

Belmore Allotments Proposed Development

Burns Close, Hayes, Hillingdon



Transport Statement

- June 2019 -



Produced by

London Design and Management Ltd



For





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1 Introduction

1.1 Preface

- 1.1.1 London Design and Management Ltd (LDM) have been commissioned by the London Borough of Hillingdon (LBH) to prepare a revised Transport Statement in support of a new planning application for the revised proposals at Belmore Allotments, in Hillingdon. The site is adjacent to the Merrifield House (a Respite Care Home for Children with disabilities) to the west and the Belmore Playing Fields to the north. Figure 3-1 shows the location plan.
- 1.1.2 The revised development would contain 112 residential dwellings comprising of 30 x 1-bedroom flats (6 of which are wheelchair accessible), 47 x 2-bedroom flats (3 of which are wheelchair accessible), 31 x 3-bedroom flats (2 of which are wheelchair accessible), 2 x 4-bedroom flats, and 2 x 3-bedroom houses. Some 113 car parking spaces would be provided in association with the revised residential development.
- 1.1.3 The proposals would comprise of 6 residential plots, A, B, C, D, E and F, which occupy an overall site area of some 1.34 hectares. Details are included in Chapter 4 (*Development Proposals*).
- 1.1.4 Access to the development site would be via access points off Burns Close and Melrose Close. Both Burns Close and Melrose Close are local residential roads linking the local community to the wider network via Balmoral Drive (more details in Chapters 3 (*Existing Conditions*)).

1.2 Objectives

- 1.2.1 The objectives of this Transport Statement are to demonstrate that the traffic and transport implications of the proposed development are acceptable, and meet Government's criteria for new developments and improvements.
- 1.2.2 Consequently, this Transport Statement will assess the conformity of the proposed development with the requirements of the National Planning Policy Framework, The London Plan, LBH Local Implementation Plan, and LBH Unitary Development Plan.





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- 1.2.3 In line with LBH's aspirations, the key criteria addressed in this Study relate to development trip generation, accessibility, service needs, safety levels, parking, and impact on the local road network.

1.3 Contents of this Report

- 1.3.1 The remainder of this report is structured as follows;
- Chapter 2 assesses the proposed development in line with the relevant national, regional and local planning policy guidelines;
 - Chapter 3 describes the existing situation;
 - Chapter 4 describes the development proposals. It also estimates traffic generation levels and distribution of new trips on the local road network;
 - Chapter 5 describes the capacity assessments undertaken to demonstrate the impact of the development on key road links and junctions;
 - Chapter 6 addresses the impact of the proposed development in terms of its parking requirements;
 - Chapter 7 describes the accessibility of the development for its intended uses in terms of walking, cycling, and public transport. It also describes how servicing of the proposed development would be undertaken; and
 - Chapter 8 presents a summary and conclusions.





2 Planning Policy

2.1 Background

- 2.1.1 The development site is located within the London Borough of Hillingdon and the Council is therefore the local planning authority for the application. In reaching their decision, they will need to be satisfied that the proposals as set out in this Transport Statement reflect national, regional, and local transport and land use planning policies.
- 2.1.2 The application site was formerly used for public allotments, but that activity has now ceased, and the land is currently undeveloped. The development proposal is for the construction of 112 residential units, with associated parking, as detailed in Chapter 4.

2.2 National

National Planning Policy Framework

- 2.2.1 The objectives of this guidance are to set out broad criteria under which there should be a presumption in favour of new development. The principal requirement is that such development should be sustainable. In order to deliver these objectives, the NPPF advises local authorities when preparing development plans and considering planning applications to consider the sustainability of a proposed development in relation to three interdependent roles:
- An economic role – by ensuring that land use supports economic need and is supported by the provision of necessary infrastructure;
 - A social role – by supporting strong, vibrant and healthy communities through the provision of good quality housing; and
 - An environmental role – by minimising waste and pollution through measures such as the promotion of sustainable transport modes.

The planning application proposals relate to the redevelopment of the Belmore Allotments site in Hayes in the London Borough of Hillingdon, which lies within an existing urban residential area. NPPF seeks to promote more sustainable residential environments by encouraging local planning authorities (LAs) to make more efficient use of land.





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- 2.2.2 NPPF urges LAs to promote more sustainable patterns of development and make better use of previously developed land; the focus for additional housing should be existing towns and cities. The planning application proposal relates to the redevelopment of the former Belmore Allotments site, a “brownfield” site surrounded by existing residential development, in the London Borough of Hillingdon.
- 2.2.3 Where a development is likely to generate significant movement the NPPF advises that it should be supported by a Transport Statement or Transport Assessment which takes account of opportunities for sustainable travel, and good accessibility for all.
- 2.2.4 NPPF encourages LAs to promote sustainable transport choices by setting local parking standards for residential development which take into account the accessibility of the development, the type and mix of housing, the availability of public transport, local car ownership levels and the need to minimise the use of high polluting vehicles.

2.3 Regional

London Plan

- 2.3.1 The London Plan, published in March 2016, is intended to provide guidance to Borough Councils on their own Local Plans. All London Borough’s Local Plans are expected to be in ‘general conformity’ with the plan.
- 2.3.2 Policy 6.10 ‘Walking’ states that local development should include high quality pedestrian environments.

There are a number of schools, recreational and leisure facilities that can be easily accessed from the site on foot. The access roads are well lit, and the footways are adequately wide. As such, future residents would benefit from a safe and sustainable environment.

Tables 6.2 and 6.4 set out the London Plan vehicle and cycle parking standards respectively, and it is expected that London Borough parking standards will be broadly in conformity with these standards. Adequate disabled parking should be included and 1 in 5 parking spaces should be equipped with an electric vehicle charging point (EVCP).

2.4 Local

LBH Local Implementation Plan (LIP) 2011-2014

- 2.4.1 Generally, the LIP reiterates policies recommended in the London Plan and offers advice on how these should be implemented in LB Hillingdon.





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- 2.4.2 The LIP notes that Hillingdon has developed planning strategies that encourage development in areas that are well served by public transport, therefore discouraging the use of the private car. Developers are also encouraged to implement travel plans, incorporating new or improved public transport services and other car reduction measures such as cycle or motorcycle schemes. However, as stated in paragraph 2.3.4 of the Hillingdon LIP, it is acknowledged that most work trips are made by car and the proportion of such trips is the highest in London. Seven percent of households in Hillingdon own three or more cars or vans with a further 71% of households owning one or two cars. This may have more to do with Hillingdon's position in outer London and the lack of alternative transport than with wealth or lifestyle. The new development seeks to encourage a gradual shift away from the high car ownership in the borough by providing an optimum amount of parking spaces, which is within Hillingdon's maximum parking standards.
- 2.4.3 The Hillingdon LIP has been updated (LIP2) through the publication of a further 3 Year Delivery Plan and Interim LIP Spending Submission 2017/18.
- 2.4.4 The LIP recognises that cycling is a convenient form of transport for journeys less than five kilometres. It therefore encourages the Council to ensure that secure, convenient cycle parking and storage facilities are provided in areas of high demand across the borough. Cycle parking has been allowed for as part of the proposed development in line with Hillingdon's parking standards.

LBH Development Plan

- 2.4.5 Hillingdon's Development Plan consists of the Local Plan, adopted in November 2012, together with saved policies from the 2007 Unitary Development Plan (UDP).
- 2.4.6 The UDP recognises that journeys up to 5 kilometres can feasibly be undertaken on cycle in the borough. However, the latent demand seems to be suppressed by the lack of the necessary cycle infrastructure. It therefore enjoins developers to cater for the need of cyclists through the provision of appropriate covered cycle parking storages and lockers to encourage cycle use. The proposed development provides cycle parking spaces that would be both covered and secured.
- 2.4.7 Policy SO18 requires that developments should incorporate improved access to local services and facilities, especially for those without access to a car, by integrating with well-planned public transport services.





2.5 Conclusions

- 2.5.1 In designing the scheme for the redevelopment of the Belmore Allotments site full regard has been given to the above national, regional and local planning policies pertaining to transport and access.
- 2.5.2 The proposed residential development is limited in scale, but nonetheless fully complies with the key policy requirements in terms of transport, access and sustainability. In particular, the level of parking provision is below the maximum permitted and this transport assessment demonstrates that it is achievable as a result of the site's location in relation to public transport, and parking demands.



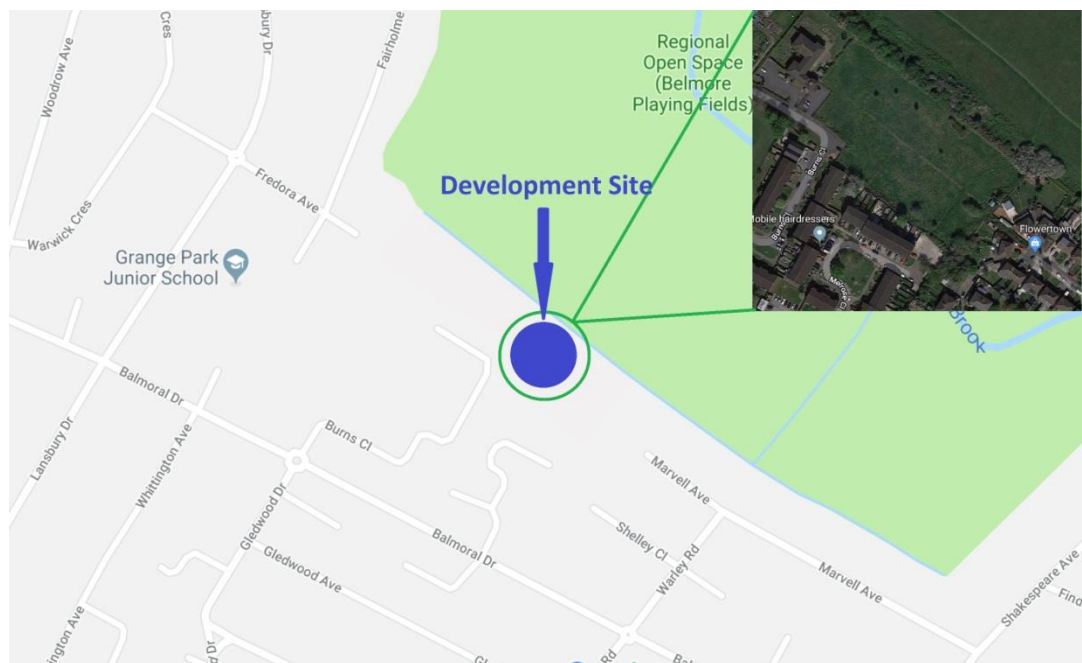


3 Existing Conditions

3.1 Development Site and Access

- 3.1.1 The development proposals relate to the redevelopment of the Belmore Allotments Site, located in relation to the local highway network as shown in Figure 3-1, to provide residential facilities.
- 3.1.2 The site which is currently undeveloped occupies approximately 1.34 hectares. It is located on the existing footpath between Marvell Avenue (to the east) and Pine Place (to the west) within a predominantly residential area in Hayes, in the London Borough of Hillingdon. It lies to the south of the Belmore Playing Fields and east of the Respite Care Home. To the south and east, there are a number of residential facilities which are accessed from Burns Close and Melrose Close (from the south) and Marvel Avenue (from the east).

Figure 3-1: The Site and Surrounding Area





3.2 Local Road Network

Burns Close

- 3.2.1 Burns Close provides vehicular access to the proposed development site and forms a small roundabout junction with Balmoral Drive. It also provides access to a number of residential dwellings, Merrifield House (to the west of the site) and the Grange Park Infant and Primary School (GPIPS).
- 3.2.2 Burns Close extends from its roundabout junction with Balmoral Drive (in the south) to the vicinity of Merrifield House. It has a carriageway width varying between 5 and 5.5 metres, and footway widths varying between 2 and 2.5 metres on both sides. The footways on Burns Close are in relatively good condition and streetlights are present.
- 3.2.3 There are pedestrian facilities in the form of splitter islands on all approaches at the Burns Close/Balmoral Drive roundabout junction.
- 3.2.4 Burns Close is generally lightly-trafficked with no parking restrictions except for buses and heavy goods vehicles between midnight and 0800 and 1830 and midnight. Only one disabled parking bay is provided on Burns Close.
- 3.2.5 There are some 20 car parking spaces/garages along Burns Close which generally are not heavily utilised during day times. Footway partial parking is also a feature along the road due to carriageway width limitation.

Balmoral Drive

- 3.2.6 Extending from Hayes Park (in the west) to Shakespeare Avenue (in the east), Balmoral Drive is the main east-west link road in the vicinity of the site. It has a varying carriageway width between 7 and 8 metres with footways of approximately 4 metres wide on both sides. Balmoral Drive also benefits from streetlights.
- 3.2.7 There are some single yellow line road markings restricting parking on the section of Balmoral Drive west of Burns Close between 0800 and 1000 and between 1430 and 1630 Monday to Friday.
- 3.2.8 Footway parking is permitted in dedicated bays on the road section east of Burns Close.
- 3.2.9 The Balmoral Drive/Lansbury Drive junction is signalised and allows for a pedestrian phase that provides a safe and convenient opportunity for those crossing the carriageway. There are controlled pedestrian crossings and safety barriers on all approaches at the junction.





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Melrose Close

- 3.2.10 Melrose Close is approximately 200 metres east of Burns Close/Balmoral Drive roundabout. It provides access to a group of residential properties located to the south of the development site, and to the development site as part of the new proposals. It has a varying carriageway width between 5 and 5.5 metres, and footways of approximately 2 metres wide on both sides.
- 3.2.11 Melrose Close has similar parking restrictions as Burns Close, and has white "keep clear" zig-zag road markings on the bends along the road alignment.
- 3.2.12 Melrose Close is generally lightly-trafficked with ample of car parking bays serving the local community. It also benefits from streetlights.

Marvell Avenue

- 3.2.13 Marvel Avenue is to the east of the site. It connects to Pine Place via an existing footpath which currently passes through the development site. The potential to provide the development site access via Marvel Avenue exists, but this option has not been progressed as it would require the demolition of at least two properties on Marvell Avenue.
- 3.2.14 Marvell Avenue has a carriageway width of approximately 5 metres and footway widths between 2 and 2.5 metres on both sides.
- 3.2.15 On-street parking is permitted for cars/vans not exceeding 1525 kilograms, whilst buses and heavy goods vehicles are prohibited from parking between midnight and 0800 and between 1830 and midnight.
- 3.2.16 As in Burns Close and Melrose Close, streetlights are also present.





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Local Road Network Map

3.2.17 The map below shows the local road network.



3.3 Public Transport

- 3.3.1 The nearest bus stop in the vicinity of the development site is located on Lansbury Drive, which is served by Routes 90, 195, U7, and 696 and 697 (for school journeys).
- 3.3.2 Table 3-1 provides a summary of bus route peak hour frequencies within the local area. It indicates that there is a minimum of 14, 11 and 9 buses available during the weekday, Saturday and Sunday/Public holiday peak hour periods, respectively, in each direction.





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Table 3-1: Summary of Peak Hour Bus Services

Bus No.	Bus Routes	First Bus	Last Bus	No. of services per peak hour per direction			
				Weekday		Saturday	Sunday/ PH
				AM	PM		
90	Feltham Leisure West – Hayes & Harlington St. – Hayes/Lansbury Drive – Balmoral Drive – Townsend Avenue – Northolt Station	0510	0100	6	6	3	3
195	Brentford County Court - Southall Stn. – Hayes/Lansbury Drive – Balmoral Drive – Fairholme Crescent – Weymouth Road – Romney Road	0522	0032	6	6	6	4
U7	Uxbridge Station – Hillingdon Road – Barwick Drive – Hayes/Lansbury Drive – Balmoral Drive – Weymouth Road – Charville Lane Est.	0551	0118	2	2	2	2
	Total (minimum)			14	14	11	9

3.4 Cycle and Pedestrian Facilities

- 3.4.1 There are adequately wide footways on Burns Close, Balmoral Drive, Warley Road, Gledwood Drive, Melrose Close and neighbouring roads that connect with various local footpaths and walking areas, thus providing a good network for pedestrians to/from the development site.
- 3.4.2 The quiet nature of the local residential roads within the vicinity of the development site provide a good and safe environment for cycling, and allow effective linkage with the National Cycle Route 6 which runs north-south to the west of the site via Uxbridge. In essence, the good quality of the local road network provides good cycle route access to other routes in the borough, neighbouring boroughs, central London, and beyond.
- 3.4.3 As such, it can be seen that the locality of the development site enjoys a fairly good linkage for pedestrians and cyclists, and encourages sustainability.

3.5 Existing Traffic Levels

- 3.5.1 Generally, the morning and evening peak hour traffic flows are considered for assessment purposes. However, when traffic tidal and pattern differences between the peak hours are minimal, it is not unusual to focus on one peak hour with the highest network traffic volume (inc. development traffic) as the chosen peak hour for assessment purposes (which in this case is the morning peak hour (0815 - 0915)). As such, traffic count surveys were undertaken for the Burns Close/Balmoral Drive junction on Thursday 1st February



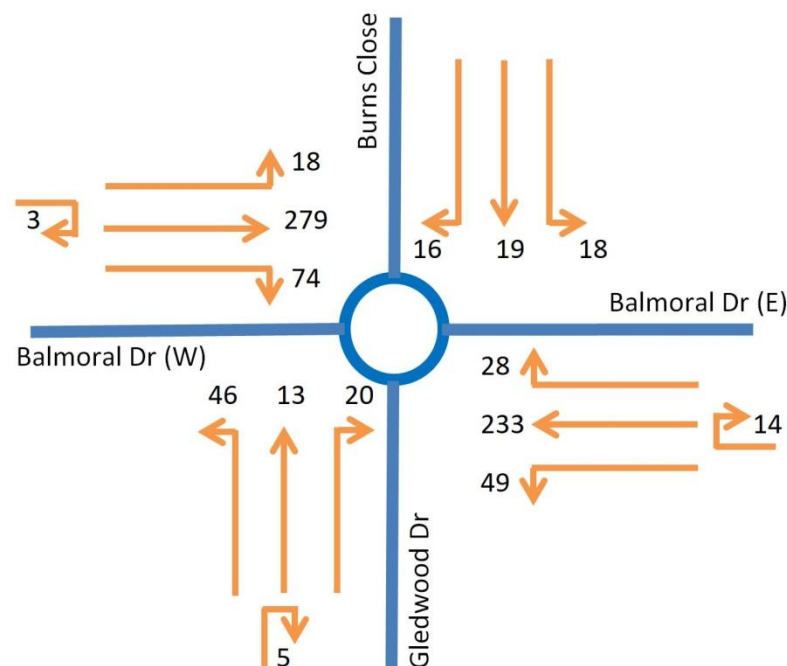


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2018 between 0700 and 1000 and between 1600 and 1900 to obtain the existing peak hour traffic levels within the vicinity of the site. Due to the minor nature of Melrose Close/Balmoral Drive priority junction, it was thought unnecessary to undertake full traffic count surveys at that locality as the major link Balmoral Drive traffic levels can be derived from the commissioned surveys. The traffic surveys are required for direct comparison with the likely traffic increase resulting from the proposed development, and to assess the development traffic implications on the local road network.

- 3.5.2 Figure 3-2 shows the observed 2018 weekday AM peak hour traffic flows. Burns Close approach has a 2-way traffic flow of some 112 vehicles per hour (53 southbound and 59 northbound), Balmoral Drive eastbound approach has some 374 vehicles per hour, and Balmoral Drive westbound approach has some 324 vehicles per hour. Gledwood Drive northbound approach has some 84 vehicles per hour, with 142 vehicles per hour in the southbound direction.

Figure 3-2: 2018 Observed Network Traffic Flows - Weekday AM Peak (0815-0915)



3.6 Local Junction Operations

- 3.6.1 The Burns Close/Balmoral Drive roundabout junction has been observed to operate well with virtually no queues occurring during the site visit on 1st February 2018. Traffic levels at the junction were light and there were some periods of 5 to 10 minutes with virtually no traffic movements into/out of Burns Close.





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- 3.6.2 Furthermore, observations at Balmoral Drive/Melrose Close priority junction and other local junctions on Balmoral Drive have shown only light traffic movements with hardly any queuing occurring.
- 3.6.3 As such, it can be seen that the local road network operates very well, with ample of spare capacity.





4 Proposed Development

4.1 Proposals

4.1.1 The development proposals relate to the redevelopment of Belmore Allotments Site, in Hillingdon. The Council proposes to provide 112 residential dwellings comprising of 30 x 1-bedroom flats (6 of which are wheelchair accessible), 47 x 2-bedroom flats (3 of which are wheelchair accessible), 31 x 3-bedroom flats (2 of which are wheelchair accessible), 2 x 4-bedroom flats, and 2 x 3-bedroom houses. Some 113 car parking spaces would also be provided in association with the proposed development.

4.1.2 The architect's indicative plan is included in Appendix A. It shows the overall layout plan of the 6 residential plots proposed (A, B, C, D, E, and F). The tables below outline the details and provisions of these residential plots.

SITE AREA		13428sqm = 1.34Ha							
DENSITY		84 U/HA 257 Hr/HA							
Type		1 BED	2 BED	3 BED	4 BED	No.	Area	Hr	THr
Block E									
Rented	A1	1BED/2P Flat	5			5	50.4m ²	2	10
	A2	1BED/2P Flat	6			6	51.0m ²	2	12
	A3	1BED/2P Flat	2			2	56.4m ²	2	4
	A4	1BED/2P Flat WHEELCHAIR	1			1	56.7m ²	2	2
	B1	2BED/4P Flat WHEELCHAIR		1		1	85.9m ²	3	3
	B2	2BED/4P Flat		4		4	72.3m ²	3	12
	B3	2BED/4P Flat		2		2	74.1m ²	3	6
	C1	3BED/5P Flat			6	6	92.7m ²	4	24
	C2	3BED/4P Flat WHEELCHAIR			2	2	92.0m ²	4	8
	D1	4BED/6P Flat				2	111.7m ²	5	10
			14	7	8	2	31		91
Block F									
	A1	3BED/4P House			2	2	99.8m ²	5	10





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Type		1 BED	2 BED	3 BED	4 BED	No.	Area	Hr	THr
Discount Market Sale	Block B								
	B1	2BED/4P Flat	4			4	71.9m ²	3	12
	B2	2BED/4P Flat	6			6	72.9m ²	3	18
	B3	2BED/4P Flat	2			2	74.3m ²	3	6
	C1	3BED/5P Flat		10		10	86.1m ²	4	40
	C2	3BED/5P Flat		2		2	88.0m ²	4	8
	C3	3BED/5P Flat		2		2	90.2m	4	8
			0	12	14	26			92
Shared ownership	Block A								
	A1	1BED/2P Flat	3			3	50.4m ²	2	6
	A2	1BED/2P Flat WHEELCHAIR	1			1	59.5m ²	2	2
	A3	1BED/2P Flat	1			1	59.5m ²	2	2
	A4	1BED/2P Flat	1			1	51.3m ²	2	2
	A5	1BED/2P Flat	1			1	53.1m ²	2	2
	A6	1BED/2P Flat	1			1	56.4m ²	2	2
	B1	2BED/4P Flat		2		2	70.3m ²	3	6
	B2	2BED/4P Flat		3		3	70.4m ²	3	9
	B3	2BED/3P Flat WHEELCHAIR		1		1	71.8m ²	3	3
	B4	2BED/4P Flat		3		3	71.8m ²	3	9
	B5	2BED/4P Flat WHEELCHAIR		1		1	87.2m ²	3	3
	C1	3BED/5P Flat			3	3	87.2m ²	4	12
			8	10	3	21			58
Shared ownership	Block C								
	A1	1BED/2P Flat	2			2	50.4m ²	2	4
	A2	1BED/2P Flat WHEELCHAIR	2			2	59.5m ²	2	4
	B1	2BED/4P Flat		2		2	70.0m ²	3	6
	B2	2BED/4P Flat		3		3	70.4m ²	3	9
	B3	2BED/4P Flat		1		1	70.8m ²	3	3
	B4	2BED/4P Flat		3		3	72.8m ²	3	9
	C1	3BED/5P Flat			3	3	87.2m	4	12
			4	9	3	16			47
Shared ownership	Block D								
	A1	1BED/2P Flat	2			2	50.4m ²	2	4
	A2	1BED/2P Flat WHEELCHAIR	2			2	59.5m ²	2	4
	B1	2BED/4P Flat		2		2	70.0m ²	3	6
	B2	2BED/4P Flat		3		3	70.4m ²	3	9
	B3	2BED/4P Flat		1		1	70.8m ²	3	3
	B4	2BED/4P Flat		3		3	72.8m ²	3	9
	C1	3BED/5P Flat			3	3	87.2m	4	12
			4	9	3	16			47
TOTALS		30	47	33	2	112			345
Proposed Parking for Dwellings: 113 spaces									





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- 4.1.3 As shown above, Plot A would include 21 dwellings (8 x 1-bedroom flats (inc. 1 wheelchair accessible flat), 10 x 2-bedroom flats (inc. 2 wheelchair accessible flats), and 3 x 3-bedroom flats), Plot B would include 26 dwellings (12 x 2-bedroom flats and 14 x 3-bedroom flats), Plot C would include 16 dwellings (4 x 1-bedroom flats (inc. 2 wheelchair accessible flats), 9 x 2-bedroom flats, and 3 x 3-bedroom flats), Plot D would include 16 dwellings (4 x 1-bedroom flats (inc. 2 wheelchair accessible flats), 9 x 2-bedroom flats, and 3 x 3-bedroom flats), Plot E would include 31 dwellings (14 x 1-bedroom flats (inc. 1 wheelchair accessible flat), 7 x 2-bedroom flats (inc. 1 wheelchair accessible flat), 8 x 3-bedroom flats (inc. 2 wheelchair accessible flats), and 2 x 4-bedroom flats), and Plot F would include 2 dwellings (2 x 3-bedroom houses).
- 4.1.4 The layout of the site has been designed to allow for comfortable traffic, cyclist and pedestrian accessibility and circulation. Also, the provision of the off-street car parking spaces ensures that the local residential roads would not be impacted by any parked cars associated with the development.
- 4.1.5 Access to the development site would be via the two local residential roads Burns Close and Melrose Close, as shown in Appendix A.
- 4.1.6 The proposed cycle parking provision on site would be in line with Hillingdon's cycle parking standards (a minimum of 1 space per dwelling (1-2 bedrooms) and 2 spaces per dwelling (3-4 bedrooms)).

4.2 Trip Generation

- 4.2.1 In order to estimate the number of vehicle trips likely to be generated by the proposed development, the TRICS database have been interrogated to obtain trip rates for the peak hour. A full copy of the TRICS trip rates is included in Appendix B.
- 4.2.2 Table 4-1 shows the TRICS peak hour trip rates and the estimated vehicle trip generation of the proposed development.





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Table 4-1: TRICS Trip Rates and Development Vehicle Trip Generation

Time Period	Trip Rates per unit		Vehicle Trip		
	Arrivals	Departures	Arrivals	Departures	Two-Way
	Residential Flats (110 units)				
08:00-09:00	0.090	0.199	10	22	32
17:00-18:00	0.100	0.072	11	8	19
	Residential Houses (2 units)				
08:00-09:00	0.140	0.284	0	1	1
17:00-18:00	0.295	0.178	1	0	1
	Total (112 units)				
08:00-09:00			10	23	33
17:00-18:00			12	8	20

TRICS estimates that the site would generate the following trip levels:

- 33 trips (10 arrivals and 23 departures) in the AM peak.
- 20 trips (12 arrivals and 8 departures) in the PM peak.

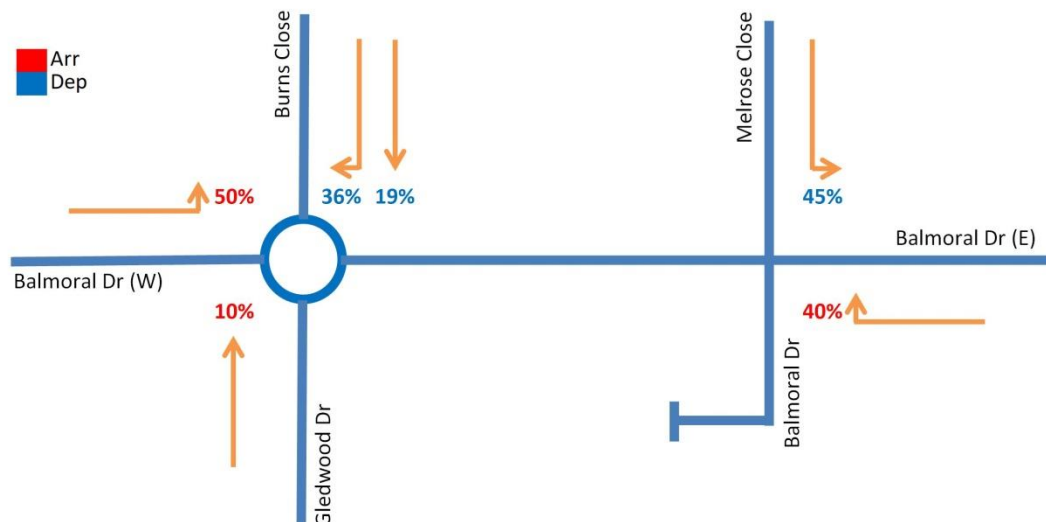




4.3 Development Traffic Distribution

- 4.3.1 The development traffic distribution has been based on existing traffic patterns as shown in Figure 3-2, but also took into account the local road network linkage and accessibility.
- 4.3.2 Figure 4-1 presents the development traffic distribution percentage for the AM peak hour (0815 - 0915) along the local road network. *[As indicated earlier, due to AM peak hour network traffic levels being higher than those in the PM peak hour, the assessments have focussed on the AM peak hour.]*

Figure 4-1: Development Traffic Distribution Percentage - Weekday AM Peak (0815-0915)

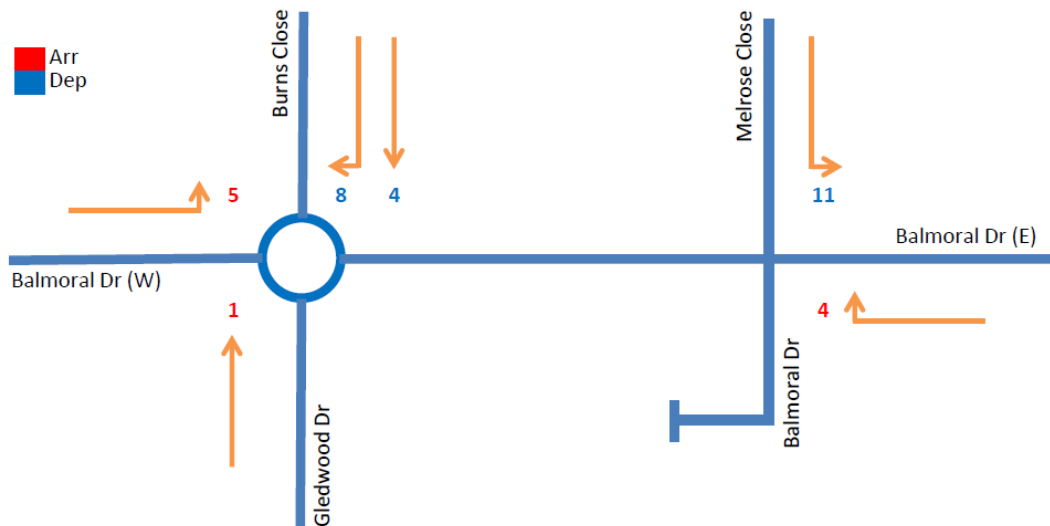




Belmore Allotments Proposed Development

Accordingly, the estimated development traffic flow distribution for the weekday AM peak hour is shown in Figure 4-2.

Figure 4-2: Development Traffic Distribution (Veh) - Weekday AM Peak (0815-0915)





4.4 Traffic Growth

- 4.4.1 It has been agreed that the likely year of opening for this development is 2020. Therefore, the effects of the proposed development will need to be assessed for the 2020 weekday AM peak hour.
- 4.4.2 Consequently, TEMPRO 7.2 has been interrogated to determine the traffic growth factor for the Hillingdon area between 2018 and 2020. As a result, TEMPRO predicted a growth factor of 1.025 for the weekday AM peak hour. TEMPRO output results are included in Appendix C.

4.5 Committed Development Traffic Flows

- 4.5.1 Hillingdon has indicated that there are no known committed developments in the vicinity of the site that are likely to have any significant transport impact on the proposed development and local area. Consequently, no allowance has been made for any committed development traffic flows.

4.6 2020 Base Traffic Flows

- 4.6.1 The predicted Temprow growth factor (1.025) has been applied to the observed 2018 AM peak directional traffic flows shown in Figure 4-3 to determine the 2020 AM peak base directional traffic flows presented in Figure 4-4.





Belmore Allotments Proposed Development

Figure 4-3: 2018 Directional Traffic Flows (Veh) - Weekday AM Peak (0815-0915)

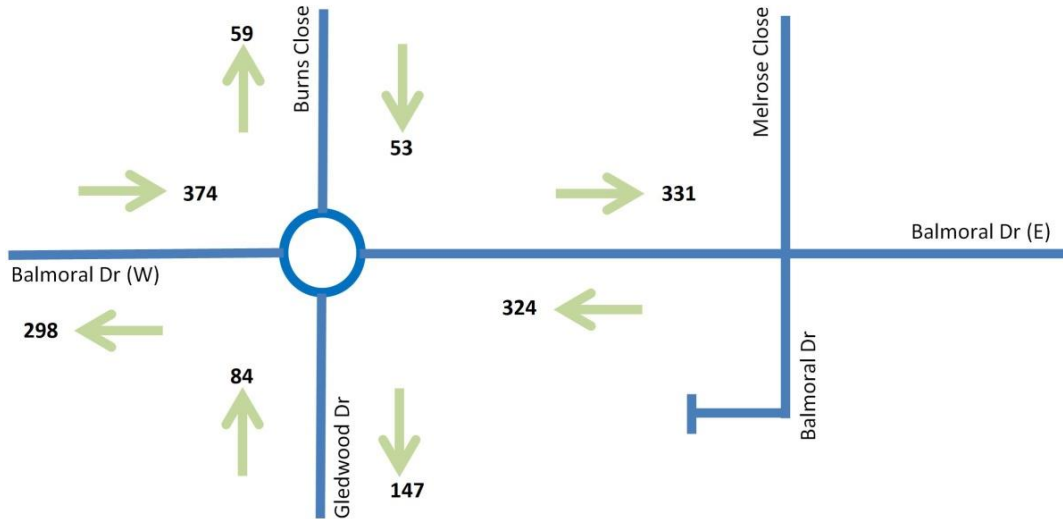
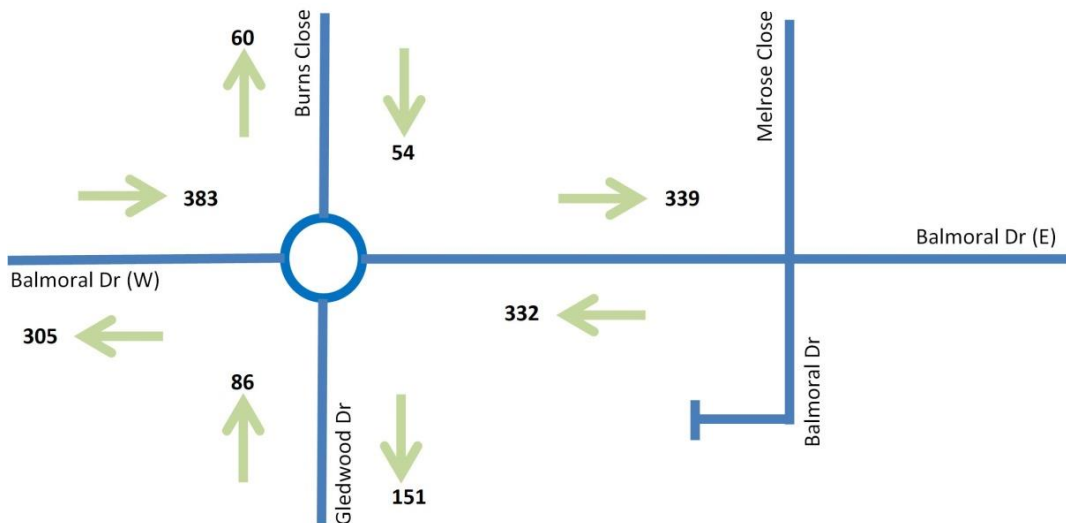


Figure 4-4: 2020 Base Directional Traffic Flows (Veh) - Weekday AM Peak (0815-0915)



4.6.2 The likely impact of the proposed development traffic flows on the local road network is discussed in Chapter 5.





5 Capacity Assessments

5.1 Introduction

- 5.1.1 Following from Chapter 4, the capacity assessments will only need to focus on the immediate vicinity of the development site (Burns Close and Melrose Close junctions with Balmoral Drive and the approach links) due to the minimal traffic generation resulting from the proposed development and its reduced influence further afield.

5.2 Road Link Capacity Assessments

- 5.2.1 Using the traffic levels outlined in Chapter 4, the percentage link traffic increases would be as follows:

- Burns Close Northbound (10%);
- Burns Close Southbound (22.2%);
- Balmoral Drive (W) Eastbound (1.3%);
- Balmoral Drive (W) Westbound (2.6%)
- Balmoral Drive (E) Eastbound (3.2%);
- Balmoral Drive (E) Westbound (1.2%);
- Gledwood Drive Northbound (1.2%); and
- Gledwood Drive Southbound (2.6%).

- 5.2.2 The overall percentage two-way traffic increases would be as follows:

- Burns Close (15.8%);
- Balmoral Drive (W) (1.9%);
- Balmoral Drive (E) (2.2%); and
- Gledwood Drive (2.1%).

As can be seen from above, the likely percentage traffic increases resulting from the proposed development are generally very low (<5%) except for Burns Close, and that is due to the very low traffic volume on Burns Close (only 114 vehicles two-way in the AM peak hour). In terms of actual vehicular trips, the maximum two-way traffic increase on Burns Close would only be 18 vehicles in the AM peak hour, which is less than one vehicle every 3 minutes, and that is hardly perceivable by local road users.





Belmore Allotments Proposed Development

Similarly, on Melrose Close, the maximum two-way traffic increase due to the proposed development would be 15 vehicles in the AM peak hour, which is about 1 vehicle every 4 minutes, and that is hardly noticeable by local road users

With such very low traffic increases, which are well within the daily traffic fluctuations, there would not be any significant impact on local roads as a result of the proposed development.

5.3 Junction Capacity Assessments

- 5.3.1 From above, there would be a net increase of 18 vehicle trips per hour at the Burns Close/Balmoral Drive junction (2.1% increase, less than 1 vehicle per 3 minutes), and net increase of 15 vehicle trips per hour at the Melrose Close/Balmoral Drive junction (about 1 vehicle per 4 minutes). Such traffic increases are considered negligible particularly that both junctions currently operate well within capacity and there are hardly any queues even during peak times. Moreover, it should be noted that Melrose Close/Balmoral Drive junction is a priority junction which gives priority to traffic on the major road Balmoral Drive, hence resulting in even lesser impact on the external road network.
- 5.3.2 Given the ample of spare capacity at the Burns Close/Balmoral Drive junction and Melrose Close/Balmoral Drive junction, the minimal traffic increases resulting from the proposed development would not have any significant impact on the operation of the junctions.

5.4 Conclusions

- 5.4.1 Given the minimal level of trips associated with the proposed development, it is not anticipated that the additional trips would have any significant impact on the local road network. As demonstrated above, the development trips would only result in a marginal increase in traffic on the local road links and junctions. Consequently, it is highly unlikely that the additional trips would cause any adverse impact given the ample spare capacity available within the local road network.
- 5.4.2 A spreadsheet analysis for the impact of the proposed development on the local road network is included in Appendix D.





6 Parking

6.1 Proposals

- 6.1.1 As mentioned in Chapter 4, the proposed parking provisions for the 112 residential units would be 113 car parking spaces, of which 13 would be for disabled persons.

6.2 Parking Standards

- 6.2.1 Hillingdon's parking standards specify the following in relation to the proposed uses;
- C3 (Dwellings) – a maximum of 1.5 spaces per dwellings without individual curtilages i.e. communal parking in garages or open car parking areas; and
 - C3 (Dwellings) – a maximum of 2 spaces per dwellings with curtilage parking.

Hillingdon's guidance further requires that 10% of all parking spaces should be provided for disabled persons to the mobility standard of 3.6m x 4.8m, with these spaces clearly marked out and positioned as near as possible to building entrances.

- 6.2.2 The proposed parking provision at the site equates to 1.01 spaces per dwelling and is in line with Hillingdon's parking requirements. Furthermore, Section 6.3 assesses the adequacy of the proposed parking provision for its intended uses.

6.3 Parking Accumulation Assessments

- 6.3.1 The car parking accumulation assessments (included in Appendix E) for the proposed residential development have been undertaken based on the arrival and departure profiles predicted by TRICS.
- 6.3.2 It is predicted that the highest accumulation at the proposed development car park would occur during night time (between midnight and 4am). Based on a robust initial parking occupancy assumption of 80% (91 parked cars) at 7am, it can be seen from the assessments in Appendix E that parking accumulation would tend to go down gradually between 7am and 3pm (to 67 parked cars) and then gradually go up towards the evening. The TRICS arrival and departure profiles do not suggest any sharp spikes in parking accumulation levels but more of a smooth change during the hours of the day. From





Belmore Allotments Proposed Development

above, it can be seen that all residential parking requirements could be accommodated on site, with potentially some spare parking.

- 6.3.3 Furthermore, it is perceived that the parking provision of approximately 1:1.01 for residents would act as deterrent for people to own more than one car per dwelling, thus promoting sustainability.

6.4 Conclusions

- 6.4.1 It can be concluded that the proposed parking provisions would be able to accommodate all parking demands associated with the proposed development as required.





7 Accessibility and Servicing

7.1 Modes of Access

- 7.1.1 The development site can be easily accessed by various travel modes including walking, cycling, public transport, and the private car. Each of these modes has been discussed below.

Walking

- 7.1.2 Advice regarding acceptable walking distances is provided in the Institution of Highways & Transportation document “Guidelines on Providing for Journeys on Foot”. Table 3.2 of that document refers to walking distances for school and commuting purposes, and advises that 500 metres is desirable, 1000 metres is allowable, and 2000 metres is the preferred maximum.
- 7.1.3 Given the proximity of the site to a number of schools (including the Grange Park Infant and Primary School) and recreational/leisure facilities which are within a reasonable walking distance of the site, it is expected that a significant number of trips would be undertaken on foot. There is good pedestrian connectivity to the area of public open space adjacent to the northern boundary of the site.
- 7.1.4 As described in Section 3.3, buses on routes 90, 195 and U7 can be accessed from Lansbury Drive which is within reasonable walking distance from the site.
- 7.1.5 It can also be seen that the lightly trafficked nature of the local residential streets, in addition to the benefits of wide and good quality footways and streetlights, would provide an enabling and comfortable environment for pedestrian movements within the local area.

Cycling

- 7.1.6 Cycling has potential to substitute short car trips, particularly those under 5km, and to form part of a longer journey by public transport. The neighbouring villages including Hillingdon, Northolt, Yeadon, Southall, Norwood Green, Hayes, Yiewsley and West Drayton could all be accessed on cycle.
- 7.1.7 Further advice regarding acceptable cycling speeds is provided in The Institution of Highways & Transportation document “Cycle-friendly Infrastructure Guidelines for Planning and Design”. The document combines user classifications as follows:





Belmore Allotments Proposed Development

- Predominantly short trips undertaken by vulnerable Children, inexperienced adults, elderly people and those with some form of disability such as deafness would be usually at speeds below 15 miles per hour;
- Medium length trips undertaken by Commuter Adults reasonably confident in traffic, valuing speed and directness would be typically at speeds 10-20 miles per hour; and
- Longer trips undertaken by Sports Adults often travelling above 20 miles per hour.

7.1.8 Using the above prescribed speeds, it can be estimated that a journey of 5 kilometres can be undertaken within 19 minutes, 13 minutes, and 10 minutes at speeds of 10mph, 15mph, and 20mph, respectively. This implies that the neighbouring villages and schools can be accessed on cycle within 20 minutes.

7.1.9 As discussed previously in Section 3.4, the quiet nature of the local residential roads allow good cycle route access to others in the borough, neighbouring boroughs, central London, and beyond.

Public Transport

7.1.10 Table 3-1 shows that there is a minimum of 14, 11 and 9 buses available during the weekday, Saturday and Sunday/Public Holiday peak hour periods, which are within reasonable walking distance from the development site.

7.1.11 The Public Transport Accessibility Level (PTAL) methodology is an industry wide measuring standard for all new developments. Bus and rail services that are available within approximately 640 metres and 960 metres walking distance from the development site, respectively, are included in the PTAL assessments. It takes into account the frequency of each service, the average walking distance to access points, and waiting time before boarding the service to determine the PTAL rating of the site.

7.1.12 The PTAL assessment for the development site is included in Appendix F. It shows that the site has an accessibility index of 4.28 and PTAL rating of between '0' and '1b' (where '0' is 'very poor' and '6' is 'excellent'). Therefore, the PTAL assessment indicates that the site is below average in terms of public transport service, but this is not uncommon for residential areas in outer London.

Car

7.1.13 There is a good highway network around the development site that would allow easy access by car, if/when required. As mentioned in paragraph 3.2.6, Balmoral Drive is the main east-west connector in the local area of the proposed development, and forms junctions with Burns Close and Melrose Close, thus allowing good linkage from the east





Belmore Allotments Proposed Development

and west to the site. The majority of cars visiting the site would join Balmoral Drive before turning left into Burns Close (those from the west) or right into Melrose Close or Burns Close (those from the east).

- 7.1.14 There is also the opportunity for those assessing the site from the south to use Uxbridge Road, turn right/left into Gledwood Drive then straight ahead through Burns Close/Balmoral Drive junction.
- 7.1.15 Appendix G includes some swept path examples of cars accessing their parking bays to demonstrate development site layout feasibility.

7.2 Servicing

- 7.2.1 All deliveries would be undertaken within the site boundaries, in accordance with best practice.
- 7.2.2 Refuse collection points would be conveniently located at key locations within the site to allow easy access for the Council's refuse collection team. Refuse vehicles would park by the designated collection points when servicing the site, and this would be undertaken during off peak periods so as not to interfere unduly with other site activities.
- 7.2.3 Service and delivery vehicles currently use Burns Close and Melrose Close to service the local community, but with the implementation of the proposed development, the service vehicle usage of Burns Close and Melrose Close may increase a bit. As such, a form of parking management strategy could be adopted along Burns Close and Melrose Close to help reduce any potential indiscriminate on-street parking along the road so as to maintain adequate carriageway width for servicing vehicles. This could include the provision of dedicated parking bays allowing vehicles to park partly on the footway and partly on the carriageway as necessary, on both sides of the road. The parking bay width would be approximately 1.8 metres. This design would also include about 10 metre parking gaps staggered on both sides of the carriageway to allow vehicles to pull over safely when opposing vehicles need to pass. Also, double yellow line road markings could be considered on bends to enforce "no parking" restrictions and maintain unobstructed carriageway widths at bends. The exact details of these measures would be produced during the detailed design stage, as required.
- 7.2.4 Appendix G includes swept path assessments for cars, servicing, and emergency vehicles, which demonstrate operational feasibility.





7.3 Conclusions

- 7.3.1 It can be seen that the site can be accessed satisfactorily by various travel modes including walking, cycling, public transport and the private car.
- 7.3.2 All proposed development servicing needs would be undertaken on-site, and the swept path assessments carried out indicate that the proposals would allow for adequate accessibility and manoeuvrability for cars, service, and emergency vehicles.





8 Summary and Conclusions

8.1 Summary

- 8.1.1 LDM were commissioned by the London Borough of Hillingdon (LBH) to prepare a Transport Statement in support of a planning application for the revised Belmore Allotments proposals, in Hillingdon.
- 8.1.2 LDM referred to various relevant planning policies and demonstrated that the proposed development is consistent with the national, regional and local planning guidance documents.
- 8.1.3 The proposed development provides for 112 residential units (comprising of a mix of 1-bedroom flats, 2-bedroom flats, 3-bedroom flats, 4-bedroom flats, and 3-bedroom houses), and 113 associated car parking spaces.
- 8.1.4 The development site would have two access points, one off Burns Close and the other off Melrose Close (as shown in Appendix A).
- 8.1.5 All residential car parking spaces would be located off-street. As was detailed in this Report, the proposed car parking provisions would be in line with current standards, and the parking accumulation assessments indicated that the proposed provisions would be adequate.
- 8.1.6 Cycle parking has also been allowed for as part of the proposed development in line with Hillingdon's parking standards.
- 8.1.7 LDM arranged for traffic count surveys at the Burns Close/Balmoral Drive junction on Thursday 1st February 2018 between 0700 and 1000 and between 1600 and 1900 hours to obtain the existing peak traffic levels within the vicinity of the development site.
- 8.1.8 TEMPRO database was used to predict the likely traffic growth between 2018 and 2020 (year of opening).
- 8.1.9 The TRICS database was interrogated in order to predict the traffic generation of the proposed development. Given that the assessments have focussed on the AM peak hour due to its higher network traffic levels, LDM have adopted the AM peak hour TRICS trip rates (which have shown to be highest of all hours). In summary, the net increase in traffic





Belmore Allotments Proposed Development

arriving/departing through the Burns Close/Balmoral Drive junction and Melrose Close/Balmoral Drive junction would be 18 vehicles and 15 vehicles respectively, during the AM peak hour.

- 8.1.10 In order to identify the traffic impact of the proposed development, LDM have assigned the likely traffic increase (as a result of the development) on local roads in line with existing traffic patterns whilst taking into account the local road network linkage and accessibility. It has been estimated that the traffic increase on Burns Close would be less than 1 vehicle per 3 minutes, and on Melrose Close would be about 1 vehicle per 4 minutes. This is hardly perceivable to local road users and is well within the daily traffic fluctuations. Overall the likely traffic increase would be minimal and unlikely to have any adverse impact on the local road network.
- 8.1.11 Given the locality of the proposed development, it has been identified that the local road network provides well for walking and cycling modes, and with the proposed pedestrian and cycle facilities associated with the development, this would contribute well to current governmental requirements and standards. With regards to public transport, albeit there are good several bus routes within the vicinity of the development site, it has been established that the development site locality has a PTAL value of between '0' and '1b', which is considered to be low, but this is not uncommon for residential areas in outer London.

8.2 Conclusions

- 8.2.1 Based on the transport assessments undertaken, it can be concluded that the proposed development would not have any significant impact on the local road network, and that the minimal trip generation associated with the proposed development could safely be absorbed within the existing local road network.
- 8.2.2 As such, it can be considered that the proposed development is acceptable in traffic and transport terms.





APPENDICES

Appendix A Architect's Indicative Plan

Appendix B TRICS Data

Appendix C TEMPRO Growth Factor

Appendix D Link/Junction Impact Assessments

Appendix E Parking Accumulation Assessments

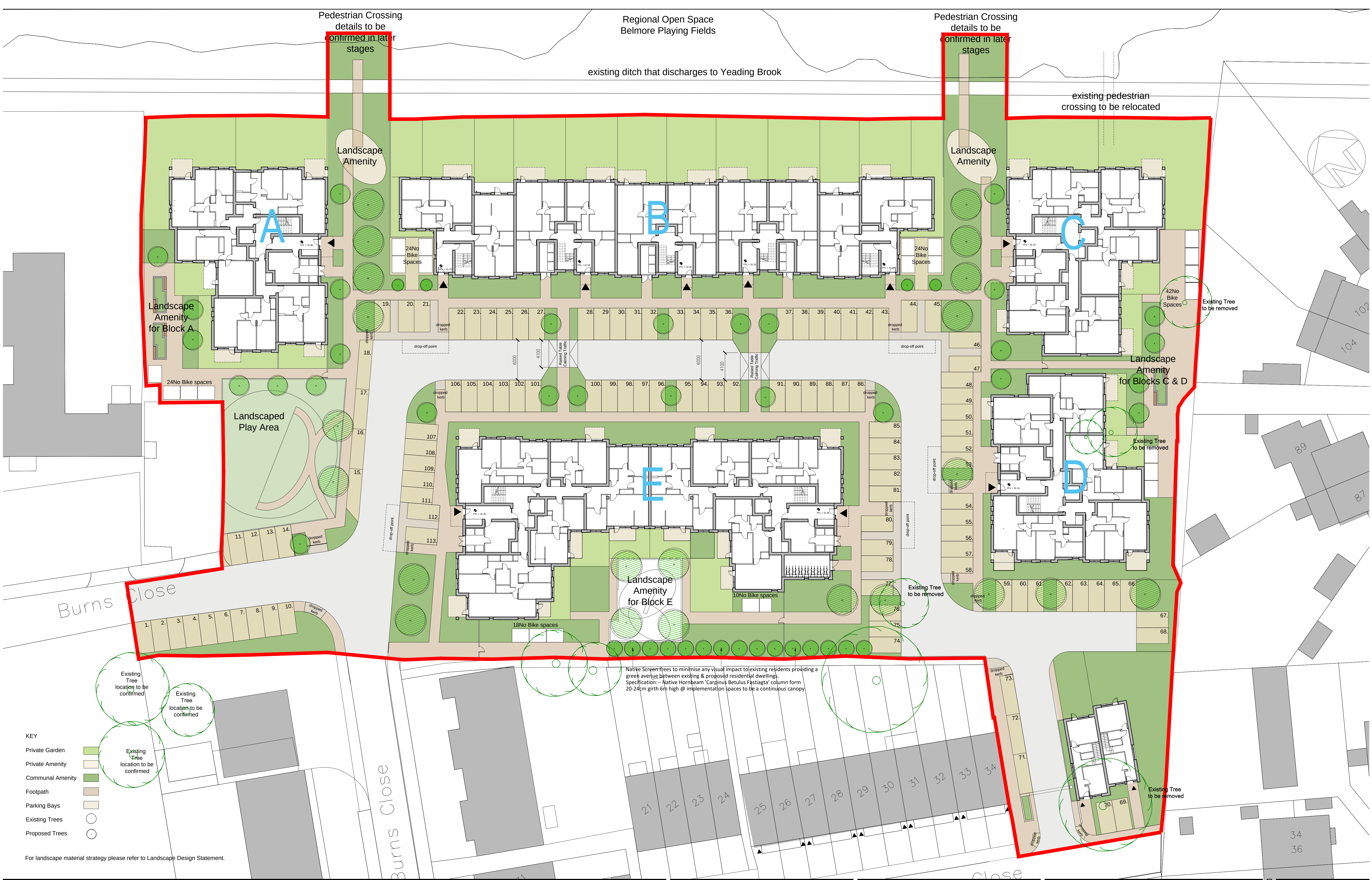
Appendix F PTAL Calculation Sheet

Appendix G Swept Path Assessments

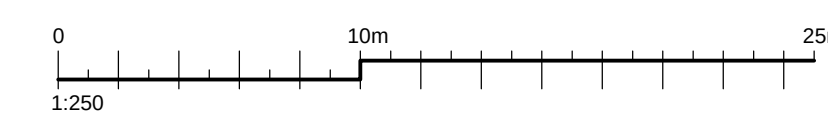




APPENDIX A Architect's Indicative Plan



Proposed Site Plan



- KEY
- Private Garden
 - Private Amenity
 - Communal Amenity
 - Footpath
 - Parking Bays
 - Existing Trees
 - Proposed Trees
- Existing Tree location to be confirmed
- Existing Tree location to be confirmed
- Existing Tree location to be confirmed

For landscape material strategy please refer to Landscape Design Statement.

F	Drop-off points and dropped kerbs added	KS	24/06/2019
E	Landscape Amenity for Block E	JC	05/06/2019
D	Revisions on Block A,B,E,F	KS/Mla	23/05/2019
C	Block E ground floor, parking layout and 2nd House revised	KS	07/05/2019
B	Revision Landscape Amenity for Block E, 2nd House added	KS	28/04/2019
A	Revision Block E, Parking Layout and Landscape Amenity for Blocks C & D	JC	12/04/2019
REVISION		D	DATE

The contractor is responsible to ensure that no products are to be utilised that do not comply with relevant British and/or European Standards and/or Codes of Practice, CDM Regulations, Construction Regulations, or which are known or suspected at the time of product selection and/or construction to be deleterious to health and safety or to the durability of the work or not in accordance with good building practices.

The contractor is responsible for checking dimensions, tolerances, levels and references. This drawing is to be read in conjunction with all relevant consultants or specialists drawings. Any discrepancy to be notified to Baily Garner LLP and rectified before proceeding with the works on site or shop drawings.

Where an item is covered by drawings to different scales, the larger scale drawing is to be worked to.

Do not scale drawings. Figured dimensions to be worked to in all cases.

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A1

CLIENT
Hillingdon Council

ADDRESS
Former Belmore Allotments
Hayes
UB4 0EJ

SCALE
1:250

FOR NO.
29069

PROJECT
Belmore Allotments Site

TITLE
Proposed Site Plan

PURPOSE OF ISSUE
Planning

DRAWING NO.
PL 11

DATE
08/06/2018

REVISION
F

BAILY
GARNER

146-148 ELTHAM HILL
LONDON SE9 5DY
t. 020 8294 1000
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e. general@bailygarner.co.uk



APPENDIX B TRICS Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : D - AFFORDABLE/LOCAL AUTHORITY FLATS
 MULTI-MODAL VEHICLES

Selected regions and areas:

01	GREATER LONDON	
	BT BRENT	1 days
	HA HARROW	1 days
02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	HC HAMPSHIRE	2 days
	OX OXFORDSHIRE	1 days

Secondary Filtering selection:

Parameter: Number of dwellings
 Actual Range: 6 to 160 (units:)
 Range Selected by User: 6 to 339 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 27/06/16

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	1 days
Thursday	3 days

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	3
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

Selected Location Sub Categories:

Residential Zone	6
------------------	---

Secondary Filtering selection:

Use Class:

C3	6 days
----	--------

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days
50,001 to 100,000	2 days

Population within 5 miles:

50,001 to 75,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	1 days
500,001 or More	2 days

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	2 days

Travel Plan:

Yes	2 days
No	4 days

PTAL Rating:

No PTAL Present	4 days
2 Poor	1 days
3 Moderate	1 days

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL 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	6	54	0.034	6	54	0.081	6	54	0.115
08:00 - 09:00	6	54	0.090	6	54	0.199	6	54	0.289
09:00 - 10:00	6	54	0.078	6	54	0.075	6	54	0.153
10:00 - 11:00	6	54	0.084	6	54	0.115	6	54	0.199
11:00 - 12:00	6	54	0.090	6	54	0.090	6	54	0.180
12:00 - 13:00	6	54	0.090	6	54	0.100	6	54	0.190
13:00 - 14:00	6	54	0.056	6	54	0.062	6	54	0.118
14:00 - 15:00	6	54	0.065	6	54	0.081	6	54	0.146
15:00 - 16:00	6	54	0.121	6	54	0.115	6	54	0.236
16:00 - 17:00	6	54	0.125	6	54	0.112	6	54	0.237
17:00 - 18:00	6	54	0.100	6	54	0.072	6	54	0.172
18:00 - 19:00	6	54	0.103	6	54	0.087	6	54	0.190
19:00 - 20:00	2	18	0.114	2	18	0.086	2	18	0.200
20:00 - 21:00	2	18	0.200	2	18	0.200	2	18	0.400
21:00 - 22:00	2	18	0.086	2	18	0.086	2	18	0.172
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.436			1.561			2.997

MULTI-MODAL TAXIS

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	6	54	0.003	6	54	0.003	6	54	0.006
08:00 - 09:00	6	54	0.016	6	54	0.019	6	54	0.035
09:00 - 10:00	6	54	0.000	6	54	0.000	6	54	0.000
10:00 - 11:00	6	54	0.003	6	54	0.003	6	54	0.006
11:00 - 12:00	6	54	0.006	6	54	0.006	6	54	0.012
12:00 - 13:00	6	54	0.003	6	54	0.003	6	54	0.006
13:00 - 14:00	6	54	0.006	6	54	0.006	6	54	0.012
14:00 - 15:00	6	54	0.003	6	54	0.003	6	54	0.006
15:00 - 16:00	6	54	0.016	6	54	0.016	6	54	0.032
16:00 - 17:00	6	54	0.016	6	54	0.016	6	54	0.032
17:00 - 18:00	6	54	0.006	6	54	0.000	6	54	0.006
18:00 - 19:00	6	54	0.016	6	54	0.022	6	54	0.038
19:00 - 20:00	2	18	0.000	2	18	0.000	2	18	0.000
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.000	2	18	0.000	2	18	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.094			0.097			0.191

MULTI-MODAL OGVS

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	6	54	0.000	6	54	0.000	6	54	0.000
08:00 - 09:00	6	54	0.000	6	54	0.000	6	54	0.000
09:00 - 10:00	6	54	0.000	6	54	0.000	6	54	0.000
10:00 - 11:00	6	54	0.009	6	54	0.006	6	54	0.015
11:00 - 12:00	6	54	0.000	6	54	0.003	6	54	0.003
12:00 - 13:00	6	54	0.003	6	54	0.003	6	54	0.006
13:00 - 14:00	6	54	0.003	6	54	0.003	6	54	0.006
14:00 - 15:00	6	54	0.000	6	54	0.000	6	54	0.000
15:00 - 16:00	6	54	0.003	6	54	0.003	6	54	0.006
16:00 - 17:00	6	54	0.000	6	54	0.000	6	54	0.000
17:00 - 18:00	6	54	0.003	6	54	0.003	6	54	0.006
18:00 - 19:00	6	54	0.000	6	54	0.000	6	54	0.000
19:00 - 20:00	2	18	0.000	2	18	0.000	2	18	0.000
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.000	2	18	0.000	2	18	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.021			0.042

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL PSVS
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	6	54	0.003	6	54	0.000	6	54	0.003
08:00 - 09:00	6	54	0.003	6	54	0.006	6	54	0.009
09:00 - 10:00	6	54	0.000	6	54	0.000	6	54	0.000
10:00 - 11:00	6	54	0.000	6	54	0.000	6	54	0.000
11:00 - 12:00	6	54	0.000	6	54	0.000	6	54	0.000
12:00 - 13:00	6	54	0.000	6	54	0.000	6	54	0.000
13:00 - 14:00	6	54	0.000	6	54	0.000	6	54	0.000
14:00 - 15:00	6	54	0.000	6	54	0.000	6	54	0.000
15:00 - 16:00	6	54	0.003	6	54	0.000	6	54	0.003
16:00 - 17:00	6	54	0.000	6	54	0.003	6	54	0.003
17:00 - 18:00	6	54	0.000	6	54	0.000	6	54	0.000
18:00 - 19:00	6	54	0.000	6	54	0.000	6	54	0.000
19:00 - 20:00	2	18	0.000	2	18	0.000	2	18	0.000
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.000	2	18	0.000	2	18	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.009			0.009			0.018

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL CYCLISTS
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	6	54	0.000	6	54	0.009	6	54	0.009
08:00 - 09:00	6	54	0.000	6	54	0.009	6	54	0.009
09:00 - 10:00	6	54	0.000	6	54	0.000	6	54	0.000
10:00 - 11:00	6	54	0.000	6	54	0.003	6	54	0.003
11:00 - 12:00	6	54	0.006	6	54	0.000	6	54	0.006
12:00 - 13:00	6	54	0.000	6	54	0.006	6	54	0.006
13:00 - 14:00	6	54	0.003	6	54	0.000	6	54	0.003
14:00 - 15:00	6	54	0.000	6	54	0.003	6	54	0.003
15:00 - 16:00	6	54	0.009	6	54	0.009	6	54	0.018
16:00 - 17:00	6	54	0.003	6	54	0.009	6	54	0.012
17:00 - 18:00	6	54	0.009	6	54	0.006	6	54	0.015
18:00 - 19:00	6	54	0.012	6	54	0.000	6	54	0.012
19:00 - 20:00	2	18	0.000	2	18	0.000	2	18	0.000
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.000	2	18	0.000	2	18	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.054			0.096

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL VEHICLE OCCUPANTS
 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	6	54	0.028	6	54	0.090	6	54	0.118
08:00 - 09:00	6	54	0.093	6	54	0.474	6	54	0.567
09:00 - 10:00	6	54	0.093	6	54	0.109	6	54	0.202
10:00 - 11:00	6	54	0.084	6	54	0.143	6	54	0.227
11:00 - 12:00	6	54	0.097	6	54	0.112	6	54	0.209
12:00 - 13:00	6	54	0.112	6	54	0.118	6	54	0.230
13:00 - 14:00	6	54	0.084	6	54	0.090	6	54	0.174
14:00 - 15:00	6	54	0.093	6	54	0.112	6	54	0.205
15:00 - 16:00	6	54	0.218	6	54	0.131	6	54	0.349
16:00 - 17:00	6	54	0.252	6	54	0.165	6	54	0.417
17:00 - 18:00	6	54	0.171	6	54	0.112	6	54	0.283
18:00 - 19:00	6	54	0.165	6	54	0.140	6	54	0.305
19:00 - 20:00	2	18	0.200	2	18	0.171	2	18	0.371
20:00 - 21:00	2	18	0.371	2	18	0.486	2	18	0.857
21:00 - 22:00	2	18	0.143	2	18	0.029	2	18	0.172
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.204			2.482			4.686

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL PEDESTRIANS
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	6	54	0.006	6	54	0.019	6	54	0.025
08:00 - 09:00	6	54	0.025	6	54	0.193	6	54	0.218
09:00 - 10:00	6	54	0.062	6	54	0.044	6	54	0.106
10:00 - 11:00	6	54	0.087	6	54	0.100	6	54	0.187
11:00 - 12:00	6	54	0.075	6	54	0.075	6	54	0.150
12:00 - 13:00	6	54	0.081	6	54	0.097	6	54	0.178
13:00 - 14:00	6	54	0.069	6	54	0.056	6	54	0.125
14:00 - 15:00	6	54	0.044	6	54	0.118	6	54	0.162
15:00 - 16:00	6	54	0.159	6	54	0.056	6	54	0.215
16:00 - 17:00	6	54	0.221	6	54	0.065	6	54	0.286
17:00 - 18:00	6	54	0.121	6	54	0.078	6	54	0.199
18:00 - 19:00	6	54	0.078	6	54	0.047	6	54	0.125
19:00 - 20:00	2	18	0.257	2	18	0.029	2	18	0.286
20:00 - 21:00	2	18	0.086	2	18	0.000	2	18	0.086
21:00 - 22:00	2	18	0.057	2	18	0.029	2	18	0.086
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.428			1.006			2.434

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL BUS/TRAM PASSENGERS
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	6	54	0.003	6	54	0.199	6	54	0.202
08:00 - 09:00	6	54	0.022	6	54	0.218	6	54	0.240
09:00 - 10:00	6	54	0.031	6	54	0.003	6	54	0.034
10:00 - 11:00	6	54	0.034	6	54	0.037	6	54	0.071
11:00 - 12:00	6	54	0.034	6	54	0.034	6	54	0.068
12:00 - 13:00	6	54	0.019	6	54	0.025	6	54	0.044
13:00 - 14:00	6	54	0.016	6	54	0.028	6	54	0.044
14:00 - 15:00	6	54	0.028	6	54	0.081	6	54	0.109
15:00 - 16:00	6	54	0.097	6	54	0.040	6	54	0.137
16:00 - 17:00	6	54	0.162	6	54	0.016	6	54	0.178
17:00 - 18:00	6	54	0.090	6	54	0.047	6	54	0.137
18:00 - 19:00	6	54	0.069	6	54	0.019	6	54	0.088
19:00 - 20:00	2	18	0.000	2	18	0.029	2	18	0.029
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.029	2	18	0.000	2	18	0.029
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.634			0.776			1.410

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL RAIL PASSENGERS
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	6	54	0.003	6	54	0.072	6	54	0.075
08:00 - 09:00	6	54	0.000	6	54	0.109	6	54	0.109
09:00 - 10:00	6	54	0.000	6	54	0.009	6	54	0.009
10:00 - 11:00	6	54	0.000	6	54	0.019	6	54	0.019
11:00 - 12:00	6	54	0.003	6	54	0.012	6	54	0.015
12:00 - 13:00	6	54	0.000	6	54	0.012	6	54	0.012
13:00 - 14:00	6	54	0.003	6	54	0.003	6	54	0.006
14:00 - 15:00	6	54	0.009	6	54	0.009	6	54	0.018
15:00 - 16:00	6	54	0.003	6	54	0.012	6	54	0.015
16:00 - 17:00	6	54	0.019	6	54	0.003	6	54	0.022
17:00 - 18:00	6	54	0.019	6	54	0.009	6	54	0.028
18:00 - 19:00	6	54	0.040	6	54	0.009	6	54	0.049
19:00 - 20:00	2	18	0.000	2	18	0.000	2	18	0.000
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.000	2	18	0.000	2	18	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.099			0.278			0.377

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL COACH PASSENGERS
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	6	54	0.000	6	54	0.000	6	54	0.000
08:00 - 09:00	6	54	0.000	6	54	0.000	6	54	0.000
09:00 - 10:00	6	54	0.000	6	54	0.000	6	54	0.000
10:00 - 11:00	6	54	0.000	6	54	0.000	6	54	0.000
11:00 - 12:00	6	54	0.000	6	54	0.000	6	54	0.000
12:00 - 13:00	6	54	0.000	6	54	0.000	6	54	0.000
13:00 - 14:00	6	54	0.000	6	54	0.000	6	54	0.000
14:00 - 15:00	6	54	0.000	6	54	0.000	6	54	0.000
15:00 - 16:00	6	54	0.000	6	54	0.000	6	54	0.000
16:00 - 17:00	6	54	0.000	6	54	0.000	6	54	0.000
17:00 - 18:00	6	54	0.000	6	54	0.000	6	54	0.000
18:00 - 19:00	6	54	0.000	6	54	0.000	6	54	0.000
19:00 - 20:00	2	18	0.000	2	18	0.000	2	18	0.000
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.000	2	18	0.000	2	18	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL PUBLIC TRANSPORT USERS
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	6	54	0.006	6	54	0.271	6	54	0.277
08:00 - 09:00	6	54	0.022	6	54	0.327	6	54	0.349
09:00 - 10:00	6	54	0.031	6	54	0.012	6	54	0.043
10:00 - 11:00	6	54	0.034	6	54	0.056	6	54	0.090
11:00 - 12:00	6	54	0.037	6	54	0.047	6	54	0.084
12:00 - 13:00	6	54	0.019	6	54	0.037	6	54	0.056
13:00 - 14:00	6	54	0.019	6	54	0.031	6	54	0.050
14:00 - 15:00	6	54	0.037	6	54	0.090	6	54	0.127
15:00 - 16:00	6	54	0.100	6	54	0.053	6	54	0.153
16:00 - 17:00	6	54	0.181	6	54	0.019	6	54	0.200
17:00 - 18:00	6	54	0.109	6	54	0.056	6	54	0.165
18:00 - 19:00	6	54	0.109	6	54	0.028	6	54	0.137
19:00 - 20:00	2	18	0.000	2	18	0.029	2	18	0.029
20:00 - 21:00	2	18	0.000	2	18	0.000	2	18	0.000
21:00 - 22:00	2	18	0.029	2	18	0.000	2	18	0.029
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.733			1.056			1.789

TRIP RATE for Land Use 03 - RESIDENTIAL/D - AFFORDABLE/LOCAL AUTHORITY FLATS
MULTI-MODAL TOTAL PEOPLE
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	6	54	0.040	6	54	0.389	6	54	0.429
08:00 - 09:00	6	54	0.140	6	54	1.003	6	54	1.143
09:00 - 10:00	6	54	0.187	6	54	0.165	6	54	0.352
10:00 - 11:00	6	54	0.206	6	54	0.302	6	54	0.508
11:00 - 12:00	6	54	0.215	6	54	0.234	6	54	0.449
12:00 - 13:00	6	54	0.212	6	54	0.259	6	54	0.471
13:00 - 14:00	6	54	0.174	6	54	0.178	6	54	0.352
14:00 - 15:00	6	54	0.174	6	54	0.324	6	54	0.498
15:00 - 16:00	6	54	0.486	6	54	0.249	6	54	0.735
16:00 - 17:00	6	54	0.657	6	54	0.259	6	54	0.916
17:00 - 18:00	6	54	0.411	6	54	0.252	6	54	0.663
18:00 - 19:00	6	54	0.364	6	54	0.215	6	54	0.579
19:00 - 20:00	2	18	0.457	2	18	0.229	2	18	0.686
20:00 - 21:00	2	18	0.457	2	18	0.486	2	18	0.943
21:00 - 22:00	2	18	0.229	2	18	0.057	2	18	0.286
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.409			4.601			9.010

Filtering Summary

Land Use	03/B	RESIDENTIAL/AFFORDABLE/LOCAL AUTHORITY
Selected Trip Rate Calculation Parameter Range	14-100 DWELLS	
Actual Trip Rate Calculation Parameter Range	14-54 DWELLS	
Date Range	Minimum: 01/01/03	Maximum: 19/09/13
Days of the week selected	Monday	1
	Tuesday	3
	Wednesday	2
	Thursday	2
	Friday	1
Main Location Types selected	Edge of Town Centre	3
	Suburban Area (PPS6 Out of Centre)	3
	Edge of Town	3
Population <1 Mile ranges selected	1,001 to 5,000	2
	5,001 to 10,000	1
	10,001 to 15,000	4
	15,001 to 20,000	1
	25,001 to 50,000	1
Population <5 Mile ranges selected	5,001 to 25,000	1
	25,001 to 50,000	2
	50,001 to 75,000	1
	75,001 to 100,000	3
	125,001 to 250,000	1
	250,001 to 500,000	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	7
	1.1 to 1.5	2
PTAL Rating	No PTAL Present	9

Land Use : 03 - RESIDENTIAL
Category : B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	2 days
08	NORTH WEST	
	LC LANCASHIRE	1 days
	MS MERSEYSIDE	1 days
11	SCOTLAND	
	MO MORAY	2 days

Secondary Filtering selection:

Parameter: Number of dwellings
Actual Range: 14 to 54 (units:)
Range Selected by User: 14 to 100 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/03 to 19/09/13

Selected survey days:

Monday	1 days
Tuesday	3 days
Wednesday	2 days
Thursday	2 days
Friday	1 days

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	3
Edge of Town	3

Selected Location Sub Categories:

Residential Zone	5
Built-Up Zone	1
No Sub Category	3

Secondary Filtering selection:

Use Class:

C3	9 days
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Population within 1 mile:

1,001 to 5,000	2 days
5,001 to 10,000	1 days
10,001 to 15,000	4 days
15,001 to 20,000	1 days
25,001 to 50,000	1 days

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	3 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days

Secondary Filtering selection (Cont.):

Car ownership within 5 miles:

0.6 to 1.0	7 days
1.1 to 1.5	2 days

Travel Plan:

No	9 days
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PTAL Rating:

No PTAL Present	9 days
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TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL 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	9	29	0.068	9	29	0.133	9	29	0.201
08:00 - 09:00	9	29	0.140	9	29	0.284	9	29	0.424
09:00 - 10:00	9	29	0.205	9	29	0.231	9	29	0.436
10:00 - 11:00	9	29	0.148	9	29	0.170	9	29	0.318
11:00 - 12:00	9	29	0.163	9	29	0.144	9	29	0.307
12:00 - 13:00	9	29	0.193	9	29	0.170	9	29	0.363
13:00 - 14:00	9	29	0.148	9	29	0.152	9	29	0.300
14:00 - 15:00	9	29	0.193	9	29	0.189	9	29	0.382
15:00 - 16:00	9	29	0.246	9	29	0.246	9	29	0.492
16:00 - 17:00	9	29	0.186	9	29	0.178	9	29	0.364
17:00 - 18:00	9	29	0.295	9	29	0.178	9	29	0.473
18:00 - 19:00	9	29	0.155	9	29	0.125	9	29	0.280
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.140			2.200			4.340

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL OGVS
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	9	29	0.000	9	29	0.000	9	29	0.000
08:00 - 09:00	9	29	0.004	9	29	0.004	9	29	0.008
09:00 - 10:00	9	29	0.000	9	29	0.000	9	29	0.000
10:00 - 11:00	9	29	0.000	9	29	0.000	9	29	0.000
11:00 - 12:00	9	29	0.000	9	29	0.000	9	29	0.000
12:00 - 13:00	9	29	0.008	9	29	0.008	9	29	0.016
13:00 - 14:00	9	29	0.000	9	29	0.000	9	29	0.000
14:00 - 15:00	9	29	0.000	9	29	0.000	9	29	0.000
15:00 - 16:00	9	29	0.000	9	29	0.000	9	29	0.000
16:00 - 17:00	9	29	0.000	9	29	0.000	9	29	0.000
17:00 - 18:00	9	29	0.000	9	29	0.000	9	29	0.000
18:00 - 19:00	9	29	0.000	9	29	0.000	9	29	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.012			0.012			0.024

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL PSVS
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	9	29	0.000	9	29	0.000	9	29	0.000
08:00 - 09:00	9	29	0.000	9	29	0.000	9	29	0.000
09:00 - 10:00	9	29	0.004	9	29	0.004	9	29	0.008
10:00 - 11:00	9	29	0.000	9	29	0.000	9	29	0.000
11:00 - 12:00	9	29	0.000	9	29	0.000	9	29	0.000
12:00 - 13:00	9	29	0.000	9	29	0.000	9	29	0.000
13:00 - 14:00	9	29	0.000	9	29	0.000	9	29	0.000
14:00 - 15:00	9	29	0.000	9	29	0.000	9	29	0.000
15:00 - 16:00	9	29	0.000	9	29	0.000	9	29	0.000
16:00 - 17:00	9	29	0.000	9	29	0.000	9	29	0.000
17:00 - 18:00	9	29	0.000	9	29	0.000	9	29	0.000
18:00 - 19:00	9	29	0.000	9	29	0.000	9	29	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.004			0.008

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL CYCLISTS
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	9	29	0.023	9	29	0.019	9	29	0.042
08:00 - 09:00	9	29	0.004	9	29	0.011	9	29	0.015
09:00 - 10:00	9	29	0.011	9	29	0.019	9	29	0.030
10:00 - 11:00	9	29	0.015	9	29	0.000	9	29	0.015
11:00 - 12:00	9	29	0.004	9	29	0.004	9	29	0.008
12:00 - 13:00	9	29	0.000	9	29	0.000	9	29	0.000
13:00 - 14:00	9	29	0.004	9	29	0.004	9	29	0.008
14:00 - 15:00	9	29	0.000	9	29	0.004	9	29	0.004
15:00 - 16:00	9	29	0.030	9	29	0.008	9	29	0.038
16:00 - 17:00	9	29	0.015	9	29	0.030	9	29	0.045
17:00 - 18:00	9	29	0.023	9	29	0.015	9	29	0.038
18:00 - 19:00	9	29	0.023	9	29	0.015	9	29	0.038
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.152			0.129			0.281

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL VEHICLE OCCUPANTS
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	9	29	0.076	9	29	0.155	9	29	0.231
08:00 - 09:00	9	29	0.193	9	29	0.473	9	29	0.666
09:00 - 10:00	9	29	0.254	9	29	0.326	9	29	0.580
10:00 - 11:00	9	29	0.208	9	29	0.258	9	29	0.466
11:00 - 12:00	9	29	0.208	9	29	0.182	9	29	0.390
12:00 - 13:00	9	29	0.250	9	29	0.220	9	29	0.470
13:00 - 14:00	9	29	0.182	9	29	0.216	9	29	0.398
14:00 - 15:00	9	29	0.265	9	29	0.280	9	29	0.545
15:00 - 16:00	9	29	0.466	9	29	0.333	9	29	0.799
16:00 - 17:00	9	29	0.284	9	29	0.292	9	29	0.576
17:00 - 18:00	9	29	0.398	9	29	0.239	9	29	0.637
18:00 - 19:00	9	29	0.227	9	29	0.205	9	29	0.432
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.011			3.179			6.190

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
 MULTI-MODAL PEDESTRIANS
 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	9	29	0.027	9	29	0.057	9	29	0.084
08:00 - 09:00	9	29	0.095	9	29	0.492	9	29	0.587
09:00 - 10:00	9	29	0.148	9	29	0.129	9	29	0.277
10:00 - 11:00	9	29	0.106	9	29	0.167	9	29	0.273
11:00 - 12:00	9	29	0.110	9	29	0.136	9	29	0.246
12:00 - 13:00	9	29	0.182	9	29	0.152	9	29	0.334
13:00 - 14:00	9	29	0.102	9	29	0.080	9	29	0.182
14:00 - 15:00	9	29	0.133	9	29	0.174	9	29	0.307
15:00 - 16:00	9	29	0.455	9	29	0.277	9	29	0.732
16:00 - 17:00	9	29	0.163	9	29	0.144	9	29	0.307
17:00 - 18:00	9	29	0.231	9	29	0.235	9	29	0.466
18:00 - 19:00	9	29	0.144	9	29	0.140	9	29	0.284
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.896			2.183			4.079

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL PUBLIC TRANSPORT USERS
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	9	29	0.000	9	29	0.011	9	29	0.011
08:00 - 09:00	9	29	0.000	9	29	0.038	9	29	0.038
09:00 - 10:00	9	29	0.011	9	29	0.027	9	29	0.038
10:00 - 11:00	9	29	0.004	9	29	0.004	9	29	0.008
11:00 - 12:00	9	29	0.004	9	29	0.015	9	29	0.019
12:00 - 13:00	9	29	0.019	9	29	0.004	9	29	0.023
13:00 - 14:00	9	29	0.023	9	29	0.000	9	29	0.023
14:00 - 15:00	9	29	0.015	9	29	0.008	9	29	0.023
15:00 - 16:00	9	29	0.023	9	29	0.004	9	29	0.027
16:00 - 17:00	9	29	0.000	9	29	0.008	9	29	0.008
17:00 - 18:00	9	29	0.023	9	29	0.000	9	29	0.023
18:00 - 19:00	9	29	0.004	9	29	0.000	9	29	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.126			0.119			0.245

TRIP RATE for Land Use 03 - RESIDENTIAL/B - AFFORDABLE/LOCAL AUTHORITY HOUSES
MULTI-MODAL TOTAL PEOPLE
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	9	29	0.125	9	29	0.242	9	29	0.367
08:00 - 09:00	9	29	0.292	9	29	1.015	9	29	1.307
09:00 - 10:00	9	29	0.424	9	29	0.500	9	29	0.924
10:00 - 11:00	9	29	0.333	9	29	0.428	9	29	0.761
11:00 - 12:00	9	29	0.326	9	29	0.337	9	29	0.663
12:00 - 13:00	9	29	0.451	9	29	0.375	9	29	0.826
13:00 - 14:00	9	29	0.311	9	29	0.299	9	29	0.610
14:00 - 15:00	9	29	0.413	9	29	0.466	9	29	0.879
15:00 - 16:00	9	29	0.973	9	29	0.621	9	29	1.594
16:00 - 17:00	9	29	0.462	9	29	0.473	9	29	0.935
17:00 - 18:00	9	29	0.674	9	29	0.489	9	29	1.163
18:00 - 19:00	9	29	0.398	9	29	0.360	9	29	0.758
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.182			5.605			10.787



APPENDIX C Tempro Growth Factor

Growth Factor

Area Description		All purposes	
Level	Name	Production	Attraction
Authority	Hillingdon	1.0212	1.0287
E02000494	Hillingdon 001	1.0151	1.0320
E02000495	Hillingdon 002	1.0183	1.0282
E02000496	Hillingdon 003	1.0140	1.0284
E02000497	Hillingdon 004	1.0155	1.0298
E02000498	Hillingdon 005	1.0130	1.0329
E02000499	Hillingdon 006	1.0132	1.0289
E02000500	Hillingdon 007	1.0143	1.0313
E02000501	Hillingdon 008	1.0119	1.0305
E02000502	Hillingdon 009	1.0150	1.0319
E02000503	Hillingdon 010	1.0084	1.0283
E02000504	Hillingdon 011	1.0116	1.0286
E02000506	Hillingdon 013	1.0099	1.0266
E02000507	Hillingdon 014	1.0128	1.0222
E02000508	Hillingdon 015	1.0295	1.0250
E02000509	Hillingdon 016	1.0373	1.0304
E02000510	Hillingdon 017	1.0238	1.0313
E02000511	Hillingdon 018	1.0177	1.0271
E02000512	Hillingdon 019	1.0272	1.0282
E02000513	Hillingdon 020	1.0301	1.0297
E02000514	Hillingdon 021	1.0226	1.0277
E02000515	Hillingdon 022	1.0288	1.0295
E02000516	Hillingdon 023	1.0232	1.0299
E02000517	Hillingdon 024	1.0274	1.0324
E02000518	Hillingdon 025	1.0253	1.0249
E02000519	Hillingdon 026	1.0331	1.0321
E02000520	Hillingdon 027	1.0300	1.0260
E02000521	Hillingdon 028	1.0274	1.0325
E02000522	Hillingdon 029	1.0243	1.0302
E02000523	Hillingdon 030	1.0231	1.0263
E02000524	Hillingdon 031	1.0261	1.0284
E02000525	Hillingdon 032	1.0282	1.0338
E02006796	Hillingdon 033	1.0169	1.0293

Future Year - Base Year

Area Description		All purposes	
Level	Name	Production	Attraction
Authority	Hillingdon	1,046	2,170
E02000494	Hillingdon 001	23	58
E02000495	Hillingdon 002	34	78
E02000496	Hillingdon 003	28	60
E02000497	Hillingdon 004	24	35
E02000498	Hillingdon 005	14	22
E02000499	Hillingdon 006	18	25

E02000500	Hillingdon 007	23	57
E02000501	Hillingdon 008	18	26
E02000502	Hillingdon 009	20	29
E02000503	Hillingdon 010	14	20
E02000504	Hillingdon 011	16	26
E02000506	Hillingdon 013	15	35
E02000507	Hillingdon 014	17	14
E02000508	Hillingdon 015	55	147
E02000509	Hillingdon 016	56	150
E02000510	Hillingdon 017	41	94
E02000511	Hillingdon 018	26	43
E02000512	Hillingdon 019	31	18
E02000513	Hillingdon 020	38	35
E02000514	Hillingdon 021	33	24
E02000515	Hillingdon 022	51	67
E02000516	Hillingdon 023	29	15
E02000517	Hillingdon 024	32	30
E02000518	Hillingdon 025	36	62
E02000519	Hillingdon 026	44	62
E02000520	Hillingdon 027	59	149
E02000521	Hillingdon 028	41	40
E02000522	Hillingdon 029	32	27
E02000523	Hillingdon 030	34	45
E02000524	Hillingdon 031	73	515
E02000525	Hillingdon 032	40	76
E02006796	Hillingdon 033	29	84

Base Year

Area Description		All purposes	
Level	Name	Production	Attraction
Authority	Hillingdon	49,407	75,632
E02000494	Hillingdon 001	1,533	1,802
E02000495	Hillingdon 002	1,885	2,771
E02000496	Hillingdon 003	1,993	2,101
E02000497	Hillingdon 004	1,571	1,172
E02000498	Hillingdon 005	1,114	673
E02000499	Hillingdon 006	1,396	871
E02000500	Hillingdon 007	1,598	1,833
E02000501	Hillingdon 008	1,506	864
E02000502	Hillingdon 009	1,350	901
E02000503	Hillingdon 010	1,668	714
E02000504	Hillingdon 011	1,395	913
E02000506	Hillingdon 013	1,531	1,326
E02000507	Hillingdon 014	1,348	610
E02000508	Hillingdon 015	1,862	5,876
E02000509	Hillingdon 016	1,511	4,922
E02000510	Hillingdon 017	1,741	3,011

E02000511	Hillingdon 018	1,446	1,584
E02000512	Hillingdon 019	1,147	648
E02000513	Hillingdon 020	1,253	1,195
E02000514	Hillingdon 021	1,476	882
E02000515	Hillingdon 022	1,756	2,287
E02000516	Hillingdon 023	1,230	487
E02000517	Hillingdon 024	1,169	925
E02000518	Hillingdon 025	1,419	2,502
E02000519	Hillingdon 026	1,317	1,932
E02000520	Hillingdon 027	1,981	5,715
E02000521	Hillingdon 028	1,491	1,242
E02000522	Hillingdon 029	1,296	909
E02000523	Hillingdon 030	1,481	1,697
E02000524	Hillingdon 031	2,808	18,138
E02000525	Hillingdon 032	1,431	2,262
E02006796	Hillingdon 033	1,707	2,867

Future Year

Area Description		All purposes	
Level	Name	Production	Attraction
Authority	Hillingdon	50,453	77,801
E02000494	Hillingdon 001	1,556	1,860
E02000495	Hillingdon 002	1,919	2,850
E02000496	Hillingdon 003	2,021	2,161
E02000497	Hillingdon 004	1,596	1,207
E02000498	Hillingdon 005	1,129	696
E02000499	Hillingdon 006	1,415	896
E02000500	Hillingdon 007	1,621	1,890
E02000501	Hillingdon 008	1,524	891
E02000502	Hillingdon 009	1,370	929
E02000503	Hillingdon 010	1,682	734
E02000504	Hillingdon 011	1,411	939
E02000506	Hillingdon 013	1,546	1,362
E02000507	Hillingdon 014	1,365	624
E02000508	Hillingdon 015	1,917	6,023
E02000509	Hillingdon 016	1,567	5,071
E02000510	Hillingdon 017	1,782	3,105
E02000511	Hillingdon 018	1,472	1,627
E02000512	Hillingdon 019	1,178	666
E02000513	Hillingdon 020	1,291	1,231
E02000514	Hillingdon 021	1,509	906
E02000515	Hillingdon 022	1,807	2,354
E02000516	Hillingdon 023	1,258	502
E02000517	Hillingdon 024	1,201	954
E02000518	Hillingdon 025	1,455	2,564
E02000519	Hillingdon 026	1,360	1,994
E02000520	Hillingdon 027	2,040	5,863

E02000521	Hillingdon 028	1,531	1,282
E02000522	Hillingdon 029	1,327	936
E02000523	Hillingdon 030	1,515	1,742
E02000524	Hillingdon 031	2,881	18,653
E02000525	Hillingdon 032	1,471	2,338
E02006796	Hillingdon 033	1,736	2,951



Belmore Allotments Proposed Development - Transport Statement

APPENDIX D Link/Junction Impact Assessments

Belmore Allotments Development Traffic Impact Analysis

AM Peak Hour	Burns Close		Balmoral Drive (W)		Balmoral Drive (E)		Gledwood Drive		Total
	Southbound	Northbound	Eastbound	Westbound	Eastbound	Westbound	Northbound	Southbound	
2020 Base Traffic Flows	54	60	383	305	339	332	86	151	1710
Development Traffic Flows	12	6	5	8	11	4	1	4	51
% Increase	22.22	10.00	1.31	2.62	3.24	1.20	1.16	2.65	2.98
Two-Way % Increase	15.79		1.89		2.24		2.11		

Overall traffic increase as a result of the proposed development would be less than 3% of local network traffic, which is well within daily traffic fluctuations.



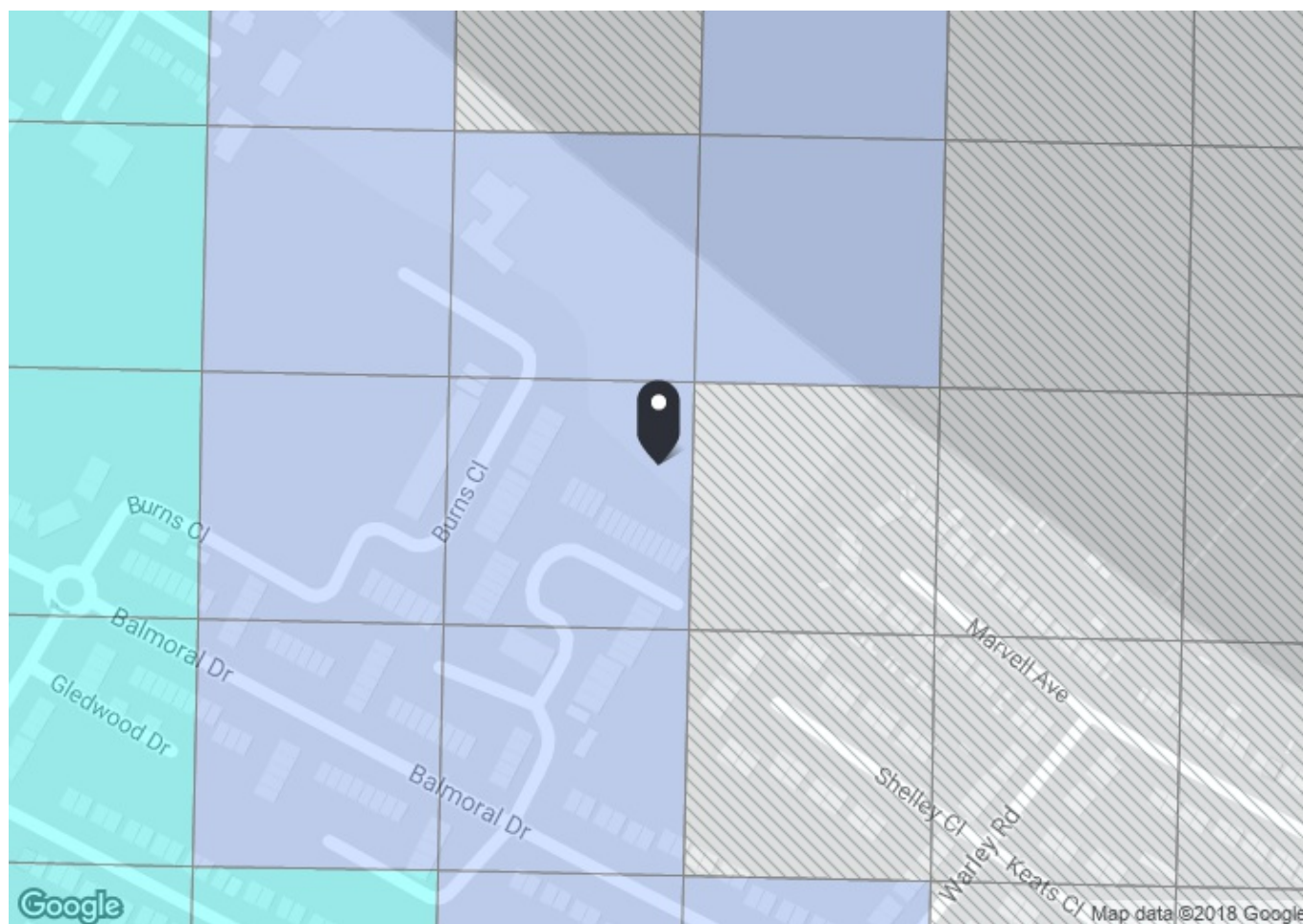
APPENDIX E Parking Accumulation Assessments

Belmore Allotments Development Car Parking Accumulation Assessments

	Residential Flats (110 Units)				Residential Houses (2 Units)					
Time Range	Vehicle Trip Rates		Vehicle Trips		Vehicle Trip Rates		Vehicle Trips		Parking Accumulation	Percentage Accumulation
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures		
At 07:00	A robust assumption of 80% parking occupancy at 7am								91	80.53%
07:00-08:00	0.034	0.081	4	9	0.068	0.133	0	0	86	75.84%
08:00-09:00	0.09	0.199	10	22	0.140	0.284	0	1	73	64.98%
09:00-10:00	0.078	0.075	9	8	0.205	0.231	0	0	74	65.22%
10:00-11:00	0.084	0.115	9	13	0.148	0.170	0	0	70	62.16%
11:00-12:00	0.09	0.09	10	10	0.163	0.144	0	0	70	62.20%
12:00-13:00	0.09	0.1	10	11	0.193	0.170	0	0	69	61.27%
13:00-14:00	0.056	0.062	6	7	0.148	0.152	0	0	69	60.67%
14:00-15:00	0.065	0.081	7	9	0.193	0.189	0	0	67	59.12%
15:00-16:00	0.121	0.115	13	13	0.246	0.246	0	0	67	59.71%
16:00-17:00	0.125	0.112	14	12	0.186	0.178	0	0	69	60.99%
17:00-18:00	0.1	0.072	11	8	0.295	0.178	1	0	72	63.92%
18:00-19:00	0.103	0.087	11	10	0.155	0.125	0	0	74	65.53%
19:00-20:00	0.114	0.086	13	9					77	68.26%
20:00-21:00	0.2	0.2	22	22					77	68.26%
21:00-22:00	0.086	0.086	9	9					77	68.26%



APPENDIX F PTAL Calculations Sheet



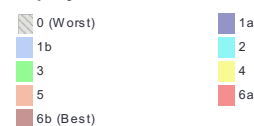
PTAL output for Base Year 1b

28 Melrose Cl, Hayes UB4 0AZ, UK
Easting: 510183, Northing: 181961

Grid Cell: 87678

Report generated: 16/02/2018

Map key - PTAL



Map layers

 PTAL (cell size: 100m)

Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

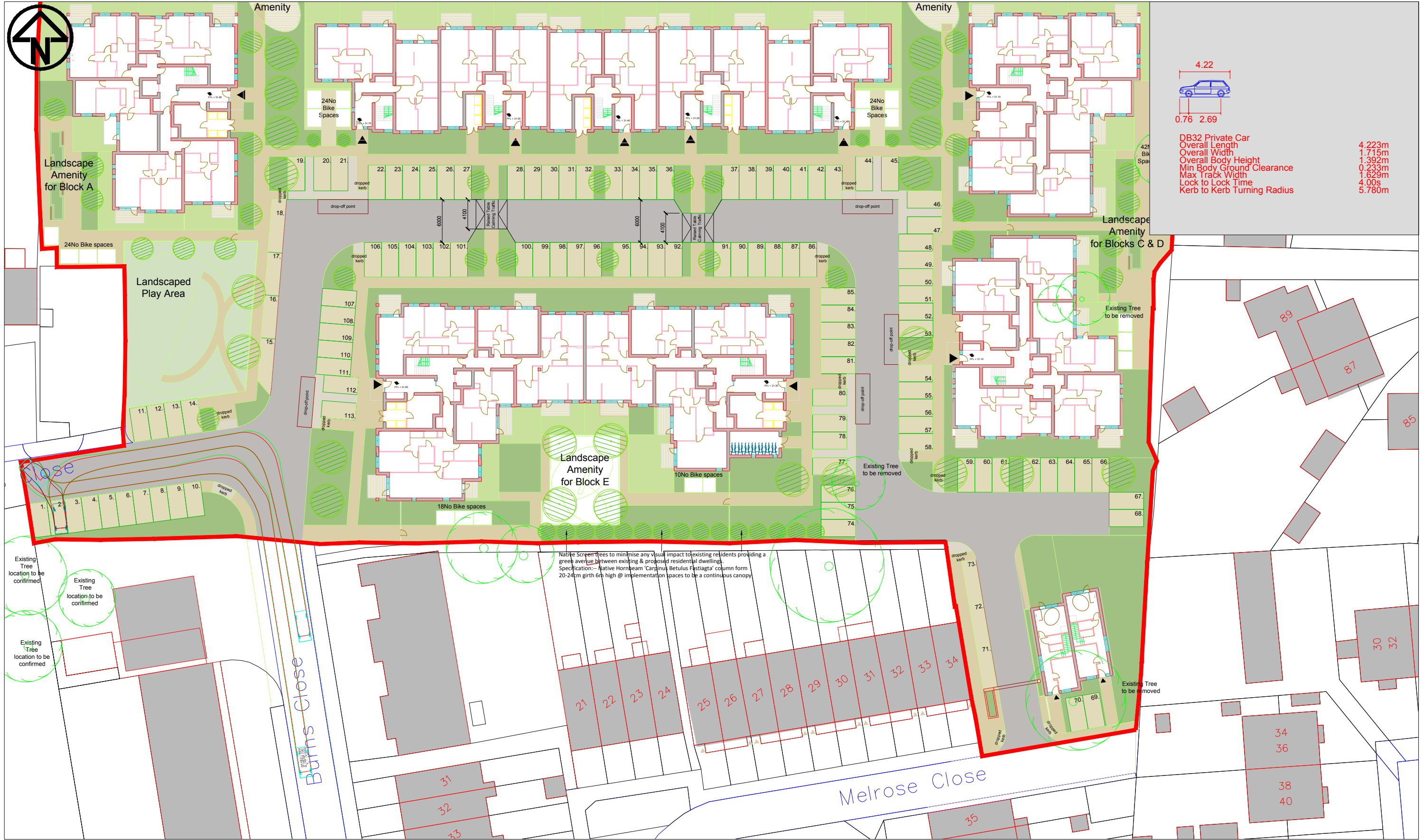
Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	LANSBURY DR BALMORAL DR	U7	589.2	2	7.37	17	24.37	1.23	0.5	0.62
Bus	LANSBURY DR BALMORAL DR	90	589.2	6	7.37	7	14.37	2.09	1	2.09
Bus	LANSBURY DR BALMORAL DR	195	589.2	5	7.37	8	15.37	1.95	0.5	0.98
Total Grid Cell AI:										3.68

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APPENDIX G Swept Path Assessments



PROJECT

Proposed Development
Site - Belmore Allotments

TITLE

Private car
AutoTrack Layout Plan
Sheet 1 of 9

DRAWN:	JJR	27/06/2019
DESIGN:	JJR	27/06/2019
CHECKED:	SH	27/06/2019
APPROVED:	SJH	27/06/2019
SCALE:	1:500	A3

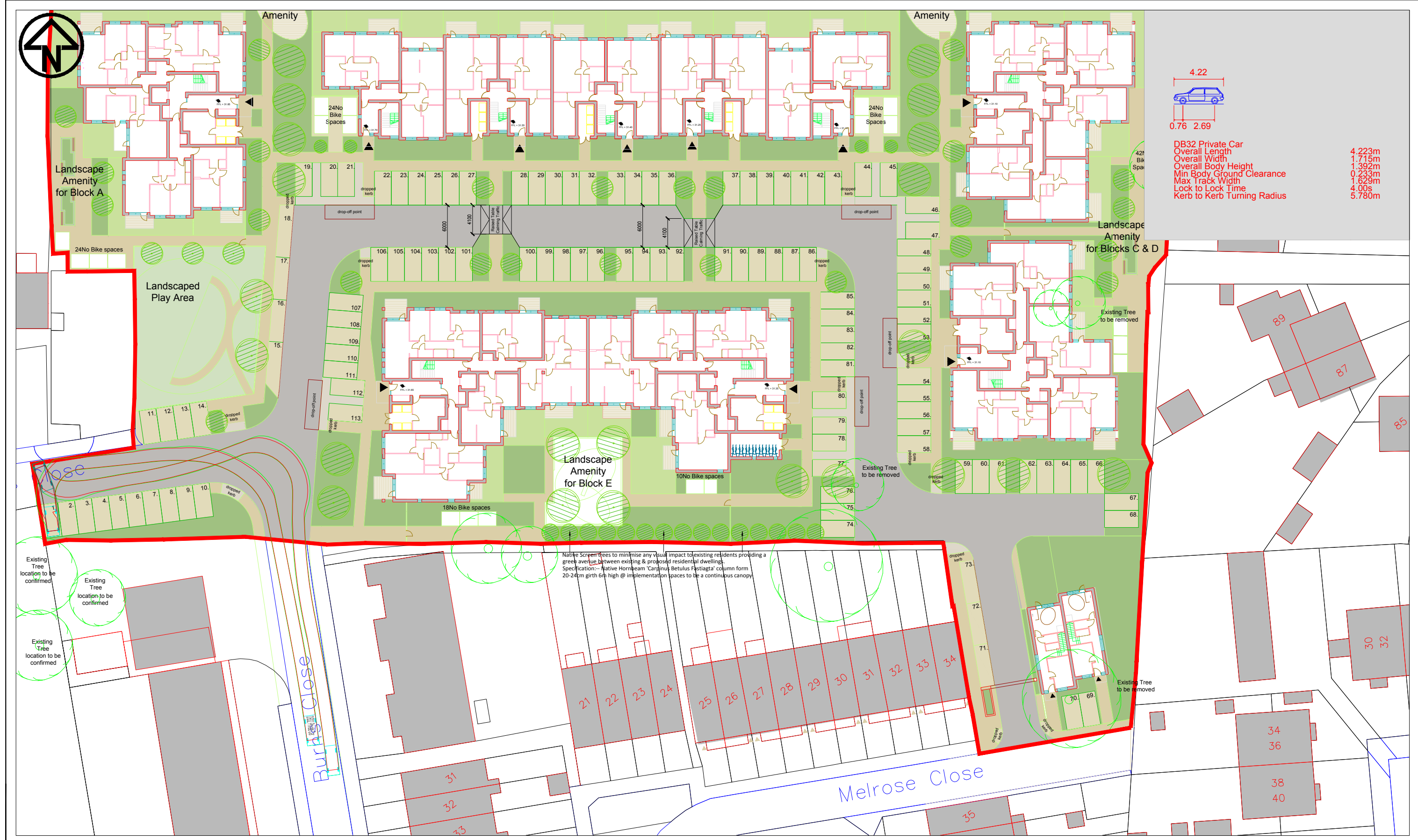
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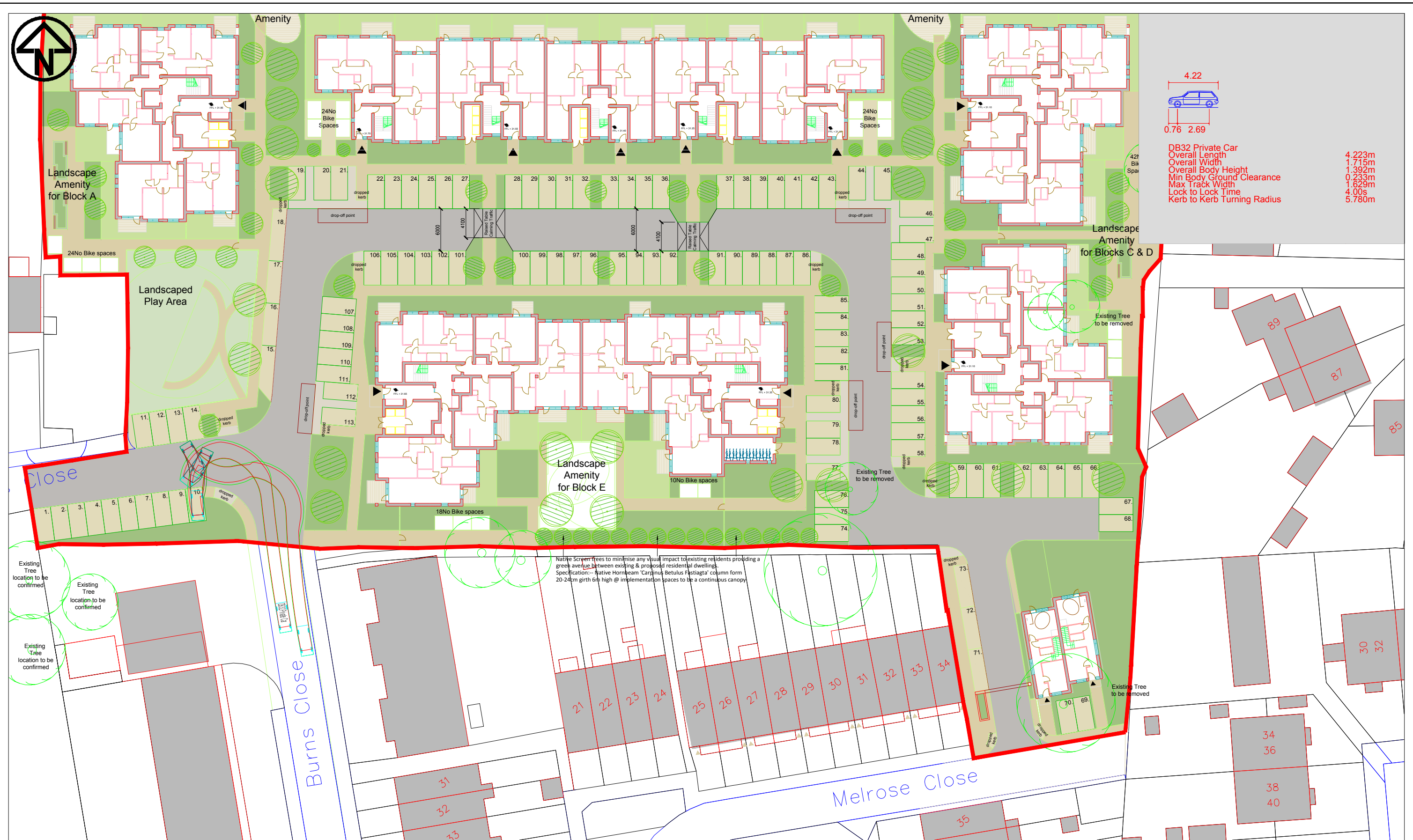
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London
W1B 3HH
United Kingdom

DRAWING No:
2019/TRACK/BA01

REV:
01



	PROJECT Proposed Development Site - Belmore Allotments	TITLE Private car AutoTrack Layout Plan Sheet 2 of 9	DRAWN:	JJR	27/06/2019	AGENT  London Design and Management Ltd 207 Regent Street (3rd Floor) London W1B 3HH United Kingdom		
			DESIGN:	JJR	27/06/2019			
			CHECKED:	SH	27/06/2019			
			APPROVED:	SJH	27/06/2019	DRAWING No:	2019/TRACK/BA02	REV: 01
			SCALE:	1:500		A3		



4.22
0.76 2.69

DB32 Private Car
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Max Track Width
Lock to Lock Time
Kerb to Kerb Turning Radius

4.223m
1.715m
1.392m
0.233m
1.629m
4.00s
5.780m

Native Screen trees to minimise any visual impact to existing residents providing a green avenue between existing & proposed residential dwellings.
Specification:- 'Native Hornbeam' Carinus Betulus Fastigata column form
20-24cm girth 6m high @ implementation spaces to be a continuous canopy



PROJECT

Proposed Development Site - Belmore Allotments

TITLE

Private car AutoTrack Layout Plan Sheet 3 of 9

DRAWN:	JJR	27/06/2019
DESIGN:	JJR	27/06/2019
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APPROVED:	SJH	27/06/2019
SCALE:	1:500	A3

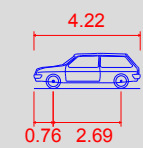
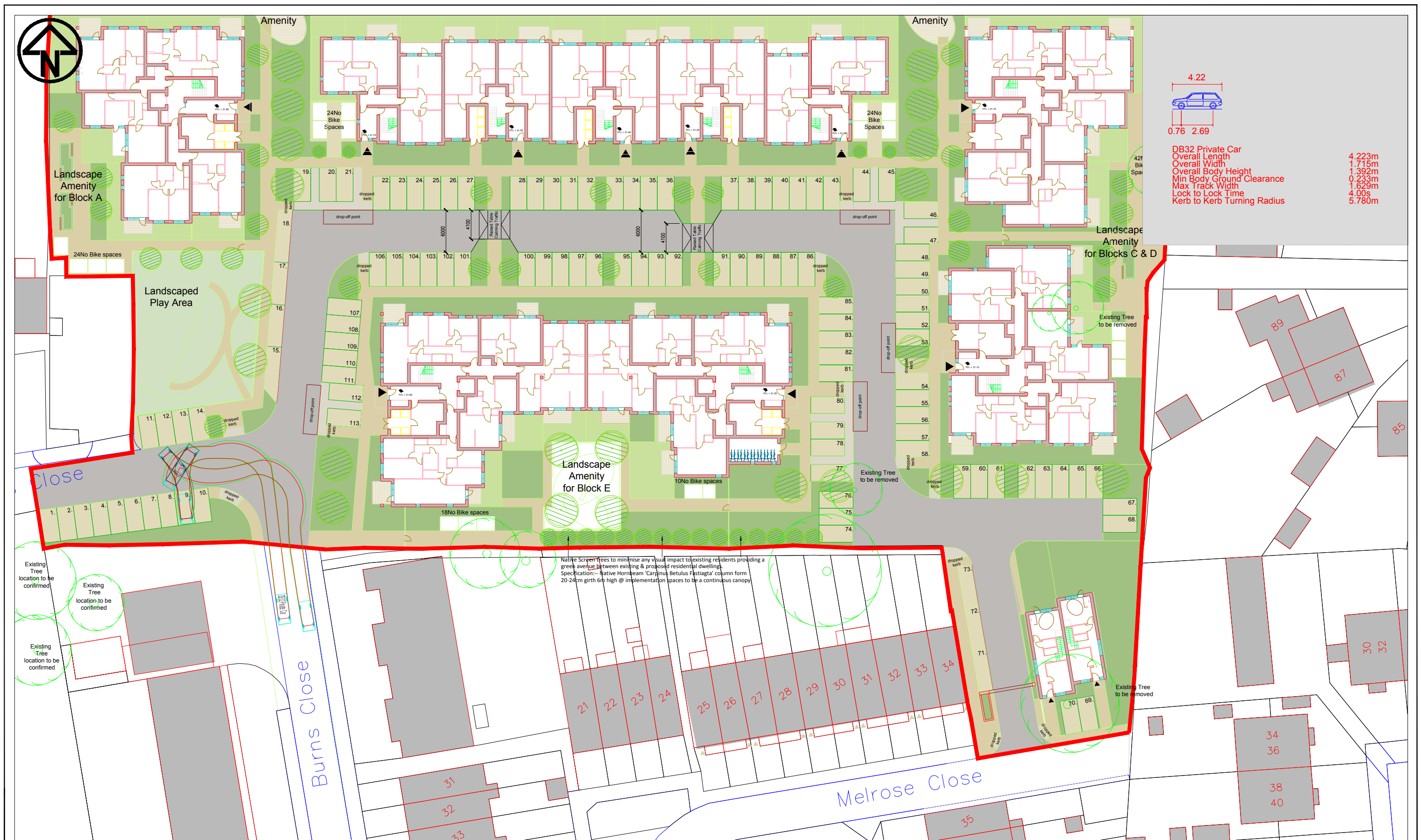
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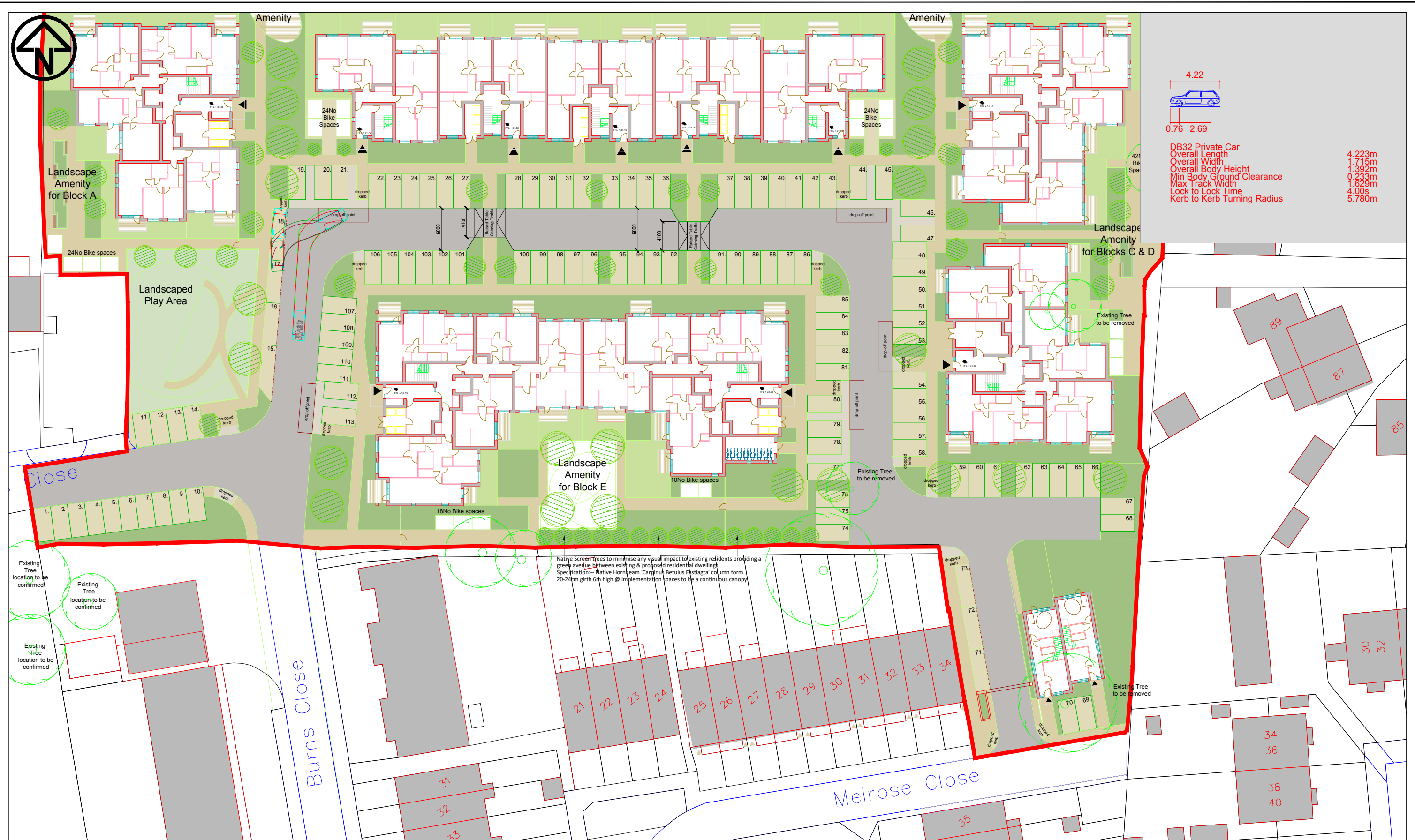
DRAWING No:
2019/TRACK/BA03

REV:
01



DB32 Private Car	4.223m
Overall Length	1.715m
Overall Width	1.392m
Overall Body Height	0.233m
Min Body Ground Clearance	1.629m
Max Track Width	4.00s
Lock to Lock Time	5.780m
Kerb to Kerb Turning Radius	

	PROJECT Proposed Development Site - Belmore Allotments	TITLE Private car AutoTrack Layout Plan Sheet 4 of 9	DRAWN: JJR 27/06/2019		AGENT  London Design and Management Ltd 207 Regent Street (3rd Floor) London W1B 3HH United Kingdom	DRAWING No: 2019/TRACK/BA04	REV: 01
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			CHECKED: SH 27/06/2019				
			APPROVED: SJH 27/06/2019				
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PROJECT

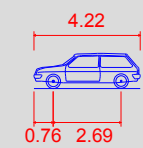
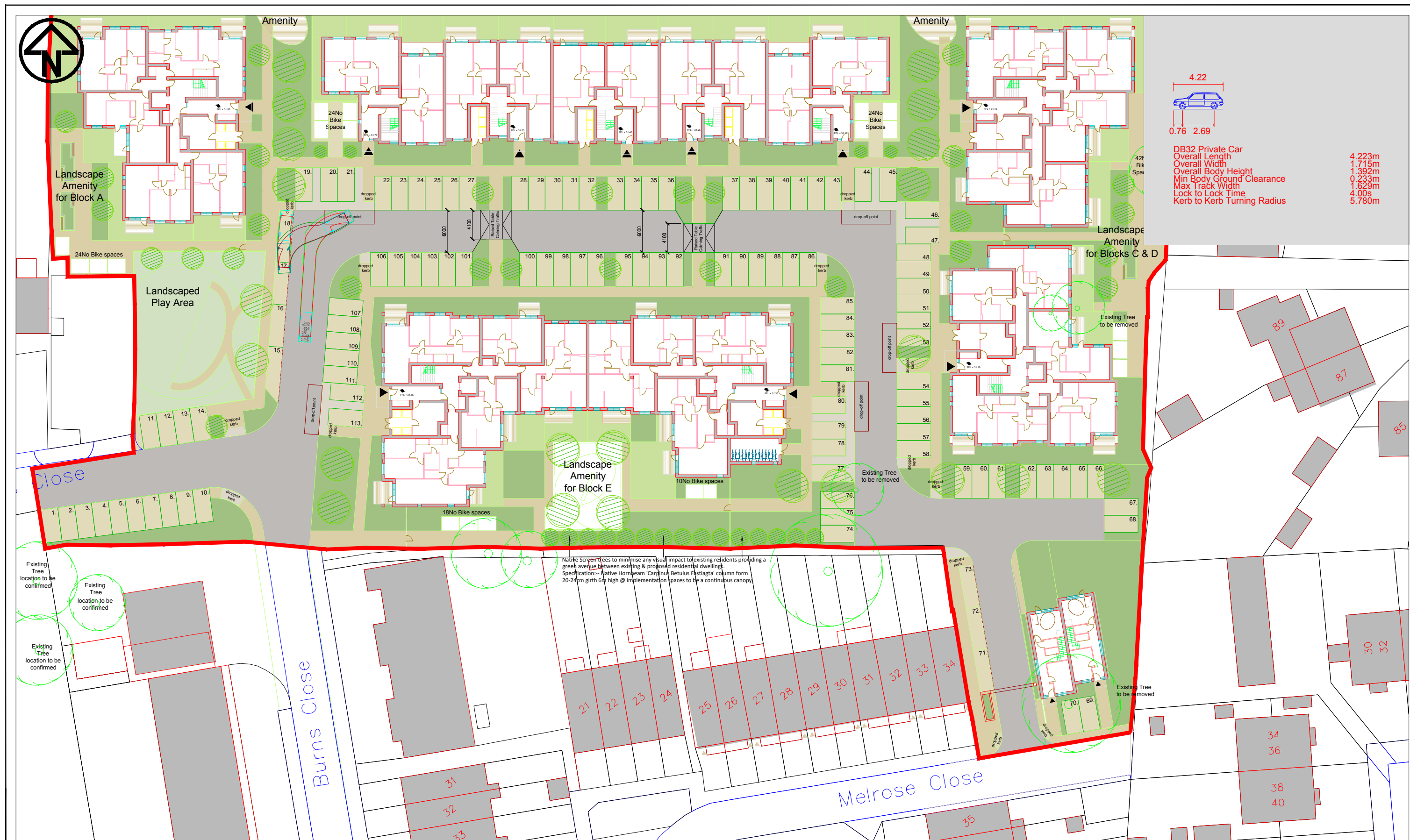
**Proposed Development
Site - Belmore Allotments**

TITLE

**Private car
AutoTrack Layout Plan
Sheet 5 of 9**

DRAWN:	JJR	27/06/2019
DESIGN:	JJR	27/06/2019
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APPROVED:	SJH	27/06/2019
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DRAWING No:		
2019/TRACK/BA05		REV:
		01



DB32 Private Car	4.223m
Overall Length	1.715m
Overall Width	1.392m
Overall Body Height	0.233m
Min Body Ground Clearance	1.629m
Max Track Width	4.00s
Lock to Lock Time	5.780m
Kerb to Kerb Turning Radius	



PROJECT

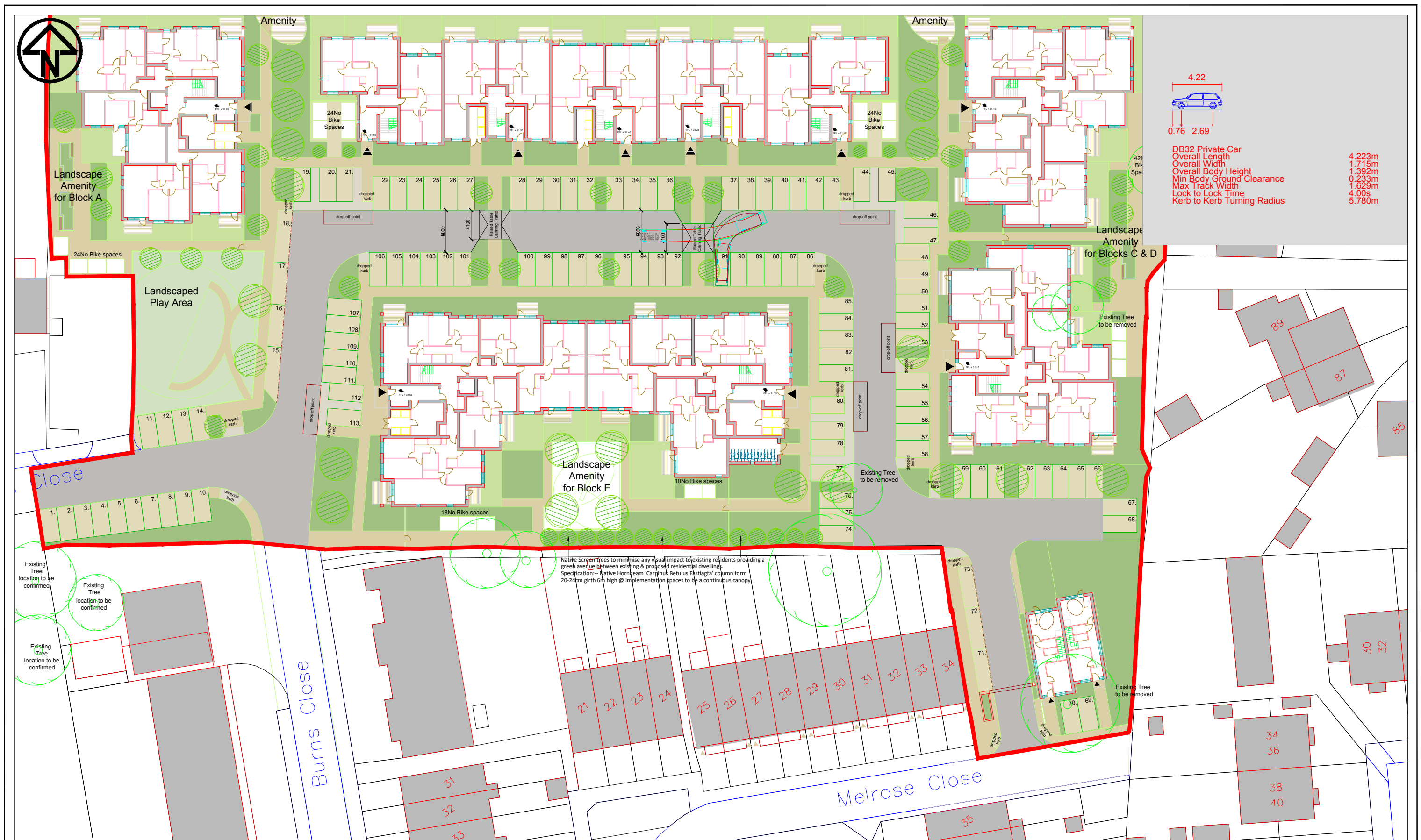
Proposed Development
Site - Belmore Allotments

TITLE

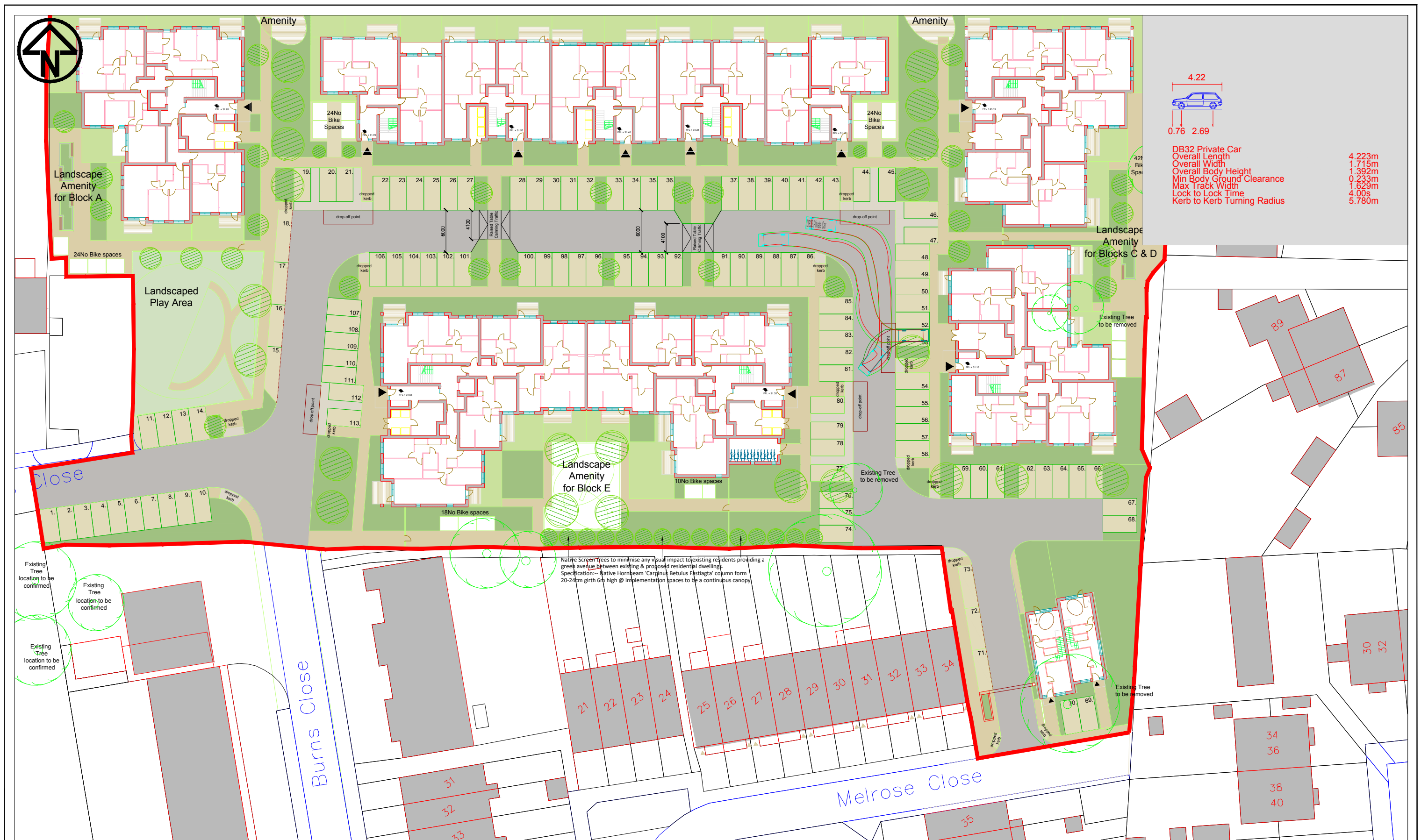
Private car
AutoTrack Layout Plan
Sheet 6 of 9

DRAWN:	JJR	27/06/2019
DESIGN:	JJR	27/06/2019
CHECKED:	SH	27/06/2019
APPROVED:	SJH	27/06/2019
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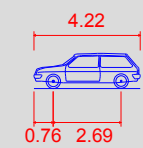
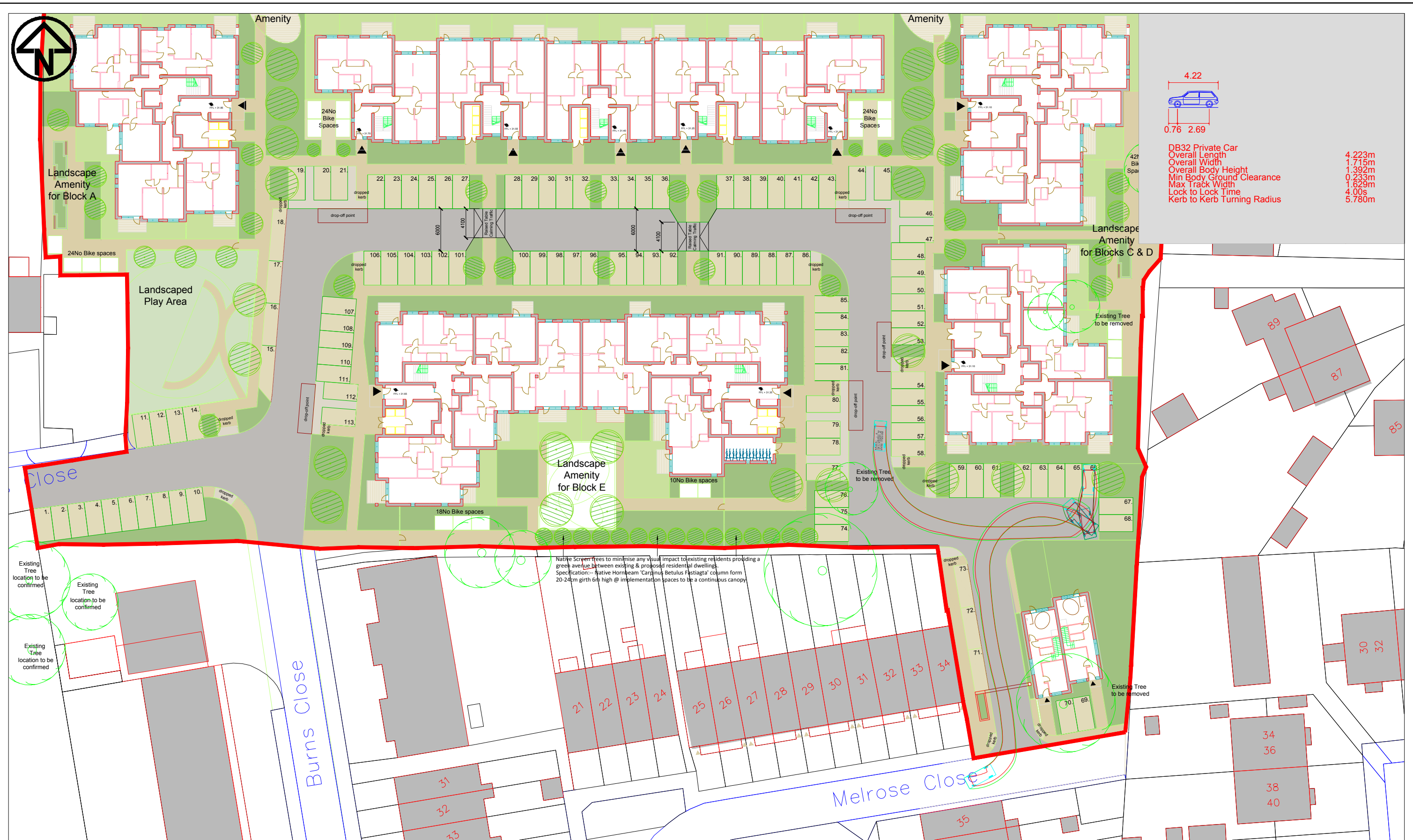
AGENT	London Design and Management Ltd 207 Regent Street (3rd Floor) London W1B 3HH United Kingdom
DRAWING No:	2019/TRACK/BA06
REV:	01



	PROJECT Proposed Development Site - Belmore Allotments	TITLE Private car AutoTrack Layout Plan Sheet 7 of 9	DRAWN:	JJR	27/06/2019	AGENT  London Design and Management Ltd 207 Regent Street (3rd Floor) London W1B 3HH United Kingdom		
			DESIGN:	JJR	27/06/2019			
			CHECKED:	SH	27/06/2019			
			APPROVED:	SJH	27/06/2019	DRAWING No:	2019/TRACK/BA07	REV: 01
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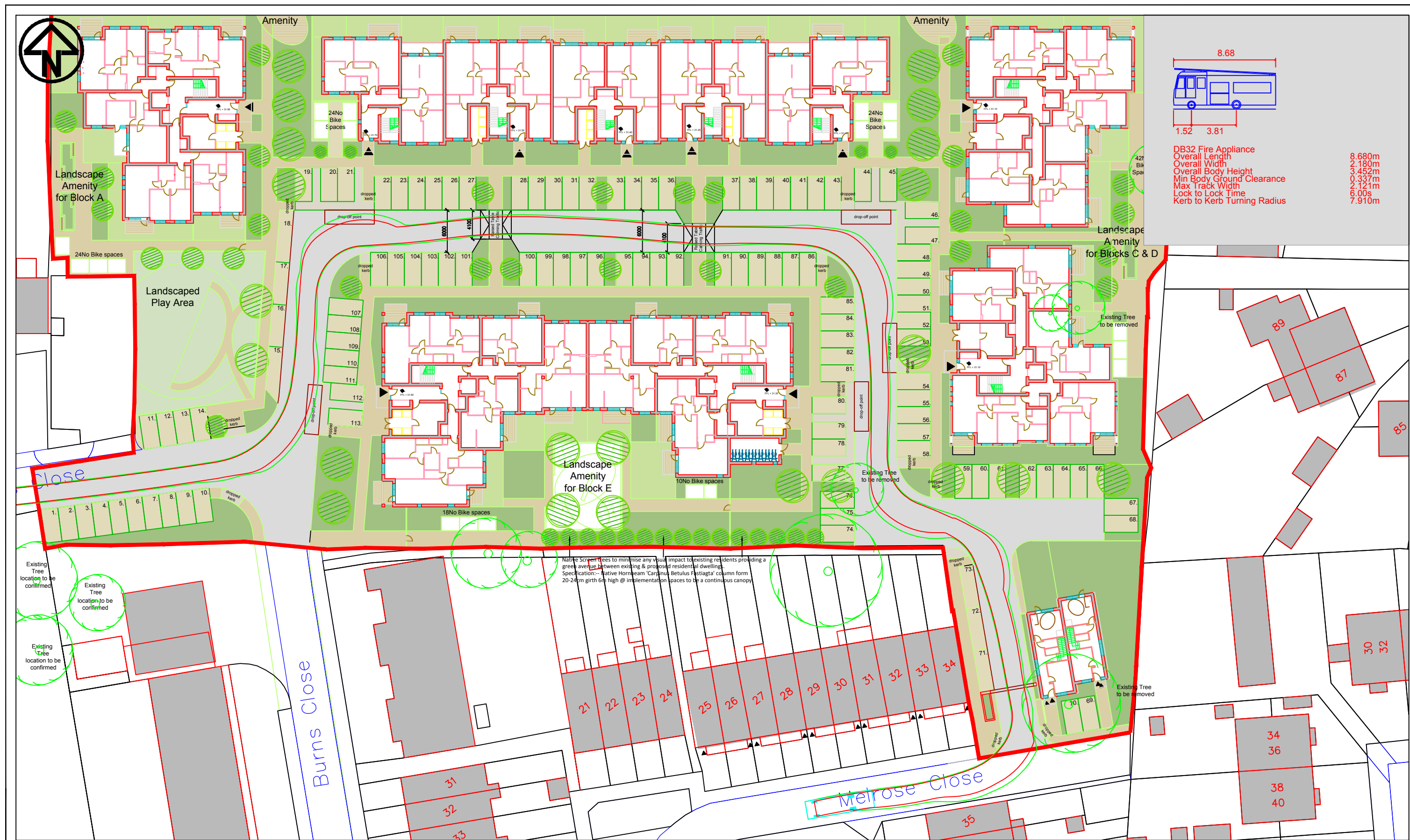


	PROJECT Proposed Development Site - Belmore Allotments	TITLE Private car AutoTrack Layout Plan Sheet 8 of 9	DRAWN:	JJR	27/06/2019	 AGENT London Design and Management Ltd 207 Regent Street (3rd Floor) London W1B 3HH United Kingdom
			DESIGN:	JJR	27/06/2019	
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			APPROVED:	SJH	27/06/2019	
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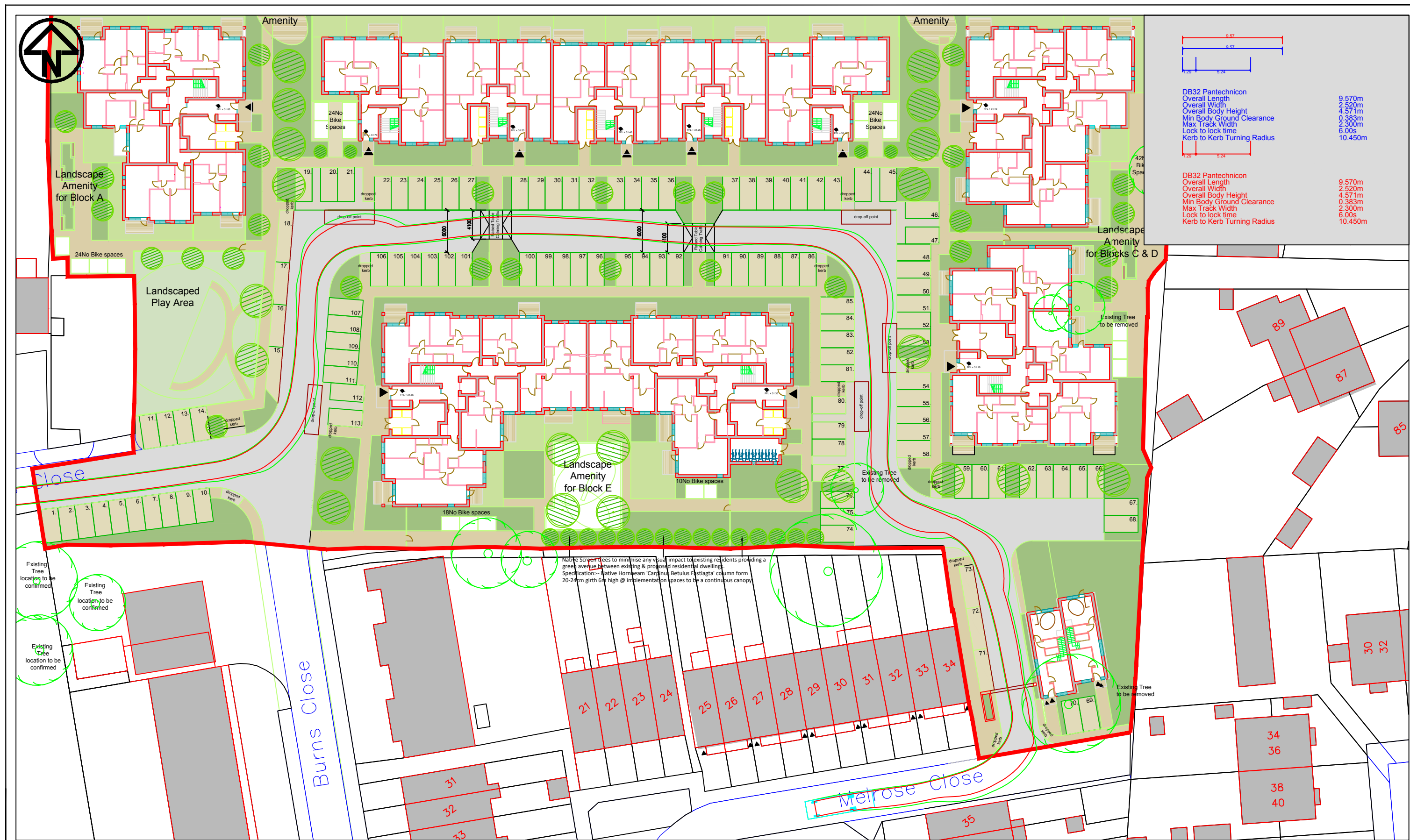


DB32 Private Car	4.223m
Overall Length	1.715m
Overall Width	1.392m
Overall Body Height	0.233m
Min Body Ground Clearance	1.629m
Max Track Width	4.00s
Lock to Lock Time	5.780m
Kerb to Kerb Turning Radius	

 HILLINGDON LONDON	PROJECT Proposed Development Site - Belmore Allotments	TITLE Private car AutoTrack Layout Plan Sheet 9 of 9	DRAWN:	JJR	27/06/2019	AGENT  London Design and Management Ltd 207 Regent Street (3rd Floor) London W1B 3HH United Kingdom
			DESIGN:	JJR	27/06/2019	
			CHECKED:	SH	27/06/2019	
			APPROVED:	SJH	27/06/2019	
			SCALE:	1:500		A3



	PROJECT Proposed Development Site - Belmore Allotments	TITLE Fire appliance clockwise AutoTrack Layout Plan Sheet 1 of 1	DRAWN:	JJR	27/06/2019	 AGENT London Design and Management Ltd 207 Regent Street (3rd Floor) London W1B 3HH United Kingdom	DRAWING No: 2019/TRACK/BA10	REV: 01
			DESIGN:	JJR	27/06/2019			
			CHECKED:	SH	27/06/2019			
			APPROVED:	SJH	27/06/2019			
			SCALE:	1:500		A3		



DB32 Pantechon	9.570m
Overall Length	2.520m
Overall Width	4.571m
Overall Body Height	0.383m
Min Body Ground Clearance	2.300m
Max Track Width	6.00s
Lock to lock time	10.450m
Kerb to Kerb Turning Radius	
DB32 Pantechon	9.570m
Overall Length	2.520m
Overall Width	4.571m
Overall Body Height	0.383m
Min Body Ground Clearance	2.300m
Max Track Width	6.00s
Lock to lock time	10.450m
Kerb to Kerb Turning Radius	

Native Screen trees to minimise any visual impact to existing residents providing a green avenue between existing & proposed residential dwellings.
Specification:- Native Hornbeam 'Carolinus Betulus Fastigiat' column form
20-24cm girth @ 1.3m high @ implementation spaces to be a continuous canopy



PROJECT

Proposed Development Site - Belmore Allotments

TITLE

Refuse vehicle clockwise AutoTrack Layout Plan
Sheet 1 of 1

DRAWN:	JJR	27/06/2019
DESIGN:	JJR	27/06/2019
CHECKED:	SH	27/06/2019
APPROVED:	SJH	27/06/2019
SCALE:	1:500	A3

AGENT



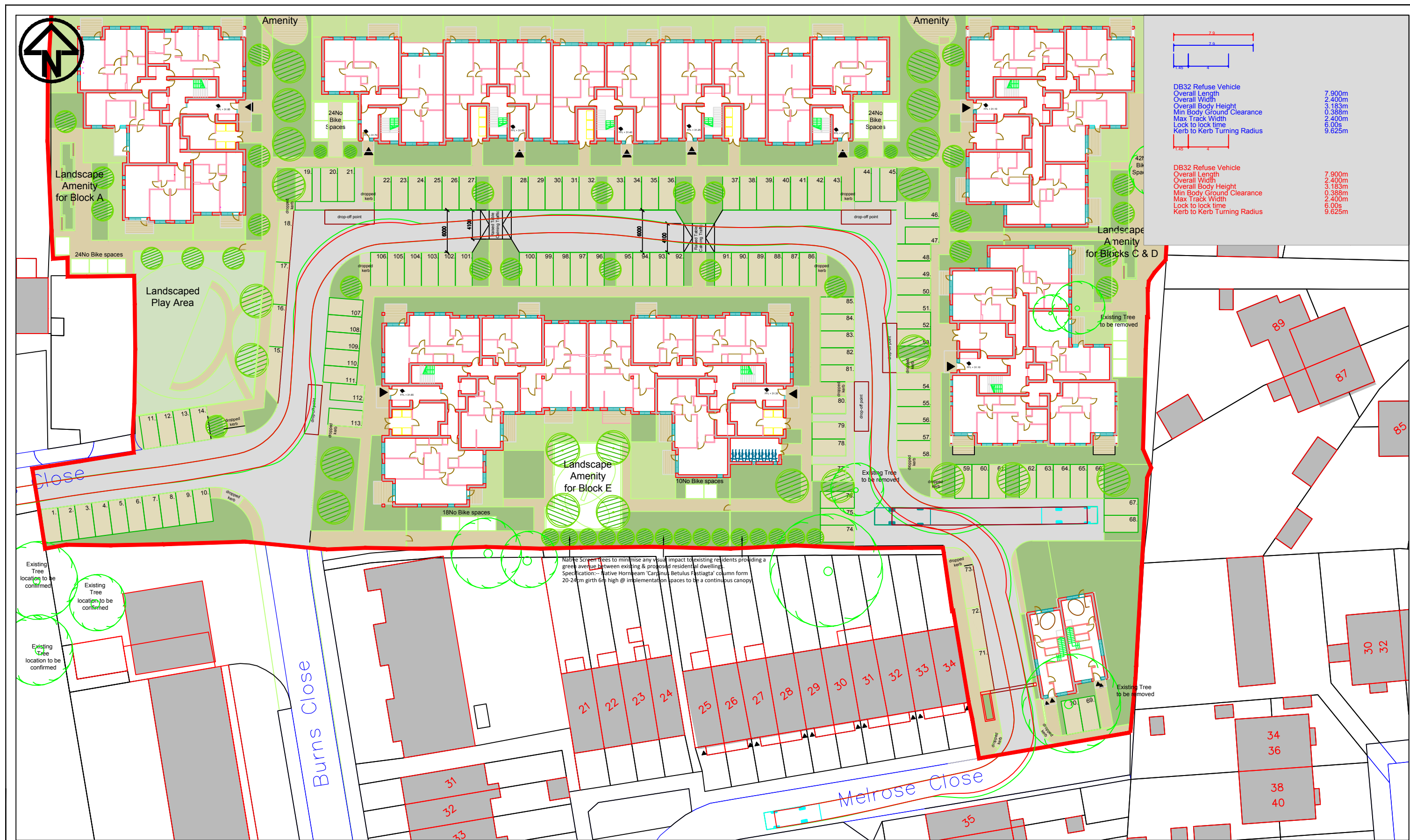
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W1B 3HH
United Kingdom

DRAWING No:

2019/TRACK/BA11

REV:

01



DB32 Refuse Vehicle	7.900m
Overall Length	2.400m
Overall Width	3.183m
Overall Body Height	0.388m
Min Body Ground Clearance	2.400m
Max Track Width	6.00s
Lock to lock time	9.625m
Kerb to Kerb Turning Radius	



PROJECT

Proposed Development Site - Belmore Allotments

TITLE

Refuse vehicle clockwise AutoTrack Layout Plan

Sheet 1 of 1

DRAWN:	JJR	27/06/2019
DESIGN:	JJR	27/06/2019
CHECKED:	SH	27/06/2019
APPROVED:	SJH	27/06/2019
SCALE:	1:500	A3

AGENT	London Design and Management Ltd 207 Regent Street (3rd Floor) London W1B 3HH United Kingdom
DRAWING No:	2018/TRACK/BA12
REV:	01