

The Quadrant Plot E – Travelodge Hotel Extension

Transport Note

Date: January 2022

Client Name: Sigma property co. LTD

Document Reference: WIE18855.102.R.1.1.1.TN [Draft]

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Issue	Prepared by	Checked & Approved by
1.1.1 [Draft]	D. Martin Senior Engineer	M. Powers Technical Director

1. Introduction

General

- 1.1. Waterman Infrastructure & Environment Ltd ('Waterman') has been appointed by Sigma property co. LTD ('the Applicant') to provide transport planning advice regarding the proposed extension to the existing Travelodge Hotel, Scott Dr, Wyberton, Boston PE21 7NH ('the Site').
- 1.2. The proposed development comprises the construction of 20 additional rooms, utilising land located within Plot E, to provide a 20-room extension to the existing 56-room Travelodge Hotel.

Document Purpose

- 1.3. This Transport Note (TN) sets out the baseline characteristics of the Site, its access to public transport and sustainable transport modes, in addition to considering the net change in movements associated with the extension to the hotel.
- 1.4. This TN is to expand upon the Transport Statement (doc ref: WIE15111-100-R-1-1-3-Transport Statement) produced in September 2018 to accompany the permitted Travelodge application (app ref: B/19/0050) to provide an overview of the anticipated uplift in trip generation as a result of the proposed 20-room extension.

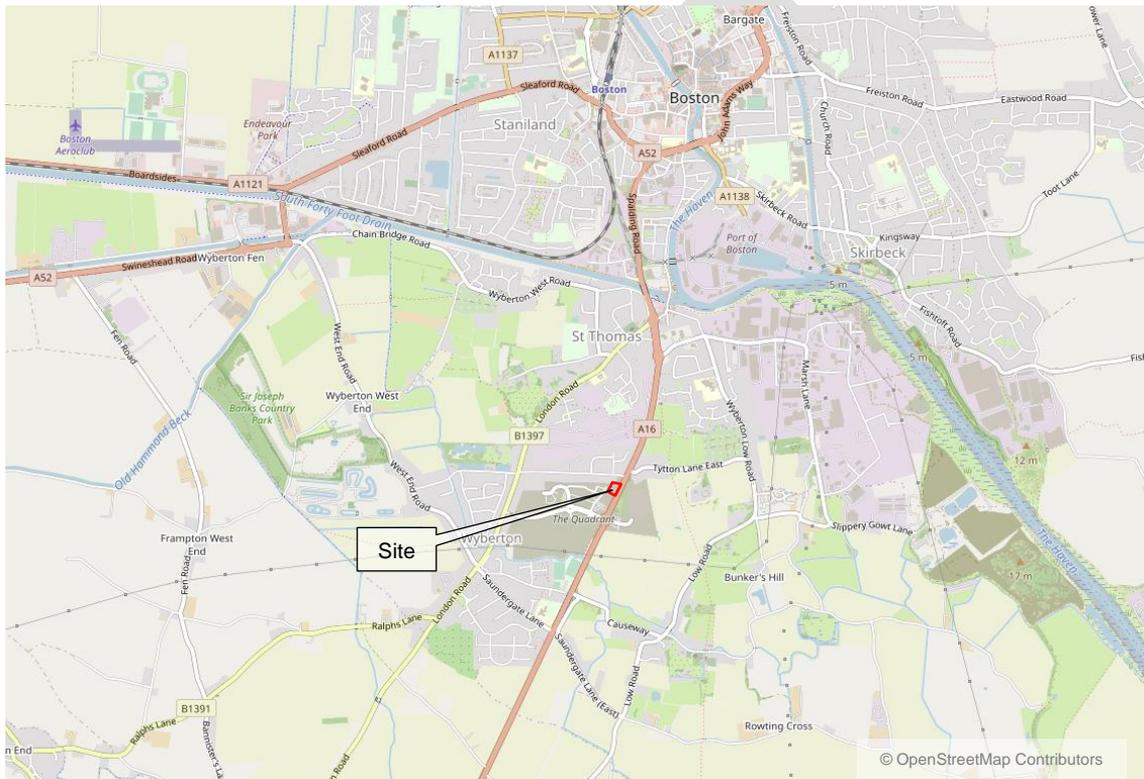
Document Structure

- 1.5. Following this Introduction, the document is structured as follows:
 - Section 2 – Existing Situation;
 - Section 3 – Proposed Development; and
 - Section 5 – Summary & Conclusions.

2. Existing Situation

- 2.1. The site, Plot E, is currently an unoccupied area of land located within the overall 'The Quadrant' development, located to the west of the A16 carriageway, approximately 2.7km to the south of Boston town centre.
- 2.2. The site is located within a predominantly residential area, however there are a number of commercial and retail units located within the 'The Quadrant' development, with Plot E identified in Figure 1 below.

Figure 1: Site Location



Highway Context

- 2.3. The development site is conveniently located near the strategic east-west link road A16, accessed via Scott Drive and Wallace Way, internal access roads within The Quadrant development. The site has a number of different of transit options to accommodate future employees and visitors to the Travelodge Hotel.

Public Transport

Bus

- 2.4. The closest existing bus stops are located on London Road and are within a short walking distance from the proposed development site access location, approximately 650m east of Plot E.
- 2.5. The bus stops located in close proximity to the proposed site are served by a total of 4 bus routes, including 2 school bus services and 2 bus routes that provide hourly and daily services to destinations within the area including Boston, Kirton and Spalding.
- 2.6. Bus stop facilities are also proposed to be installed on the A16 in close proximity to the roundabout junction, this will ensure that bus travel can be considered a viable form of transport for those working at and travelling to the proposed development.
- 2.7. A summary of the existing accessible bus routes is provided below.

Table 1: Bus Services

Service / Operator	Route	Day	Service Frequency
B13 Brylaine Travel	Boston Bus Station – Wyberton – Kirton – Surfleet - Spalding	Mon-Fri Sat	60 mins 60 mins
	Spalding – Surfleet – Kirton – Wyberton – Boston Bus Station	Mon-Fri Sat	60 mins 60 mins
K58 Brylaine Travel	Boston Bus Station – Wyberton – Frampton - Kirton	Mon-Fri Sat	60 mins 60 mins
	Kirton – Frampton – Wyberton – Boston Bus Station	Mon-Fri Sat	60 mins 60 mins

- 2.8. The above table indicates that the site has good connections to bus routes with frequent hourly services to the local area and wider Lincolnshire region.

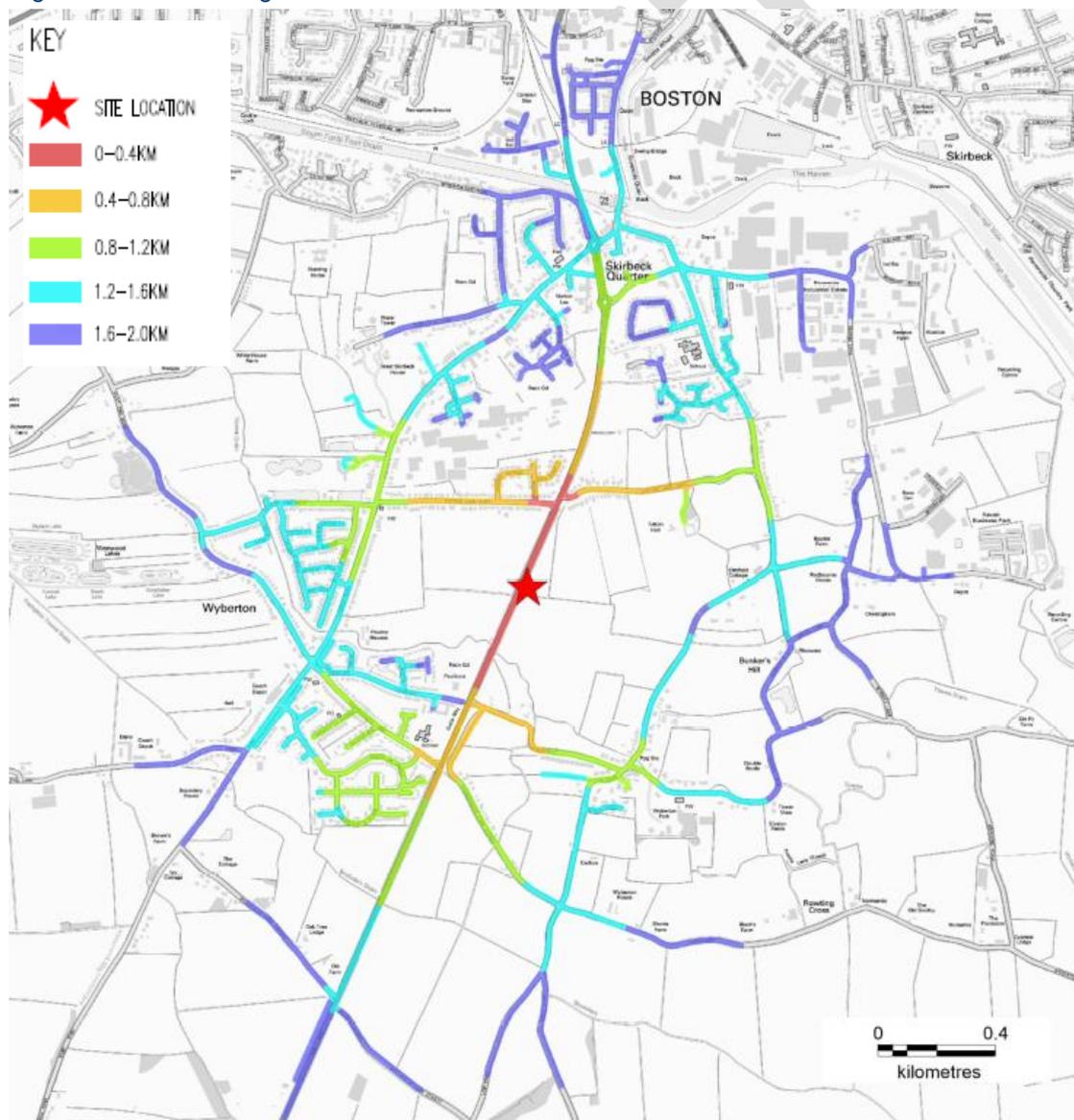
Rail

- 2.9. Boston Station, managed by East Midlands Railway is approximately 2.5 kilometres north of the site, offers regular services between Nottingham and Skegness, as well as frequent services to nearby destinations such as Wainfleet, Sleaford, Grantham, and Bingham on the East Midlands Trains rail network, with services every hour in both directions seven days a week.
- 2.10. Grantham station connects to London Kings Cross, with trains running every 20 minutes (approximately) throughout the day. Grantham is served by the London North East Railway (LNER) network.
- 2.11. Although Boston station is located in excess of the limit of acceptable walking distance from the site, the station is readily accessible by both of the hourly bus services (B13 and K58) that stop within close proximity of the site.
- 2.12. Details of the train timetables are available at www.eastmidlandstrains.co.uk and www.lner.co.uk

Walking

- 2.13. Footways and high-quality pedestrian facilities are proposed as part of 'The Quadrant' development ensuring a safe environment for pedestrians throughout the site and in the area surrounding the proposed development.
- 2.14. Existing pedestrian facilities are also present on both sides of the London Road carriageway and the northern side of Tytton Lane East. The footways are relatively wide, well maintained and subject to regular street lighting ensuring that walking is a viable option for travel within the area of the site.
- 2.15. A 2km walking catchment plan is provided below at [Figure 2](#).

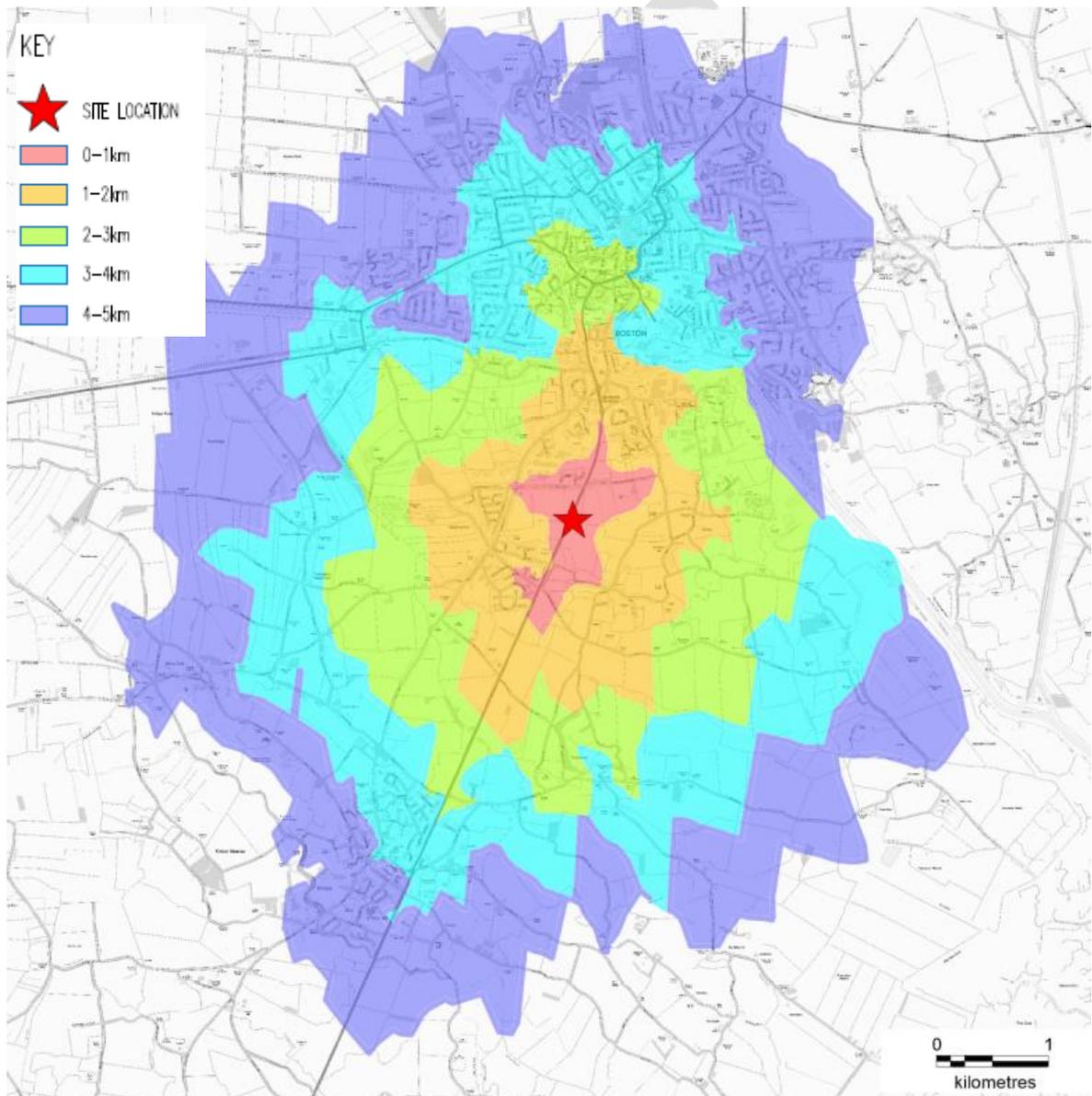
Figure 2: 2km Walking Catchment



Cycling

- 2.16. The site has good cycle linkage within the surrounding areas, with a shared footway/cycleway on the western side of the London Road carriageway and a dedicated on-road cycle lane on the eastern side.
- 2.17. Additional cycle links are also present within the area and the quieter side roads also offer an excellent, safe environment for cycling.
- 2.18. A 5km cycle catchment plan and Boston cycle route map is provided below at Figure 3.

Figure 3: 5km Cycle Catchment



3. Proposed Development

Overview

- 3.1. The proposal is to construct a two-storey extension to the existing Travelodge Hotel, utilising land within Plot E, to provide an additional 20 rooms, with layout plans provided at [Appendix A](#), as follows:
- 12 x Double Rooms;
 - 6 x Family Rooms; and
 - 2 x Accessible Rooms.
- 3.2. Vehicle access to the hotel extension is to continue to be provided via the existing Travelodge access, with arrivals and departures via the internal access road formed by Scott Drive, which forms the western boundary of the plot.

Car Parking

- 3.3. A further 20 car parking spaces are to be provided to accommodate the additional parking generated by the uplift of available rooms. Swept path analysis of the proposed car park layout is provided at [Appendix B](#).

Deliveries & Servicing

- 3.4. Deliveries and servicing will take place within the car park area, via the existing site access in line with the existing arrangement.

Trip Generation

TRICS Data

- 3.5. The TRICS database (v7.8.4) was interrogated for vehicle trips rates for hotel developments with comparable characteristics, with the following criteria:
- Hotels;
 - Suburban Area;
 - Edge of Town; and
 - Neighbourhood Centre.
- 3.6. The data set has been used to provide assessments of vehicle trips to be generated by the existing and extended Travelodge Hotel during peak periods of highway operation and across daily site use (TRICS output at [Appendix C](#)).

Table 2: Existing Travelodge Hotel Vehicle Trips (56 rooms)

Time Range	Trip Rates			Trips		
	Arrivals	Departures	Totals	Arrivals	Departures	Totals
08:00-09:00	0.059	0.195	0.254	3	11	14
17:00-18:00	0.201	0.118	0.319	11	7	18
Daily 07:00-22:00	1.474	1.470	2.944	83	82	165

- 3.7. The table above demonstrates that the existing 56-room Travelodge Hotel has the potential to generate 14 two-way vehicle trips in the AM peak hour period and 18 two-way vehicle trips in the PM peak hour period. Over the full day, the existing hotel is anticipated to generate 83 arrivals and 82 departures, resulting in 165 two-way vehicle movements across 15 hours of daily hotel operation.

Table 3: Proposed Extended Travelodge Hotel Vehicle Trips (76 rooms)

Time Range	Trip Rates			Trips		
	Arrivals	Departures	Totals	Arrivals	Departures	Totals
08:00-09:00	0.059	0.195	0.254	4	15	19
17:00-18:00	0.201	0.118	0.319	15	9	24
Daily 07:00-22:00	1.474	1.470	2.944	112	112	224

- 3.8. The table above demonstrates that the extended 76-room Travelodge Hotel has the potential to generate 19 two-way vehicle trips in the AM peak hour period and 24 two-way vehicle trips in the PM peak hour period, with 224 two-way vehicle trips generated across 15 hours of daily operation.

Table 4: Proposed Net Change (two-way trips)

Time Range	Existing (56 rooms)	Proposed (76 rooms)	Net Change
	Two-way	Two-way	
08:00-09:00	14	19	+5
17:00-18:00	18	24	+6
Daily	165	224	+59

- 3.9. It is anticipated that the proposed 20-room extension would generate an additional 5 two-way vehicle trips in the AM peak period, 6 additional two-way trips in the PM peak period and an additional 59 two-way trips across 15 hours of daily operation. The net increase in vehicle trips is the equivalent of one additional vehicle movement every 12 minutes in the AM peak, 10 minutes in the PM peak and one additional movement every 15 minutes across the day.
- 3.10. Overall, the expected uplift in vehicle movements, as a result of the proposed 20-room extension, is considered negligible and likely within daily levels of fluctuation on the existing highway network.

4. Summary & Conclusion

Summary

General

- 4.1. Waterman Infrastructure & Environment Ltd ('Waterman') has been appointed by Sigma property co. LTD ('the Applicant') to provide transport planning advice regarding the proposed extension to the existing Travelodge Hotel, Scott Dr, Wyberton, Boston PE21 7NH ('the Site').
- 4.2. The proposed development comprises the construction of 20 additional rooms, utilising land located within Plot E, to provide a 20-room extension to the existing 56-room Travelodge Hotel.

Accessibility

- 4.3. The site has good connections to bus routes with frequent hourly services to the local area and wider Lincolnshire region.
- 4.4. Although Boston station is located in excess of the limit of acceptable walking distance from the site, the station is readily accessible by both of the hourly bus services (B13 and K58) that stop within close proximity of the site and is located within acceptable cycle distance. Boston station offers regular service between Nottingham and Skegness, as well as access to nearby destinations, seven days a week.

Footways and high-quality pedestrian facilities are proposed as part of 'The Quadrant' development ensuring a safe environment for pedestrians throughout the site and in the area surrounding the proposed development, with good cycle linkage within the surrounding areas also available, ensuring the site is well located for sustainable travel.

Proposed Development

- 4.5. The proposal is to construct a two-storey extension to the existing Travelodge Hotel, utilising land within Plot E, to provide an additional 20 rooms.

Site Access Arrangements

- 4.6. Vehicle access to the hotel extension is to continue to be provided via the existing Travelodge access, with arrivals and departures via the internal access road formed by Scott Drive, which forms the western boundary of the plot.

Parking

- 4.7. A further 20 car parking spaces are to be provided to accommodate the additional parking generated by the uplift of available rooms..

Trip Generation

- 4.8. The associated net increase in vehicle movements by to/from the proposed development are small within each peak hour, resulting in negligible impacts on local network capacities.

- 4.9. The daily increase in vehicle movements is the equivalent of one vehicle movement every 15 minutes across daily operation.
- 4.10. Overall, the expected uplift in vehicle movements, as a result of the proposed 20-room extension, is considered negligible and likely within daily levels of fluctuation on the existing highway network.

Conclusion

- 4.11. Whilst the proposed traffic arising from the proposed 20-room extension will be new to the network, the uplift is negligible and it is considered that the residual cumulative impacts of the development will not be severe.

DRAFT

A. Proposed Scheme Layout

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PLOT C

CAR HIRE
AND A5 UNIT

■ = Existing (Retained) □ = Existing (To be Removed) ■ = Proposed



PLOT E

PROPOSED EXTENSION TO PLOT D

PLOT D

TRAVELODGE

SLIGHT AMENDMENT TO
PARKING LAYOUT

PLOT E

SEPARATE
APPLICATION
FOR THIS
AREA

PLANT
/ BINS

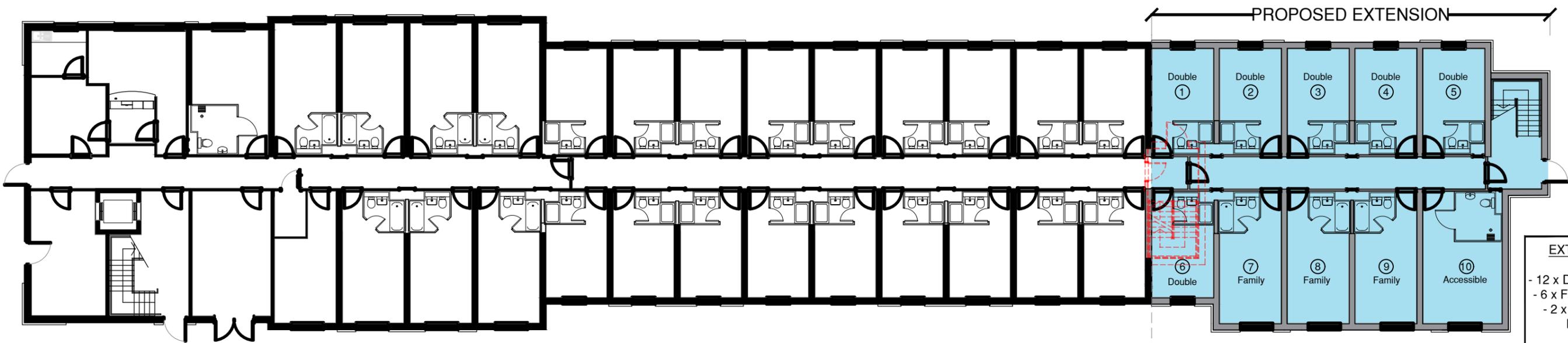
PROPOSED SITE PLAN - PLOT D/E - PROPOSED TRAVELODGE EXTENSION

THE QUADRANT, BOSTON, LINCOLNSHIRE

3606_PL805A
1:250 @ A3
T: 020 3141 3600

DOVETAIL
ARCHITECTS



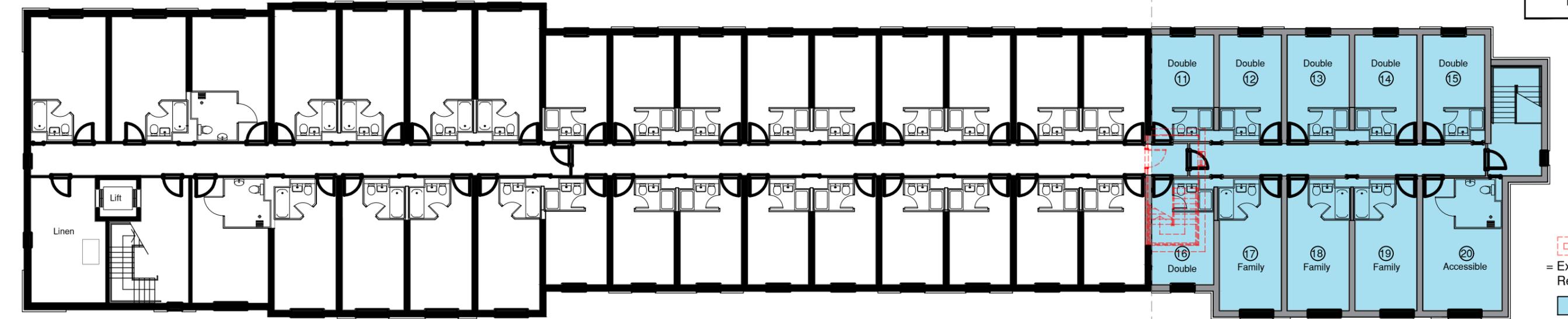


GROUND FLOOR PLAN

EXTENSION:

- 12 x Double Rooms
- 6 x Family Rooms
- 2 x Accessible Rooms

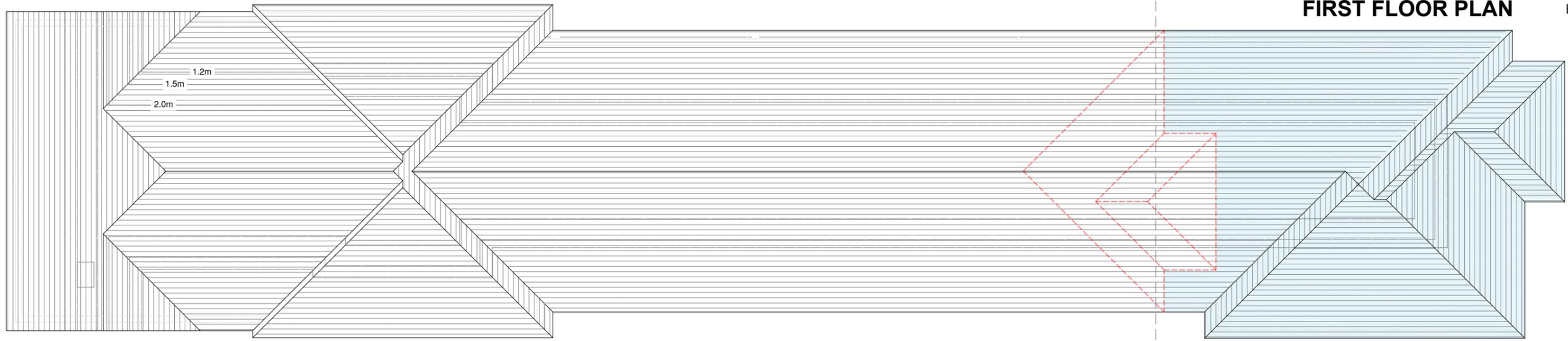
- TOTAL - 20 New Rooms



FIRST FLOOR PLAN

= Existing to be Removed

= Proposed Extension



ROOF PLAN

PROPOSED FLOOR PLANS - PLOT D/E - PROPOSED TRAVELODGE EXTENSION

THE QUADRANT, BOSTON, LINCOLNSHIRE

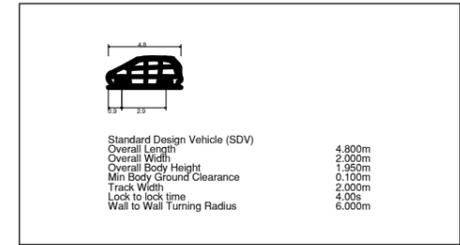
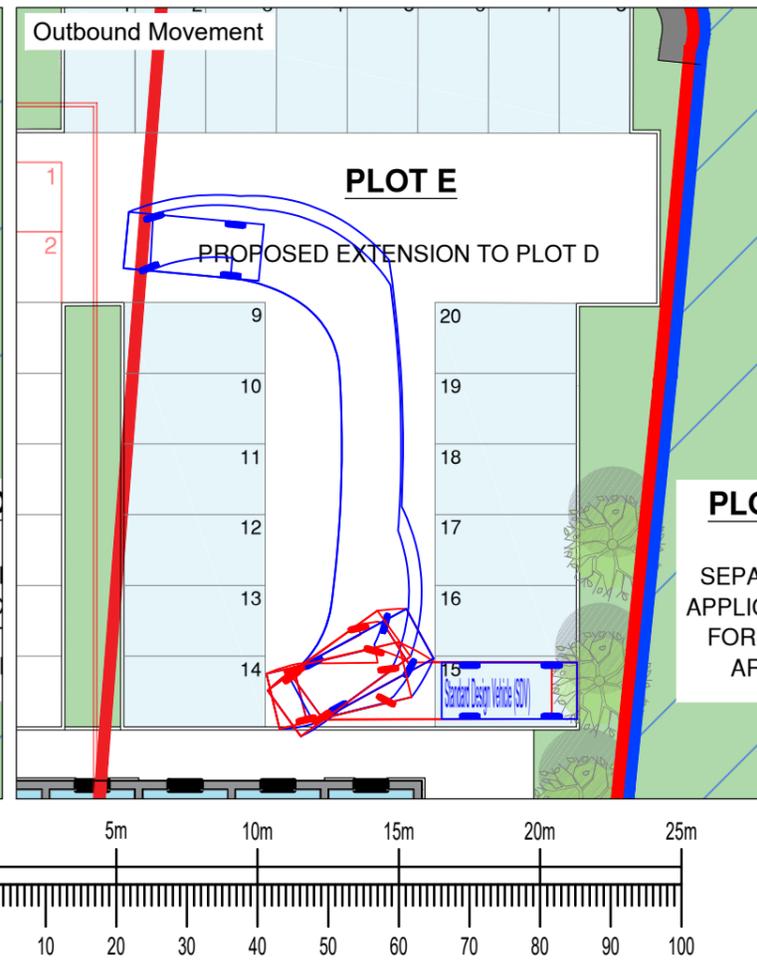
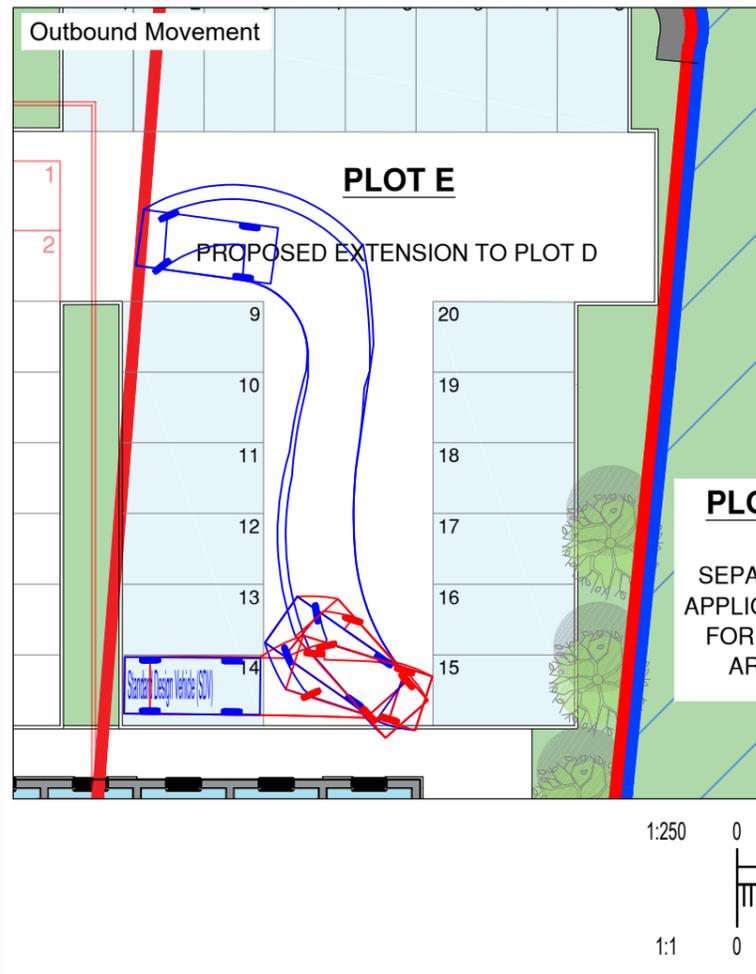
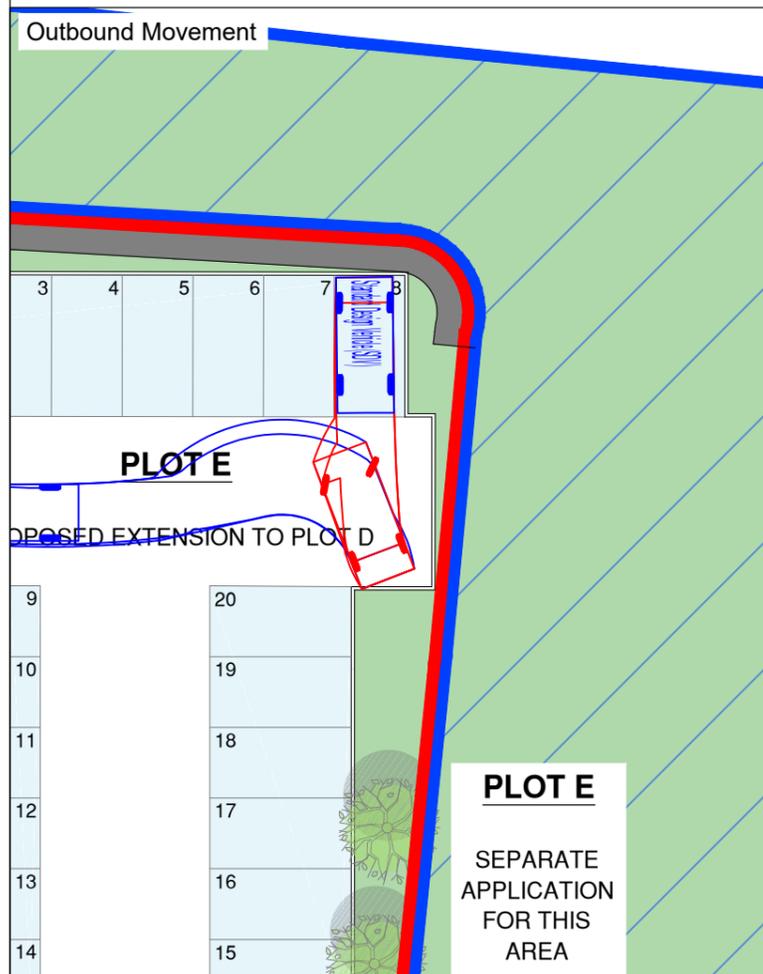
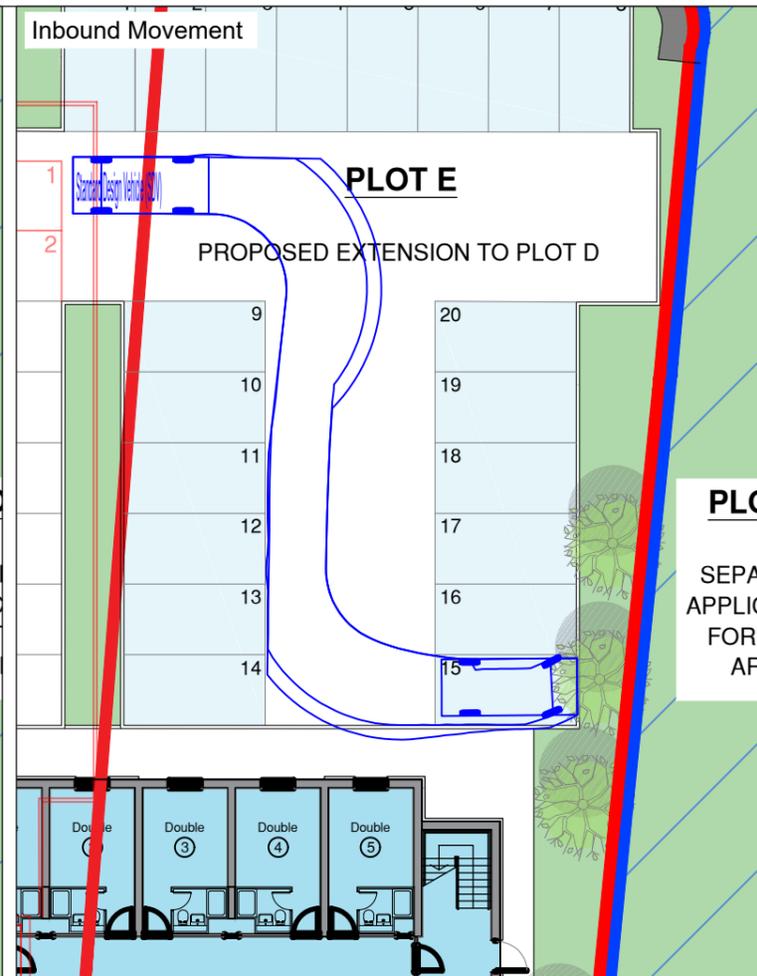
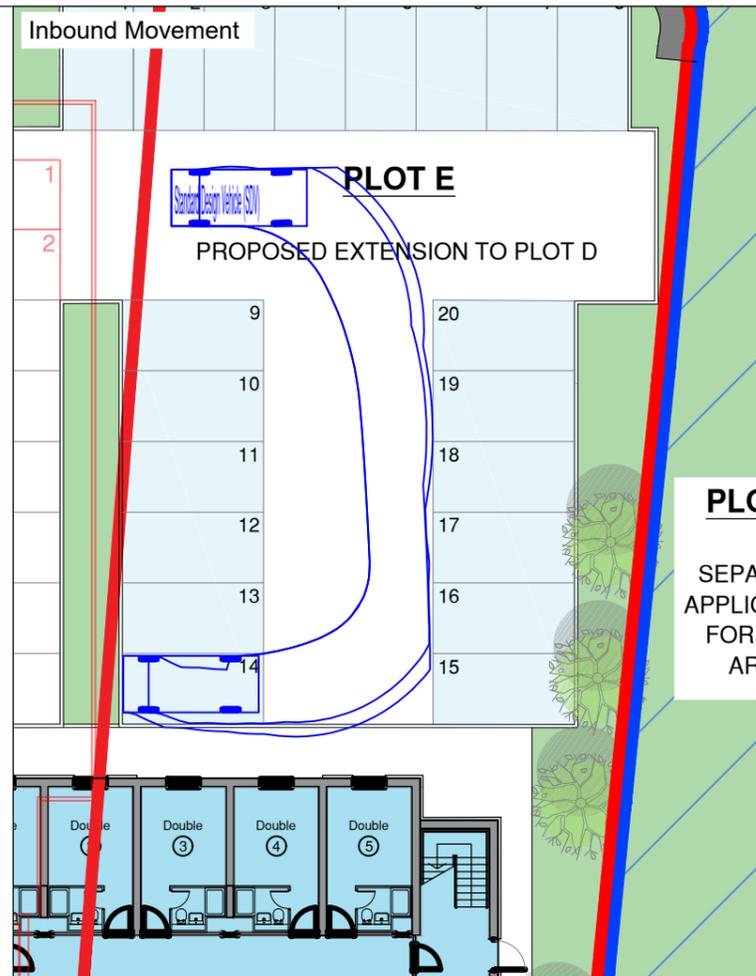
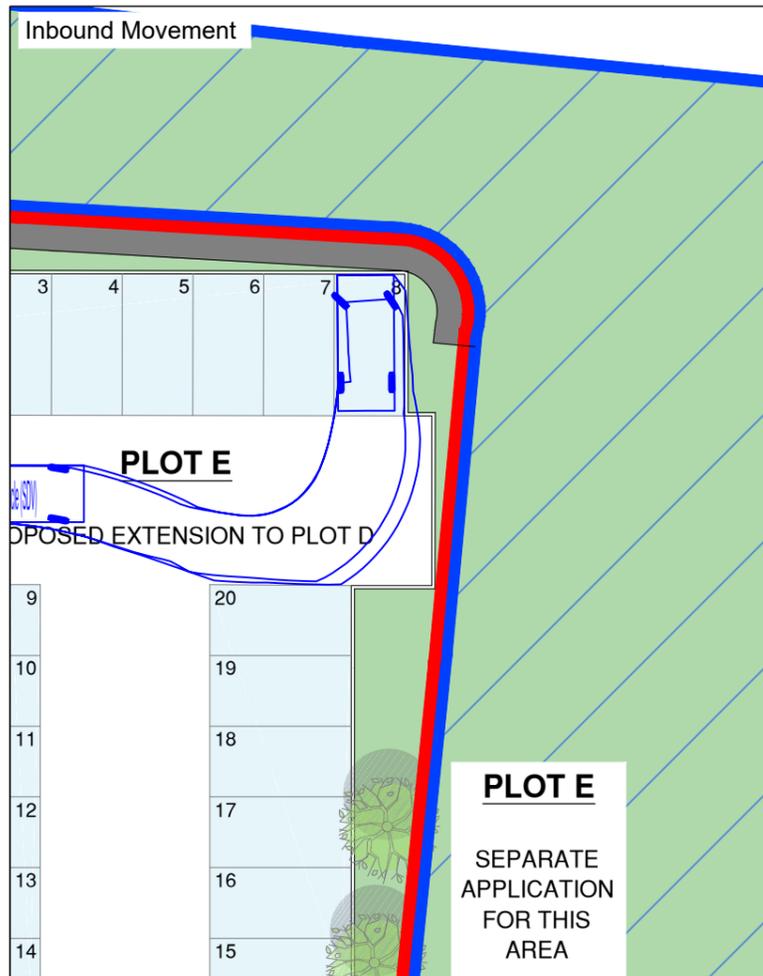
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 1:200 @ A3
 T: 020 3141 3600

DOVETAIL
 ARCHITECTS



B. Car Park Swept Path Analysis

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A01	S0	21.01.22	ISSUED	DM	MP
Status	Date	Description		By	Chk

Amendments

Project
Plot E, The Quadrant

Title
**Car Park Swept Path Analysis
Standard Design Vehicle**

Client
Sigma property co. LTD

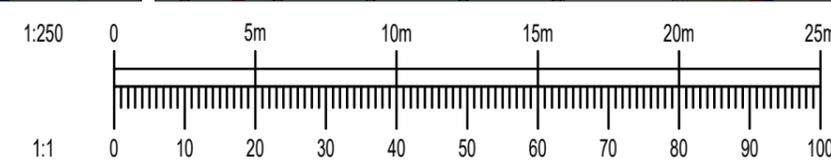


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Status
PRELIMINARY

Designed By	DM	Director	MP	Waterman Ref	WIE18855
Drawn By	DM	Date	January 2022	Scales @ A3	1:250

Project - Originator - Volume - Level - Type - Role - Number	Revision
WIE-18855-SA-05-0002-P01	P01



C. TRICS Output

DRAFT

Calculation Reference: AUDIT-701701-220124-0126

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK

Category : A - HOTELS

TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	GS GLOUCESTERSHIRE	1 days
	WL WILTSHIRE	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	SW SWANSEA	1 days

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

Primary Filtering selection:

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

Parameter: Number of bedrooms

Actual Range: 56 to 99 (units:)

Range Selected by User: 30 to 110 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 25/11/19

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

Selected survey days:

Monday	2 days
Tuesday	1 days
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	5 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	2
Neighbourhood Centre (PPS6 Local Centre)	1

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:

Development Zone	2
Residential Zone	1
Village	1
No Sub Category	1

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:

C1 5 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
10,001 to 15,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	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	3 days
1.1 to 1.5	2 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 5 days

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

PTAL Rating:

No PTAL Present 5 days

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

LIST OF SITES relevant to selection parameters

1	GS-06-A-02 PREMIER INN GLOUCESTER ROAD CHELTENHAM SPA SAINT MARKS Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of bedrooms: 67 <i>Survey date: THURSDAY 28/11/13</i>	GLOUCESTERSHIRE	<i>Survey Type: MANUAL</i>
2	SW-06-A-01 IBIS FABIAN WAY SWANSEA PORT TENNANT Edge of Town Development Zone Total Number of bedrooms: 99 <i>Survey date: MONDAY 07/10/19</i>	SWANSEA	<i>Survey Type: MANUAL</i>
3	TW-06-A-02 TRAVELODGE CASPER WAY GATESHEAD SWALWELL Suburban Area (PPS6 Out of Centre) Development Zone Total Number of bedrooms: 60 <i>Survey date: FRIDAY 13/11/15</i>	TYNE & WEAR	<i>Survey Type: MANUAL</i>
4	WL-06-A-03 TRAVELODGE LAWRENCE HILL WINCANTON Edge of Town No Sub Category Total Number of bedrooms: 57 <i>Survey date: TUESDAY 18/09/18</i>	WILTSHIRE	<i>Survey Type: MANUAL</i>
5	WM-06-A-05 HOTEL BIRMINGHAM ROAD BIRMINGHAM HOPWOOD Neighbourhood Centre (PPS6 Local Centre) Village Total Number of bedrooms: 56 <i>Survey date: MONDAY 09/11/15</i>	WEST MIDLANDS	<i>Survey Type: MANUAL</i>

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

TOTAL VEHICLES

Calculation factor: 1 BEDRMS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	68	0.018	5	68	0.153	5	68	0.171
08:00 - 09:00	5	68	0.059	5	68	0.195	5	68	0.254
09:00 - 10:00	5	68	0.088	5	68	0.150	5	68	0.238
10:00 - 11:00	5	68	0.050	5	68	0.088	5	68	0.138
11:00 - 12:00	5	68	0.083	5	68	0.097	5	68	0.180
12:00 - 13:00	5	68	0.086	5	68	0.068	5	68	0.154
13:00 - 14:00	5	68	0.059	5	68	0.074	5	68	0.133
14:00 - 15:00	5	68	0.088	5	68	0.080	5	68	0.168
15:00 - 16:00	5	68	0.094	5	68	0.056	5	68	0.150
16:00 - 17:00	5	68	0.147	5	68	0.097	5	68	0.244
17:00 - 18:00	5	68	0.201	5	68	0.118	5	68	0.319
18:00 - 19:00	5	68	0.215	5	68	0.097	5	68	0.312
19:00 - 20:00	5	68	0.112	5	68	0.094	5	68	0.206
20:00 - 21:00	5	68	0.118	5	68	0.068	5	68	0.186
21:00 - 22:00	5	68	0.056	5	68	0.035	5	68	0.091
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.474			1.470			2.944

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

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

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Parameter summary

Trip rate parameter range selected: 56 - 99 (units:)
 Survey date range: 01/01/13 - 25/11/19
 Number of weekdays (Monday-Friday): 5
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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