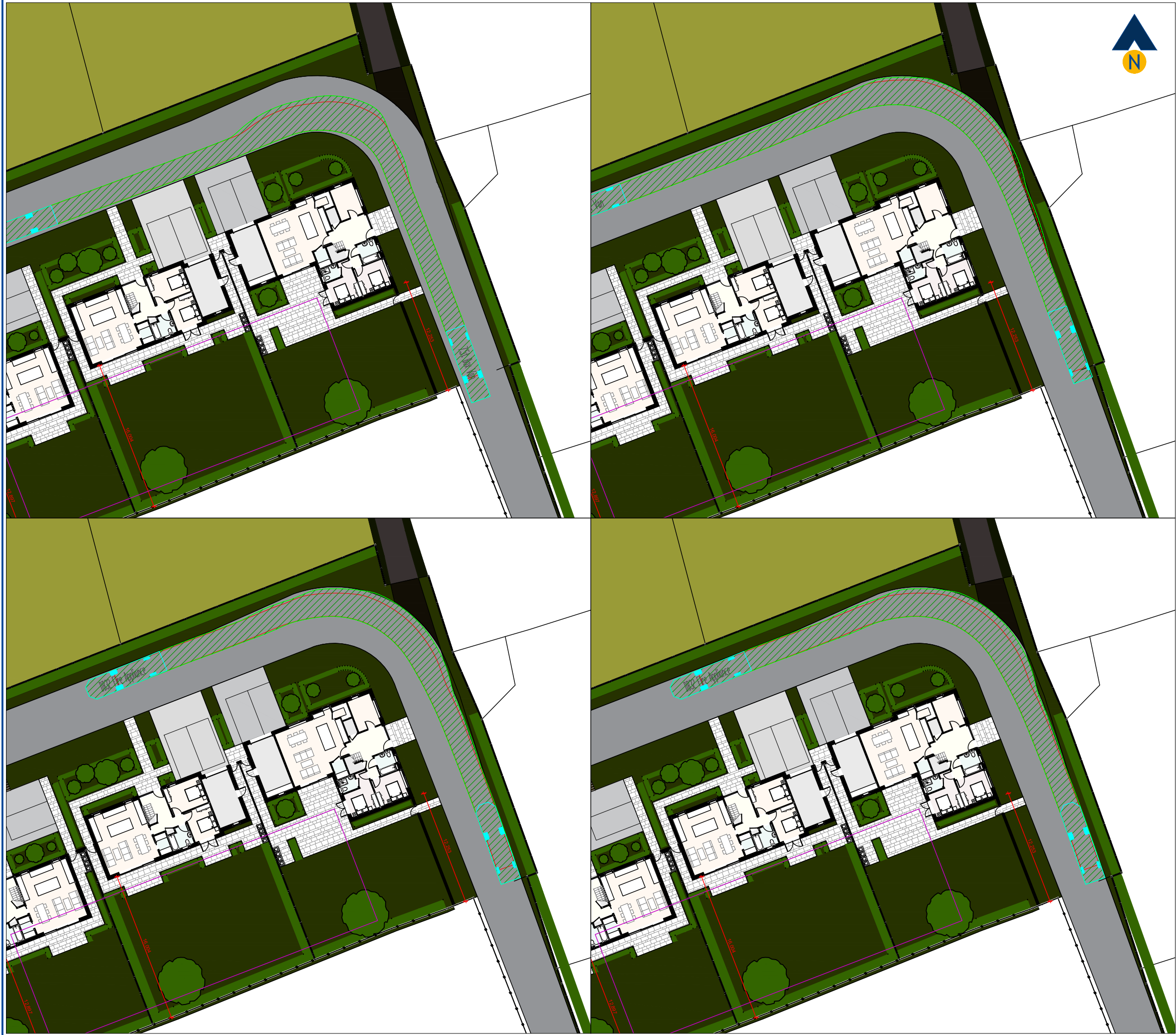
Checked By:
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Status:
Information

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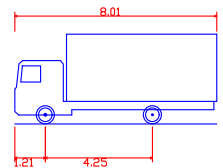
DO NOT SCALE - Follow any figured dimensions.

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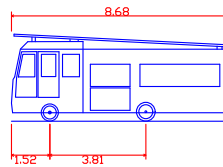


Revision:

A -



7.5t Box Van
Overall Length 8.010m
Overall Width 2.100m
Overall Body Height 2.556m
Min Body Ground Clearance 0.351m
Track Width 2.064m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 7.400m



DB32 Fire Appliance
Overall Length 8.680m
Overall Width 2.180m
Overall Body Height 2.452m
Min Body Ground Clearance 0.327m
Max Track Width 2.121m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 7.910m

Client:

Mr Michael Rowland

Project:

Proposed Residential Development
Naylor's Road, Knowsley

Drawing Title:

Example Vehicle Swept Path Runs
Main Site Bend Feature
7.5t Box Van & Large 4x4

Drawing Number:

J000504-ATR205

Revision:

-

Date:

28/02/24

Scale:

1:400@A3

Drawn By:

APB

Checked By:

-

Status:

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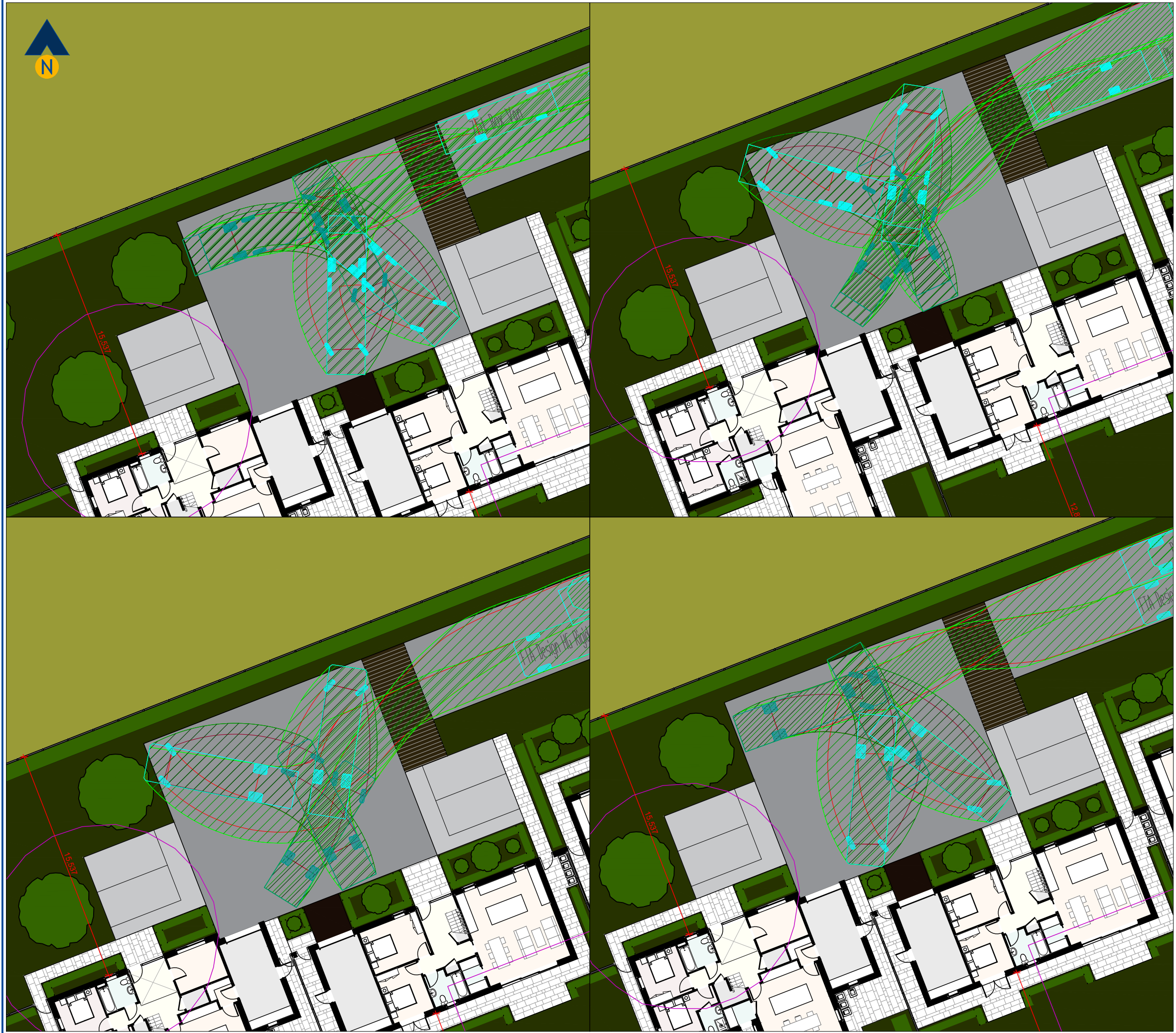




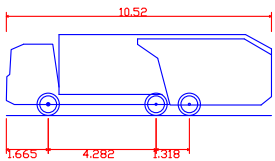
Revision:	
A -	

Client:	Mr Michael Rowland
Project:	Proposed Residential Development Naylors Lane, Knowsley
Drawing Title:	Residential Area Key Highway Dimensions
Drawing Number:	J000504-SK201
Date:	28/02/24
Drawn By:	APB

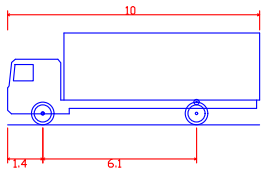
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Scale:	1:400@A3
Checked By:	-
Status:	Information
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DO NOT SCALE - Follow any figured dimensions.	
This drawing has been prepared for feasibility purposes and does not represent a construction plan. All design aspects to be confirmed at the appropriate detailed design stage.	



Revision:
A -



Phoenix 2-23W (with Elite 2 6x2ML chassis)	
Overall Length	10.520m
Overall Width	2.530m
Overall Body Height	3.211m
Min Body Ground Clearance	0.416m
Track Width	2.530m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	10.250m



FTA Design HG Rigid Vehicle (1998)	
Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	11.000m

Client:	Mr Michael Rowland
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Project:	Proposed Residential Development Naylor's Road, Knowsley
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Drawing Title:	Example Vehicle Swept Path Runs Large Service Vehicles in Main Turning Area
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Drawing Number:	J000504-ATR201
Revision:	-

Date:	28/02/24
Scale:	1:400@A3

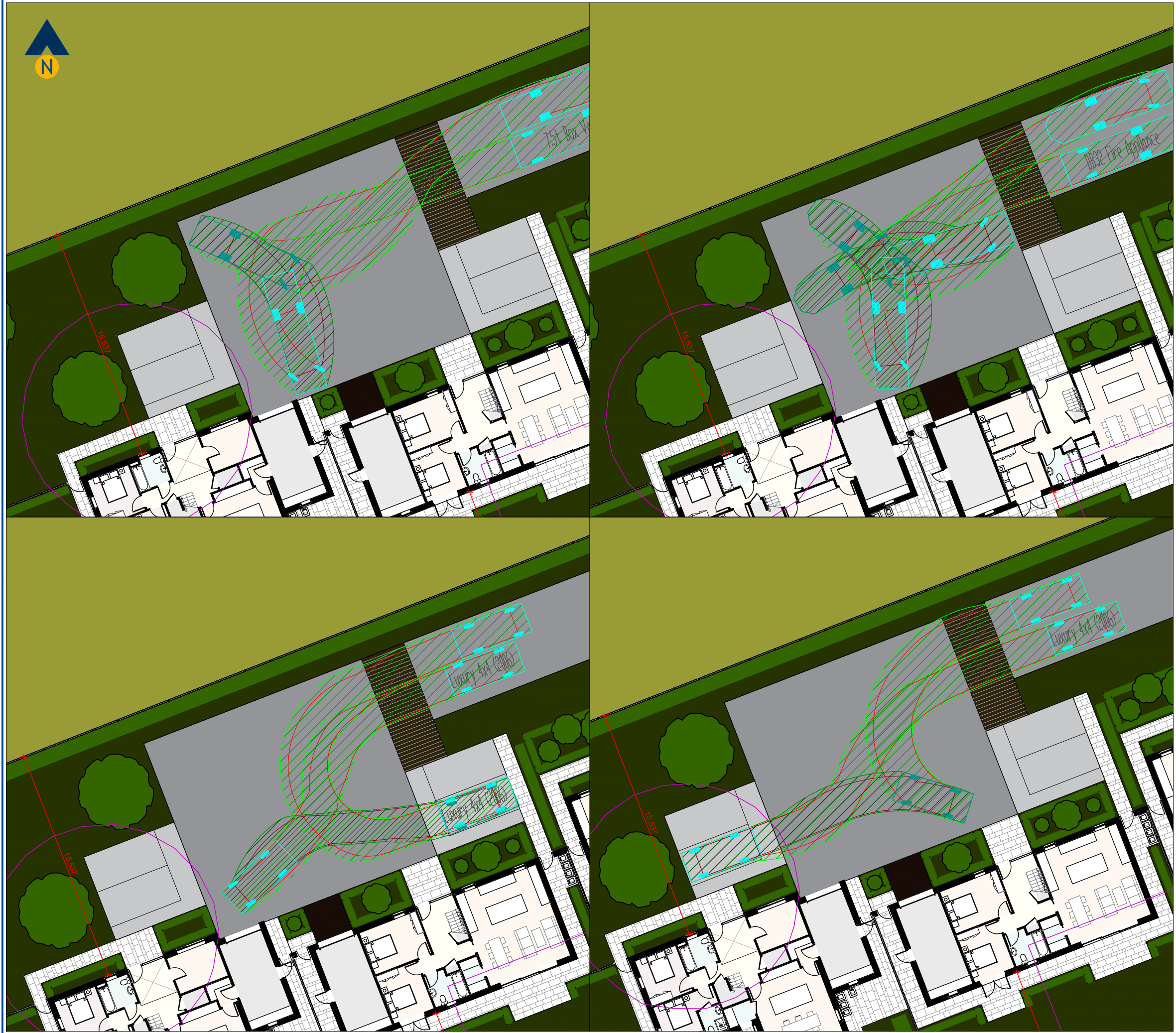
Drawn By:	APB
Checked By:	-

Status:	Information
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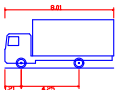
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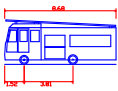
This drawing has been prepared for feasibility purposes and does not represent a construction plan. All design aspects to be confirmed at the appropriate detailed design stage.



Revision:	
A -	



7.5t Box Van
Overall Length 8.00m
Overall Width 2.50m
Overall Body Height 3.50m
Min Body Ground Clearance 0.25m
Track Width 2.50m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 7.40m



Fire Tender
Overall Length 8.68m
Overall Width 2.50m
Overall Body Height 3.50m
Min Body Ground Clearance 0.25m
Track Width 2.50m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 9.91m



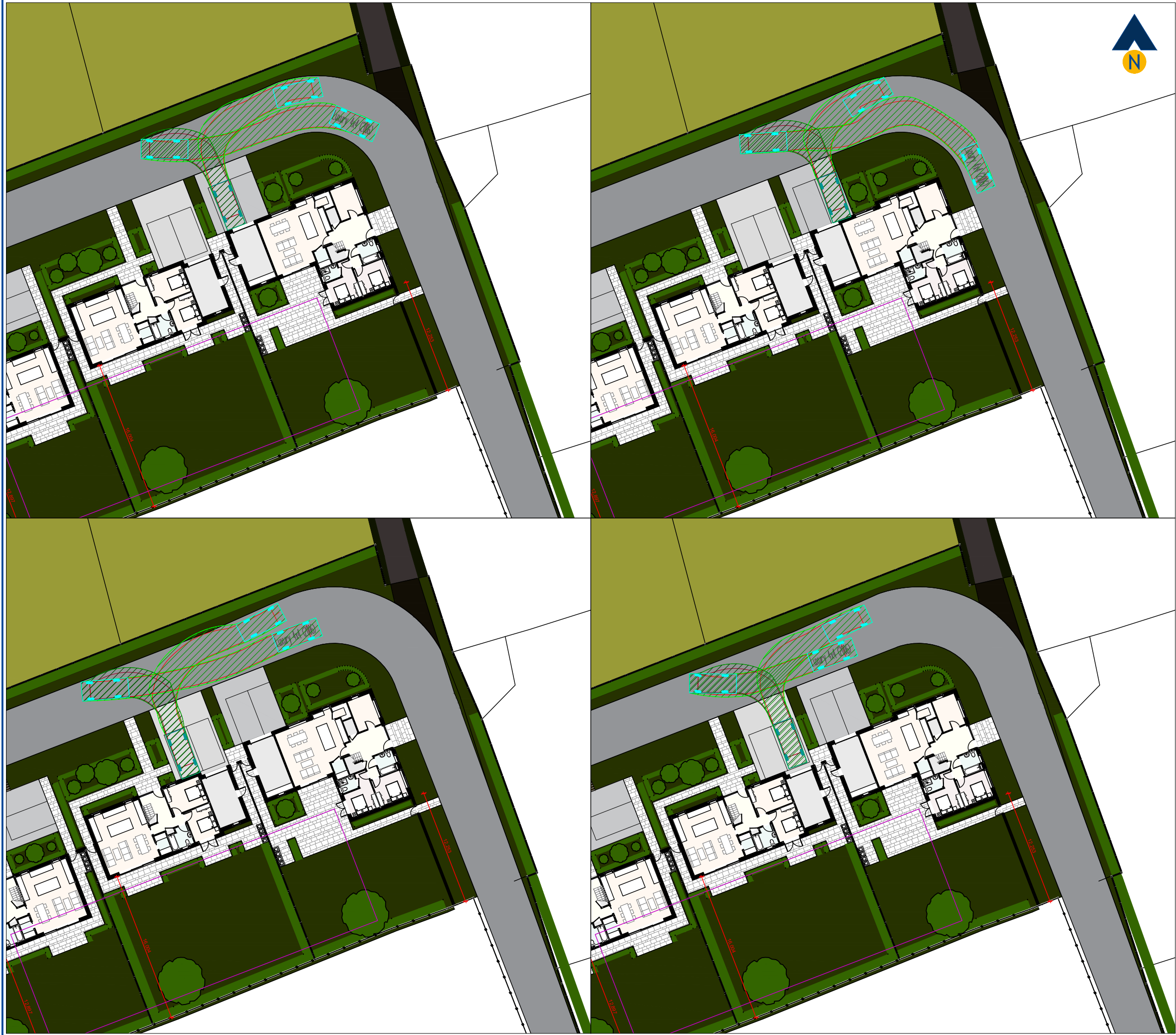
Luxury 4x4 (2006)
Overall Length 4.97m
Overall Width 2.50m
Overall Body Height 2.50m
Min Body Ground Clearance 0.25m
Track Width 2.50m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 5.80m

Client:	Mr Michael Rowland
Project:	Proposed Residential Development Naylor's Road, Knowsley
Drawing Title:	Example Vehicle Swept Path Runs 7.5t Box Van, Fire Tender & Large 4x4 in Main Turning Area
Drawing Number:	J000504-ATR202
Date:	28/02/24
Drawn By:	APB
Status:	Information

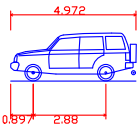
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Revision:
A -



Luxury 4x4 (2006)
Overall Length 4.972m
Overall Width 2.034m
Overall Body Height 1.905m
Min Body Ground Clearance 0.279m
Max Track Width 1.884m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 5.800m

Client:
Mr Michael Rowland

Project:
Proposed Residential Development
Naylor's Road, Knowsley

Drawing Title:
Example Vehicle Swept Path Runs
Large 4x4 Access to Plots 1 & 2

Drawing Number: J000504-ATR203
Revision: -

Date: 28/02/24
Scale: 1:400@A3

Drawn By: APB
Checked By: -

Status:
Information

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Residential Trip Rates - Total Vehicles

Proposed Development 4 dwellings

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

Calculation Factor: 1 DWELLS

Count Type: TOTAL VEHICLES

Time Range	Rates per dwelling					Trip Demand - Average Trip Rates		
	Survey	Ave.	Arrivals	Departures	Total	Arrivals	Departures	Total
	Days	Dwellings	Trip Rate	Trip Rate	Trip Rate	Trip Rate	Trip Rate	Trip Rate
00:00-01:00	0	0	0	0	0	0	0	0
01:00-02:00	0	0	0	0	0	0	0	0
02:00-03:00	0	0	0	0	0	0	0	0
03:00-04:00	0	0	0	0	0	0	0	0
04:00-05:00	0	0	0	0	0	0	0	0
05:00-06:00	0	0	0	0	0	0	0	0
06:00-07:00	0	0	0	0	0	0	0	0
07:00-08:00	8	14	0.079	0.211	0.29	0	1	1
08:00-09:00	8	14	0.202	0.307	0.509	1	1	2
09:00-10:00	8	14	0.07	0.167	0.237	0	1	1
10:00-11:00	8	14	0.193	0.219	0.412	1	1	2
11:00-12:00	8	14	0.149	0.14	0.289	1	1	1
12:00-13:00	8	14	0.211	0.237	0.448	1	1	2
13:00-14:00	8	14	0.202	0.175	0.377	1	1	2
14:00-15:00	8	14	0.105	0.132	0.237	0	1	1
15:00-16:00	8	14	0.237	0.193	0.43	1	1	2
16:00-17:00	8	14	0.219	0.158	0.377	1	1	2
17:00-18:00	8	14	0.307	0.202	0.509	1	1	2
18:00-19:00	8	14	0.272	0.184	0.456	1	1	2
19:00-20:00	0	0	0	0	0	0	0	0
20:00-21:00	0	0	0	0	0	0	0	0
21:00-22:00	0	0	0	0	0	0	0	0
22:00-23:00	0	0	0	0	0	0	0	0
23:00-24:00	0	0	0	0	0	0	0	0
12hour (07-19)	0	0	2.246	2.325	4.571	9	9	18

Average Trip Rates

	In	Out	Total
AM Peak	0.202	0.307	0.509
PM Peak	0.307	0.202	0.509
12hr (07-19)	2.246	2.325	4.571

	In	Out	Total
AM Peak	1	1	2
PM Peak	1	1	2
12hr (07-19)	9	9	18

	In	Out	Total
AM Peak	0.488	0.496	0.984
PM Peak	0.399	0.248	0.648
12hr (07-19)	3.525	3.836	7.361

	In	Out	Total
AM Peak	2	2	4
PM Peak	2	1	3
12hr (07-19)	14	15	29

Ranked Sites (85th percentile rates)

AM In	AM Out	PM In	PM Out	12hr In	12hr Out
0.579	0.421	0.500	0.643	4.214	4.357
0.500	0.500	0.333	0.250	3.583	3.917
0.250	0.667	0.368	0.211	2.4	2.3
0.000	0.375	0.389	0.167	2.421	2.263
0.059	0.176	0.294	0.176	1.722	1.889
0.000	0.222	0.400	0.000	1.706	1.765
0.100	0.100	0.125	0.000	1	1.125
0.000	0.063	0.000	0.063	1	1.125

0.4875	0.49605	0.39945	0.24805	3.5249	3.83615
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Site Search Criteria: UK only (excluding Greater London & Eire)

Edhe of Town Only

5 - 20 Dwellings

Calculation Reference: AUDIT-506501-221112-1149

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	HF HERTFORDSHIRE	1 days
	KC KENT	1 days
	MW MEDWAY	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
10	WALES	
	VG VALE OF GLAMORGAN	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 8 to 19 (units:)
Range Selected by User: 5 to 20 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 06/06/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	1 days
Wednesday	4 days
Thursday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	7 days
Directional ATC Count	1 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town	8
--------------	---

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	8
------------------	---

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	5 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	5 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	3 days
No	5 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	8 days
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This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
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LIST OF SITES relevant to selection parameters

1	HF-03-A-04 HOLMSIDE RISE WATFORD SOUTH OXHEY Edge of Town Residential Zone Total No of Dwellings: 8 Survey date: TUESDAY 08/06/21	TERRACED HOUSES	HERTFORDSHIRE	Survey Type: MANUAL
2	KC-03-A-09 WESTERN LINK FAVERSHAM DAVINGTON Edge of Town Residential Zone Total No of Dwellings: 14 Survey date: WEDNESDAY 09/06/21	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
3	MW-03-A-02 OTTERHAM QUAY LANE RAINHAM Edge of Town Residential Zone Total No of Dwellings: 19 Survey date: MONDAY 06/06/22	MIXED HOUSES	MEDWAY	Survey Type: MANUAL
4	NF-03-A-03 HALING WAY THETFORD Edge of Town Residential Zone Total No of Dwellings: 10 Survey date: WEDNESDAY 16/09/15	DETACHED HOUSES	NORFOLK	Survey Type: MANUAL
5	NF-03-A-10 HUNSTANTON ROAD HUNSTANTON Edge of Town Residential Zone Total No of Dwellings: 17 Survey date: WEDNESDAY 12/09/18	MIXED HOUSES & FLATS	NORFOLK	Survey Type: DIRECTIONAL ATC COUNT
6	SF-03-A-05 VALE LANE BURY ST EDMUNDS Edge of Town Residential Zone Total No of Dwellings: 18 Survey date: WEDNESDAY 09/09/15	DETACHED HOUSES	SUFFOLK	Survey Type: MANUAL
7	SH-03-A-06 ELLESMERE ROAD SHREWSBURY Edge of Town Residential Zone Total No of Dwellings: 16 Survey date: THURSDAY 22/05/14	BUNGALOWS	SHROPSHIRE	Survey Type: MANUAL
8	VG-03-A-01 ARTHUR STREET BARRY Edge of Town Residential Zone Total No of Dwellings: 12 Survey date: MONDAY 08/05/17	SEMI-DETACHED & TERRACED	VALE OF GLAMORGAN	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	14	0.079	8	14	0.211	8	14	0.290
08:00 - 09:00	8	14	0.202	8	14	0.307	8	14	0.509
09:00 - 10:00	8	14	0.070	8	14	0.167	8	14	0.237
10:00 - 11:00	8	14	0.193	8	14	0.219	8	14	0.412
11:00 - 12:00	8	14	0.149	8	14	0.140	8	14	0.289
12:00 - 13:00	8	14	0.211	8	14	0.237	8	14	0.448
13:00 - 14:00	8	14	0.202	8	14	0.175	8	14	0.377
14:00 - 15:00	8	14	0.105	8	14	0.132	8	14	0.237
15:00 - 16:00	8	14	0.237	8	14	0.193	8	14	0.430
16:00 - 17:00	8	14	0.219	8	14	0.158	8	14	0.377
17:00 - 18:00	8	14	0.307	8	14	0.202	8	14	0.509
18:00 - 19:00	8	14	0.272	8	14	0.184	8	14	0.456
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.246			2.325			4.571

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 8 - 19 (units:)
 Survey date range: 01/01/14 - 06/06/22
 Number of weekdays (Monday-Friday): 8
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.