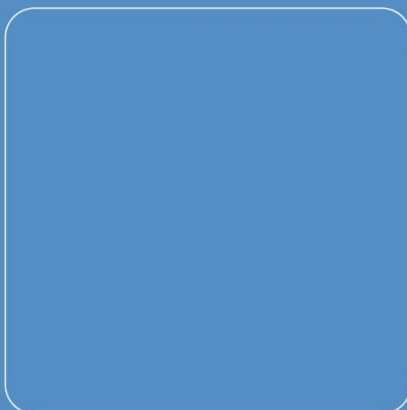
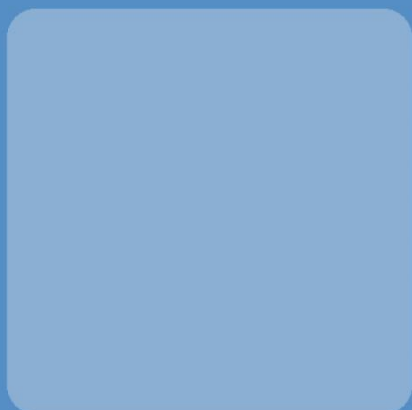
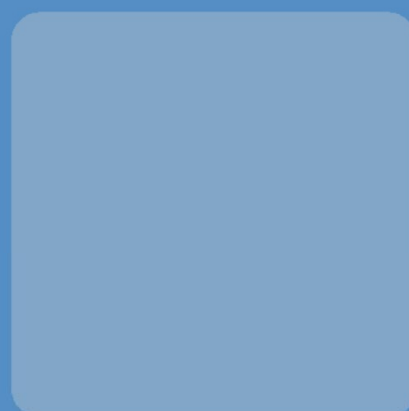
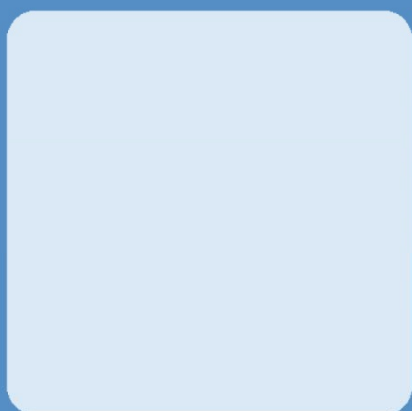


RPS

**ST PATRICK'S HALL
UNIVERSITY OF READING
TRANSPORT STATEMENT**





**ST PATRICK'S HALL
UNIVERSITY OF READING**

TRANSPORT STATEMENT

10 November 2017

Our Ref: SRD/HB/sjs/lh/JNY9421-01A

RPS

140 London Wall
London
EC2Y 5DN

Tel: 020 7280 3300

Email: transport@rpsgroup.com

QUALITY MANAGEMENT

Prepared by:	Harrison Bains
Authorised by:	Shelley Dix
Date:	10 November 2017
Project Number/Document Reference:	JNY9421-01A

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1 INTRODUCTION

Introduction

- 1.1 RPS Transport has prepared this Transport Statement as part of the forthcoming planning application for the proposed redevelopment of St Patrick's Hall student accommodation (the site) promoted by the University of Reading (the Applicant) and its specialist partner UPP Projects Limited.
- 1.2 The existing St Patrick's Hall of Residence are located on Northcourt Avenue, Reading, West Berkshire, RG2 7HB (**Figure 1**). The site is located within the administrative boundary of Reading Borough Council (RBC). The site is situated approximately two kilometres to the south-west of Reading town centre and close to the University's Whiteknights Campus.

Development Brief

- 1.3 The development proposals are to demolish existing student accommodation, comprising 182 student rooms, the student refectory, the warden's lodge and an additional family house, and construct 884 replacement student rooms with associated shared facilities plus houses for families. There will subsequently be a net increase of 702 student rooms. Existing student accommodation at Pearson's Court will be retained.
- 1.4 The proposed increase in student rooms is to cater for existing demand and future growth. Currently, students who have been unable to obtain a place in University halls of residence have sought accommodation within private rented accommodation across Reading. No additional car parking is proposed; however, cycle parking will be proposed in accordance with current policy requirements.
- 1.5 Whilst no new car parking is to be proposed onsite for students, vehicular access for staff and visitor parking, as well as vehicular access for servicing and deliveries and emergency access will be retained from Northcourt Avenue, as illustrated in the Masterplan attached at **Appendix 1**.

Pre-Application Consultation

- 1.6 This report has been prepared following initial scoping discussions with RBC (**Appendix 2**). It has been agreed that the quantum of development is such that warrants a Transport Statement and associated Student Management Plan, prepared in accordance with the current Planning Practice Guidance and RBC local policy.
- 1.7 The extent of the study area was established during initial scoping discussions and this Transport Statement incorporates all the comments received. The report considers the transport issues in the area of the site and identifies the likely impacts of the proposed development at St Patrick's Hall, with all modes of travel considered.

- 1.8 On the basis of the development being car free, with students not permitted to park on-site or on campus, vehicle trip generation is anticipated to be low. Furthermore, the University's Student Residence Agreement (SRA) requires students to enter into a contractual agreement which prohibits students parking on campus and on the local roads within 1 mile of the University. It has therefore been agreed with RBC that offsite junction operational assessments are not required as part of the assessment works.
- 1.9 A review of the current and potential multi-modal trip generation has been undertaken based on a survey of the existing students, undertaken as part of the wider university Travel Plan monitoring.
- 1.10 The Applicant has held a public consultation and separate meetings with the local Northcourt Avenue Resident Association (NARA). As part of the consultation process residents raised concerns regarding the existing demand for on-street parking generated by students residing at St Patricks Hall. RBC also raised that there could be potential issue regarding residents' concerns over on-street car parking. RBC therefore recommended that a parking beat survey be undertaken of the local residential roads to establish the current level of demand for on-street parking and a subsequent assessment undertaken.

Report Methodology

- 1.11 The following research has been undertaken in the preparation of this Transport Statement:
- Site visit and assessment of local infrastructure and facilities;
 - Pre-application consultation with Reading Borough Council and Transport Assessment scoping exercise;
 - Review of existing public transport provision, timetable information, bus routes and services;
 - Review of existing infrastructure provision for pedestrians and cyclists;
 - Review of national, regional and local government policy guidance;
 - Analysis of the potential person and vehicle trip generation of the development;
 - Analysis of potential car parking demand of development and impact assessment based on development proposals;
 - Swept path analysis of the servicing and delivery arrangements;
 - Assessment of the road safety implications of the proposed development.

Report Structure

- 1.12 This Transport Statement is set out as follows:
- Section 2 'Existing Situation' – Review of the existing transport conditions of the site and surrounding transport networks;
 - Section 3 'Policy' - A review of the relevant national and local planning policy;

- Section 4 – *Proposed Extension* - Analysis of the proposed extension in respect of access, parking strategy and trip generation;
- Section 5 – *Development Impact* – Analysis of the impacts of the proposed extension on all modes of travel and on-street car parking;
- Section 6 – *Construction Management* – presents a summary of the traffic management strategy to be implemented as part of the construction phase for the development
- Section 7 - *Summary* – summarises the assessment findings and sets out the concluding comments.

2 POLICY APPRAISAL

Introduction

- 2.1 This section details the transport policy documents against which the development proposals will be considered from a national and local perspective.

National Policy

National Planning Policy Framework (NPPF) (March 2012)

- 2.2 The National Planning Policy Framework (NPPF) was published in March 2012 and sets out national policy for delivering sustainable growth and development. The NPPF aims to make the planning system less complex and more accessible. The NPPF replaces a number of Planning Policy Statements and Guidance including PPG13 – Transport and PPS1 - Delivering Sustainable Development.
- 2.3 The NPPF sets out the Government’s planning policies for England and how these are expected to be applied. In terms of transport, the objectives outlined in NPPF are to:
- **The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. (Paragraph 29)**
 - **Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport. (Paragraph 30)**
- 2.4 When determining planning applications Paragraph 32 of the NPPF states that planning policies should consider whether:
- **The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;**
 - **Safe and suitable access to the site can be achieved for all people;**
 - **improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development; and**
 - **Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.**
- 2.5 Whilst the NPPF provides no definition of what a ‘severe’ impact would be, it is clear that *de minimise* impacts are not a reason for preventing development from coming forward for transport reasons.

Planning Practice Guidance (PPG) – Travel Plans, Transport Assessments and Statements in Decision-Taking (March 2014)

- 2.6 The PPG was released in March 2014. The document *Travel Plans, Transport Assessments and Statements in Decision-Taking* provides a concise report on the use, importance of, and content to be provided within Transport Assessments, Transport Statements and Travel Plans.
- 2.7 With regard to whether to provide a Transport Assessment, Transport Statement or no assessment, the PPG states that local planning authorities, developers, relevant transport authorities, and neighbourhood planning organisations should agree what evaluation is needed in each instance. In this instance, due to the small scale nature of the proposals, pre-application discussions between the University and Reading Borough Council has indicated the need for a Transport Statement to accompany the application.
- 2.8 The Guidance states that Transport Assessments, Transport Statements and Travel Plans should be proportionate to the size and scope of the proposed development, be tailored to particular local circumstances and be established at the earliest practicable possible stage of a development proposal.

Local Policy

Reading Borough Council Local Plan

- 2.9 Reading Borough Council Local Plan Core Strategy was adopted in January 2008 with an alteration adopted 27 January 2015. The Spatial Strategy sets out a vision for Reading to 2023, derived from the City 2020 Vision. The Core objectives set out in the Core Strategy are:
- Strengthen the role of Reading;
 - Improve the quality of life;
 - Ensure new development is accessible and sustainable;
 - Maintain and enhance the historic, built and natural environment;
 - Improve and develop excellent transport systems;
 - Offer outstanding cultural opportunities; and
 - Ensure that Reading is a multi-cultural city.
- 2.10 Reading adopted a Supplementary Planning Document (SPD) *Revised Parking Standards and Design* on 31st October 2011. This sets out the parking requirements for different land uses. This document also contains standards for cycle and motorcycle parking. The SPD parking standards are based on a zonal strategy with the site situated within Zone 2.
- 2.11 The parking standards for halls of residences located in zone 2 require that 1 space per FTE staff and no parking for students are provided. The standards state that *Where necessary, student parking restrictions will be enforced through tenancy agreements*

Draft Reading Borough Council Local Plan

- 2.12 A new Local Plan is currently being produced which will guide development in Reading up to 2036. The document drafted in May 2017 carries little weight at this time, however it should be a consideration in future development proposals within the borough.
- 2.13 With regard to transport, Policy TR1 sets out the following:
- “Proposed development should contribute appropriately to meeting the objectives of the most up-to-date Local Transport Plan or any successor document, including sub-strategies, specific projects identified and the local action plans.**
- Planning permission will not be granted for major development proposals unless there is a commitment to implement measures to promote and improve sustainable transport facilities, such as through provision to encourage walking, cycling and the use of public transport; and through agreed travel plans, safe routes to local facilities and services, including schools and parks, and similar measures.**
- All development proposals should make appropriate provision for works and contributions to ensure an adequate level of accessibility and safety by all modes of transport from all parts of a development, particularly by public transport, walking and cycling, in accordance with any agreed transport assessment submitted as part of the application.”**
- 2.14 Policy TR3 concerns development proposals involving a new or altered access or the generation of additional trips onto the transport network. It is stated that proposals will only be permitted where:
1. **Accesses and works to the highway comply with the adopted standards of the Transport Authority;**
 2. **The development would not have a material detrimental impact on the functioning of the transport network;**
 3. **The proposals would not be detrimental to the safety of users of the transport network, including pedestrians and cyclists;**
 4. **The proposal would not generate regular movement of heavy goods vehicles (HGVs) on unsuitable roads, or on roads without easy access to the Classified Highway Network; and**
 5. **For non-residential uses, or new dwellings on classified roads, off-street servicing would be provided.**
- 2.15 TR4 concerns cycling, and notes that:
- “Developments will be expected to make full use of opportunities to improve access for cyclists to, from and within the development and to integrate cycling through the provision of new facilities.”**
- 2.16 With respect to car and cycle parking, Policy TR5 states that:
- “Development should provide car parking and cycle parking that is appropriate to the accessibility of locations within the Borough to sustainable transport facilities, particularly public transport.”**

Reading Borough Council Local Transport Plan 3 (2011-2026)

2.17 The Council's Local Transport Plan 3 sets out strategic objectives which provide the link between the local vision, national goals and emerging policy. The objectives for transport are:

- To facilitate more physically active travel for journeys in a healthy environment;
- To improve personal safety on the transport network;
- To provide affordable, accessible and inclusive travel options for everyone;
- To ensure that the transport network operates safely and efficiently to meet the needs of all users;
- To align transport and land use planning to enable sustainable travel choices, improve mobility, reduce the need to travel and preserve the natural environment;
- To deliver balanced packages of value for money transport solutions and make best use of existing transport investment;
- To offer sustainable transport choices for the Travel to Work Area and beyond, integrating within and between different types of transport;
- To improve journey times, journey time reliability and the availability of information; and
- To reduce carbon emissions from transport, improve air quality and create a transport network which supports a mobile, affordable low-carbon future.

Overview

2.18 This chapter has outlined the policy context to which the proposed development relates and the frameworks with which the development proposal needs to comply.

2.19 It is clear that development should be sustainable in form and location, seeking to reduce reliance on the private car and reducing potential impact on the local highway network.

3 EXISTING SITUATION

Site Location

- 3.1 The St Patrick's Hall of Residence are located on Northcourt Avenue, approximately two kilometres to the southeast of Reading town centre and 400metres west of the University's Whiteknights Campus.
- 3.2 The buildings occupied by St Patrick's Hall is bound to the south and west by Sherfield Drive, to the east by Northcourt Avenue, and to the north by a footpath connection from Northcourt Avenue to Benyon Hall. A site location plan is attached at **Figure 1** in the context of its surroundings.
- 3.3 The A327 (Christchurch Road) immediately north west of Northcourt Avenue offers a number of local shops and amenities inclusive of; local convenience store, newsagents, coffee shop and pharmacy. This local centre is circa 300 metres walk from the site.
- 3.4 The University's leisure facilities are situated on the Whiteknights Campus approximately a 400 metre walk distance from the site. The campus also supports medical facilities, a small supermarket and other with other student welfare services.
- 3.5 Manual for Streets (MfS) considers a walkable neighbourhood to be that where local facilities and amenities are accessible within an 800m. It is considered that the site location affords a sustainable location for accessing a number of facilities and amenities on foot, based on the MfS guidance.

Local Highway Network

- 3.6 St Patrick's Hall is accessible from a private access road to the west of Northcourt Avenue, approximately 270 metres from the priority T-junction with the A327. Northcourt Avenue is a single carriageway and passes through a quiet, residential area with a prevalence of residential on-street parking on its western side. The eastern side of the carriageway is subject to double yellow line parking restrictions. The carriageway itself measures approximately 6.6 metres in width and has ample footway provision on both sides of the road, commensurate with street lighting.
- 3.7 Pedestrian access to the site is also via the footpath connection from the south of Creighton Court accessible from Northcourt Avenue, which routes south to St Patrick's Hall reception area.
- 3.8 Northcourt Avenue forms a priority T-junction with a dedicated ghost island right turn lane with the A327 to the north of the building. The Northcourt Avenue/A327 priority junction is located immediately north of the signal controlled junction between the A327/Redlands Road/Elmhurst Road. Controlled pedestrian crossings are located to the northwest and southeast of the Northcourt Avenue/A327 priority junction to allow the safe crossing of students over the A327 to access the Whiteknights Campus entrance.

- 3.9 Redlands Road routes north from this signal controlled junction towards the A4, University of Reading London Road Campus and Royal Berkshire Hospital. Elmhurst Road routes past the northern border of Whiteknights Campus to connect with Upper Redlands Road and Whiteknights Road.
- 3.10 In the opposite direction, Northcourt Avenue routes south beyond the St Patrick's Hall vehicular entrance to form a priority crossroad junction with Cressingham Road/Sycamore Road. Prior to this Northcourt Avenue forms a priority junction with Wellington Avenue, which in turn connects to the signal controlled crossroad junction of the A327 with Pepper Lane, at the Pepper Lane, Whiteknights Campus entrance. This provides a most direct route between the Halls of Residence and the central or southern areas of the University campus. Wellington Avenue has footway provision on both sides of the carriageway.
- 3.11 Pepper Lane is a single carriageway with footway provision on both sides and a hatched central reservation. The majority of the highway has double yellow parking restrictions with the exception of a section on its western side north of the Whiteknights Campus junction, which has no restrictions.
- 3.12 The A327 is a strategic route between Reading town centre south of the River Kennet and south Reading, Shinfield and Eversley. It routes over the M4 but also provides a connection to the B3270, which joins junction 11 of the M4. The A33 routes south from junction 11 of the M4 to Basingstoke and the M3.
- 3.13 The A4 is accessible from the A327 towards Reading town centre via a signal controlled crossroad junction. The A4 bypasses the south of the town centre and connects to Calcot, junction 12 of the M4, Theale and Newbury in the west and Woodley, Twyford and Maidenhead in the east.
- 3.14 St Patrick's Hall of Residence is therefore well connected to the regional strategic highway network from its proximity to the M4, A329(M) and A34.

Pedestrian Access

- 3.15 Students and visitors are able to easily access St Patrick's Hall of Residence on foot from Whiteknights Campus, London Road Campus and other key facilities in south-west Reading. All local roads to the halls (Northcourt Avenue, Wellington Avenue, Pepper Lane, A327) exhibit continuous footway provision, street lighting and dropped kerbs with tactile paving at junctions with driveways and minor roads.
- 3.16 As previously mentioned there is a controlled pedestrian crossing over the A327 at two separate points adjacent to the Northcourt Avenue/A327 priority junction, which assists with the safe movement of pedestrians crossing the A327, in particular it assists students cross to access the northern area of the Whiteknights Campus and Redlands Road.
- 3.17 The walking distance between St Patrick's Hall and the Shinfield Road (A327) entrance into Whiteknights Campus is only 450 metres, which is the most convenient entrance for areas north of the campus including the sports centre and the majority of Halls of Residence. The central and southern areas of the campus including the University Library and Reading Enterprise Centre are most conveniently accessed from the Halls via Northcourt Avenue (south) and Pepper Lane. The Pepper Lane entrance is located 900 metres from St Patrick's Hall.

- 3.18 Whiteknights Campus itself is conducive to pedestrian movements with a network of traffic-free footpaths throughout the campus connecting to the various academic and catering facilities in addition to halls of residence. There are several pedestrian crossing points within the campus internal road network for the safety of students, staff and visitors including on all arms of the mini roundabout north of the Pepper Lane access point into the campus. The pedestrian zebra crossing prior to the Pepper Lane ghost island right turn lane priority junction is shown at **Plate 1**:

Plate 1: Pedestrian zebra crossing north-east of Whiteknights Campus entrance off Pepper Lane



- 3.19 External from the campus, the route travelling north along Redlands Road provides access to Royal Berkshire Hospital, the University's London Road campus and Reading College. There is footway provision on both sides of Redlands Road.
- 3.20 The most direct walking route from St Patrick's Hall of Residence into Reading town centre is via the A327 in a north-west direction, covering a distance of approximately 2.2 kilometres (to Castle Street/Bridge Street junction).
- 3.21 There is footway provision along the length of the A327 into the town centre, accompanied by street lighting, dropped kerbs and tactile paving at junctions with side roads and controlled pedestrian crossing points at major junctions and across the A327 itself. Bridge Street routes into the town centre area from the A327/A329 roundabout junction, which has footway provision and signalised crossing points. Commercial retail and leisure facilities are provided in the town centre along Broad Street, St Mary's Butts, and Gun Street and within the Oracle shopping centre that students are likely to access.
- 3.22 Reading railway station is located 550 metres walking distance to the north of Castle Street/Gun Street/Bridge Street crossroad junction. The total walking distance between the railway station and St Patrick's Hall of Residence is 2.8 kilometres.

- 3.23 It is noted that there are several food, retail, sport and leisure facilities located on Whiteknights Campus itself, which will help to minimise the number of trips to / from the Halls of Residence to Reading town centre.

Cyclist Access

- 3.24 It is likely that a large proportion of students at St Patrick's Hall of Residence will own a bicycle as a form of transport to local areas. This will be supported by the provision of lockable bicycle sheds and storage areas at the Halls.
- 3.25 Reading University encourages staff, students and visitors to cycle to access the facilities, enhanced through the provision of shared and segregated cycleways/footpaths through Whiteknights Campus grounds. There are ReadyBike stands offering bike hire by the hour at the following locations:
1. on the south-eastern corner of the Elmhurst Road/A327/Redlands Road signalised junction;
 2. opposite the University's Chaplaincy Centre 100 metres from the University Library; and
 3. east of Randolph College.
- 3.26 Shower facilities are located at several buildings on the campus should students travelling from the Halls of Residence require these. Cycle parking compounds are available across the campus providing over 1,800 cycle parking spaces across all University campuses.
- 3.27 Reading Borough Council have issued a cycle route map for the Reading area which is attached at **Appendix 3** identifying the suitability of cycle routes in the southeast part of the town.
- 3.28 Northcourt Avenue itself is highlighted at **Appendix 3** as a suitable on-road cycle route with the lower traffic volumes. The recommended route continues south towards Sycamore Road, Linden Road and Westlands Avenue providing good cycling access to residential areas and Asda Superstore in Earley.
- 3.29 The A327 and Redlands Road are highlighted in the extract as an on-road cycle route with no dedicated cyclist facilities. This is the most suitable cycle route from the Halls of Residence into Reading town centre and railway station as there are lower traffic volumes and less signalised junctions. Redlands Road forms a junction with the A4 London Road, which exhibits a blue signed shared cycleway/footway on both sides of the carriageway separated from the traffic. Watlington Street routes north from the A4 opposite Redlands Road and offers an on-road cycle route due to its quiet nature.
- 3.30 The town centre area can then be reached from the traffic-free cycle route on the southern side of River Kennet and Yield Hall Place. This is the long distance National Cycle Network Route 4 which follows the Kennet and Avon Canal. Route 5 is accessible from the footbridge at the River Thames / Kennet confluence east of Cholmeley Road, which routes north towards Oxfordshire.
- 3.31 Reading railway station can be reached by continuing north on London Street, Duke Street, The Forbury and Forbury Road. There is secure and covered cycle parking available at the railway station where students can securely leave their bicycles whilst using the rail services to other destinations. Other key cycle parking destinations in the town centre area are illustrated on **Appendix 3**.

- 3.32 To the east of the campus, Whiteknights Road is identified as suitable on-road cycle routes due to lower traffic volumes. The A329 Wokingham Road is accessible from the Earley Gate entrance to the campus in the eastern corner and has a shared cycleway / footway set back from the carriageway. This provides direct access from the campus to Earley railway station that students at the Halls of Residence may wish to access. Cycle parking is available at the railway station.

Bus Access

- 3.33 The closest bus stops to St Patrick's Hall of Residence are located on the A327 with the northbound and southbound bus stops located either side of the Elmhurst Road/A327/Redlands Road signal controlled junction approximately a 300 metre walking distance. Both bus stops are marked by a flag and pole with the addition of a shelter, seating and real time information. These bus stops are marked on **Figure 1**.
- 3.34 These bus stops are served by Reading Bus service Claret 21 / 21a, which runs a 24 hour service seven days a week. The Claret 21a operates only during University term time, which is approximately half of the Claret 21 / 21a services combined. Reading Bus services 3 and 10 call at these stops which operate throughout the year and are not constrained to University term time.
- 3.35 The aforementioned bus service details are summarised in **Table 3.1** with their routes attached at **Appendix 4**.

Table3.1: Local Bus Services to St Patrick's Hall of Residence

Route No.	Bus Stop	Operator and Route	Frequency				
			Weekday			Weekend	
			Daily	First Service	Last Service	Sat	Sun
Claret 21 / 21a	A327, adj. to Elmhurst Rd / Redlands Rd	Reading Buses Reading Station - Christchurch Green - Whiteknights Campus - Asda, Chalfont Park - Earley	Every 7-8 minutes	N/A		Every 15 mins	Every 20 mins
	A327, opp. to Elmhurst Rd / Redlands Rd	Reading Buses Earley - Asda, Chalfont Park, Whiteknights Campus - Christchurch Green - Reading Station	Every 7-8 minutes	N/A		Every 15 mins	Every 20 mins
Leopard 3 / 10	A327, adj. to Elmhurst Rd / Redlands Rd	Reading Buses Reading Station - Royal Berkshire Hospital - University - Shinfield - School Green - Arborfield - Wokingham	4 services per hour	05:26	23:51	4 services per hour	Every 30 mins
	A327, opp. to Elmhurst Rd / Redlands Rd	Reading Buses Wokingham - Arborfield - School Green - Shinfield - University - Royal Berkshire Hospital - Reading Station	4 services per hour	05:40	23:49	4 services per hour	Every 30 mins

Source: Reading Buses (accessed October 2017)

- 3.36 It is highlighted that the Halls of Residence is accessible from a large range of destinations across south Reading by public transport, including residential areas like Whitley, Earley and Shinfield which may attract visitors, in addition to Reading town centre where it is likely students will be travelling to from the Halls for the vast range of leisure, retail and employment functions.
- 3.37 The above bus routes either commence or terminate at Reading railway station which provides rail services to several key regional and national destinations. This is a useful link for students or visitors that may visit the Halls from areas outside of Reading, combining a public transport journey with cycling or Reading Buses.

Accessibility Summary

- 3.38 This site accessibility appraisal demonstrates that St Patrick's Hall of Residence and Whiteknights Campus can be reached by sustainable modes from a large range of local and regional destinations. This accords with the University's sustainability principles and local and national policy. It should be further emphasised that a wide range of facilities are located within the Halls of Residence and campus boundaries itself, which will internalise staff, student and visitor trips. It is expected that the majority of the trips made by students residing in St Patrick's Hall will be to the University Campuses.

Existing Student Travel Behaviour

- 3.39 Annual travel surveys are undertaken as part of the University Travel Plan. The purpose of the surveys is to understand travel behaviours of students, employees and site visitors. The UoR has provided the latest survey data for 2013 and 2014 which reports on the travel behaviours of those residing at St Patrick's Hall. The raw data is attached at **Appendix 5**.
- 3.40 The data has provided details of the student modal split by journey purpose as well as typical arrival/departure times for travelling to/from the University Campus. The survey data between 2013 and 2014 provides different background information, the data which is considered of most relevance to this study is listed below:
1. Campus Destination (2013 and 2014)
 2. Modal Split for trips to campus (2013 and 2014)
 3. Typical Arrival time on campus (2014)
 4. Typical Departure time on campus (2014)
 5. Modal Split for other identified journey purposes (2013)
- 3.41 The site is located within 450m metres of the main Whiteknights, UoR campus. The site therefore provides a convenient location for students based at Whiteknights. The 2013 and 2014 data corroborates this as summarised in **Table 3.2**, with over 90% of students either walking or cycling to campus.

Table 3.2: Proportion of Students residing at St Patricks by Campus

Campus	2013	2014
Earley Gate	5%	11%
London Road	0%	4%
Off campus (e.g. farms)	0%	2%
Whiteknights	95%	83%

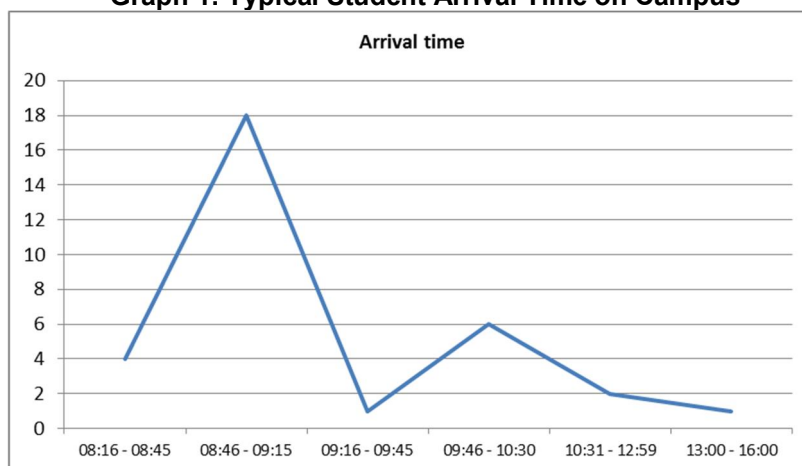
3.42 The modal split for trips to campus has remained fairly consistent between 2013 and 2014 as demonstrated in **Table 3.3**. The majority of students walk to campus with 95% walking in 2013 and 96% walking in 2014. The remaining proportion of students travel either on foot or by motorcycle/scooter/moped. No students are reported to travel by car either as a car driver or a car passenger.

Table 3.3: Travel Mode to Campus

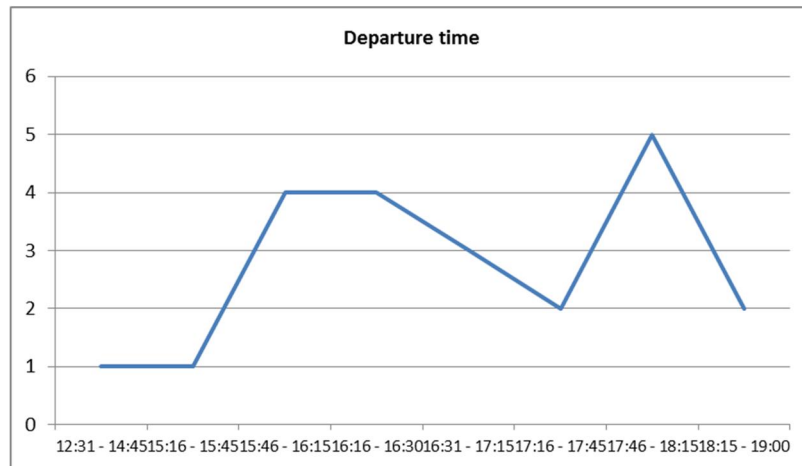
Mode of Travel	(2013)	(2014)
Cycle	2%	4%
Motorcycle / scooter / Moped	2%	0%
Walk	95%	96%
Bus	0%	0%
Car as driver alone	0%	0%
Car as driver with passengers	0%	0%
Car as passenger	0%	0%
Train	0%	0%
Taxi	0%	0%
Not applicable / don't do this	0%	0%

3.43 The typical arrival and departure times of students to campus were surveyed as part of the 2014 travel survey. The data is presented in Graphs 1 and 2 below. Student arrivals on campus peak between 08:45 and 09:15 (**Graph 1**) with two peak periods for departures recorded of between 15:46 and 16:30 and a later peak between 17:46 and 18:15 (**Graph 2**). It should be noted that many students reported that arrival and departure times varied a lot

Graph 1: Typical Student Arrival Time on Campus



Graph 2: Typical Student Departure time from Campus



3.44 As part of the 2013 travel survey travel modes used for other journey purposes were also recorded, providing a comprehensive overview of student travel choices. The data is summarised in **Table 3.4**.

Table 3.4: Travel Mode by Journey Purpose (2013)

Mode of Travel	Grocery Shopping	Reading (daytime)	Reading (night time)	Out of Reading
Cycle	0%	0%	2%	0%
Motorcycle/scooter/Moped	2%	2%	2%	0%
Walk	66%	48%	16%	7%
Bus	11%	45%	25%	11%
Car as driver alone	2%	0%	0%	2%
Car as driver with passengers	5%	0%	0%	2%
Car as passenger	0%	0%	0%	2%
Train	0%	2%	0%	48%
Taxi	0%	0%	50%	0%
Not applicable / don't do this	14%	2%	5%	27%

3.45 For trips to the library, grocery shopping and daytime trips to Reading, walking presents the highest proportion of trips of between 48% and 91%. Travel by bus to Reading town centre is also a common travel choice representing 45% trips. For trips to Reading at night travel by taxi represent 50% of trips with the remainder of trips undertaken by bus (35%), on foot (16%), cycle (2%) and motorcycle (2%).

3.46 Travel by car is minimal with only a small proportion driving to undertake grocery shopping (7% car drivers) and for trips outside of Reading (4% drivers).

3.47 It is apparent that the proportion of trips are undertaken by car are minimal, with 7% of students travelling by car for grocery shopping and 6% for shopping trips out of Reading. The car does not form a mode travel for other journey purposes.

- 3.48 In view of the UoR's no parking at halls, nor within 1 mile of campus policy unless obtaining a parking permit further research has been undertaken to establish where the 7% driving for grocery shopping students might be parking. The UoR have confirmed that that 21 students residing at St Pat's were issued with parking permits for the academic year coinciding with the 2013 travel survey. This equates to 7% of students having a vehicle parked at Halls. The modal share can therefore be offset against those with parking permits for the corresponding academic year, as such parking of students vehicles would be at Halls.
- 3.49 The potential trip generation by journey purposes for the existing halls (298 bedrooms) is presented in **Table 3.5** based on the most recent modal split data. This data presents the potential number of students that might travel by these modes, assuming students undertake these journeys daily.

Table 3.5: Existing Multi-Modal Trip Generation by Journey Purpose (298 students)

Modal split	Lectures /Campus (2014)	Grocery Shopping (2013)	Reading - daytime (2013)	Reading – night time (2013)	Out of Reading (2013)
Cycle	7	11	0	0	7
Motorcycle /Scooter/ Moped	7	0	7	7	7
Walk	284	287	196	142	47
Bus	0	0	34	135	75
Car as driver alone	0	0	7	0	0
Car driver with passengers	0	0	14	0	0
Car as passenger	0	0	0	0	0
Train	0	0	0	7	0
Taxi	0	0	0	0	149
Not applicable/don't do this	0	0	41	7	14

- 3.50 The above table assumes that each trip by journey purpose is undertaken daily. The 2013 survey data has provided evidence regarding the temporal distribution of trips over a typical week and month, presented in **Table 3.6**.

Table 3.6: Temporal Distribution of Trips by Journey Purpose (2013)

Frequency	Campus	Grocery shopping	Reading day time	Reading Night time	Out of Reading - Day time
1-3 days a week	2%	34%	27%	59%	2%
3-4 days a week	11%	5%	0%	5%	0%
5 or more days a week	86%	2%	0%	0%	0%
daily	100%	41%	27%	64%	2%
a few times a month	0%	36%	61%	16%	11%
never	0%	11%	2%	7%	34%
occasionally	0%	11%	9%	14%	52%
Total	100%	100%	100%	100%	100%

- 3.51 It is considered that the frequency of trips categorised as 1-3 days a week, 3-4 days a week and 5 or more days a week represent daily trips for a typical weekday (**Table 3.6**). The aggregate of these categories has provided the proportion of daily trips as presented in **Table 3.7** below. The Daily Proportion has subsequently been applied to the projected multi modal trip generation to provide a more realistic forecast of trips by journey purpose.

Table 3.7: Existing Daily Multi Modal Trip Generation by Journey Purpose (298 students)

Modal split	Lectures/ campus (2014)	Grocery Shopping	Reading (daytime)	Reading (night time)	Out of Reading
Daily Trips	100%	41%	27%	64%	2%
Cycle	11	0	0	4	0
Motorcycle/Scooter/Moped	0	3	2	4	0
Walk	287	80	39	30	0
Bus	0	14	37	47	1
Car as driver alone	0	3	0	0	0
Car as driver with passengers	0	6	0	0	0
Car as passenger	0	0	0	0	0
Train	0	0	2	0	3
Taxi	0	0	0	95	0
Not applicable / don't do this	0	17	2	9	2

- 3.52 For the existing daily situation approximately 287 students walk to the university campus and a further 11 might cycle to campus, no students however drive to campus. Grocery shopping generates minimal trips by car daily (9 students), with the remaining trips undertaken on foot (80 students), bus (14 students) and motorcycle (3 students).
- 3.53 Travel to the town centre during the day time is largely split between trips on foot (39 students) and trips by bus (37 students). Trips to the town centre at night are split between taxi, bus and on foot. When travelling out of Reading the train serves to generate the largest proportion of trips and the bus the second most common travel choice, minimal trips are undertaken by car. Trips out of Reading are less frequency representing only 2% of total trips.
- 3.54 Based on experience of trip behaviour it is likely that some of these trips would be linked or pass-by trips. However, data to this effect is not available at the time of writing and therefore all trips have been treated as separate trips.
- 3.55 The existing travel behaviours are considered to represent a sustainable situation. Students typically choose alternative means to the private car for journeys both locally and further afield in the town centre and out of Reading. This data indicates that there is minimal car ownership amongst students residing at this location.

Local Highway Safety

- 3.56 Personal Injury Accident (PIA) data has been obtained from WBC for the local area surrounding St Patrick's Halls of Residence, for the latest available three year period, inclusive of 1 September 2014 to 31 August 2017 (see **Appendix 6**).

- 3.57 The search area includes the following highway network:
- A327 from the signalised junction with Northcourt Avenue / Redlands Road / Elmhurst Road, to the priority junction with Cressingham Road;
 - The entire length of Northcourt Avenue;
 - Wellington Avenue; and
 - Cressingham Road between its junction with Northcourt Avenue and its junction with A327.

3.58 During the study period 23 PIAs were reported to the police. All PIAs were recorded as resulting in a slight injury.

A327 / Northcourt Avenue / Redlands Road / Elmhurst Road signal controlled junction

3.59 A total of six slight incidents have been reported at this junction. As such it is considered that this junction presents an accident cluster location.

3.60 One incident involved rear collisions between two LGVs and a car as the vehicles approached the signal controlled junction along the north-western arm of the A327. The PIA was attributed to the drivers following too close behind one another.

3.61 Three incidents at this junction caused injury to a pedal cyclist. One incident occurred as a motorist failed to give way as they changed lane on the northwest arm of the A327, and collided with a cyclist on the outside of the vehicle. Another incident occurred as a pedal cycle waited to turn right at the lights into Elmhurst Road from the A327, however the cyclist was hit in the rear by a vehicle. The remaining pedal cyclist was injured as they entered the junction from the northwest arm of the A327, and a vehicle travelling in the opposite direction failed to look as they turned right towards Elmhurst Road and collided with the cycle. All of these incidents were attributable to driver error.

3.62 The final PIA to occur at the junction involved the same manoeuvre as the incident described above, whereby a vehicle entered the junction from the northwest arm of the A327 and a vehicle travelling in the opposite direction turned right towards Elmhurst Road. This incident involved two cars rather than a pedal cycle, however again it was attributed to human error as the driver failed to look properly when turning right.

3.63 All accidents at this junction have been caused by human error and therefore are not attributable to the highway design in this location.

A327 Shinfield Road / Queen's Drive priority junction

3.64 Three slight PIAs were recorded at the A327 Shinfield Road / Queen's Drive priority junction during the three year study period. Two of these accidents involved pedal cycles. One occurred as a pedal cyclist waited to turn right into Queen's Drive; however, a car driver turning right onto the A327 failed to give way and collided with the cyclist. The other incident involved a motorcycle turning right onto the A327, which collided with a pedal cycle travelling southeast bound on A327.

3.65 The remaining incident involved a collision between two cars, one of which was turning right onto the A327 while the other travelled southeast bound on the A327.

- 3.66 The data indicates that the incidents recorded at this junction have been caused by driver error and are therefore not attributable to the highway design or layout in this location.

A327 Shinfield Road / Wellington Avenue / Pepper Lane signal controlled crossroad junction

- 3.67 Three slight PIAs were recorded at this junction during the study period. Two of the PIAs resulted in injury to a pedal cyclist.
- 3.68 One of these PIAs involved a vehicle colliding into the rear of a cyclist as they travelled southbound on the A327. The driver was considered to be careless / in a hurry. The other incident occurred as a pedal cyclist crossed the junction from Pepper Lane towards Wellington Avenue between stationary vehicles and collided with a stationary vehicle waiting to travel north along the A327; it has been attributed to the cyclist failing to look properly.
- 3.69 The remaining PIA involved car drivers and was due to a vehicle disobeying a red light signal.
- 3.70 The data indicates that all of the accidents at this location have been caused by human error and are therefore not attributable to the highway design or layout in this location.

Cressingham Road / Northcroft Avenue / Sycamore Road priority junction

- 3.71 Three incidents were reported at this junction, all of which involved car drivers. One incident occurred as an intoxicated driver lost control of the vehicle and collided with a house. The other PIAs occurred as drivers failed to give way when entering the junction, and are therefore not attributable to the highway design or layout at this location.

Remaining PIAs

- 3.72 The remaining eight slight PIAs were dispersed over the study area and were attributable to reasons other than highway design. Two caused injury to pedestrians who failed to look properly when crossing the carriageway and were subsequently struck by a vehicle.
- 3.73 Two were located at the Cressingham Road / A327 priority junction, in which a car failed to give way turning right out of the minor road. In one of the incidents the car collided into a motorcycle as it travelled northbound, which was masked from view by a car in front turning left into the minor road.

Summary

- 3.74 This analysis has demonstrated that the primary cluster point of PIAs is the A327 / Northcourt Road / Elmhurst Road / Redlands Road junction. This junction is signal controlled, however some right turn movements are uncontrolled. The recorded incidents can be attributed to road user error.
- 3.75 For the remaining PIAs the analysis has demonstrated that the incidents recorded are attributable to factors unrelated to the design of the highway network. It is reasonable therefore to conclude there is not an existing highway safety issue within the locality of the site.

Overview

- 3.76 In terms of sustainability, it is clear that the site is accessible by all modes of travel, with the main University Campus within easy walking distance of the Halls.
- 3.77 The site is accessible to public transport, with bus stops a short walk away.
- 3.78 Moreover, the many local facilities and amenities within Reading are within easy walk and cycle distances. The site therefore provides students with opportunities to walk and cycle for many journey purposes with the option of bus travel for longer journeys or to connect to the railway station.

4 DEVELOPMENT PROPOSALS

Introduction

- 4.1 This section sets out the redevelopment proposals for St Patrick's Halls, including vehicular and pedestrian access arrangements, proposed car and cycle parking provision and proposed refuse, servicing and delivery vehicle access arrangements.

Proposed Development

- 4.2 The UoR together with UPP propose to redevelop the existing St Patrick's Students hall with the exception of Pearson's Court which will be retained. The existing hall, comprising Pearson's Court, New Court and the student refectory building, form part of the Northcourt Group of student halls located on Northcourt Avenue, Reading. The North Court Group student halls also comprises Sherfield Hall, Benyon Hall and Creighton Court, together with 12,14,16 and 18 Northcourt Avenue.
- 4.3 Pearson's Court takes the form of a series of houses of 12 bedrooms each. Designed as catered accommodation they have been altered to provide a very small kitchen and extended to provide a further shower and WC. New Court consists of three storey accommodation forming a courtyard to the north of the site, while the student refractory building consists of single storey accommodation in the centre of the site. The existing St Patrick's Halls provides a total of 298 student bedrooms.
- 4.4 The proposals seek to demolish the New Court and the student refectory building comprising of 182 bedrooms and redevelop the site to provide circa 884 new rooms, arranged as cluster flats and townhouses; all with shared kitchens and lounges. The redevelopment will therefore provide a net increase of 702 bedrooms.
- 4.5 Three of the existing houses/bungalows will be retained, while the wardens house and one existing house will be demolished. As such these buildings have not formed part of the study.
- 4.6 The accommodation is supported with a range of common facilities. Launderettes, a gym, cafe and common rooms are provided within the courtyards. The central hub will contain a refectory, reception and management offices. Shared social space, such as common rooms and a bar will also be provided to the centre of the site.
- 4.7 A full development description can be found in the Design and Access Statement which accompanies this planning submission.

Proposed Vehicular and Pedestrian Access Arrangements

- 4.8 It is proposed to retain the existing vehicular access south of the halls from Northcourt Avenue. As part of the proposals an additional section of road will be created within the site and the north-west access will be upgraded to provide an additional vehicular and pedestrian access onto Northcourt Avenue.

- 4.9 This northern access will become the 'Northern Green Access Corridor' which has been designed to direct pedestrians away from Northcourt Avenue drawing them into St Patrick's Hall. This route, which is also suitable for vehicles will include parking, a lay-by / drop off zone. A new hedgerow will edge the majority of the road behind which will sit new tree planting interspersed between existing trees within amenity grassland
- 4.10 This will also improve access to Benyon Hall thereby reducing traffic using the southern entrance and vehicle movements across the St Patricks Hall site, benefitting the pedestrian environment.
- 4.11 It is proposed that the northern access will take the form of a vehicle crossover. Northcourt Avenue is a residential street subject to a 30mph speed restriction. A visibility splay of 2.4m x 43m is required which is demonstrated in **Appendix 7**. RBC confirmed during the Pre-Application meeting held 1 December 2015 that in view of the road alignment and typical on-street parking in this location, it would be acceptable to demonstrate visibility to the north, to the edge of the parked car.
- 4.12 The provision of the northern access will provide a dedicated, safer, night time route for students returning from campus, buses and/or the town centre on foot/cycle. The added benefit will also be a reduction in pedestrian and cycle traffic along the frontages of the private residential properties fronting Northcourt Avenue.

Parking Strategy

Car Parking Proposals

- 4.13 The RBC parking policy standards are based on a zonal methodology where the required provision is based on the access to alternative means of travel. The site lies within zone 2, the required standards for C2 development (halls of residence) in zone 2 indicate that no parking should be provided for students and car parking for staff should be provided at a level of 1 space per full time equivalent staff (**Table 4.1**). Parking should be provided for accessible units at a minimum of 3 spaces for the development or 5% of the total capacity.

Table 4.1: RBC Parking Policy Requirements (Zone 2) and Proposed Provision

User	No. Units/Persons	Car Parking Standard	Car Parking Provision
Students	1,000	0 parking for students	0
DDA units	9	Up to 200 spaces i All developments: 3 disabled spaces or 5% of total capacity, whichever is greater.	9
FTE Staff	21	1/FTE staff	21
Moped parking	n/a	2% of maximum total parking provision	1
Total	-	-	30

- 4.14 In accordance with the parking policy the redevelopment is proposed to be car free for students, with only car parking for staff, visitors and residents of accessible units by permit only. On site car parking associated with the new student accommodation is to be provided for 30 vehicles, as presented in **Table 4.1**. Parking is to be provided for each of the accessible units equating to 9 parking spaces and for the new staff at a provision of 21 spaces. An additional space is to be provided for moped/motorcycle parking.
- 4.15 The UoR Travel Plan encourages students to use alternative forms of transport to attend the University. The current Student Residence Agreement with the University does not permit students to bring motorised vehicles onto campus. Students are also prohibited to park their vehicles within one mile of the Whiteknights campus.
- 4.16 The modal split data by journey purposes indicates that students adhere to the University policies, with 0% of students residing at St Patricks travelling to campus by car (**Table.5**). Furthermore the proportion and associated trips undertaken by car is minimal for all journey purposes as demonstrated in **Table 3.4** and **Table 3.5**. The parking strategy is therefore considered appropriate for this type of development. A full assessment of the impacts of the proposals on local on-street parking is provided in **Section 6**.

Car Parking Policy

- 4.17 At the beginning and end of term time it is recognised there are peak periods when student vehicles will need to enter and park on site associated with moving in and out of accommodation. UPP has developed, together with the UoR, an established management plan which manages arrivals, parking and induction into the accommodation. The management strategy incorporates the following measures:
- Each student is issued with a staggered arrival time to mitigate delays and congestion on arrival;
 - Students are given 30 minutes to drive on to site to unload their car near to their accommodation;
 - A clearly signed one way system is introduced on the day of intake, to reduce the impact of traffic on the surrounding roads and manage the flow of student arrival through the day;
 - Staff assist the management of arrivals and ensure parking restrictions are adhered to;
 - Temporary dedicated parking facilities offsite provided for cars once initial drop off has been completed; and
 - Leaflet drops to local residents are also completed before intake, advising residents of key dates and activities together with a round the clock contact number.
- 4.18 For those students that reside on a weekly basis a specified access route will be opened for student traffic arrivals on weekends. An indicative illustration of this arrangement is attached at **Appendix 8**.

- 4.19 As iterated above, the current Student Residence Agreement with the University does not permit students to bring motorised vehicles onto campus. Students are also prohibited to park their vehicles within one mile of the Whiteknights campus.

Cycle Parking

- 4.20 Cycle parking is to be provided for students and staff in line with BREEAM and RBC standards respectively.
- 4.21 BREEAM requires that cycle parking is provided for students at a level of 1 per 2 students. However, BREEAM permits that the provision can be reduced to 1 per 4 students in areas of good public transport accessibility links such as the proposed development site. Cycle parking is therefore provided for 270 cycles on site, which exceeds and therefore is in accordance with the level required by BREEAM and RBC for 1 space per 5 students.
- 4.22 RBC requires that cycle parking is provided for 1 space per 3 staff for C2 developments, which equates to a minimum requirement for 7 staff cycle parking spaces (21 FTE staff). 17 staff cycle parking spaces are proposed, in excess of and therefore in accordance with the minimum RBC requirement.

Refuse, Servicing and Deliveries

- 4.23 The site layout has been designed to ensure that refuse and service vehicle can enter and exit the site in forward gear. All vehicles will enter the site at the southern access and exit via the north-west access. An Auto Track assessment has been undertaken to demonstrate that the proposed layout enables a refuse vehicle to manoeuvre within the site, as illustrated in **Appendix 9**.

Overview

- 4.24 This section provides the details of the development proposals, which comprise:
1. Net increase of 702 student bedrooms;
 2. Range of supporting facilities and amenities;
 3. Additional vehicular and pedestrian access onto Northcourt Avenue;
 4. 21 car parking spaces for staff and 9 disabled spaces;
 5. 287 cycle parking spaces; and
 6. Refuse collection to be undertaken via the internal road, accessing the site via the southern access and exiting via the north-west access.

5 MULTI-MODAL TRIP GENERATION

Introduction

- 5.1 This section considers the potential net multi-modal trip generation that would occur as a result of the redevelopment proposals

Trip Generation

- 5.2 The potential multi-modal trip generation for the proposed redevelopment has been calculated based on the empirical data evidence base for the existing situation. **Table 3.3** and **Table 3.4** present the existing modal split of students by journey purpose. Comparison of the modal share for trips to the University between 2013 and 2014 indicate that the modal shares are consistent and therefore provide a robust basis for projecting future trip generation. The most recent data (2014) has been applied as part of this assessment as presented in **Table 5.1**.

Table 5.1: Most Recent Modal Share by Journey Purpose

Mode/Journey Purpose	Lectures /Campus (2014) <i>Ref: Table 3.3</i>	Grocery Shopping (2013) <i>Ref: Table 3.4</i>	Reading - daytime (2013) <i>Table 3.4</i>	Reading – night time (2013) <i>Table 3.4</i>	Out of Reading (2013) <i>Table 3.4</i>
Cycle	4%	0%	0%	2%	0%
Motorcycle/scooter/Moped	0%	2%	2%	2%	0%
Walk	96%	66%	48%	16%	7%
Bus	0%	11%	45%	25%	11%
Car as driver alone	0%	2%	0%	0%	2%
Car as driver with passengers	0%	5%	0%	0%	2%
Car as passenger	0%	0%	0%	0%	2%
Train	0%	0%	2%	0%	48%
Taxi	0%	0%	0%	50%	0%
Not applicable / don't do this	0%	14%	2%	5%	27%

- 5.3 Applying the modal shares presented in **Table 5.1** to the proposed development (1,000 beds) has provided the potential multi-modal trip generation for the development, by journey purpose this is presented in **Table 5.2**.

**Table 5.2: Proposed Development (1,000 beds)
Modal Share by Journey Purpose**

Modal split	Lectures / campus (2014)	Grocery Shopping	Reading (daytime)	Reading (night time)	Out of Reading
Cycle	38	0	0	23	0
Motorcycle / scooter / Moped	0	23	23	23	0
Walk	962	659	477	159	68
Bus	0	114	455	250	114
Car as driver alone	0	23	0	0	23
Car as driver with passengers	0	45	0	0	23
Car as passenger	0	0	0	0	23
Train	0	0	23	0	477
Taxi	0	0	0	500	0
Not applicable / don't do this	0	136	23	45	273

Note: Figures may not sum due to rounding

5.4

As per the existing situation the trip generation presented in **Table 5.2** assumes trips are undertaken daily by all students. The potential daily trip generation has been calculated based on the temporal proportions determined from the 2013 dataset (**Table 3.7**). The anticipated daily trip generation is therefore presented in **Table 5.3**.

**Table 5.3: Proposed Development (1,000 beds)
Daily Multi-Modal Trips by Journey Purpose**

Modal split	Lectures/ campus (2014)	Grocery Shopping	Reading (daytime)	Reading (night time)	Out of Reading	Total
Cycle	38	0	0	14	0	52
Motorcycle/ Scooter/ Moped	0	9	6	14	0	30
Walk	962	270	130	101	2	1,465
Bus	0	46	124	159	3	332
Car as driver alone	0	9	0	0	1	10
Car as driver with passengers	0	19	0	0	1	19
Car as passenger	0	0	0	0	1	1
Train	0	0	6	0	11	17
Taxi	0	0	0	318	0	318
Not applicable / don't do this	0	56	6	29	6	97

Note: Figures may not sum due to rounding

- 5.5 The largest number of trips generated by the development is anticipated to be daily trips on foot to the campus by 962 students. Trips by public transport are anticipated to be highest when accessing the town centre undertaken by 124 students during the daytime and 159 students at night time. Trips to the town centre are for leisure and shopping purposes, these are therefore not anticipated to coincide with the typical commuter peak periods (08:00-09:00 and 17:00-18:00). Trips by bicycle are anticipated daily to the University campus and town centre (night time), undertaken by 38 and 14 students respectively.
- 5.6 It is acknowledged that a small proportion of students travel by car to undertake grocery shopping (7%). The UoR has confirmed that the number of parking permits issued the year of the travel survey as being 21 permits which represented 7% of the resident students. This equated to the same proportion of students as those driving to undertake grocery shopping. The modal share is accounted for by those who are permitted to park at St Patricks Hall.
- 5.7 The modal shares and resulting trip generation therefore present the potential scenario assuming a similar level of parking permits are issued. Based on the proposed level of parking on campus for accessible units equating to eight units it is anticipated that the maximum number of students with cars parked at halls would equate to 7.8%

Net Trip Generation

- 5.8 The proposed redevelopment will deliver 1,000 student bedrooms on the existing St Patrick's Hall site. The current student accommodation comprises of 298 student bedrooms, as such the redevelopment will result in a net increase of 702 student bedrooms.
- 5.9 The existing development is currently occupied and therefore the trips generated by the student's halls are present on the local network. Taking this into consideration it is appropriate to assess only the net increase in trips that would result from the redevelopment.
- 5.10 **Table 5.4** presents the potential net increase of students, by journey purpose for the proposed redevelopment.

Table 5.4: Net Daily Student Trips by Journey Purpose

Modal split	Lectures/ campus (2014)	Grocery Shopping	Reading (daytime)	Reading (night time)	Out of Reading	Total
Cycle	26	0	0	10	0	37
Motorcycle/Scooter/Moped	0	7	4	10	0	21
Walk	676	189	91	71	1	1028
Bus	0	33	87	112	2	233
Car as driver alone	0	7	0	0	0	7
Car driver with passengers	0	13	0	0	0	13
Car as passenger	0	0	0	0	0	0
Train	0	0	4	0	8	12
Taxi	0	0	0	223	0	223
Not applicable/don't do this	0	39	4	20	4	68

Note: Figures may not sum due to rounding

- 5.11 The assessment demonstrates that there would be increases in pedestrian movements to/from the university, but that the number of students travelling by car would remain minimal for all journey purposes. The development is proposed to be car free and as such only those students permitted to park at halls would account for car driver trips.

Overview

- 5.12 This section demonstrates that the proposed development will generate minimal trips by car and the local highway network would therefore be readily able to accommodate these trips. The increase in trips by other modes would also be accommodated by the existing transport networks given the quality of the existing walking / cycling / public transport infrastructure in the vicinity of the site. From this is it clear that the development would not result in a severe residual impact on the local highway network in accordance with the requirements of the NPPF. Furthermore, the development will provide a safe means of access to the site.

6 DEVELOPMENT IMPACT AND MITIGATION

Impacts on the Sustainable Transport Network

- 6.1 The net increase in trips has been reviewed in the context of the local sustainable transport network. The proposed redevelopment will accommodate an existing demand for student accommodation, which is currently sought by first year students in private rented accommodation across Reading. As such these trips are not new trips to the wider local network, but are considered new trips in this location.

Impact on Pedestrian Routes

- 6.2 **Section 3** describes the acceptable standard of footways along all local roads in the area including Northcourt Avenue, Wellington Avenue, Pepper Lane, A327, in addition to the location and standard of local pedestrian crossings. The Northcourt Avenue links with Shinfield Road on which the University Whiteknights campus is located immediately south of the junction.
- 6.3 An existing pedestrian crossing facility is present at this location, however observations indicate that students do not currently use the crossing in the manner intended. This could be resolved by redesigning the crossing. It is also considered that the width of the pedestrian island might need to be increased to serve additional pedestrian movements.

Impacts on Cycle Routes

- 6.4 The development could generate an additional 37 students travelling by bicycle daily. The provision of cycle parking within the development would allow students to safely store cycles on-site. These trips are not new trips to the wider network or the campus itself and therefore parking at key trip ends currently serves this level of demand.
- 6.5 Northcourt Avenue is considered to be suitable for cycling in view of low vehicle speeds. From Northcourt Avenue it is possible to access the extensive Reading cycle network, as identified in the RBC cycle map (**Appendix 3**). Convenient access to this will further enhance the accessibility of the site by bicycle.
- 6.6 The increase in cycle movements between Northcourt Avenue and the University is not considered to be significant. Notwithstanding this, there is limited cycle infrastructure at the Northcourt Avenue/Shinfield Road junction, particularly for cyclists turning out of the junction. It would therefore be beneficial to review the opportunity to provide cycle infrastructure at this location, simultaneously with any improvements identified for the pedestrians.

Impacts on Local Bus Network

- 6.7 Travel by local bus services is anticipated to serve trips into Reading for shopping/leisure purposes with a large proportion occurring at night. A net increase of 87 students travelling daily during the daytime and 112 students at night are forecast. These are identified for shopping and leisure and therefore are likely to occur outside of commuter peak hours (08:00-09:00 and 17:00-18:00) when demand on bus services is at its highest.

- 6.8 The local bus services to the development operate daily at a minimum 20 minute frequency with some service operating up to a 7 minutes frequency. Based on the level of services and frequency it is not anticipated that such an increase in trips would have a significant impact on local public transport. Furthermore these trips are already on the network and therefore there is the potential that only a small proportion of these trips would be new trips on these bus routes.

Impact on Local Highway Network and Parking

- 6.9 As set out in **Table 5.4**, the proposed redevelopment at the site could result in an additional 20 students travelling by car over a 24 hour period. These movements would be spread out over the daily period and would therefore be considered to be imperceptible on the local highway network. The proportion of car trips would be limited to the proportion of residents issued with a parking permit for halls. It is not anticipated that more than 11 permits would be issued serving only the accessible parking spaces.
- 6.10 Northcourt Avenue is subject to on-street parking restrictions Monday – Saturday between 08:00 and 18:30. Maximum stay of 2 hours is permitted only, with no return within 2 hours.
- 6.11 Students are not encouraged to bring cars to University, this is reinforced by the UoR policy which prohibits students for applying for parking permits for campus car parks. Students are also prohibited from parking within 1 mile of the University, enforced by way of a signed agreement between each student and the University.
- 6.12 The anticipated low level of car ownership together with the University student parking policy would ensure that student parking would not impact upon local on-street parking.
- 6.13 The exception to this rule is during the student intake periods when students are moving in and out of student accommodation. UPP together with UoR have developed a management strategy for such time periods which manages vehicle parking on and off site so as to cause minimal disruption to the local network. This has previously been set out in **Section 4**.
- 6.14 Visitor parking would be provided for within the development as per the existing situation, whereby students can apply for half and full day parking permits for visitors. Visitor parking is therefore not anticipated to pose adverse on local on-street parking provision.

Parking Beat Surveys

- 6.15 Notwithstanding the foregoing, it has been acknowledged that local residents of Northcourt Avenue have concerns that an element of on-street parking is practiced by students residing at the existing St. Patrick's Hall. Given this parking beat surveys were undertaken on 11 November 2015 (term time) and 16 December 2015 (out of term time). The datasets showed little variation in on-street parking between the two surveys, indicating no existing on-street parking occurs as a result of the existing Student Halls of Residence in the locality, comprising St. Patrick's Hall, Benyon Hall and Sherfield Hall.

- 6.16 However, a separate survey was also undertaken by the Northcourt Avenue Residents' Association (NARA). This survey identifies a variance of overnight parking during term time, over and above that of the Applicant's surveys. The NARA out of term time survey results were comparable to the Applicant's. Given this the RBC Highways Officer requested that an additional parking beat survey should be undertaken to address the variation in results, in comments dated 26 August 2016.
- 6.17 It was agreed with RBC that the parking beat surveys would be undertaken in accordance with the Lambeth Methodology, which is a generally accepted industry wide methodology. These require that for residential development, parking demand surveys are undertaken within 200 metres of the site between the hours of 00h30 and 05h00 on a weekday Monday to Thursday (inclusive). This time period typically peak levels of residential car parking. As such, parking beat surveys have been undertaken on the following days and times, by an independent specialist survey company, as set out in **Table 6.1**.

Table 6.1: Parking Beat Survey Dates and Times

Date	Day	Time	Term-time/Out of Term
11-11-2015	Wednesday	01:00	Term-Time
16-12-2015	Wednesday	03:00	Out of Term
27-09-2016	Tuesday	02:00	Term-Time
29-09-2016	Thursday	02:30	Term-Time

- 6.18 A review of the parking beat surveys undertaken by NARA indicates only one of these surveys was undertaken within the agreed survey time period.
- 6.19 It should also be noted that the NARA survey area was also not the same as the agreed survey area and therefore the results are not directly comparable, with the NARA survey area being smaller. It is also important to note that the NARA surveys were undertaken by the residents themselves and therefore cannot be considered to be independent or impartial.
- 6.20 As noted surveys have been undertaken by an independent specialist traffic survey company, Tracsis Limited, on three separate occasions in accordance with the agreed methodology. A summary of the results are provided in **Table 6.2** and the full results are attached at **Appendix 10**.

Table 6.2: Parking Beat Survey Results Summary

Survey Period	Term-time		Out of Term-Time		Difference: Term-Time vs Holidays	
Date	No. Cars	Available spaces	No. Cars	Available spaces	No. Cars	Available spaces
Nov/Dec 2015	15	90	11	95	4	-5
27 Sept 2016	11	93	-		0	-2
29 Sept 2016	14	89	-		3	-6
Average	-				2.33	-4.33

- 6.21 The results of the surveys found there was a slight increase in parking demand on-street during term-time, with a maximum of four additional vehicles parked, relative to that of the out of term periods, as presented in **Table 6.2**. This could be attributed to the students, but equally could be attributed to natural variations in parking associated with the local residents, for example, people being holiday or there being overnight visitors. The term time surveys demonstrate there is consistency in the parking demand over-night.
- 6.22 The parking restrictions within the survey area were altered between the November/December 2015 survey and the September 2016 surveys. Double and single yellow lines were implemented on Wellington Avenue South and Northcourt Avenue west reducing the available on-street car parking capacity from 110 spaces to approximately 104 spaces. Parking behaviour remains unchanged on Wellington Avenue; however, parking on Northcourt Avenue has reduced. The overall level of capacity remains similar (**Table 6.3**).

Table 6.3: Parking Demand by Road

Location	11 Nov 2015		16 Dec 2015		27 Sep 2016		29 Sep 2016	
	No. Cars	Available spaces	No. Cars	Available spaces	No. Cars	Available spaces	No. Cars	Available spaces
Northcourt Ave (east)	3	35	2	37	3	36	4	35
Northcourt Ave (west)	9	31	5	36	6	35	8	32
Wellington Ave (north)	1	14	2	12	0	14	0	14
Wellington Ave (south)	2	10	2	10	2	8	2	8
Total	15	90	11	95	11	93	14	89

- 6.23 Comparing the difference between the term-time and holiday period indicates an average of circa 3.5 additional vehicles parking on-street over-night during the term. As detailed, the data does not provide a level of detail that can determine whether these vehicles are associated with the existing student halls. Notwithstanding this, to present a worst case scenario it has been assumed that the additional parking demand is generated by the student halls.
- 6.24 An assessment of the existing parking demand per bedroom for the student's halls has been undertaken. The demand is based on the entire Northcourt Avenue campus. Currently the accommodation at Northcourt provides 1,002 bedrooms within 3 separate halls; Sherfield Hall, Benyon Hall and St Patrick's Hall. The current additional demand for overnight on-street parking in term time is calculated at an average of 2.33 vehicles, ranging between 0 and 4 vehicles. The demand per bedroom is presented in **Table 6.4**.

Table 6.4: Existing Term Time Parking Demand and Demand per Bedroom

Existing Parking Demand	Minimum	Average	Maximum
No. Vehicles	0.0	2.3	4.0
No. Vehicles/Room	0.000	0.002	0.004

- 6.25 The proposed redevelopment will result in a net increase of 702 bedrooms at Northcourt, thus increasing the overall provision of accommodation in the three halls to 1,704 bedrooms. Based on the existing demand per bedroom it is possible to apply this to the proposed level of accommodation to determine the potential on-street parking demand, should students risk ignorance of the current University parking policy, as presented in **Table 6.5**.

Table 6.5: Potential Parking Demand (1,704 bedrooms)

No. Vehicles	Minimum	Average	Maximum
Existing Demand/Room	0.000	0.002	0.004
Potential Parking demand	0	4	7
Net Change	0	2	3

- 6.26 The above assessment indicates that on-street parking demand could potentially increase by 2-3 vehicles, increasing overall demand to a maximum of seven vehicles.
- 6.27 **Table 6.3** identifies there is currently residual overnight parking capacity on-street, of between 89 and 93 parking bays during term-time. As such, should such an increase in parking demand occur as a result of the development proposals, as presented in **Table 6.5**, this could readily be accommodated on-street without having a severe impact on parking demand.

Impact on local Highway Safety

- 6.28 The development is not anticipated to generate a significant number of daily vehicle movements. It is anticipated that a net increase of 20 students might drive daily (29 students daily for the full development). These movements would be spread out over the daily period and therefore are not considered to pose an adverse impact on the local highway safety.
- 6.29 Consideration has been given to the potential impact of the net increase in students forecast to walk to the campus. The PIA data does not indicate that the existing pedestrian crossing facility on Shinfield Road poses any risk to users. However, it is considered that the width of the pedestrian island might need to be increased to serve additional pedestrian movements, in order to ensure that the proposals will not adversely affect safety on the highway.

Overview

- 6.30 This section demonstrates that the trips that would be generated on the development would readily be able to be accommodated by the existing local highway and transport networks and would have a severe impact on their operation in NPPF terms.
- 6.31 Notwithstanding, due to the increase in pedestrian movements, it has been noted that the width of the Shinfield Road pedestrian island may benefit from some widening.
- 6.32 Furthermore, a detailed assessment of the existing parking demand for the local highway network and the effects of potential student on-street car parking has undertaken, and demonstrates that existing on-street parking demand levels are low, with lots of capacity to be able to accommodate additional on-street parking should it occur and would not have a severe impact on its operation or highway safety in accordance with the requirements of the NPPF. Furthermore, the development will provide a safe means of access to the site.

7 CONSTRUCTION TRAFFIC

- 7.1 A Construction Management Traffic Plan (CTMP) would be prepared as a condition of the planning consent. This chapter provides a summary of the routing strategy and management practices that would be employed throughout the construction period.
- 7.2 The principal aim of this CMS is to ensure that any demolition and construction works are organised and delivered in a manner that safeguards the highway impact, highway safety and amenity of the area surrounding the development site.

Operations

- 7.3 The proposed construction period is split over three phases. It is anticipated that phase 1 would commence in September of 2018 with completion anticipated in August 2019. Phase 1 comprises demolition of the existing accommodation at New Court and the student refractory building. Phase 2 is scheduled to commence in early September 2019 with completion in August 2020. Phase 2 comprises of the construction of 268 standard student bedrooms. Phase 3 is scheduled to commence in early September 2020 with completion expected in August the following year. This phase comprises the construction of all remaining accommodation. The phasing plans can be seen in **Appendix 11**.
- 7.4 Construction phases 2 and 3 will each consist of one main construction phase associated with the development build and subsequent interior fit out.
- 7.5 Construction materials will be sourced locally where appropriate, to minimise the environmental impact of transportation. During the construction period, the normal hours of working are proposed to be as follows, to facilitate ease of flow around the peak hours on local roads (unless agreed otherwise with the local planning authority, LPA):
- Monday – Friday: 08:00-18:00
 - Saturday: 08:00-14:00
 - Sundays and Bank Holidays: No operations

Operative Staff and Traffic Generation

- 7.6 The number of operative staff on-site is anticipated to vary over the demolition and construction period of Phases 1, 2 and 3, determined by the intensity of activities on-site. Similarly the level of construction traffic is likely to vary over the construction periods, reflective of the operations being undertaken.
- 7.7 At the peak of the construction phases it is not anticipated that the workforce would exceed 200 operatives onsite with a daily average of 120 operatives attending the site.
- 7.8 During the demolition and site clearance phases it is anticipated that the site could generate 15 – 20 HGV movements daily.

- 7.9 During the Construction phases the major HGV movements should not exceed 60 movements daily.

Traffic Management

HGV Routing Strategy

- 7.10 Construction traffic would access the site from Northcourt Avenue. The vehicle routing strategy has had regard for and avoids routes where vulnerable road users and construction vehicles could conflict. Likewise, it is considered appropriate to avoid routes where scheduled road works and construction vehicles could conflict. The proposed construction routes are outlined below.
- 7.11 It is anticipated that the majority of deliveries would be from the south via the A327 and B3270 from the M4 or A33. Construction vehicles are not permitted to turn right onto Shinfield Road when exiting Northcourt Avenue.
- 7.12 The Reading Borough Council Freight Gateway is a designated Heavy Goods Vehicle Routing strategy for the town. Shinfield Road is designated as a Secondary HGV route rated for vehicles in excess of 25 tonnes, as illustrated in **Appendix 12**. This road is suitable for all required construction deliveries travelling from either north or south, linking the site to both the town centre and the M4 via the A33 or B3031. To prevent shortcuts being taken through the local residential streets of Buckland and Cressingham Road, the contractor will erect way finding signage for HGVs. Clear instructions will be given to suppliers and subcontractors of the delivery regime.
- 7.13 A just in time delivery system will be operational, with vehicles waiting in the numerous lay-bys and lorry parks surrounding Reading town centre. As such there will be sufficient parking availability for HGVs onsite, with limited vehicles waiting on Northcourt Avenue.

Delivery of Plant and Materials

- 7.14 The proposed site compound and car park is located on the existing demolished bungalows (**Appendix 11**), adjacent to the northern southern-most access.
- 7.15 All materials and plant associated with the development process will be stored on site. The area around the construction work will remain presentable and tidy at all times. A loading and unloading area for plant and materials will be provided. Waste from this process will be removed frequently.
- 7.16 Workforce and contractors will be required to consider the movement of existing staff and students of Benyon and Sherfield halls at all times when works are being undertaken. Banksman will be on hand at all times to ensure manoeuvres in and out of the construction compound are undertaken in a safe manner with minimal disruption to pedestrians, cyclists and vehicle movements.
- 7.17 If vehicle movements across pedestrian or cycle corridors it is anticipated then the contractor will provide additional workforce where vehicle, pedestrian and cycle movements interact to guide traffic, pedestrians and cyclists and to ensure safety.
- 7.18 Temporary signage (as appropriate to Traffic Signs Manual Chapter 8) will be erected informing pedestrians, cyclists and vehicles of the construction work and any changes to normal routes, movements or special requirements due to the works.

Contractor Staff Parking

- 7.19 The site's suburban location determines that operatives will typically not be permitted to park on-site. This will minimise potential traffic impact on the immediate highway network and residential area.
- 7.20 It is proposed that operative parking would be provided within the existing car park at the junction of Northcourt Avenue/Sherfield Drive which provides parking for circa 50 vehicles. It is proposed to extend this car park to provide an additional 15 car parking spaces providing a total 65 parking spaces. Car Parking will be provided on site for a further 25 vehicles adjacent to the compound (**Appendix 11**).
- 7.21 Parking within these car parks will be for permit holders only; permits will be issued weekly for those meeting the following criteria:
- Vans with shared occupancies;
 - Crew Buses / Mini Buses;
 - Cars with shared occupancies; and
 - Persons suffering from a disability.
- 7.22 The contractor will actively encourage operative staff to travel by alternative travel modes to that of the private car when accessing the site, making-use of the available public bus services which operate to here, from the town centre and railway station.

Air Pollution, Dust/Dirt and Noise Management

- 7.23 It is important that construction impacts in relation to issues that may arise along the local highway network, as well as increases in vehicle emissions and waste attributable to the proposed scheme, are addressed. Suitable mitigation measures aimed at reducing these impacts with specific regard to transport are identified below.
- 7.24 Robert McAlpine (the appointed construction contractor) fully appreciates the implications of water, air, noise and waste pollution and adopt appropriate working practices. They use recyclable materials and timber from sustainable sources wherever possible. Furthermore, their construction waste is always deposited with specialist waste contractors who recycle as much as possible.

Air Pollution, Dust/Dirt Control

- 7.25 During works the main air pollution emissions are the dust generated when building materials are broken up and the fumes from machinery. The contractors will use high pressure hoses to saturate all bulk materials with water during the process and whilst loading the waste materials for disposal. Sand and cement will be stored in silos or delivered to site ready mixed. Machinery exhaust emissions will be kept as low as is practicable by using well maintained vehicles and machinery at all times.

- 7.26 The three main instances of air pollution emissions during construction works are the use of compressors, generators and portable petrol cut off saws. Any compressors or generators used will be of the latest design available with low emission ratings and will be sited as far from residential units as is practicable. All machinery will be switched off when not in use to minimise emissions as well as noise. Portable petrol cut off saws will be operated with an automatic water applicator. The water application is designed to dampen any arising debris and dust as well as reduce wear to the blade. Use of cut off saws without water attachments will not be tolerated under any circumstances.
- 7.27 All skips will be sheeted when not in use. Given that HGVs serving the site will only be travelling on surfaced roads it is considered that wheel washing facilities will not be required. Notwithstanding this, provision will be made for cleaning of the road whenever required.
- 7.28 The contractor will ensure that the area around the site including the public highway is regularly and adequately swept to prevent any accumulation of dust and dirt.
- 7.29 Burning of materials on site will not be permitted in order to prevent smoke emissions.
- 7.30 Top soils will be seeded to prevent dust spreading.

Vehicle Washing Facilities

- 7.31 Mud and debris on the road is regarded as one of the main environmental nuisances and safety problems arising from construction sites. The contractor will adopt a three stage strategy for keeping vehicles leaving site clean including:-
- Supplying Wheel Washing Facilities at the Main Gate;
 - Visiting Road Brush - During the early stages of the project, Demolition, Site Clearance and Foundations the perimeter local authority's highways will be cleaned regularly by a visiting road brushes; gullies will also be cleaned to ensure that there is no build-up of water on Northcourt Avenue. As the works become cleaner the road brush will be called in when required; and
 - Black Topping Temporary Site Haul Roads at the earliest opportunity to facilitate ease of cleaning by a road brush (visiting or pulled behind a tractor/site forklift).

Noise Control

- 7.32 Noise generated by the demolition and construction process will be considered and its impact on neighbouring properties mitigated. The operating hours for noisy construction and demolition works are to be reduced from those of the site operational hours as set out below:
- Monday-Friday: 08:00-18:00
 - Saturdays: 09:00-13:00
 - Sundays and Bank Holidays: No Operations

- 7.33 The contractor will be required to employ good practice and best available technology to ensure that noise and vibration emissions are kept to a minimum. The contractor will be required to implement the requirements of BS5228:2009 'Code of Practice for noise and vibration control on Construction and Open Sites summarised as follows:
- When carrying out a task, the quietest plant and /or machinery will be used. Regular checks will be made by the site team to ensure that plant, tools and equipment are up-to-date or have been modified to meet the requirements of EEC directives
 - The site team will ensure that all plant, tools and equipment is well maintained and in good mechanical order fitted with the appropriate silencers, mufflers or acoustic covers.
 - As part of the site planning stationary noise sources will be sited as far as possible from noise sensitive development and where necessary, acoustics barriers will be erected to screen the source.
 - Vehicles movement to and from the site will only be permitted within the times agreed with the local authority. These times will be written into the sub contracts and in forced by the site team.
 - As part of the site rules stationary vehicles will be switched off.
 - Absorbent acoustic screens will be erected adjacent to a high sound generation points i.e.: hydraulic breaker mounted on an excavator.
 - We will inform the Noise Team at Reading Borough Council Environmental Protection Team when noisy operations are to take place and when works are likely to overrun.
- 7.34 The contractor will be required to enter into a Control of Pollution Act 1974, Application for Section 61 Prior Consent with Reading Borough Council.

8 SUMMARY AND CONCLUDING COMMENTS

Summary

- 8.1 This Transport Statement has been produced in support of a planning application to redevelop the existing St Patrick's student hall, Northcourt Avenue, Reading to provide a total of 1,000 student rooms plus houses for families. The redevelopment will see the demolition of existing halls which currently provide 182 rooms plus one house and wardens accommodation, while 116 student rooms within Pearson's Court and three houses/bungalows will be retained. The proposals thereby result in a net increase of 702 student rooms. The increase in campus accommodation is sought to serve the existing demand of students.
- 8.2 Vehicular access to the site will be retained from the Northcourt Avenue to the south with access north west of the site to be facilitated. This access is to take the form of a vehicle cross over, with sufficient visibility achieved, as demonstrated in **Appendix 7**. The internal layout will subsequently take the form of a loop road. This layout arrangement will enable one way circulation of traffic.
- 8.3 In line with RBC parking standards parking is provided for staff and visitors only and for the accessible student accommodation units. Car parking will therefore not be available for students on-site, this corroborates with the University Parking Policy. A parking management plan will be employed at student intake and departure periods from halls to minimise disruption to local residents. Visitor parking would be accommodated on-site, with permits issued for half and full days parking.
- 8.4 The proposed site is located in a highly accessible location for all accessing the University campuses on foot and or bicycle, reducing the need to own a car. The site is also well located to access local bus services, which provide frequent services to the town centre seven days a week. There are many local facilities located within 800m of the site, which can be conveniently accessed on foot/cycle.
- 8.5 The existing students travel behaviour provides evidence to support the considered sustainable location of the site with over 90% traveling on foot/cycle to University campus. Only a small proportion of trips are undertaken by car with 7% of students travelling by car for grocery shopping and 6% for shopping trips out of Reading. All remaining trips for all journey purposes are undertaken either on foot/cycle, local bus services for travel within Reading during the day. Trips by taxi form a large proportion of travel for trips at night time. Travel by rail is common for those travelling out of Reading for shopping and Leisure purposes.
- 8.6 Travel by car has been accounted for by the proportion of students issued with parking permits residing at St Patricks Hall the year of the travel survey.
- 8.7 Parking beat surveys commissioned on behalf of the Applicant demonstrate there is minimal variation in night time on-street car parking between the University's term time and non-term time. The assessment demonstrates there is significant existing spare capacity for on-street parking at peak times of residential parking, and that based on a worst-case assessment scenario, the proposed development would generate minimal additional on-street car parking that could easily be accommodated in the local area, with significant spare capacity.

- 8.8 All refuse collection will be carried out in accordance with the existing arrangements. **Appendix 9** demonstrates that a large refuse vehicle (3 axle) is able to enter and exit the site onto the site from Northcourt Avenue in a forward gear.
- 8.9 The net increase for trips on foot is greatest with an increase of 1,028 students undertaking trips daily on foot for various journey purposes. Trips to the campus represent the highest trips with a net increase of 676 students accessing the campus on foot daily. A net increase of 233 students travelling by bus is anticipated daily.
- 8.10 Whilst the net increase in student movements at this location are considered to be new, these actually represent existing movements already on the network. With the site proposed to accommodate existing demand for student accommodation which is currently sought in private rented accommodation across Reading, these trips are therefore not new trips to the wider network.
- 8.11 In the context of public transport, it is therefore likely that these trips are already on the network and therefore there is the potential that only a small proportion of these trips would be new trips on these bus routes.
- 8.12 With regard to pedestrian movements, it is considered that the pedestrian island on the A237 may benefit from some widening to help accommodate the increase in the number of students that would be walking between the application site and the University campus.

Concluding Comments

- 8.13 In conclusion, the Transport Statement establishes that the St Patrick's student hall site is acceptable to serve the proposed development of 1,000 student bedrooms.
- 8.14 It has also been concluded that the impact of the proposed development would not have a severe residual impact on the local highway network in accordance with the requirements of the NPPF. Furthermore, the development will provide a safe means of access to the site.

FIGURES

Figure 1: Site Location Plan



Date: OCT 2015 Scale: NTS Rev: -
 Drwg. No: JNY8681-01 Drawn: AVG Checked: SD

Project: ST PATRICK'S HALL, READING

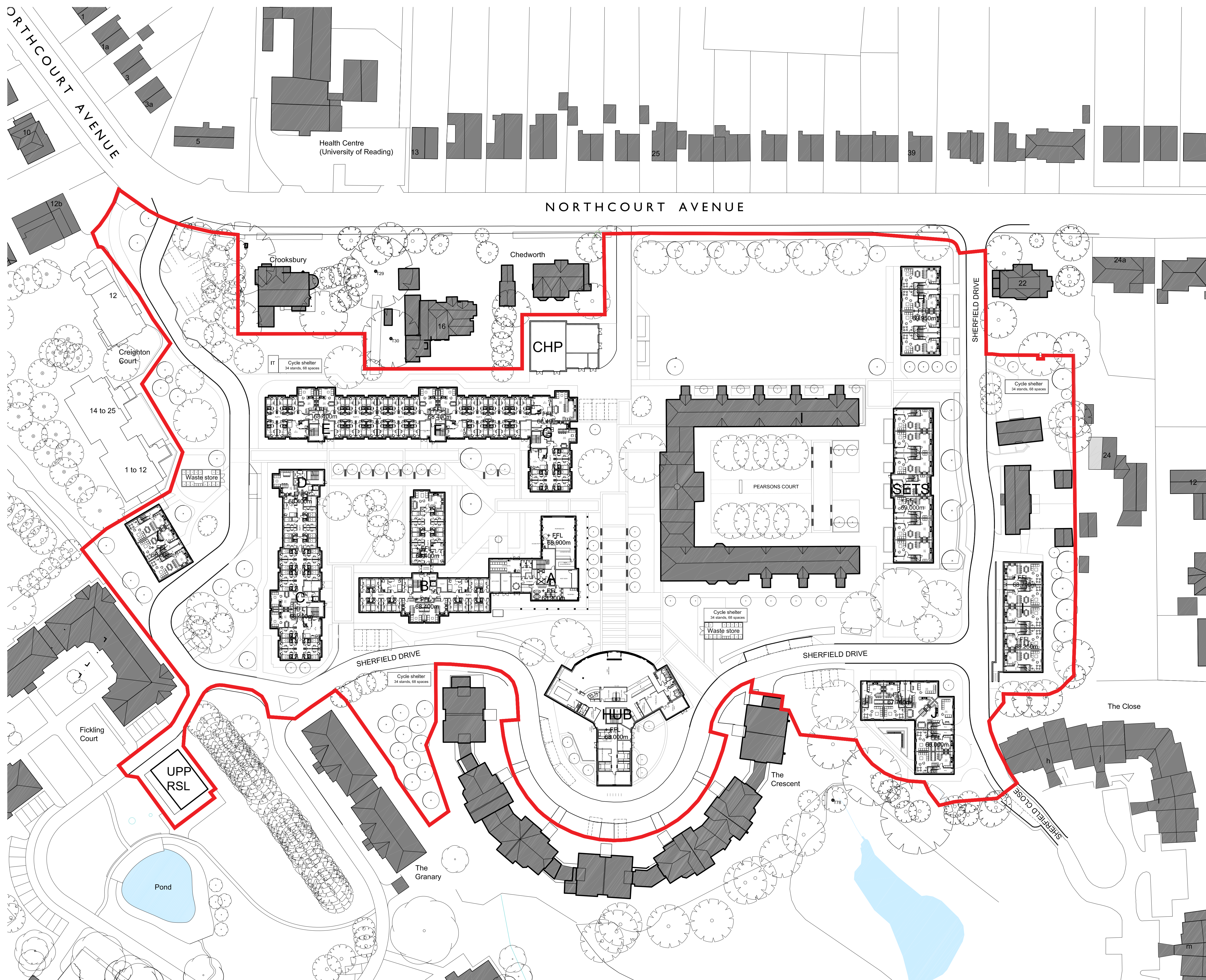
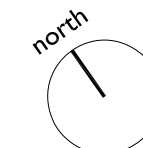
Title: SITE LOCATION PLAN

Figure No: 1

Transport

APPENDICES

APPENDIX 1: MASTERPLAN



Amendment	Drwn	Chkd	Date	Rev
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w|a willmore ile architects

267 Hotwell Road · Hotwells · Bristol · BS8 4SF · Tel: 0117 9450962 · Fax: 0117 9450963
enquiries@hoganiles.com

Drawing Status **PLANNING**

Client

UNIVERSITY PARTNERSHIPS PROGRAMME

Job Title ST PATRICKS HALL
UNIVERSITY OF READING

Drawing Title

PROPOSED SITE PLAN

Scale 1:500	Size A1	Drawn RT	Checked AI	Date NOV 2017
Dwg No StP-WIA-00-GF-DR-A-000003				Rev

APPENDIX 2: PRE-APPLICATION CONSULTATION

Nicola Clay

From: Saunders, Chris <Chris.Saunders@reading.gov.uk>
Sent: 21 September 2015 15:47
To: Shelley Dix
Cc: Andrew Cockerell; Vigar, Stephen; andrewrenshaw@stridetreglown.com; TomLambshhead@stridetreglown.com; Cook, Darren; Lucas, Natalie
Subject: RE: St. Patricks Hall, Reading: Transport Scoping (JNY8681)

Dear Shelley

Thank you for your email and I can confirm that I find your proposed scope for the development at the University's St Patricks Hall acceptable. Even though the number of student rooms are increasing by 700, subject to the halls operator agreeing to the same terms as per the previous Halls redevelopments regarding car ownership, I believe an objection would be hard to maintain for the Highway Authority.

However while I accept that the university claims that the halls are not for new students but to meet current demand, a question that will be asked by members and local residents will be where are the students current residing and what will happen to these residential properties.

Also while I accept that there will be no car parking for students as per the university rental agreement where students sign a waiver that they will not bring cars to the site or vicinity of the site, again residents and members are unlikely to accept this stating that neighbouring roads have a student parking problem. Therefore it may be advisable to undertake parking surveys on the neighbouring roads during a weekday evening, in and out of term to ascertain if there is a parking residue from the existing halls. I would not undertake one during the day as some of the parking is likely to be related to the businesses and community facilities in the area.

As I informed you on my voicemail message I am leaving the authority and joining the Dark Side as an associate with Motion Transport in Guildford in 4 weeks. Therefore I will not be dealing with any of the pre app or formal application on this site. The authority is looking to replace me but I have copied in my two colleagues Darren Cook and Natalie Lucas who will be likely dealing with this.

If you need anything else, please let me know.

Kind Regards

Chris Saunders IEng, FIHE
Transport Development Control Manager
Transport
Department of Environment and Neighbourhood Services

Reading Borough Council
Civic Offices
Bridge Street
RG1 2LU

0118 937 3949 (73949 internal extension)

[Website](#) | [Facebook](#) | [Twitter](#) | [YouTube](#)

From: Shelley Dix [mailto:DixS@rpsgroup.com]

Sent: 21 September 2015 14:19

To: Saunders, Chris

Cc: Andrew Cockerell; Vigar, Stephen; andrewrenshaw@stridetreglown.com; TomLambhead@stridetreglown.com

Subject: St. Patricks Hall, Reading: Transport Scoping (JNY8681)

Hello Chris

I hope you are keeping well.

Further to my voicemail message, I am writing to you in regard to new proposals for the redevelopment of the existing St. Patrick's Halls of Residence at the University of Reading and the associated Transport work that is required to accompany the forthcoming planning application.

The existing St. Patrick's Halls are located on Northcourt Avenue, Reading, RG2 7HB and provide circa 350 student rooms.

The proposals incorporate the demolition of the existing halls of residence and construction of new halls providing circa 1,050 student rooms, an increase of 700 rooms. The proposed increase in student rooms is to cater for current demand, opposed to catering for future growth. No additional car parking is proposed; however, cycle parking will be proposed in accordance with current policy requirements.

It expected there will be a negligible impact in traffic terms associated with the additional students on a day to day basis as they do not have cars and the University has a policy whereby students are not allowed to park on-site or on-campus.

Vehicular access to the site will remain unchanged, which takes the form of a vehicular crossover from the western side of Northcourt Avenue.

Northcourt Avenue is a residential street, with many of the properties having private driveways accessed via vehicular crossovers directly from Northcourt Avenue.

To the north of the site access a variety of waiting restrictions are in force incorporating double yellow lines, single yellow lines preventing waiting on a Monday – Saturday between the hours of 8am and 6:30pm and car parking bays are marked on-street, restricting parking from Monday – Saturday to a maximum of 2 hours between 8am and 6:30pm, with no return within 2 hours.

To the south of the site access in the vicinity of the halls, there are no waiting restrictions in force on the western side of Northcourt Avenue; however, single yellow lines are present on the eastern side western side of the carriageway, preventing waiting on a Monday – Saturday between the hours of 8am and 6:30pm. Further to the south there are no waiting restrictions on either side of Northcourt Avenue.

To the north, Northcourt Avenue connects with the A327 Shinfield Road via a priority junction. Exit movements from Northcourt Avenue are restricted to left out only at this junction. This road forms a give-way arm within the A327 signal controlled junction with Elmhurst Road. Both the A327 arms of the signal controlled junction provide controlled pedestrian crossing facilities comprising dropped kerbs, tactile paving, pedestrian refuge islands and push buttons. Pedestrian movements on the Elmhurst Road arm of the junction are uncontrolled, with dropped kerbs and a pedestrian refuge island provided to assist with pedestrian movements.

To the south Northcourt Avenue connects to Wellington Avenue via a simple priority junction, which in turn connects to the A327 Shinfield Road forming a signal controlled crossroad junction with Shinfield Road and Pepper Lane. All arms of the signal controlled junction provides formal pedestrian crossing facilities in the form of dropped

kerbs, tactile paving and a push button, with refuge islands also provided on the Wellington Avenue and Pepper Lane arms of the junction.

The main University of Reading campus is located on the eastern side of the A327 Shinfield Road, with St. Patrick's Hall located on the western side.

The University has an existing Travel Plan that incorporates St. Patrick's Hall. This will continue to be implemented for the redeveloped St. Patrick's Hall.

On the basis that the students are not permitted to park on-site or on campus and the fact the Halls are located very close to the main University Campus, vehicular movements associated with the Halls are and will continue to be minimal, with the large majority of daily movements made by sustainable modes of travel. It is therefore considered that the preparation of a Transport Statement would be appropriate for submission in support of the forthcoming planning application. It is proposed the Transport Statement will consider the following:

1. Existing accessibility by all modes of travel;
2. Personal injury accident data for the most recent three-year period available;
3. Existing modal splits associated with the existing St. Patrick's Halls. Whilst the existing Travel Plan provides modal split data for the UoR campuses, it does not provided modal split data specific to St. Patrick's Halls of Residence. In regard to the various halls of residence the Travel Plan sets out that use of a car alone to travel to University is extremely rare, typically around 1% of trips to University. It is therefore proposed that a web-based travel survey is undertaken to establish the existing modal splits for St. Patrick's Hall to enable an estimate of the post development multi-modal trips to be made;
4. Relevant national and local transport policies;
5. The development proposals, including pedestrian, cycle, vehicular and servicing arrangements, cycle and car parking provision and servicing arrangements;
6. The net increase in multi-modal trips resulting from the development proposals;
7. The likely impact of the additional trips on the local highway and transport networks; and
8. Provide a summary and conclusions.

Since car based trips will be minimal, it is considered that detailed junction capacity assessments will not be required.

Furthermore, on the basis the University of Reading has an existing Travel Plan that encompasses St. Patrick's Halls, the preparation of a separate stand-alone Travel Plan is not proposed as it is considered this would not be appropriate for this development.

I trust the above scope of work is acceptable and look forward to receiving your confirmation. In the meantime, if you have any queries please call me wither on the office phone or on my mobile.

Kind regards
Shelley

Shelley Dix
Associate (Transport) - RPS Planning & Development
14 Cornhill,
London, EC3V 3ND.
United Kingdom
Tel: +44 (0) 20 7280 3200
Fax: +44 (0) 20 7283 9248
Mobile: +44 (0) 7919 215465
Email: DixS@rpsgroup.com
www: www.rpsgroup.com

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APPENDIX 3: RBC CYCLE MAP

