

Land Rear of 74 Church Road, Barnes

Transport Statement

115932/R2.4

January 2017



FAIRHURST

CONTROL SHEET




CLIENT: TURNBERRY PLANNING LIMITED ON BEHALF OF BASINGHALL ESTATE COMPANY LTD






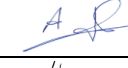

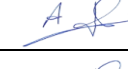
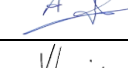
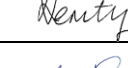

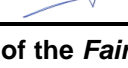
PROJECT TITLE: LAND REAR OF 74 CHURCH ROAD, BARNES

REPORT TITLE: TRANSPORT STATEMENT

PROJECT REFERENCE: 115932

DOCUMENT NUMBER: R2.4

Issue & Approval Schedule		Name	Signature	Date
	Prepared by	J.MUSKETT		12/08/2016
	Checked by	C.GRINDLE		12/08/2016
	Approved by	E.MORAN		12/08/2016

Revision Record	Rev	Date	Status	Description	Signature	
	1	07/09/2016	Draft	To include Tracking Diagrams for on-site car parking spaces	JM	
					AW	
					AW	
	2	30/11/2016	Final	To include revised Architect's layout	JM	
					LV	
					AW	
	3	23/01/2017	Final	Include Town Planner's comments	LV	
					AW	
					AW	
4	24/01/2017	Final	Include Town Planner's comments	LV		
				AW		
				AW		

This document has been prepared in accordance with procedure OP/P02 of the Fairhurst Quality and Environmental Management System

CONTENTS

1.0	INTRODUCTION	1
2.0	THE SITE IN CONTEXT	2
3.0	DEVELOPMENT PROPOSALS	9
4.0	SUMMARY/CONCLUSIONS	12

TABLES

Table 2.1:	Bus Services on Church Road, Barnes	4
Table 2.2:	London Borough of Richmond Parking Standards	8
Table 3.1:	Development Proposals	9

APPENDICES

APPENDIX A – SITE LOCATION PLAN

APPENDIX B – EXISTING SITE

APPENDIX C – PTAL OUTPUT

APPENDIX D – GROUND FLOOR PROPOSED SITE PLAN

APPENDIX E – TRACKING DIAGRAMS FOR ON-SITE CAR PARKING FACILITIES

1.0 INTRODUCTION

- 1.1 This Transport Statement has been prepared by Fairhurst on behalf of 'Basinghall Estate Company Limited' (the applicant) and supports a full planning application to the London Borough of Richmond upon Thames (the Local Planning Authority [LPA]) for a proposed residential-led mixed-use development on land rear of No. 74 Church Road, Barnes, London, SW13 0DQ. A site location plan is shown in **Appendix A**.
- 1.2 The Application Site is located in the centre of the suburban district of Barnes, south west of London, and is under the jurisdiction of the London Borough of Richmond. The application involves the demolition of the existing buildings that currently take form as an interior furnishing store and café into a development that comprises of 5 workshop/office units and 6 dwellings with associated parking.
- 1.3 Within the London Borough of Richmond's Development Management Plan (DMP, 2011), Policy DM TP 2 states that all planning applications for smaller developments should be accompanied by a Transport Statement.
- 1.4 This Transport Statement has been prepared in accordance with the National Planning Policy Framework (NPPF, 2012), as well as relevant development plan documents via the London Plan as well as Local Plan related documents from the LPA.
- 1.5 It will be concluded that the residual cumulative impact of the proposed land use change is negligible, therefore there is no reason on highways and transport grounds why the proposed development should not be fully supported through the planning process.
- 1.6 Further details of the development proposal is contained in the submitted 'Planning Statement' prepared by Turnberry Planning Limited.

2.0 THE SITE IN CONTEXT

Site Location

- 2.1 The Application Site is located to the rear of Church Road within Barnes local centre. Barnes is located to the south west of Central London and is bounded to the west, north and east by a bend in the River Thames with Roehampton located to the south.
- 2.2 Church Road is located within the centre of the suburb, to the east of Barnes Bridge Station and the High Street and to the west of the WTT London Wetland Centre and the Barn Elms Sports Trust.
- 2.3 The Application Site is located to the rear of number 74 Church Road in a courtyard. It is bounded by number 74 and Church Road to the north; residential properties on Elm Grove Road to the east; residential properties to the south; and the associated properties on Bracken Gardens to the west. The area surrounding the site is densely populated and consists of a combination of commercial and residential properties.

Planning History

- 2.4 Prior to any retail operation, the land use of the Application Site was industrial. In 1997, permission was granted for the operation of a retail unit and adjoining workshops and preparation areas. The same year, permission was also granted for a section of the development to change use to a food preparation and staff canteen area. In 2011, there was a change of use for part of the retail business to become a café and this is the current status of the Application Site. Further planning history information is set out in **Section 2** of the Planning Statement.

Local Road Network

- 2.5 Church Road spans from the London Wetlands Centre located 300m to the east of the Application Site to a point 500m west of the Application Site where it becomes Barnes High Street.
- 2.6 The five-way junction 110m to the east of the Application Site provides a number of road links to the surrounding area. Heading north, Castelnau (A306) provides access to residential properties and schools. With the River Thames bordering the west,

north and east of Barnes, access to northerly neighbouring boroughs is limited but Castelnau provides direct access to the Hammersmith Bridge connecting over the River Thames to Hammersmith and Central London. There are no other bridges or road links other than this serving the north of Barnes and heading in a northerly direction.

- 2.7 Rocks Lane (A306), also accessed at the 5-way junction, heads south and leads towards Barnes Railway Station (1.2km away) the South Circular Road (1.4km away) and the district of Roehampton (2.2km away). The South Circular Road which spans a total of 28.1km through the south of London provides a link towards Richmond and Kew to the west and Putney to the east.
- 2.8 Heading west, Church Road leads to Barnes High Street and then The Terrace (A3003) heading south and Lonsdale Road heading north (B350) both of which run adjacent to the River Thames. Lonsdale Road provides access to schools and residential properties before joining Castelnau to the north east. Barnes Bridge Railway Station, the nearest to the Application Site, is approximately 1km away on The Terrace. The Terrace heads south-west where it becomes Mortlake High Street (A3003) before providing a direct link to Richmond on the Lower Richmond Road/Lower Mortlake Road (A316).
- 2.9 Alternative bridge crossings to the Hammersmith Bridge to access the north of the River Thames can be undertaken by road using either the Chiswick Bridge to the west (3.5km away) or Putney Bridge to the east (2.8km away).

Existing Site and Access

- 2.10 Located within an enclosed courtyard, the Application Site covers 927.17 sqm in a mostly triangular shape with the western boundary having the greatest length. The single storey building is located along the southern end of the site and housing an interior furnishings store and café, see **Appendix B**.
- 2.11 Access is currently provided from two points: a covered passageway from Church Road and an additional access route from Elm Grove Road. Both accesses are shared surface. Elm Grove Road meets Church Road at a signalised junction to the east of the Application Site.

Sustainable Travel/PTAL

- 2.12 The nearest bus stop to the Application Site is located 38m east of the Church Road access and is formally known by TfL as Barnes/Red Lion bus stop; services which stop here head west down Church Road. For services heading east on Church Road a bus stop 100m west of the site formally known as 'Glebe Road' can be used.
- 2.13 **Table 2.1** below shows the services hosted by both of the bus stops within close proximity to the Application Site.

Table 2.1: Bus Services on Church Road, Barnes

Service	Overall Bus Journey	Frequency
209	Mortlake Bus Station to Hammersmith Bus Station	Typically every 3-6 minutes
485	Hammersmith Bus Station to Ram Street (Wandsworth)	Every 30 minutes
969	Whitton to Roehampton Vale	1 service on a Tuesday/Thursday
N22	Fulwell to Picadilly Circus	Night service, every half an hour between 01:00 and 06:00

- 2.14 As stated previously, Barnes Bridge Railway Station is the nearest to the Application Site at a distance of around 1km; Barnes Railway Station is 1.2km away. At both stations services are provided between London Waterloo and Weybridge. A service starting and terminating at London Waterloo via the Hounslow Loop line also stops at both stations via Twickenham and Richmond. An extra service serves just Barnes Railway Station, which is on the Kingston Loop link, providing direct services to destinations such as Kingston, Strawberry Hill and Norbiton.
- 2.15 The Transport for London Public Transport Accessibility Level (TfL PTAL) measures the connectivity of a given location to the wider public transport network in Greater London.
- 2.16 The accessibility level is measured between 0 and 6b, where a score of 0 reflects very poor access and a score of 6b represents excellent access.

- 2.17 The TfL database showed that the site has a PTAL rating of 3 which is described as 'moderate'. The full PTAL report can be found in **Appendix C**.

Regional Policy

The Mayor's Transport Strategy

- 2.18 The Mayor's Transport Strategy, published in 2010, sets out the challenges and strategic policies and transport proposals to address them in London. Key goals that the Strategy seeks to achieve are:
- To support economic development and population growth;
 - Enhance the quality of life for Londoners;
 - Improve the safety and security of all Londoners;
 - Improve Transport opportunities for all Londoners; and
 - Reduce transport's contribution to climate change, and improve its resilience.
- 2.19 Better integrated transport systems with enhanced interchanges are highlighted as important ways of getting the most from the transport system. Locating homes, services and employment opportunities together is central to the plans outlined in the Mayor's Strategy, by reducing the need to travel.

The London Plan

- 2.20 The London Plan – the Mayor's Spatial Development Strategy for London Consolidated with Alterations since 2011 (published March 2016) further expands upon the criteria set out in the Mayor's Transport Strategy, acting as a statutory planning framework to help guide new developments in London. Focusing on the next two decades, the London Plan indicates that a sustainable development plan must be implemented, primarily based upon expansions to the existing walking, cycling, and public transport networks within London. Effective planning must be adopted to ensure the continued growth and expansion of London, with an integrated planning and transportation link at the forefront of these proposals.
- 2.21 A number of policies within the London Plan are relevant to this development as follows:
- Policy 6.1 'Strategic Approach' states that 'The Mayor will work with all relevant partners to encourage the closer integration of transport and development by

encouraging patterns of development that reduce the need to travel, especially by car'. In addition those developments that generate high levels of trips will only be supported in locations with high levels of public transport accessibility.

- Policy 6.3 'Assessing Effects of Development on Transport Capacity' states that 'development proposals should ensure that impacts on transport capacity and the transport network, at both a corridor and local level, are fully assessed. Development should not adversely affect safety on the transport network'.
- Policy 6.5 relates to the need for new development to fund Crossrail and other strategically important infrastructure. According to the Crossrail Funding SPG (updated March 2016), the proposed development will be subject to Mayoral Community Infrastructure Levy (CIL) to help pay for Crossrail in the order of £50 per sqm (i.e. GIA) and that only medical / health and education related uses are exempt.
- Policy 6.9 'Cycling' states that 'developments should provide secure, integrated and accessible cycle parking facilities and provide on-site changing facilities and showers for cyclists'.
- Policy 6.10 'Walking' states that 'development proposals should ensure high quality pedestrian environments and emphasise the quality of the pedestrian and street space'.
- Policy 6.13 'Parking' states that 'the maximum parking standards set out in the Parking Addendum should be applied to planning applications'.

The London Plan Revised Early Minor Alterations (October 2013)

2.22 Revised Early Minor Alterations to the London Plan (REMA) were made in October 2013 in order to ensure that the Plan is as up-to-date as possible, in particular regarding references to Government guidance and national legislation enacted since July 2011. Revisions within Section 6, pertaining to transport, are primarily related to cycle parking standards.

Draft Further Alterations to the London Plan (2014)

2.23 In January 2014 the Draft Further Alterations to the London Plan (FALP) were published with suggested amendments to this draft published in July 2014 following a

period of consultation. In respect of transport the main changes relate to car and cycle parking.

2.24 In respect to car parking FALP outlines in Table 6.2 proposed changes to car parking standards from the currently adopted London Plan and recommends the following:

- All residential developments in areas of good public transport accessibility should aim for significantly less than 1 space per unit. Adequate parking spaces for disabled people must be provided preferably on-site.
- Maximum residential parking standards for 1-2 bedroom units, less than 1 parking space per unit.
- 20% of all residential parking spaces must be for electric vehicles with an additional 20% passive provision for electric vehicles in the future.
- Parking for employment uses, B1, in Outer London, 50-100 spaces per sqm of gross floorspace.
- 20% of all employment parking spaces must be for electric vehicles with an additional 10% passive provision for electric vehicles in the future.

2.25 In respect to disabled parking FALP outlines in Table 6.2 proposed changes to designated Blue Badge parking standards from the currently adopted London Plan and recommends the following:

- Workplaces – From the outset 1 space for each employee who is a disabled motorist and 5% of the total capacity for visiting disabled motorists. Future provision, a further 5% of the total capacity.

2.26 In respect to cycle parking FALP outlines in Table 6.3 proposed changes to cycle parking standards from the currently adopted London Plan and recommends the following:

- C3-C4 (all dwellings) – For long-stay 1 space per studio and 1 bedroom unit and 2 spaces per all other dwellings. For short-stay, 1 spaces per 40 units.
- B1 (business offices) – Outer London, for long-stay 1 space per 150 sqm. For short-stay, 1 space per 500 sqm for the first 5000 sqm and 1 space per 5000 sqm thereafter.

Local Policy

- 2.27 Policies DMTP7 and DMTP8 of the London Borough of Richmond's Development Management Plan (DMP, 2011) relate specifically to transportation matters and provide the parking standards required for this Application Site.
- 2.28 Policy DMTP7 relates to cycling provision and states that it should be ensured that 'new development or schemes do not adversely impact on the cycling network or cyclists and provide appropriate cycle access and sufficient, secure cycle parking facilities'.
- 2.29 Policy DMTP8 regarding off street parking states that car and cycling parking provision should be provided in accordance with the standards set out in Appendix 4 of the DMP. It also states that the parking provided should be an appropriate level to avoid an adverse impact on the on-street parking conditions and the local traffic. The standards set out in DMP Appendix 4 are summarised in **Table 2.2** below:

Table 2.2: London Borough of Richmond Parking Standards

Land Use	Maximum Car Parking Standard	Cycle Parking
B1 (office/light industrial)	1 space per 300sqm	1 space per 200sqm
C3 (standard residential)	1-2 bedrooms = 1 space	1 space per dwelling

3.0 DEVELOPMENT PROPOSALS

Proposed Development

- 3.1 The proposal is for the demolition of the current buildings on site and the construction of a 2 storey mews comprising 6no residential units and 5no commercial B1 units with associated access, parking and landscaping.
- 3.2 Four of the proposed dwellings will be 2-bed units with the remainder two being 1-bed units. The existing access and servicing arrangements will remain. **Appendix D** contains the proposed groundfloor site plan.
- 3.3 **Table 3.1** below shows the schedule of development per unit.

Table 3.1: Development Proposals

Unit	Floor	No. of Beds	Gross Internal Area (sqm)	Allocated Off-street Car Parking Space
Flat 1	Ground	2	70	1
Flat 2	Ground	2	83.2	1
Flat 3	First	2	72.1	1
Flat 4	First	1	44.6	0
Flat 5	First	1	44.6	0
Flat 6	First	2	71.3	1
Commercial Unit 1	Ground	N/A	28.1	1 (for visitor parking only)
Commercial Unit 2	Ground	N/A	28.7	
Commercial Unit 3	Ground	N/A	28.7	
Commercial Unit 4	Ground	N/A	28.7	
Commercial Unit 5	Ground	N/A	28.1	

Servicing

- 3.4 The site has a long and established planning history. It is envisaged that there will be no material changes to the overall servicing of the site.
- 3.5 In terms of refuse collection, a bin store will be provided close to the car parking spaces near the staircase. On collection day, the bins will be taken out to the edge of the public highway to be collected as part of the existing waste collection regime operating in the area.

Parking Provision

- 3.6 Car Parking provision is proposed in accordance with the standards set out in the London Plan (2016) and the London Borough of Richmond's DMTP8. Given that the Application Site is within a wider 'Controlled Parking Zone', the parking standards set out in Section 2 of this TS are expressed as a 'maximum'.
- 3.7 In light of this, a total of 5 car parking spaces will be provided on-site. Four car parking spaces will be made available for residents of the residential units, based on the London Plan standards at less than 1 space per 1-2 bed dwelling. One of the parking spaces will be designated to Blue Badge holders and 1 car parking space will be made available to the commercial component of the development (for visitor access). Access and egress to the car parking spaces is available using either Church Road or Elm Grove Road (as is the existing access arrangement to the site) and users will choose which is more convenient on particular journeys. This choice is available to the occupiers of all 5 spaces apart from space no. 5 which is more conveniently accessed from Church Road as explained below.
- 3.8 In **Appendix E** we provide the tracks of vehicles parking in spaces (as specified in car park location plan drawing 115932/1809) as follows:

Drawings 1812 and 1813 indicate how a vehicle using car park space 1 enters via Elm Grove Road and leaves via Church Road with *drawings 1814 and 1815* entering and leaving in the opposite direction.

Drawings 1816 and 1817 indicate how a vehicle using car park space 5 enters via Church Road and leaves via Elm Grove Road. *Drawings 1818, 1819, 1820 and 1821*

show how space 6 (designated as the disabled space) is accessed from either Church Road or Elm Grove Road.

Finally, *Drawings 1810 and 1811* demonstrate how vehicles would enter and leave the site using either access without parking.

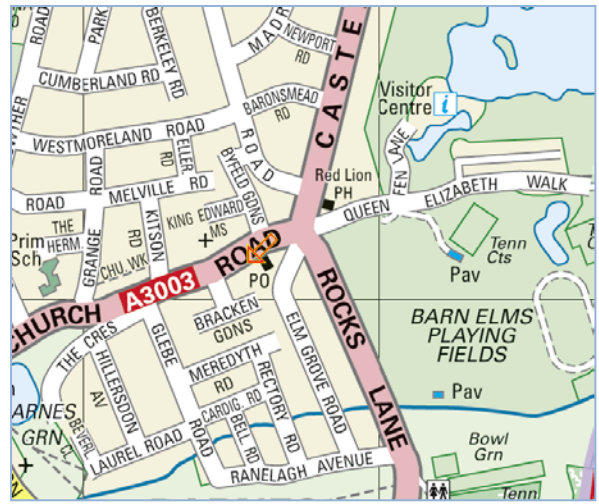
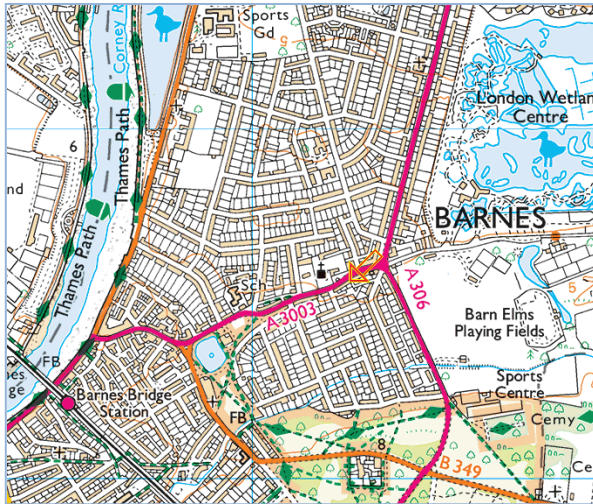
- 3.9 Cycling parking is provided adjacent to the staircase access on the western side of the Application Site, (see Appendix C). In line with the London Plan (2016), 17 cycling spaces will be provided.
- 3.10 The overall B1 land use area proposed is 142.38sqm. This is well below the London Borough of Richmond's DMTP8 car parking standard of 1 space per 300sqm and the 1 space per 200sqm required for cycling provision. It is also below the London Plan (2016) requirement of 1 cycle space per 150 sqm. The London Plan (2016) states that 1 car parking spaces per 100-600 sqm should be provided for developments in Outer London.
- 3.11 Given the moderate PTAL score of 3, the level of car and cycling parking provision proposed is considered reasonable at this location and is consistent with the aims of the London Plan (2016) and London Borough of Richmond's DMTP8 of the development Plan (2011) as an appropriate level of off street parking is proposed which avoids an unacceptable impact on on-street parking conditions and local traffic conditions.
- 3.12 Four parking space will be allocated to a residential unit, one will be a dedicated Blue Holder parking space and one will be allocated to the commercial component of the development.

4.0 SUMMARY/CONCLUSIONS

- 4.1 Fairhurst have been commissioned by the applicant to prepare a Transport Statement (TS) to accompany a Planning Application for the demolition and construction of 2 storey mews comprising 6no residential units and 5no commercial B1 units with associated access, parking and landscaping at a site located at the rear of 74 Church Road, Barnes, London.
- 4.2 The application involves the demolition of the existing buildings that currently take form as an interior furnishing store and café. Current access arrangements to the site will remain the same as these are not a part of the Application Site. Car parking provision consists of 6 spaces for the residential dwellings. Secure and covered cycling parking provision will also be provided.
- 4.3 It can be concluded that the residual cumulative impact of the development is not severe. There is, therefore no reason on highways and transport grounds why the proposals should not be fully supported through the planning process.

APPENDIX A
SITE LOCATION PLAN

74 CHURCH RD, LONDON SW13 0DQ



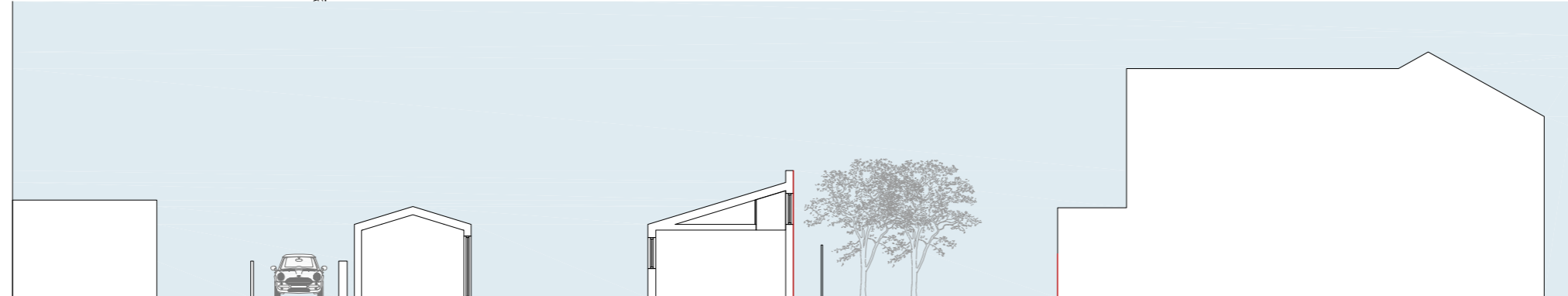
Grid Reference	TQ222765
Nearest Post Code	SW13 0DQ



APPENDIX B
EXISTING SITE LAYOUT

NOTES

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REAR PROPERTIES FACING CHURCH ROAD

ACCESS ROAD

COURTYARD

PRIVATE GARDEN

12 ELM GROVE ROAD SECTION A A



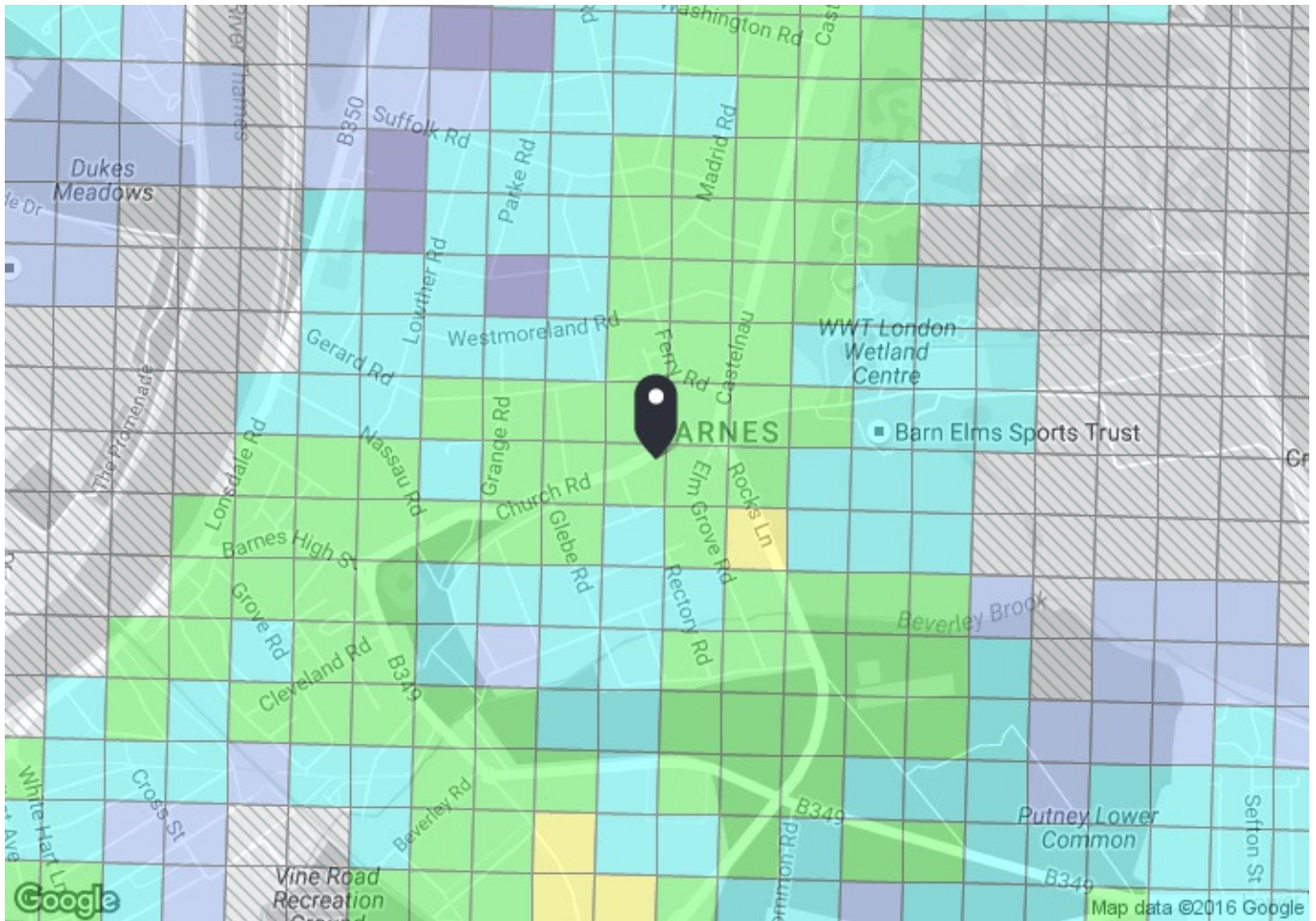
24a PETERSHAM MEWS LONDON SW7 5NR
Telephone 0207 5813652 Facsimile 0207 5813652

Project
74 CHURCH ROAD, BARNES, LONDON, SW13 0DQ, MIXED USE SCHEME
Client
THE BASINGHALL ESTATE Co Ltd

Drawing Title
EXISTING SITE PLAN AND CROSS SECTION PLAN

North N 	Scale 1:200 @ A3	Drawn by
	Date APRIL 2016	Checked by -
Project No. 1051	Drawing No. 1051-APP-03	Revision -

APPENDIX C
PTAL OUTPUT



PTAL output for 2011 (Base year)
3

SW13 0DQ
Church Rd, London SW13 0DQ, UK

Easting: 522280, Northing: 176563

Grid Cell: 61058

Report generated: 12/08/2016

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

Map key- PTAL

0 (Worst)	1a
1b	2
3	4
5	6a
6b (Best)	

Map layers

- PTAL (cell size: 100m)

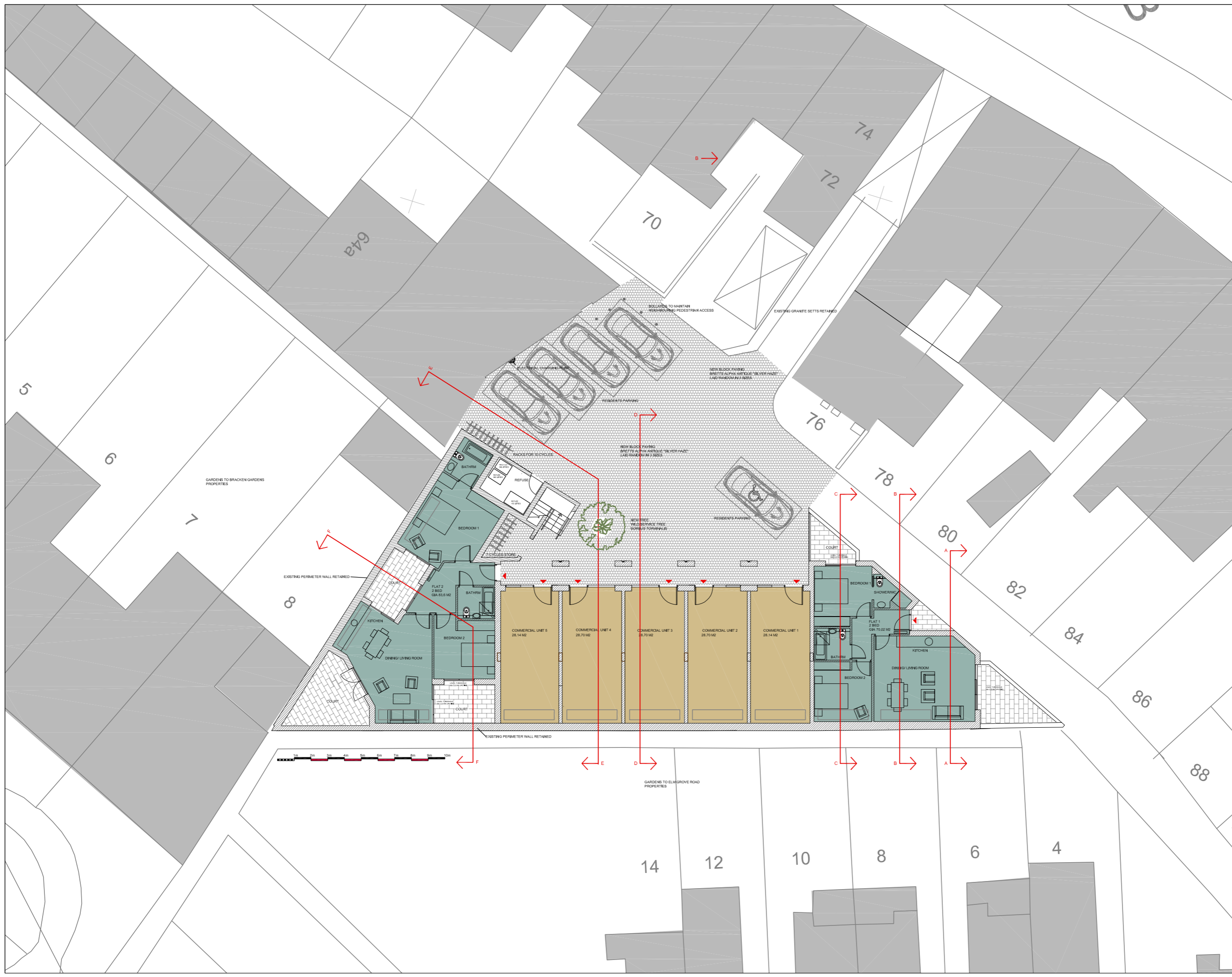
Calculation data

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	BARNES RED LION	72	193.34	7.5	2.42	6	8.42	3.56	0.5	1.78
Bus	BARNES RED LION	33	193.34	7.5	2.42	6	8.42	3.56	0.5	1.78
Bus	BARNES RED LION	485	193.34	2	2.42	17	19.42	1.55	0.5	0.77
Bus	BARNES RED LION	283	193.34	7.5	2.42	6	8.42	3.56	0.5	1.78
Bus	BARNES RED LION	209	196.39	13.33	2.45	4.25	6.71	4.47	1	4.47
Rail	Barnes Bridge	'TWCKNHM-WATRLMN 2R03'	939.46	0.33	11.74	91.66	103.4	0.29	0.5	0.15
Rail	Barnes Bridge	'WATRLMN-WATRLMN 2R09'	939.46	2	11.74	15.75	27.49	1.09	1	1.09
Rail	Barnes Bridge	'STAINES-WATRLMN 2S10'	939.46	0.33	11.74	91.66	103.4	0.29	0.5	0.15
Rail	Barnes Bridge	'WEYBDGB-WATRLMN 2S12'	939.46	1.67	11.74	18.71	30.46	0.98	0.5	0.49
Rail	Barnes Bridge	'WATRLMN-WEYBDGB 2S13'	939.46	2	11.74	15.75	27.49	1.09	0.5	0.55
Rail	Barnes Bridge	'WATRLMN-HOUNSLW 2S91'	939.46	0.33	11.74	91.66	103.4	0.29	0.5	0.15
Total Grid Cell AI:										13.17

APPENDIX D
GROUND FLOOR PROPOSED SITE PLAN

NOTES


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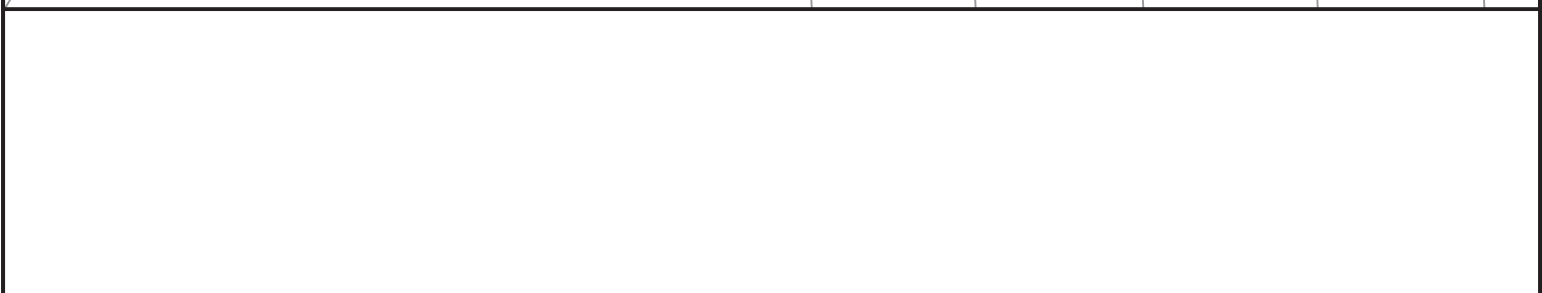
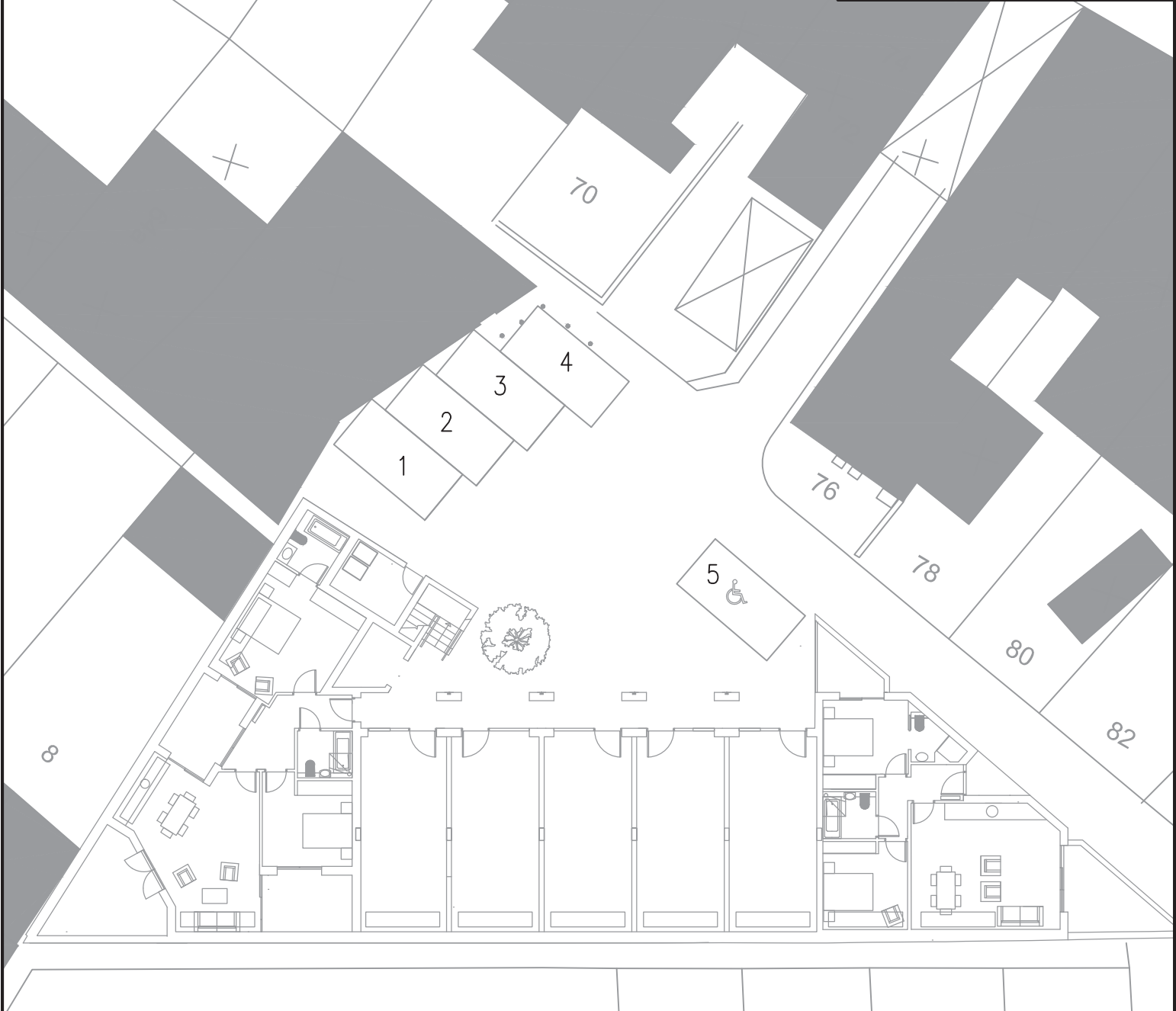
24a PETERSHAM MEWS LONDON SW7 5NR
Telephone 0207 5813652 Facsimile 0207 5813652

Project
74 CHURCH ROAD, BARNES, LONDON, SW13 0DQ,
MIXED USE SCHEME
Client
THE BASINGHALL ESTATE Co Ltd

Drawing Title
PROPOSED GROUND FLOOR PLAN

North 	Scale 1:100@A1	Drawn by RL
	Date MAY 2016	Checked by -
Project No. 1051	Drawing No. 1051-APP-05	Revision A

APPENDIX E
TRACKING DIAGRAMS FOR ON-SITE CAR PARKING SPACES



B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW
Rev.	Date	Description	Drawn	Checked	Approved

Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR PARK
 LOCATION PLAN**

FAIRHURST

Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412

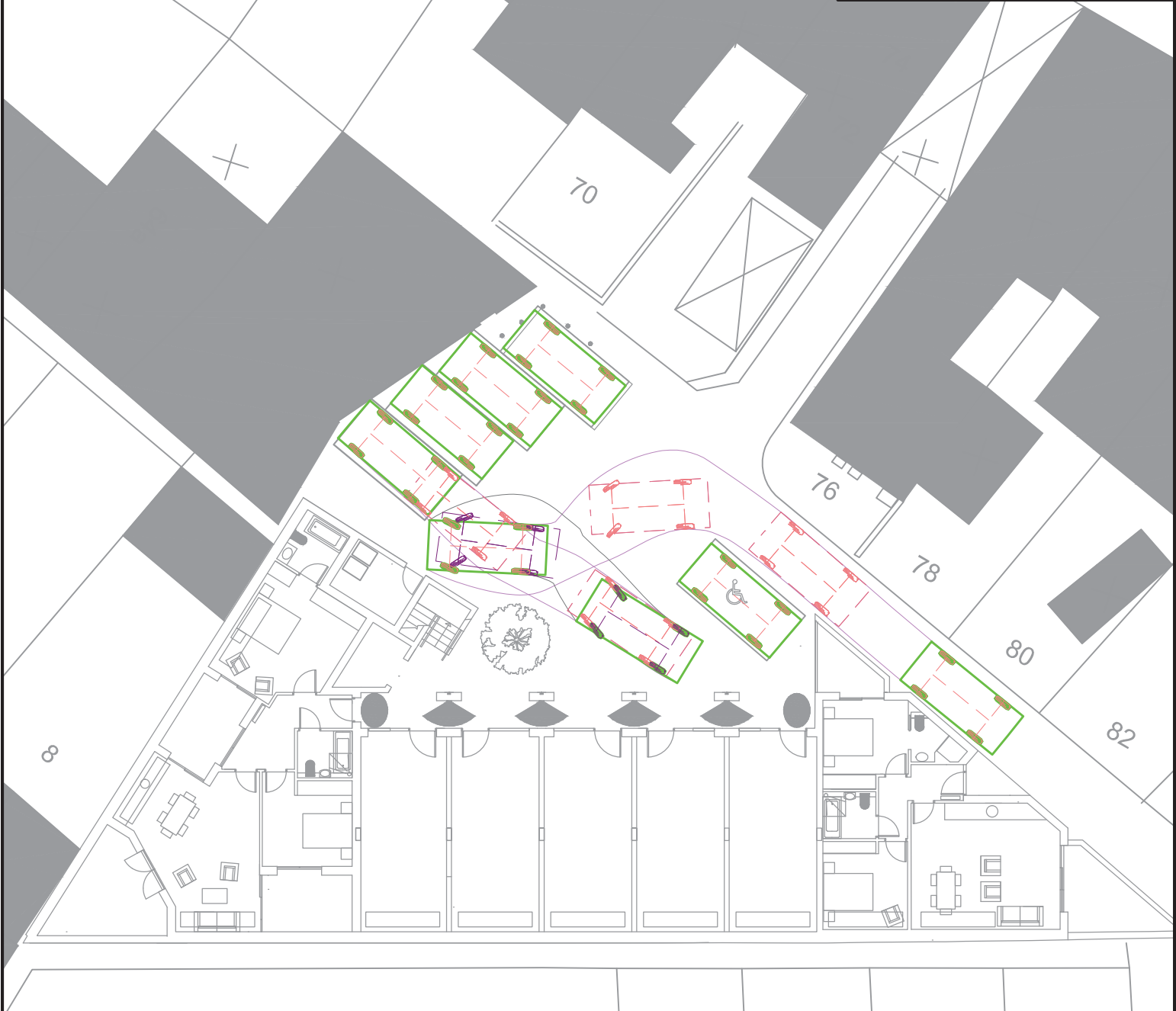
Scale at A4:
 1:250

Status:
 For Information

Drawn: TD	Checked: JM	Approved: AW
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Date: 07/09/16	Date: 07/09/16	Date: 07/09/16
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Drawing No.:	Revision:
115932/1809	B



Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:

FORWARD MANOEUVRE CAR

REVERSE MANOEUVRE CAR

TRACKING INDICATOR IMPACT

Standard Design Vehicle (SDV)
 Overall Length 4.800m
 Overall Width 2.000m
 Overall Body Height 1.950m
 Min Body Ground Clearance 0.100m
 Track Width 2.000m
 Lock to Lock Time 4.00s
 Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW



Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR ENTERING CAR PARK
 TO SPACE 1 FROM
 ELM GROVE ROAD**

FAIRHURST

Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412

Scale at A4: 1:250	Status: For Information	
Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16
Drawing No.: 115932/1812		Revision: B



Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:

FORWARD MANOEUVRE CAR

REVERSE MANOEUVRE CAR

TRACKING INDICATOR **IM** IMPACT

Standard Design Vehicle (SDV)
 Overall Length 4.800m
 Overall Width 2.000m
 Overall Body Height 1.950m
 Min Body Ground Clearance 0.100m
 Track Width 2.000m
 Lock to Lock Time 4.00s
 Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW

Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR EXITING CAR PARK
 FROM SPACE 1 TO
 CHURCH ROAD**

FAIRHURST

Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412

Scale at A4:
 1:250

Status:
 For Information

Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16

Drawing No.: **115932/1813** Revision: **B**



Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:

FORWARD MANOEUVRE CAR

REVERSE MANOEUVRE CAR

TRACKING INDICATOR **IM** IMPACT

Standard Design Vehicle (SDV)

- Overall Length 4.800m
- Overall Width 2.000m
- Overall Body Height 1.950m
- Min Body Ground Clearance 0.100m
- Track Width 2.000m
- Lock to Lock Time 4.00s
- Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW

Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR ENTERING CAR PARK
 TO SPACE 1 FROM
 CHURCH ROAD**

FAIRHURST

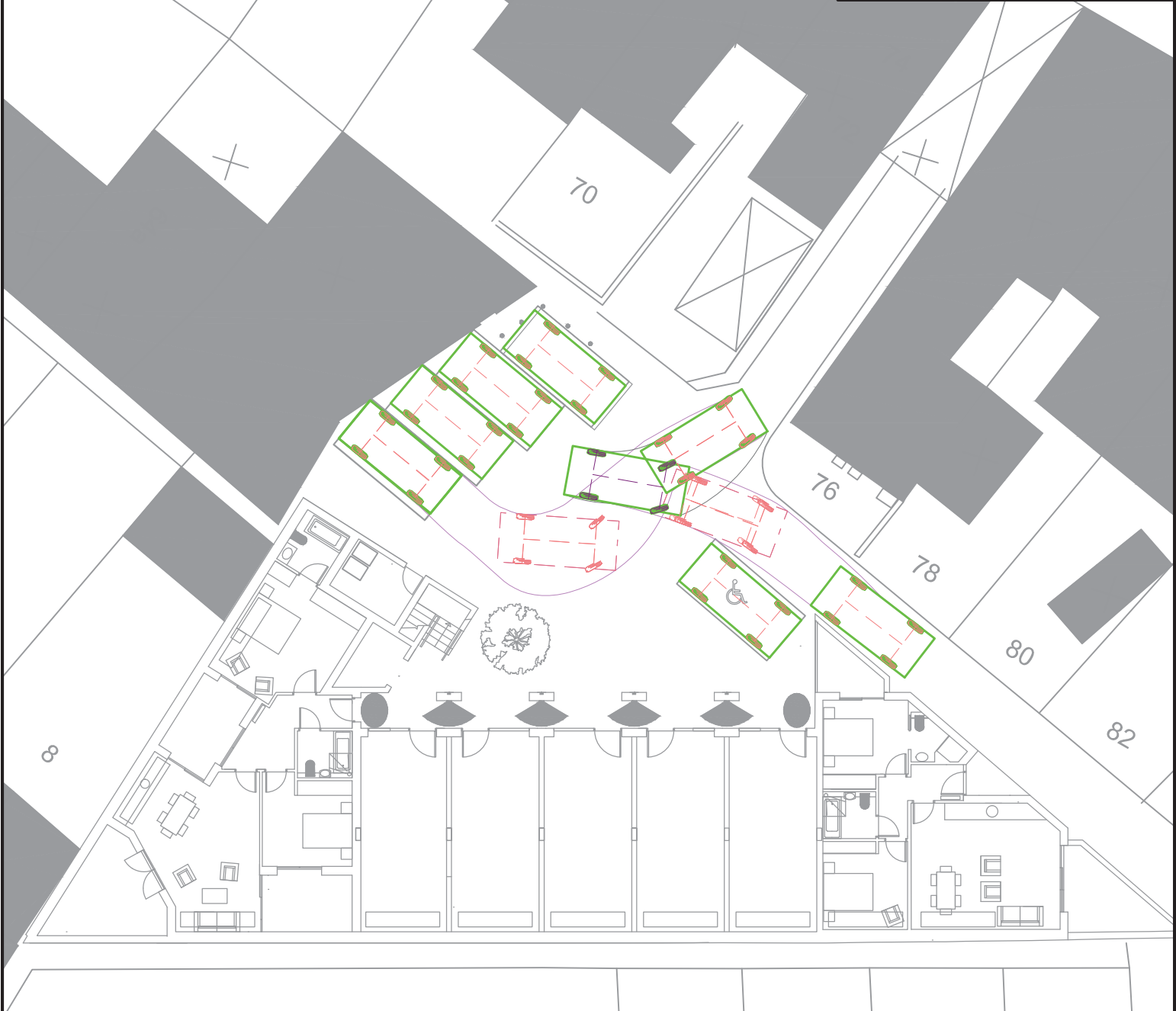
Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412

Scale at A4:
 1:250

Status:
 For Information


Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16


Drawing No.: **115932/1814** Revision: **B**




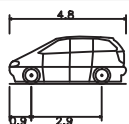
Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:


FORWARD MANOEUVRE CAR


REVERSE MANOEUVRE CAR

TRACKING INDICATOR

IMPACT



Standard Design Vehicle (SDV)
 Overall Length 4.800m
 Overall Width 2.000m
 Overall Body Height 1.950m
 Min Body Ground Clearance 0.100m
 Track Width 2.000m
 Lock to Lock Time 4.00s
 Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW



Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR EXITING CAR PARK
 FROM SPACE 6 TO
 CHURCH ROAD**

FAIRHURST


Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412


Scale at A4: 1:250	Status: For Information	
Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16
Drawing No.: 115932/1815		Revision: B




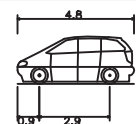
Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:


FORWARD MANOEUVRE CAR


REVERSE MANOEUVRE CAR

TRACKING INDICATOR

IMPACT



Standard Design Vehicle (SDV)
 Overall Length 4.800m
 Overall Width 2.000m
 Overall Body Height 1.950m
 Min Body Ground Clearance 0.100m
 Track Width 2.000m
 Lock to Lock Time 4.00s
 Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW



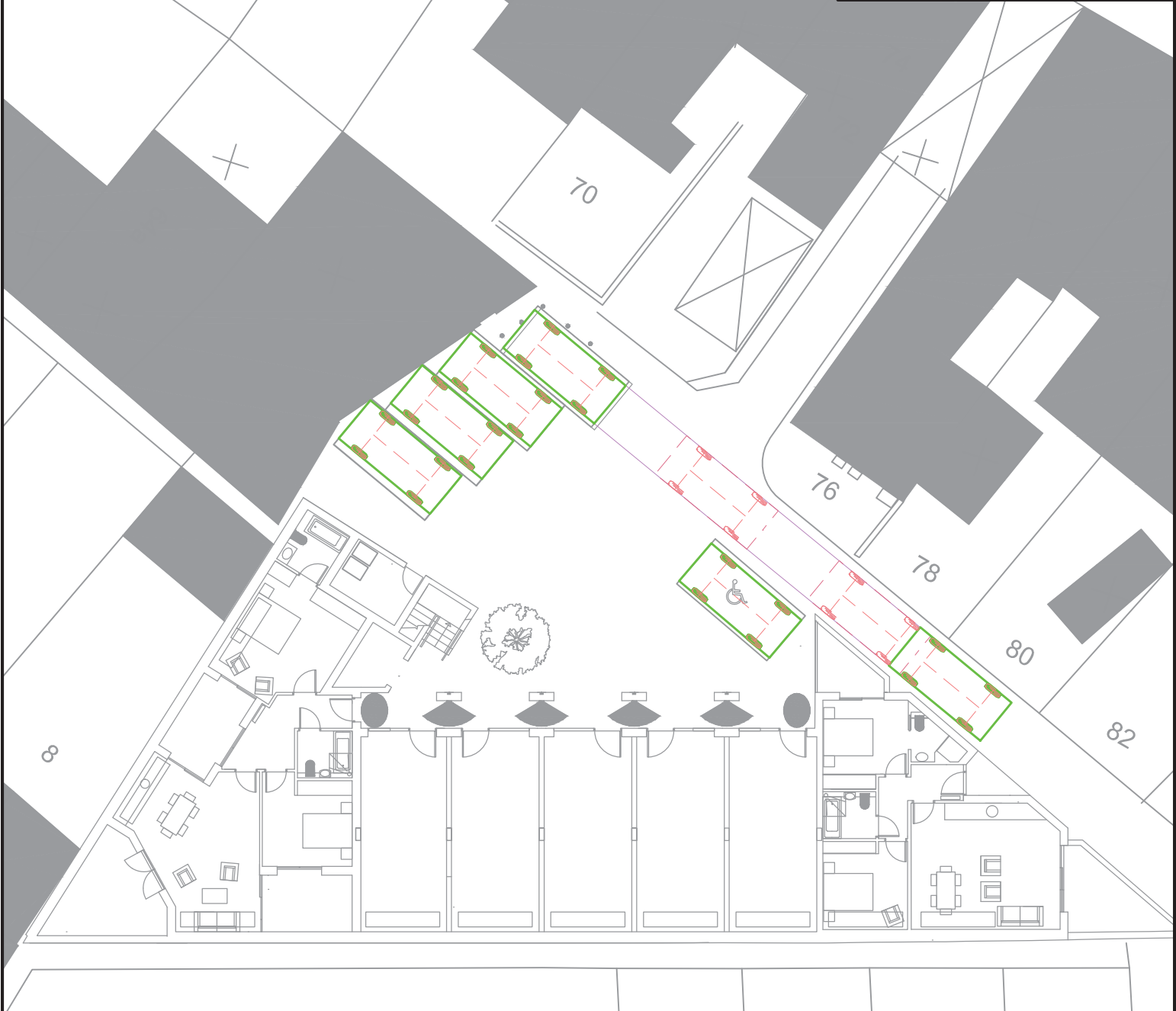
Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR ENTERING CAR PARK
 TO SPACE 4 FROM
 CHURCH ROAD**

FAIRHURST


Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412


Scale at A4: 1:250	Status: For Information	
Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16
Drawing No.: 115932/1816		Revision: B




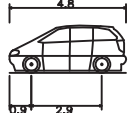
Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:

 FORWARD MANOEUVRE CAR

 REVERSE MANOEUVRE CAR

 TRACKING INDICATOR **IM** IMPACT



Standard Design Vehicle (SDV)

- Overall Length 4.800m
- Overall Width 2.000m
- Overall Body Height 1.950m
- Min Body Ground Clearance 0.100m
- Track Width 2.000m
- Lock to Lock Time 4.00s
- Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW

Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR EXITING CAR PARK
 FROM SPACE 4 TO
 ELM GROVE ROAD**

FAIRHURST

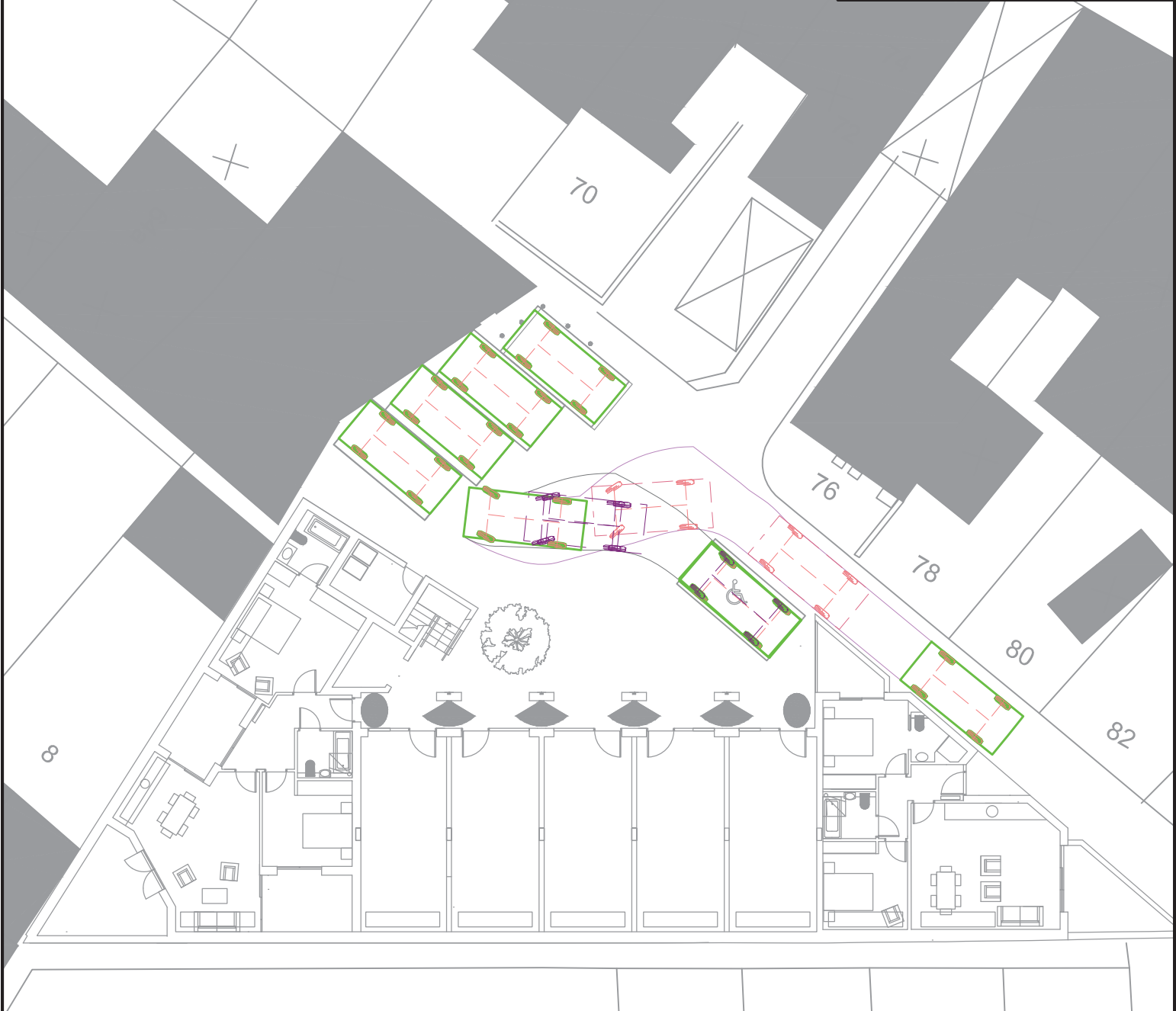
Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412

Scale at A4:
 1:250

Status:
 For Information

Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16

Drawing No.: **115932/1817** Revision: **B**



Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:

FORWARD MANOEUVRE CAR

REVERSE MANOEUVRE CAR

TRACKING INDICATOR IMPACT

Standard Design Vehicle (SDV)

- Overall Length 4.800m
- Overall Width 2.000m
- Overall Body Height 1.950m
- Min Body Ground Clearance 0.100m
- Track Width 2.000m
- Lock to Lock Time 4.00s
- Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW



Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR ENTERING CAR PARK
 TO SPACE 5 FROM
 ELM GROVE ROAD**

FAIRHURST

Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412

Scale at A4: 1:250	Status: For Information	
Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16
Drawing No.: 115932/1818		Revision: B



Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:

FORWARD MANOEUVRE CAR

REVERSE MANOEUVRE CAR

TRACKING INDICATOR
IMPACT

Standard Design Vehicle (SDV)
 Overall Length 4.800m
 Overall Width 2.000m
 Overall Body Height 1.950m
 Min Body Ground Clearance 0.100m
 Track Width 2.000m
 Lock to Lock Time 4.00s
 Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW

Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR EXITING CAR PARK
 FROM SPACE 5 TO
 CHURCH ROAD**

FAIRHURST

Oak House, Reeds Crescent,
WATFORD, WD24 4PH
Tel: 01923 210 460 Fax: 0844 381 4412

Scale at A4: 1:250	Status: For Information	
Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16
Drawing No.: 115932/1819		Revision: B



Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:

FORWARD MANOEUVRE CAR

REVERSE MANOEUVRE CAR

TRACKING INDICATOR

IMPACT

Standard Design Vehicle (SDV)
 Overall Length 4.800m
 Overall Width 2.000m
 Overall Body Height 1.950m
 Min Body Ground Clearance 0.100m
 Track Width 2.000m
 Lock to Lock Time 4.00s
 Wall to Wall Turning Radius 6.000m

B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW
Rev.	Date	Description	Drawn	Checked	Approved

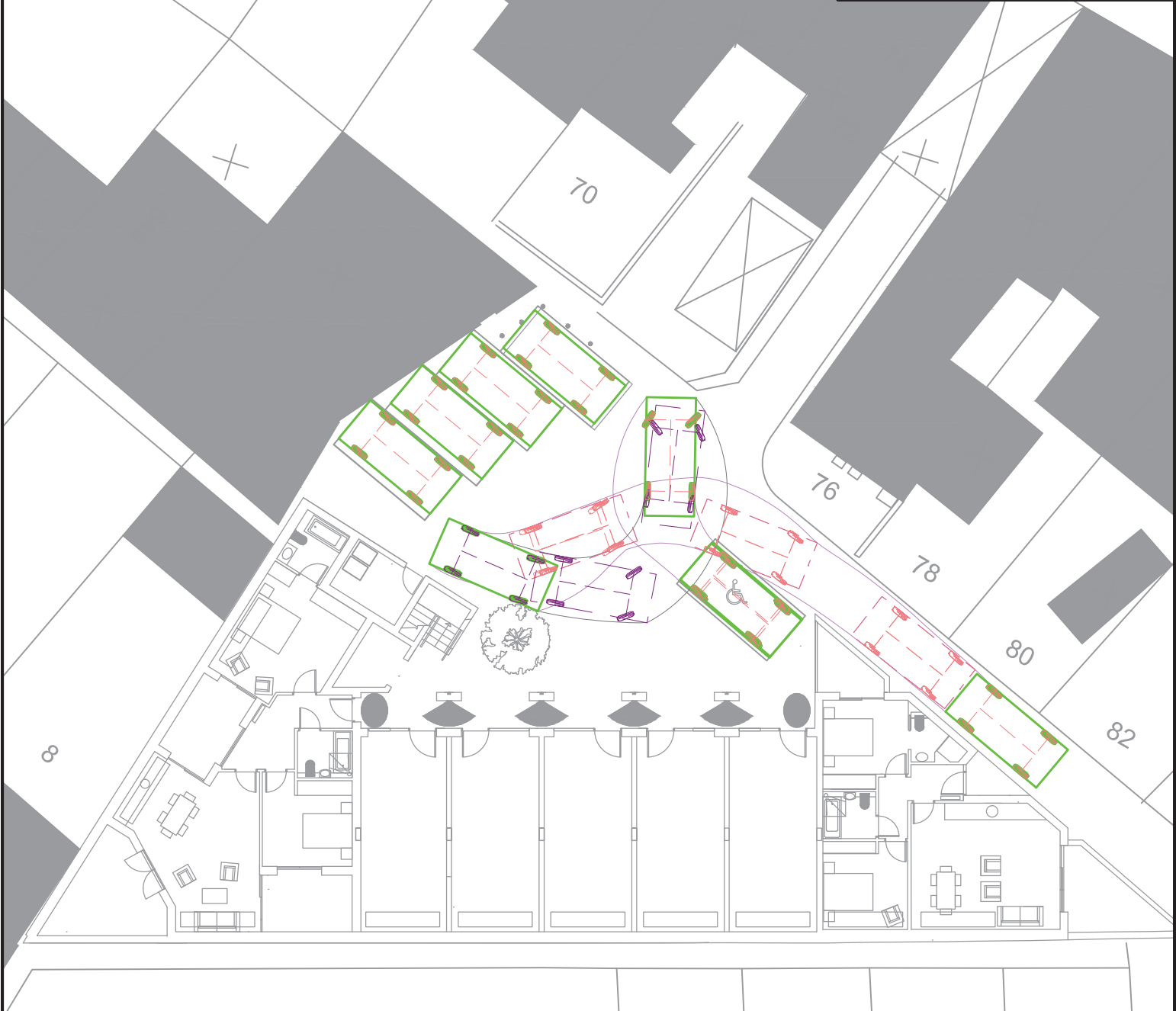
Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR ENTERING CAR PARK
 TO SPACE 5 FROM
 CHURCH ROAD**

FAIRHURST

Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412

Scale at A4: 1:250	Status: For Information	
Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16
Drawing No.: 115932/1820		Revision: B



Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:

FORWARD MANOEUVRE CAR

REVERSE MANOEUVRE CAR

TRACKING INDICATOR **IM** IMPACT

Standard Design Vehicle (SDV)

- Overall Length 4.800m
- Overall Width 2.000m
- Overall Body Height 1.950m
- Min Body Ground Clearance 0.100m
- Track Width 2.000m
- Lock to Lock Time 4.00s
- Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW



Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**CAR EXITING CAR PARK
 FROM SPACE 6 TO
 ELM GROVE ROAD**

FAIRHURST

Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412

Scale at A4: 1:250	Status: For Information	
Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16
Drawing No.: 115932/1821		Revision: B



Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:

FORWARD MANOEUVRE CAR

REVERSE MANOEUVRE CAR

TRACKING INDICATOR **IM** IMPACT

Standard Design Vehicle (SDV)

- Overall Length 4.800m
- Overall Width 2.000m
- Overall Body Height 1.950m
- Min Body Ground Clearance 0.100m
- Track Width 2.000m
- Lock to Lock Time 4.00s
- Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW

Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**SWEPT PATH ANALYSIS
 ELM GROVE ROAD
 TO CHURCH ROAD
 (NO PARKING)**

FAIRHURST

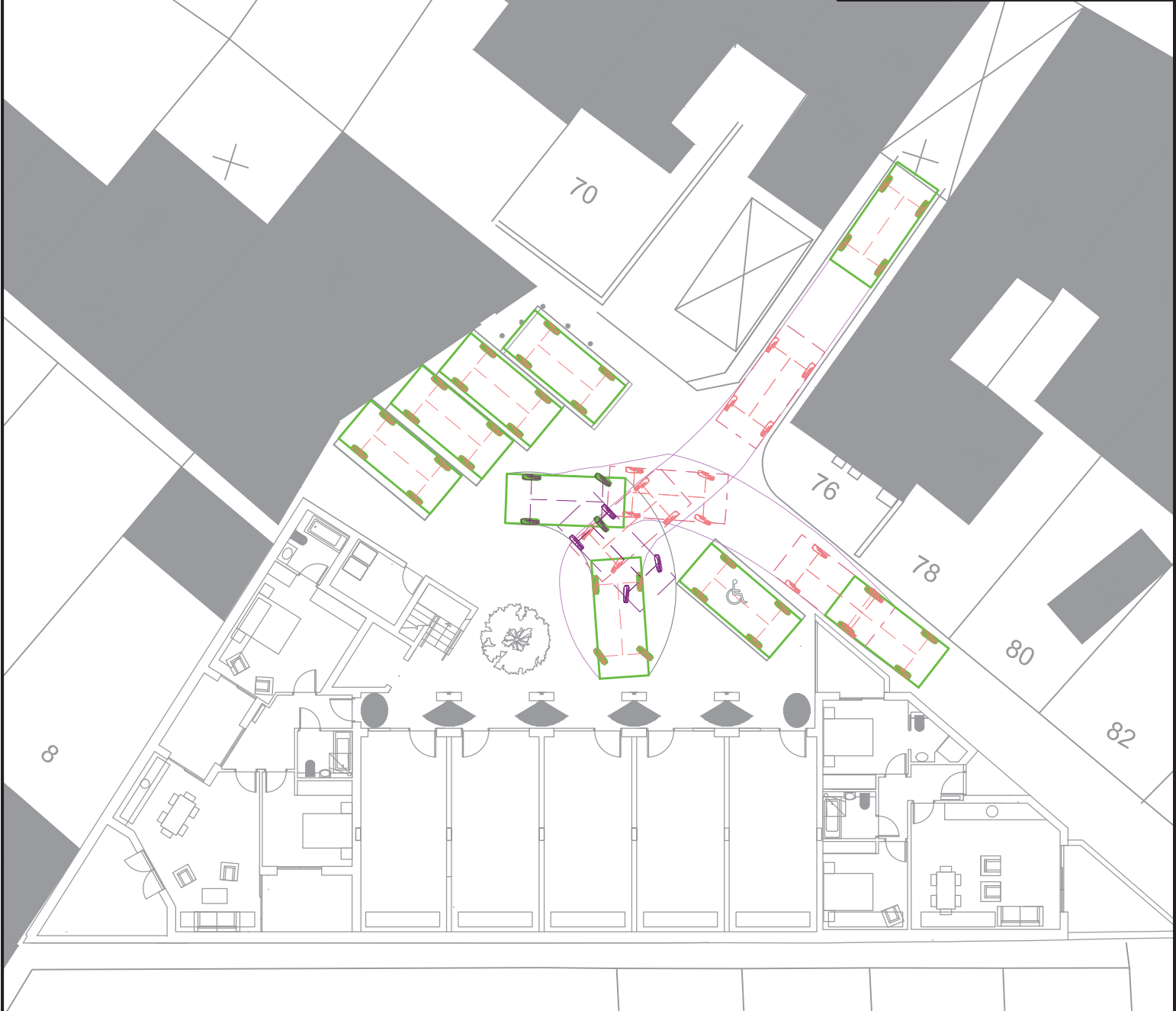
Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412

Scale at A4:
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Status:
 For Information

Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16

Drawing No.: **115932/1810** Revision: **B**



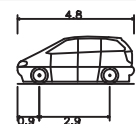
Notes:
 1. VEHICLE TRACKING SHOWN HAS BEEN CARRIED OUT USING AUTODESK VEHICLE TRACKING 2015.

Legend:

FORWARD MANOEUVRE CAR

REVERSE MANOEUVRE CAR

TRACKING INDICATOR IMPACT



Standard Design Vehicle (SDV)
 Overall Length 4.800m
 Overall Width 2.000m
 Overall Body Height 1.950m
 Min Body Ground Clearance 0.100m
 Track Width 2.000m
 Lock to Lock Time 4.00s
 Wall to Wall Turning Radius 6.000m

Rev.	Date	Description	Drawn	Checked	Approved
B	30/11/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	JM	LV	AW
A	20/10/16	DRAWING UPDATED TO LATEST ARCHITECTS LAYOUT.	TD	JM	AW



Project Title:
**74 CHURCH ROAD
 BARNES
 LONDON**

Drawing Title:
**SWEPT PATH ANALYSIS
 CHURCH ROAD TO
 ELM GROVE ROAD
 (NO PARKING)**

FAIRHURST

Oak House, Reeds Crescent,
 WATFORD, WD24 4PH
 Tel: 01923 210 460 Fax: 0844 381 4412

Scale at A4: 1:250	Status: For Information	
Drawn: TD	Checked: JM	Approved: AW
Date: 07/09/16	Date: 07/09/16	Date: 07/09/16
Drawing No.: 115932/1811		Revision: B

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