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STONEHILLS, **WELWYN GARDEN CITY**

PROPOSED RESIDENTIAL AND RETAIL DEVELOPMENT

TRANSPORT STATEMENT

17125/FPEC May 2019

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1. INTRODUCTION

- 1.1 COTTEE Transport Planning are instructed by Amsprop Estates Ltd to prepare a Transport Statement to accompany a planning application for a residential development and retention of retail space at ground floor level at 26 Stonehills, Welwyn Garden City, Hertfordshire, AL8 6NA.
- 1.2 This report examines the existing transport network and reviews the transport impacts of the proposed development.
- 1.3 In particular it considers the effect of the development being car-free in the city centre.
- 1.4 There have been pre-application discussions with Welwyn Hatfield Borough Council (WHBC) which have been taken into account in the development of the scheme.



2. THE SITE AND EXISTING TRANSPORT NETWORK

The Site

- 2.1 The site is located in Welwyn Garden City Centre on the western side of Stonehills and is currently occupied by Debenhams.
- 2.2 Immediately north of the site are landscaped gardens traversed by Sir Theodores Way, a pedestrian thoroughfare which links Stonehills to the south east with Wigmores North to the north west. The western site boundary is formed by Wigmores North and the John Lewis customer car park. Further retail premises and a shared loading / delivery area form the southern site boundary.
- 2.3 Being a city centre location there are a wide range of shops, services, and facilities near the site. These include cafes, clothes shops, restaurants, banks, a nursery, bus station, rail station, Waitrose food store, Sainsbury's food store, library, college, and business park all within 600m (8 minute walk distance) of the site.
- 2.4 A site location plan is included at Figure 1 and a site context plan at Figure 2.

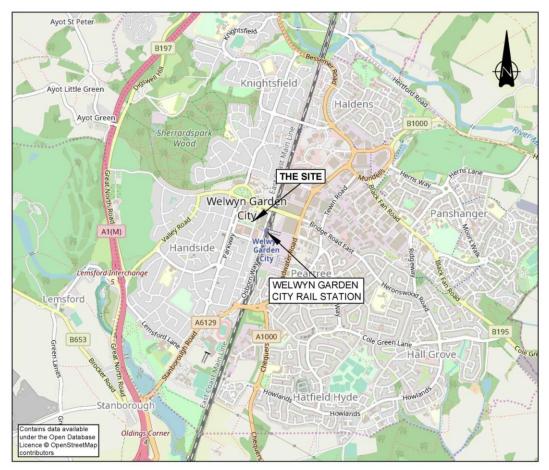


Figure 1: Site Location

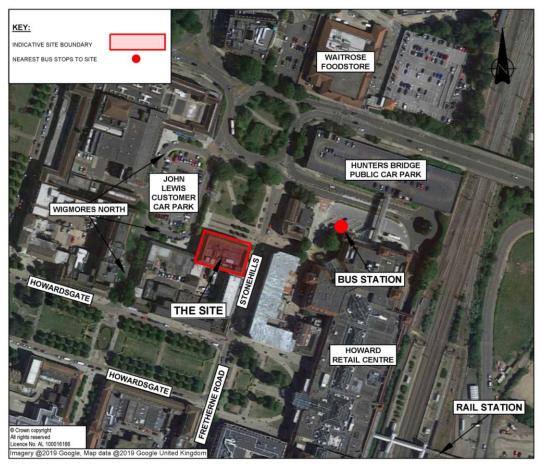


Figure 2: Site Context

Local Road Network

- 2.5 Stonehills is a no through road with a turning head at its northern end. To the south it becomes Fretherne Road. It is street lit and subject to a 30mph speed limit.
- 2.6 Wigmores North forms the western site boundary and connects to the B195 (Bridge Road) / Osborn Way / Wigmores North roundabout junction around 70m north of the site.
- 2.7 In the wider context, the A1(M) passes around 1.8km west of the site and Hertford is around 10km east.

Parking

- 2.8 The site is located within the city centre where a variety of on-street parking restrictions are in operation and where there are a number of car parks.
- 2.9 The car parks and parking restrictions in place in the site vicinity are as follows:
 - Double yellow lines and no loading markings operate on the western side of Stonehills
 from adjacent to the main retail entrance of the site up to the northern turning head of
 Stonehills. No parking is permitted on this stretch of Stonehills, nor is loading.
 - On the western side of Stonehills to the south east of the site there around 8 marked parking bays and a parking bay of around 20m in length where parking restrictions apply of a 1 hour maximum stay Monday to Saturday 0800 – 1800 with no return with 1 hour.



One disabled bay also operates with a restriction of 3 hours stay and no return within 1 hour.

- On the eastern side of Stonehills there are 14 marked parking bays and 4 disabled bays which have the same parking regimes as above.
- On the northern and southern sides of Howardsgate (south of the site) there are a further 4 disabled bays, 2 Electric Vehicle Charging Points (EVCPs) and over 150m of parking bays. Again, restrictions to standard bays are 1 hour maximum stay Monday to Saturday 0800 1800 with no return with 1 hour. Disabled bays operate with a restriction of 3 hours stay and no return within 1 hour, and EVCPs restrict use to 4 hours stay with no return within 4 hours.
- A taxi rank also operates on the north east of Howardsgate and the eastern side of Fretherne Road adjacent to Howardsgate.
- To the north west of Wigsmore North there are 5 disabled bays and a taxi rank. Over 100m of standard parking is also spread across two bays located on the eastern side of Wigsmore North directly adjacent to the site and at the southern end of Wigsmore North.
- Two car parks are within walking distance of the site. The John Lewis Customer Car Park
 is located at the north west site corner and is open daily between 0855 1930 Monday to
 Saturday and 1025 1730 on a Sunday. The 638 space WHBC Hunters Bridge Car Park
 is located 150m north east of the site and open 24 hours 7 days a week.

Public Transport

- 2.10 The plan at **Appendix A** illustrates the bus service provision in Welwyn Garden City. The plan demonstrates there is a good range of bus services serving all parts of the city and connecting to other major centres.
- 2.11 The closest bus stops to the site are at Welwyn Garden City Bus Station within 80m (1 minute walk distance) east of the site on Osborn Way. The bus station can be accessed on foot via Stonebank, a pedestrianised road on the eastern side of Stonehills which also provides access to the Howard Centre retail complex within which the rail station is located.
- 2.12 There are 23 bus services that either terminate at or call at the bus station. Nine of the services call at least once an hour or more frequently.
- 2.13 Welwyn Garden City rail station is accessible from within the Howard Centre retail complex just 260m (3 minutes walk distance) from the site. The Great Northern and Thameslink rail networks operate from the station with around 10 trains per hours providing services to London Kings Cross, Cambridge and Moorgate.

Pedestrian and Cycle Routes

2.14 There is a well established network of pedestrian routes and crossing points in the area. There is a mixture of pedestrian thoroughfares surrounded by gardens, footways adjacent to roads, and car free pedestrian shopping areas in the site vicinity. All footways are of good standard, wide, and street lit.



- 2.15 Routes 12, 57, and 61 of the Sustrans National Cycle Network (NCN) are accessible from the city centre. Route 57 can be accessed at the southern end of Stonehills, 60m south east of the site. This route connects to Route 12 to the east and Route 61 to the south east.
- 2.16 A map of the local cycle network is shown at **Figure 3** below.

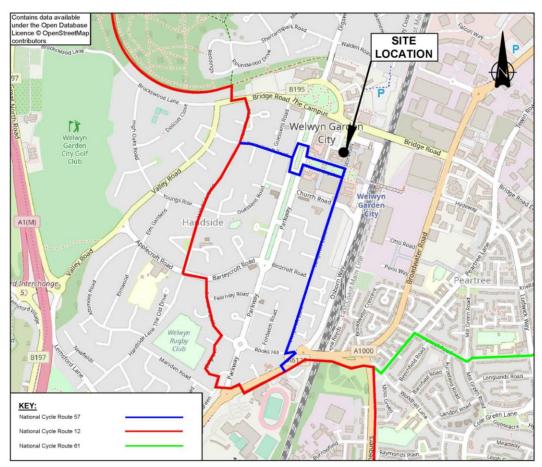


Figure 3: Cycle Network



3. DEVELOPMENT PROPOSALS

- 3.1 The proposed development comprises of redeveloping the existing Debenhams at 26 Stonehills to residential use at first, second, and third floors and retaining retail use at ground floor level.
- 3.2 A third storey will be built to provide 27 flat units at first, second, and third floor levels comprising of 19 one bedroom units and 8 two bedroom units. There will be 1026 sqm of retail space retained at ground floor level, this space could be partitioned to provide either one or two retail spaces.
- 3.3 The entrance to the retail use will remain as existing at the north east corner of the site. The main residential entrance will be located at the south east site corner on Stonehills, whilst a secondary residential entrance will be at the north west site corner on Wigmores North.
- 3.4 A proposed site layout is included at **Appendix B**.
- 3.5 A residential refuse store will be provided on the western site boundary accessible from Wigmores North. Refuse vehicles will gain access to the residential refuse store from Wigmores North. Refuse collection for the retail space will remain as existing using the service area on the south side of the building.
- 3.6 The development will be car free so there will be no car parking spaces.
- 3.7 In accordance with standards, 28 cycle spaces will be provided in a secure cycle storage area within the ground floor of the building.

4. DEVELOPMENT IMPACTS

4.1 In order to understand the impact of the development, the number of people movements during peak times and through the day has been assessed based on surveys of existing similar sites.

The proposed mode of travel has been derived from the latest Census data.

Mode of Travel - Residential

- 4.2 The latest Trip Rate Information Computer System (TRICS) database includes details of multimodal surveys of residential (flats) sites in town centre locations and provides an indication of the number of trips associated with the residential use.
- 4.3 The TRICS output is attached at **Appendix C** and indicates the following total person trips per unit:

Time Period	Arrivals	Departures	Total	
0800 – 0900 0.056		0.449	0.505	
1700 – 1800 0.607		0.229	0.836	
0700 - 1900	2.527	2.514	5.041	

4.4 For 27 residential units the total number of person trips will be:

Time Period	Arrivals	Departures	Total	
0800 – 0900	2	12	14	
1700 – 1800 16		6	22	
0700 - 1900 68		68	136	

4.5 The mode of travel of a particular site is best represented using information from the 2011 Census regarding "Travel to Work". Details from the Output Area which covers the town centre are included at **Appendix D** and a summary of the information is set out below:

•	Walk	17%
•	Cycle	2%
•	Motorcycle	0%
•	Bus	5%
•	Rail	27%
•	Car	47%
•	Car Passenger	1%
•	Other	1%

4.6 From the information above, 51% of people living in the site output area in the city centre use sustainable modes of travel. This compares to the whole of Welwyn Hatfield where only 31% of people use sustainable modes of travel.



- 4.7 Given that the development is well located to public transport and cycle links and the site will be car free, then the proportion using a car to travel will be very low. The provision of cycle parking on-site will also encourage cycling, while the availability of good public transport facilities in the vicinity will encourage bus and rail travel.
- 4.8 Accordingly, the mode of travel proportions have been adjusted to provide a site specific modal split as follows:

•	Walk	40%
•	Cycle	10%
•	Motorcycle	0%
•	Bus	15%
•	Rail	30%
•	Car	2%
•	Car Passenger	3%

- 4.9 Using the modal split data from the Census enables values for person trips by travel mode from the residential aspect of the development to be calculated.
- 4.10 The total person trips by various modes are as follows:

Mode	0800 – 0900 Hours	1700 – 1800 Hours	0700 – 1900 Hours	
Walk	6	9	54	
Cycle 2		2	14	
Motorcycle	0	0	0	
Bus	2	3	20	
Rail / Underground	4	7	41	
Car	0	0	3	
Car passenger	0	1	4	
Total	14	22	136	

4.11 As a result of the trip generation analysis undertaken above, it is anticipated that vehicle movements associated with the proposals will be very low, with a high proportion of trips undertaken using sustainable modes, primarily walking, cycling, bus, and rail services. The impact of the proposals will therefore not be severe.

Mode of Travel - Retail

4.12 It should also be noted that the existing site will have generated a considerable number of people movements. The building has no existing parking on the site and so has already been operating on a restricted basis with customers having walked into the city or used the local parking provision in the city.



- 4.13 Vehicle trips associated with both the existing and proposed retail use will be linked trips with the city centre, whereby the majority of customers who drive to the city visit a number of shops and facilities rather than just Debenhams or the proposed retail use. Therefore, the development proposals are unlikely to materially change the number of existing person trips to the city centre.
- 4.14 The existing Debenhams retail space is 2105 sqm over three floors. This will be reduced to 1026 sqm at ground floor level only i.e. reducing the retail space by over 50%. Consequently, the development is not expected to result in a significant number of new additional vehicle movements to the city centre.

Welwyn Garden City Infrastructure Improvements

- 4.15 The current parking arrangements in the site vicinity are detailed in **Section 2**. Herts County Council (HCC) and WHBC propose improvement works to the parking arrangements in the site vicinity, especially on Stonehills, Fretherne Road, Howardsgate, and Wigmores North. Overview plans of the changes from the now completed consultation are attached at **Appendix E** and a summary of the proposals is as follows:
 - The northern end of Stonehills will become a 'Pedestrian Zone';
 - Parts of Howardsgate, Wigmores North, Fretherne Road, and Stonehills will become a
 'Restricted Zone' whereby no waiting or loading is permitted at anytime except in signed
 bays. Proposals are shown at Appendix E;
 - There will be a 20mph zone on parts of Howardsgate, Wigmores North, Fretherne Road, and Stonehills;
 - Fretherne Road will become one way southbound with a counter flow cycle lane;
 - Wigmores North will become one way entry from Howardsgate. Cyclists will be exempt from this restriction;
 - An additional 'parking place' on Wigmores North with the same parking regime as other bays; and
 - Flat topped road humps and junction speed tables on parts of Parkway, Howardsgate, Wigmores North, Stonehills, and Fretherne Road to encourage sustainable travel and reduce vehicle speeds.
- 4.16 The above proposals are designed to reduce traffic circulation in the town centre, improve the environment for pedestrians and cyclists and to enhance the experience for people using the town centre. The proposed car-free development will compliment these town centre improvements by encouraging the use of sustainable modes of travel from a location where there is excellent access to a wide range of facilities, public transport modes, and employment areas.

Parking

4.17 Policy M14 of the WHBC District Plan 2005 states:

"The Council will require parking provision for new development to be made in accordance with the standards set out in the Council's supplementary planning guidance on parking. These standards represent the maximum allowable provision, except for



cycle parking and car parking for disabled people where the standards represent the minimum allowable.

In urban areas of the district which are accessible by non-car modes, the Council will require parking standards for non-residential development to be reduced below the maximum allowable provision, in line with the methodology set out in the supplementary planning guidance on parking, unless it can be clearly demonstrated that such a limitation to the development would be detrimental to the economic viability of the area. The zones where such reductions will be applied are identified in the supplementary planning guidance."

- 4.18 The parking standards Supplementary Planning Guidance (SPG) document adopted January 2004 outlines WHBC maximum parking standards for residential developments. A zonal approach is used within the document whereby zonal-based parking restraint can be applied in more accessible areas. For example, the site is in Welwyn city centre (Zone 1). The document notes that car parking provision in Zone 1 can be applied at 0 25% of the maximum demand based standard and that "the general presumption is to impose the lower (most restrictive) end of each range".
- 4.19 The parking standards within the document for C2 residential dWelwyns in Zone 1 and 2 are outlined below:
 - 0.75 spaces per one bedroom dWelwyn; and
 - 1 space per two bedroom dWelwyn.
- 4.20 There will be 27 dWelwyns onsite, 19 one bedroom and 8 two bedroom units. According to the above maximum standards up to 22 spaces could be provided. A zonal based approach however would indicate 0% to 25% of this could be provided.
- 4.21 Following production of the Interim Policy for Car Parking Standards and Garage Sizes (approved in 2014), WHBC treats the above standards and zonal approach as guidelines rather than maximums and notes:

"Planning applications will be determined on a case-by-case basis to achieve a sensible level of provision taking account of existing SPG standards, NPPF guidance, the relevant circumstances of the proposal, its site context and its wider surroundings."

- 4.22 The existing Debenhams store does not provide customer parking being a city centre location where the majority of customer trips will be linked with a visit to the city and other shops and facilities. Therefore, by reducing the floor area by over 50% it is proposed that no parking provision will continue to be provided.
- 4.23 Given the excellent access to public transport, local facilities, and employment areas a car free proposal is considered reasonable in this city centre location.
- 4.24 A secure cycle store will be provided on ground floor level with provision of 28 cycle spaces for the residential units. This is in accordance with standards of one cycle space per residential unit outlined within WHBC standards.



Pedestrian and Cycle Movement

4.25 The site is well located for pedestrian and cycle access. The pedestrian network is well established with good quality, wide footways in the area and safe crossing points. The site is in the city centre where the pedestrian environment is prioritised and due to undergo further improvements.

Public Transport

- 4.26 The site is close to a range of bus services in the city centre with the bus station being located just 80m (1 minute walk distance) from the site where there are 23 bus services that either terminate at or call at the bus station. Nine of the services call at least once an hour or more frequently. Several service routes provide connection to employment areas surrounding the city centre.
- 4.27 Welwyn Garden City rail station is within a 3 minute walk and provides regular services to London Kings Cross, Cambridge and Moorgate.

Local Facilities

- 4.28 Being a city centre location there is immediate access to many shops. In addition, there is excellent access to numerous other facilities within 800m (8 minute walk distance) of the site, including those outlined below:
 - · Waitrose, Sainsbury's, and Aldi food stores
 - Pubs, Bars, and Cafes
 - Banks
 - Bus Station
 - Rail Station
 - GP Surgery
 - Opticians
 - Dentist
 - Nursery
 - Preschool
 - College
 - Pharmacies
 - Business Park
 - Retail Park
 - Post Office
 - Leisure Centre
 - Theatre
 - Cinema
 - Gym
 - · Council offices
 - Library
- 4.29 Further facilities including several employment areas are accessible within 1600m (20 minute walk distance). This includes Shire Park where Tesco Head Offices are based. These employment areas can be reached on foot, by bike, and by local bus services from the bus station.



4.30 The excellent access to facilities in close proximity to the site demonstrates that residents can use sustainable forms of transport to easily access numerous facilities including food stores, GP surgeries, trains and buses for wider travel, and employment areas. Thus, showing the site is a sustainable car free location.

Disabled Parking

- 4.31 The plan attached at **Appendix F** shows there are currently 10 disabled parking bays in the immediate site vicinity on Stonehills and Wigmores North. These do not have time restrictions between 1800 and 0800 and all day Sunday.
- 4.32 The provision of disabled parking bays on Stonehills will change slightly alongside the proposed WHBC improvements, but will still remain high (as shown on the plan at **Appendix E**).

Visitor Parking

4.33 Any visitors who arrive by car will be able to park in the 638 space WHBC Hunters Bridge Car Park which is located 150m (2 minutes walk distance) north east of the site and open 24 hours 7 days a week. There is very good pedestrian connection between the car park and the site which will be enhanced further by the proposed WHBC pedestrianisation of the northern end of Stonehills.

Servicing

- 4.34 A residential refuse store will be provided on the western site boundary accessible from Wigmores North. Refuse vehicles will gain access to the residential refuse store from Wigmores North. This will be facilitated by a proposed loading bay on the eastern side of Wigmores North which will replace around 12m of on-street parking.
- 4.35 This has been agreed in principle by Hertfordshire County Council (HCC) and a plan of the proposed position of the loading bay is attached at **Appendix G**.
- 4.36 Refuse collection for the retail space will remain as existing.

5. TRANSPORT POLICY

National Policy

- 5.1 National Transport Policy is contained in the National Planning Policy Framework (NPPF) February 2019.
- 5.2 Section 9 deals with Promoting Sustainable Transport and paragraph 102 states:
 - "Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:
 - a) the potential impacts of development on transport networks can be addressed;
 - b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised for example in relation to the scale, location or density of development that can be accommodated;
 - c) opportunities to promote walking, cycling and public transport use are identified and pursued:
 - d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
 - e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places"
- 5.3 Paragraphs 109 and 110 require consideration to be given to sustainable travel modes, the needs of people with disabilities, safe layouts, the delivery of goods, and provision for plug-in and ultralow emission vehicles.
 - "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Within this context, applications for development should:

- a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second so far as possible to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- c) create places that are safe, secure and attractive which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

- d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."
- 5.4 This TS demonstrates that the development gives priority to pedestrian and cycle movements by being car free and through its sustainable location within walking distance of many facilities and public transport. Servicing of the site can also be achieved efficiently.
- 5.5 Paragraph 111 refers to the need for Travel Plans and Transport Statements or Transport Assessments:

"All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed."

- This TS demonstrates how the site is well located for access to sustainable transport modes. Being car-free, the development encourages the use of sustainable modes of travel primarily resulting in the traffic impact on local roads being negligible, therefore in accordance with the aims of national policy.
- 5.7 The development is in a city centre location on a site which already has no parking provision and therefore its cumulative impacts could not be considered as severe.

Local Policy

5.8 Policy D1 (Quality of Design) of the WHBC District Plan 2005 outlines policy for the quality of design in new developments:

"The Council will require the standard of design in all new development to be of a high quality. The design of new development should incorporate the design principles and policies in the Plan and the guidance contained in the Supplementary Design Guidance."

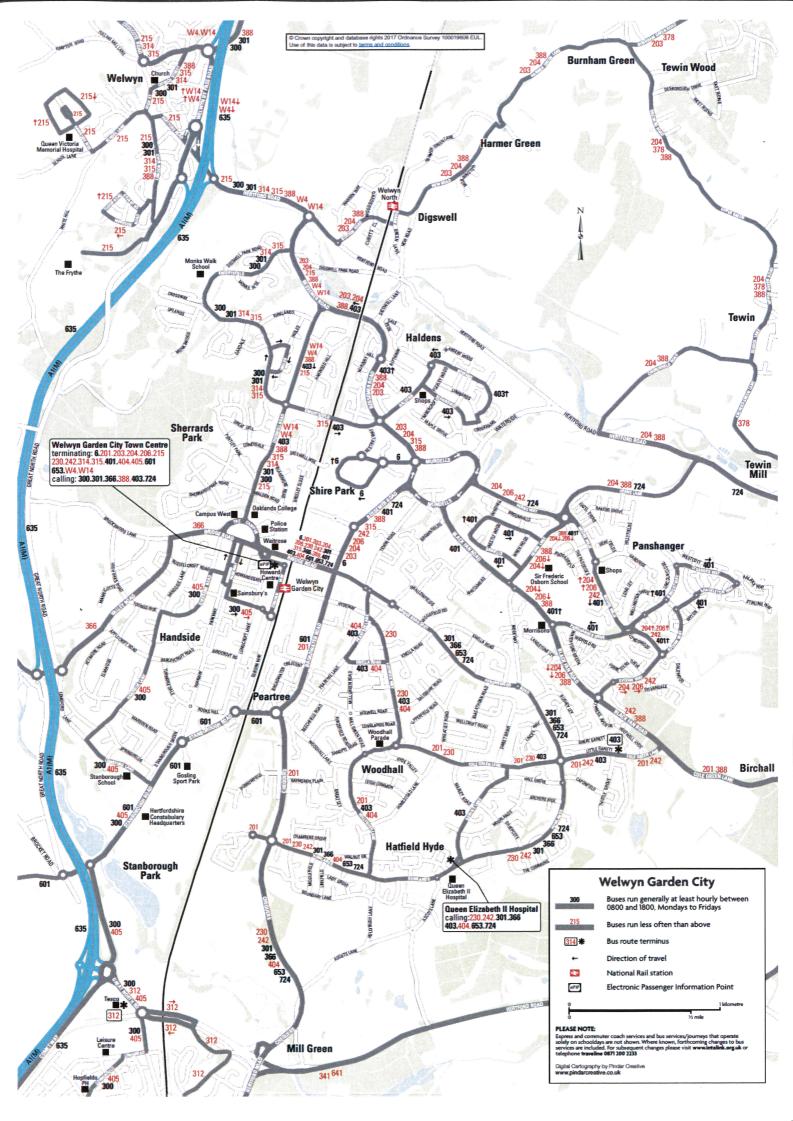
- 5.9 Supplementary planning guidance for parking is set out in the parking standards Supplementary Planning Guidance (SPG) document adopted January 2004 and Interim Policy for Car Parking Standards and Garage Sizes (approved in 2014). These are discussed in **Section 4**.
- 5.10 The development will minimise the impacts of motor vehicles and encourage journeys on foot, by bicycle and passenger transport. Therefore, given the excellent access to public transport, local facilities, and employment areas a car free proposal is considered reasonable in this city centre location.
- 5.11 The proposals are therefore in conformity with both national and local transport policies by encouraging the use of sustainable travel modes and restricting car use.

6. SUMMARY AND CONCLUSIONS

- This Transport Statement supports a planning application for residential and retail development at 26 Stonehills, Welwyn Garden City. It reviews the transport provision and considers the impact of the scheme.
- 6.2 The proposals comprise 27 flat units of which 19 are one bedroom and 8 are two bedroom.
- The site is located in the city centre and so is within a well established network of footways, pedestrian dominated streets and safe crossing places for pedestrian activity.
- 6.4 It has cycle parking provision for each of the residential unit and is close to existing and proposed cycle routes for the town.
- 6.5 The site has excellent access to a range of bus services in the town centre serving destinations within the town and further afield. In fact the bus station is 80m (1 minute walk distance) from the site and provides access to 23 bus services.
- The rail station is within a 3 minute walk to the north of the site providing access to around 10 trains per hour providing services to London Kings Cross, Cambridge and Moorgate.
- 6.7 The proposals are car free and this aspect is supported by the following reasons;
 - Being in a city centre there is access to a wide range of local facilities;
 - There are excellent employment opportunities locally;
 - The site is well located for access to sustainable travel modes of walking, cycling, travelling by bus and train;
 - It is not possible to park a car for 24 hours close to the site other than on a Sunday or in the paid for public car park. There is a parking regime on street which prevents this; and
 - The proposals are supported by national and local transport policy encouraging the use of sustainable modes of travel.
- 6.8 It is therefore considered that the transport impacts of the proposed scheme are not severe in the context of NPPF and the proposals should not be refused on transport grounds.

APPENDIX A

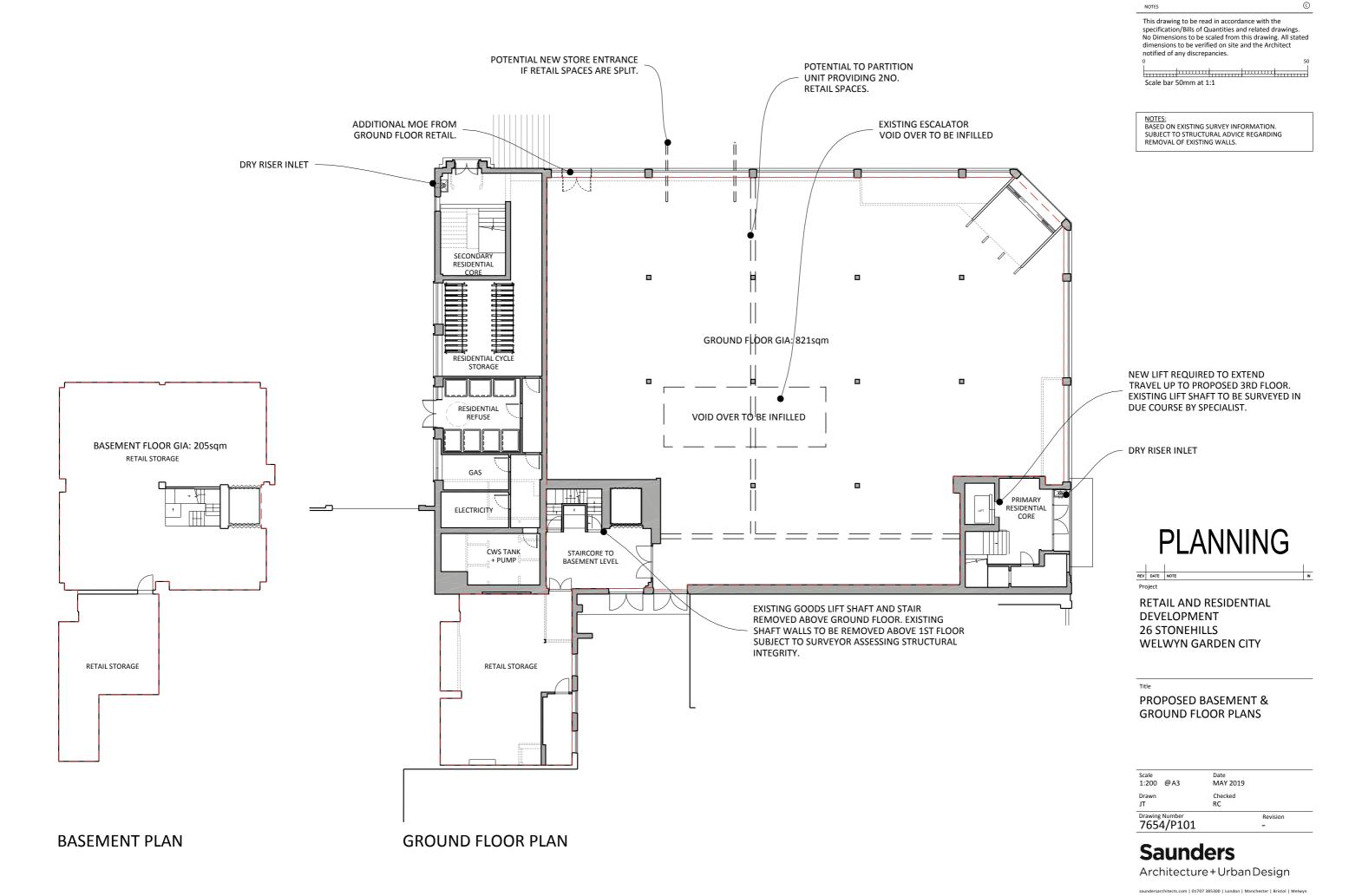
BUS SERVICES



APPENDIX B

PROPOSED SITE LAYOUT





APPENDIX C

TRICS OUTPUT

TRICS 7.6.1 230419 B19.07 Database right of TRICS Consortium Limited, 2019. All rights reserved Wednesday 24/04/19 17125 Residential TR Page 1

COTTEE TRANSPORT PLANNING FIR LODGE FEERING Licence No: 719701

Calculation Reference: AUDIT-719701-190424-0426

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLES

Selected regions and areas:

08 NORTH WEST
GM GREATER MANCHESTER

2 days

09 NORTH

CB CUMBRIA 1 days

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

Secondary Filtering selection:

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

Parameter: Number of dwellings Actual Range: 20 to 154 (units:) Range Selected by User: 6 to 175 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 05/06/18

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

Selected survey days:

Thursday 2 days Friday 1 days

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

Selected survey types:

Manual count 3 days
Directional ATC Count 0 days

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

Selected Locations:

Town Centre 3

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

Selected Location Sub Categories:

Built-Up Zone 3

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

Secondary Filtering selection:

Use Class:

C3 3 days

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

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Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000 3 days

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

Population within 5 miles:

75,001 to 100,000 1 days 500,001 or More 2 days

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

Car ownership within 5 miles:

0.6 to 1.0 2 days 1.1 to 1.5 1 days

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

Travel Plan:

No 3 days

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

PTAL Rating:

No PTAL Present 3 days

This data displays the number of selected surveys with PTAL Ratings.

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LIST OF SITES relevant to selection parameters

1 CB-03-C-01 BLOCK OF FLATS CUMBRIA

KING STREET CARLISLE

Town Centre Built-Up Zone

Total Number of dwellings: 40

Survey date: THURSDAY 12/06/14 Survey Type: MANUAL
GM-03-C-02 BLOCK OF FLATS GREATER MANCHESTER

WHITWORTH STREET W.

MANCHESTER

Town Centre Built-Up Zone

Total Number of dwellings: 154

Survey date: THURSDAY 13/10/11 Survey Type: MANUAL GM-03-C-03 BLOCK OF FLATS GREATER MANCHESTER

FAIRFIELD STREET MANCHESTER

Town Centre Built-Up Zone

Total Number of dwellings: 20

Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

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

COTTEE TRANSPORT PLANNING FIR LODGE FEERING

Licence No: 719701

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES		TOTALS			
	No.	Ave.	Trip	No. Ave. Trip			No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	71	0.014	3	71	0.117	3	71	0.131
08:00 - 09:00	3	71	0.056	3	71	0.449	3	71	0.505
09:00 - 10:00	3	71	0.051	3	71	0.266	3	71	0.317
10:00 - 11:00	3	71	0.098	3	71	0.131	3	71	0.229
11:00 - 12:00	3	71	0.145	3	71	0.187	3	71	0.332
12:00 - 13:00	3	71	0.187	3	71	0.252	3	71	0.439
13:00 - 14:00	3	71	0.224	3	71	0.196	3	71	0.420
14:00 - 15:00	3	71	0.215	3	71	0.126	3	71	0.341
15:00 - 16:00	3	71	0.234	3	71	0.187	3	71	0.421
16:00 - 17:00	3	71	0.411	3	71	0.332	3	71	0.743
17:00 - 18:00	3	71	0.607	3	71	0.229	3	71	0.836
18:00 - 19:00	3	71	0.285	3	71	0.042	3	71	0.327
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.527			2.514			5.041

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

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

APPENDIX D

2011 CENSUS DATA

Method of Travel to Work (QS701EW)

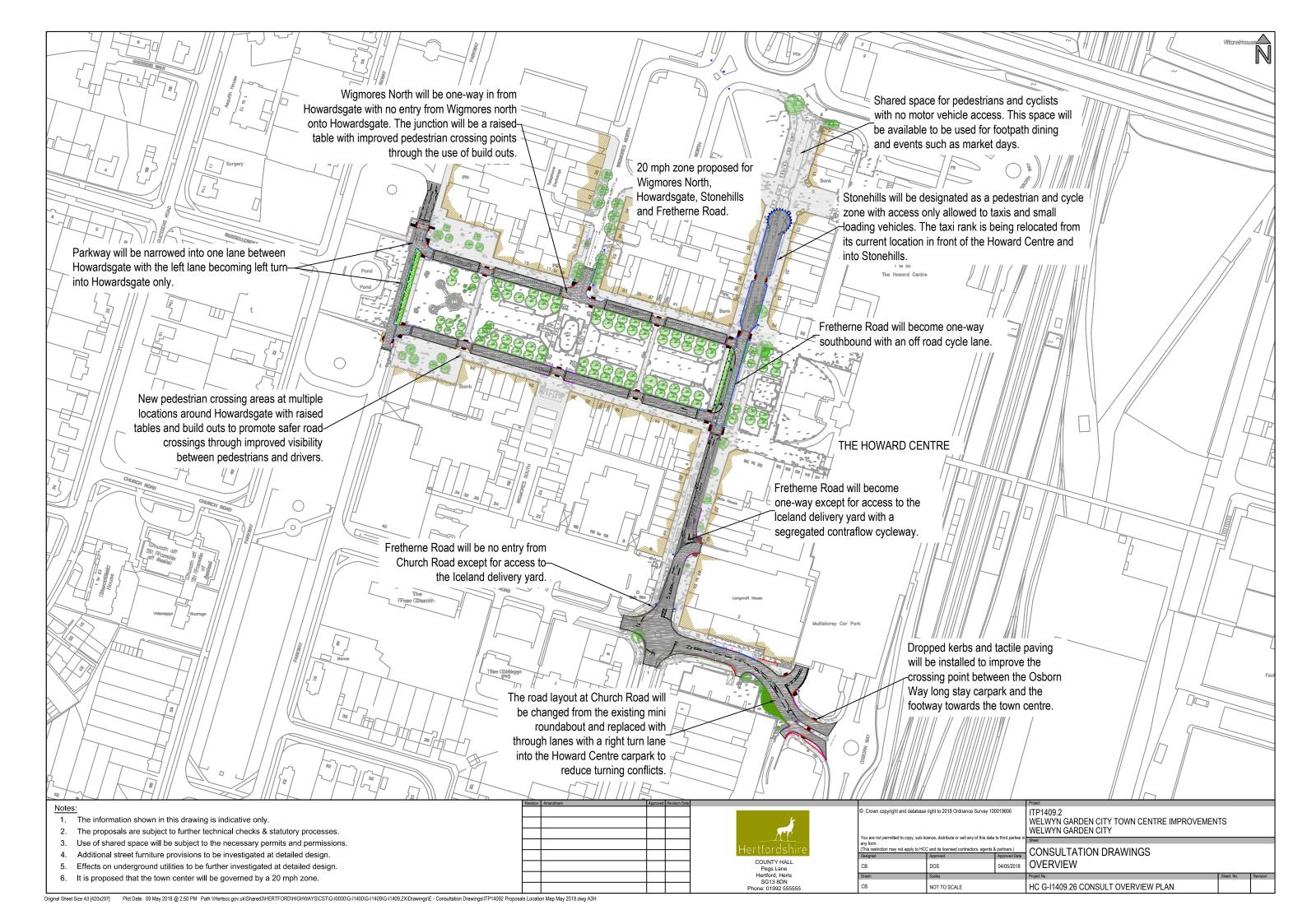
	E00121439		Welwyn Hatfield		East of England		England	
	Output Area		District		Region		Country	
All Usual Residents Aged 16 to 74	150		50083		2688084		23813153	
Underground, Metro, Light Rail, Tram	3	2%	684	1%	33110	1%	1027625	4%
Train	38	25%	5402	11%	205077	8%	1343684	6%
Bus, Minibus or Coach	7 5%		2251	4%	106303	4%	1886539	8%
Taxi	0	0%	280	1%	13227	0%	131465	1%
Motorcycle, Scooter or Moped	0	0%	396	1%	22475	1%	206550	1%
Driving a Car or Van	70	47%	31009	62%	1757121	65%	14345882	60%
Passenger in a Car or Van	2	1%	2498	5%	143749	5%	1264553	5%
Bicycle	3	2%	1398	3%	100651	4%	742675	3%
On Foot	25	17%	5919	12%	288663	11%	2701453	11%
Other Method of Travel to Work	2	1%	246	0%	17708	1%	162727	1%

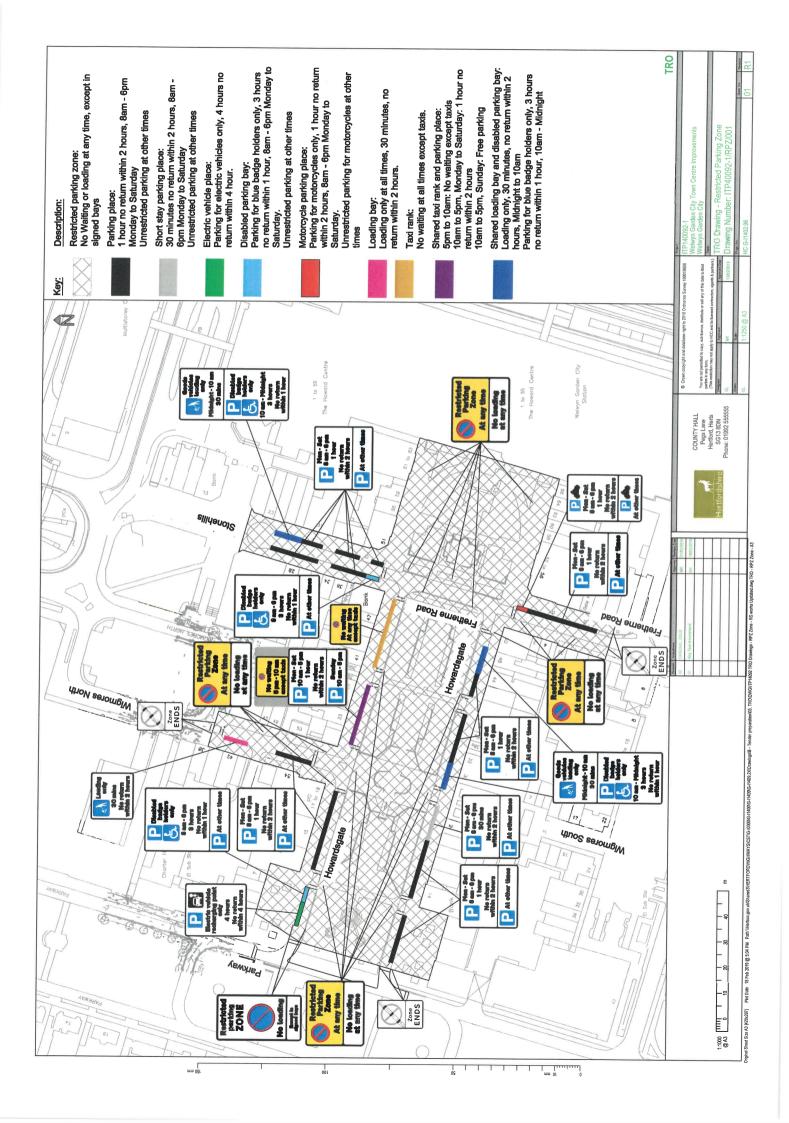
Note: Those who work at or mainly from home and those not currently in employment have been excluded from this analysis.



OA E00121439

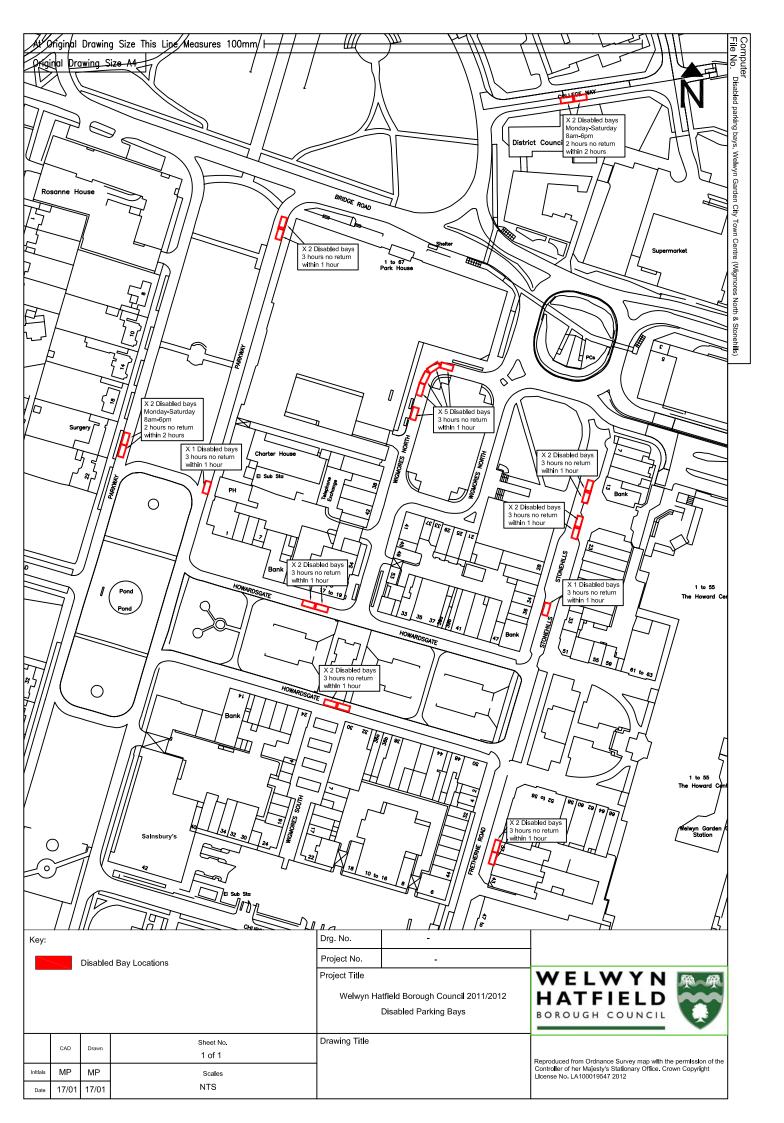
WHBC CITY CENTRE IMPROVEMENT WORKS





APPENDIX F

DISABLED PARKING LOCATIONS



APPENDIX G

PROPOSED REFUSE LOADING BAY

