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June 2022				
VN212091				
Transport Statement				
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Appendices

Appendix A – Residential/ Houses Privately Owned TRICS Output File

Transport Statement vectos.co.uk

1 Introduction

Introduction

1.1 Vectos has been commissioned by Gleeson Homes to advise on traffic and transport issues in relation to a proposed residential development in Whitehaven. The site is located within the jurisdiction of Copeland Council who act as the planning authority, with Cumbria County Council acting as the highway authority.

Site Location

- 1.2 The site lies to the south of the B5295 Cleator Moor Road. The site has been cleared of all development having formerly accommodated part of a large industrial unit. The remainder of the land occupied by this industrial unit has since been developed as a care home.
- 1.3 The location of the site is shown in **Plan 1**, with **Plan 2** illustrating the site in a more local context.

Proposed Development

- 1.4 The planning application proposes a residential development comprising 37 dwellings, consisting of a range of 2 4 bedrooms.
- 1.5 Primary vehicle access to the site is proposed via a priority controlled junction with Cleator Moor Road, which is located on the western side of the site frontage. A second private access to serve Plots 1 4 is then proposed in the same location as the existing eastern site access.
- 1.6 The proposed site layout is provided as **Plan 3**.

Scope of Report

- 1.7 This Transport Statement has been prepared in accordance with guidance provided by the Department for Transport's (DfT) 'Travel Plans, Transport Assessment and Statements' (2014) document, as well as paying due notice to the DfT's now superseded 'Guidance on Transport Assessments' document.
- 1.8 Following this introduction, the report provides the following information:
 - Section 2 Provides a review of pertinent national planning policy guidance;
 - Section 3 Provides a review of the baseline conditions of the site and local highway network;
 - Section 4 Provides a review of the accessibility of the site by sustainable modes of travel;
 - Section 5 Describes the development proposals, including built proposals, access arrangements, and traffic generation implications; and
 - Section 6 Provides the reports summary and conclusions.

2 Transport Planning Considerations

Introduction

2.1 This section of the report considers the national planning policy guidance which is pertinent in the context of the development proposals.

National Planning Policy

- 2.2 The latest National Planning Policy Framework (NPPF) was published in July 2021 by the Ministry of Housing, Communities and Local Government, replacing the previous versions published in 2012, 2018 and 2019. The NPPF sets out the government's planning policies for England and how these are expected to be applied. At the heart of the Framework is a presumption in favour of sustainable development.
- 2.3 As part of promoting sustainable transport, paragraph 110 of the revised NPPF states that in assessing applications for development, it should be ensured that:
 - a) appropriate opportunities to promote sustainable transport modes can be or have been taken up, given the type of development and its location.
 - b) safe and suitable access to the site can be achieved for all users;
 - c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and
 - d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.
- 2.4 Paragraph 111 goes on to state that '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'.

3 Baseline Conditions

Introduction

3.1 Section 3 of this report discusses the existing site, local highway network, and reviews accident records on the immediate highway network.

Site Description

3.2 The site lies to the south of the B5295 Cleator Moor Road. The site has been cleared of all development having formerly accommodated part of a large industrial unit. The remainder of the land occupied by this industrial unit, and which fronts Cleator Moor Road and Main Street, has since been developed as a care home. **Figure 3.1** provides an aerial view of the site, including approximate red line boundary.

Figure 3.1: Proposed Development Site



3.3 The application red line boundary includes two existing vehicle access points with Cleator Moor Road, which are both priority controlled. These are located on the east and western site boundaries, with kerb radii and dropped kerbs in situ to identify the position of these.

Surrounding Highway Network

- 3.4 Cleator Moor Road provides a 7.3 metre carriageway, with a single lane in each direction. Subject to a 30mph speed limit, Cleator Moor Road provides street lit footways on either side of the road, with 'Slow' carriageway markings and 'School' signage present in the vicinity of the site. Double yellow lines are present on both sides of the carriageway for the majority of the site frontage.
- 3.5 The wider highway network surrounding the site is provided in **Figure 3.2**.

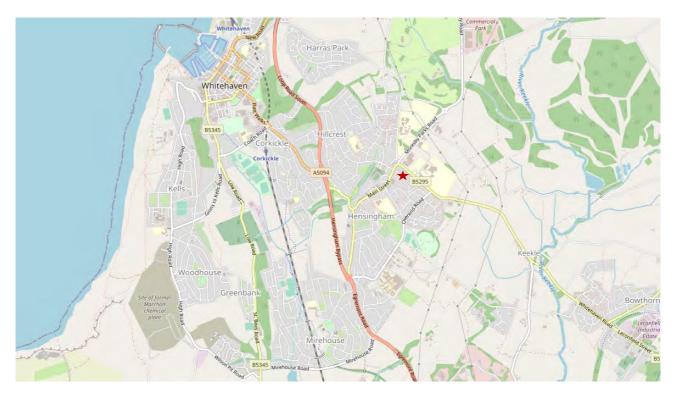


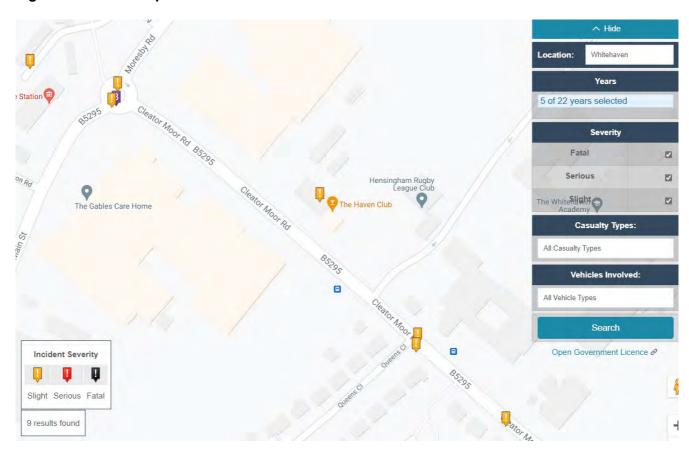
Figure 3.2: Surrounding Highway Network

- 3.6 To the east of the site Cleator Moor Road provides access to Keekle and Cleator Moor. The B5295 then forms a priority controlled junction with the A5086 Frizington Road, from where connections are available to Cleator and the A595 to the south and to Frizington, Rowrah and Cockermouth to the north.
- 3.7 Approximately 100 metres to the west of the site Cleator Moor Road forms a mini-roundabout junction with Moresby Road and Main Street. The Main Street arm then head southwest, connecting with a mini-roundabout junction with Egremont Road and Ribton Moorside, from where the northern arm provides connections to the A595 at a signal controlled junction.
- 3.8 The A595 then provides links towards Whitehaven town centre to the northwest, and thereafter towards Workington, while to the south it provides connections towards Egremont, Broughton in Furness, and southern areas of the Lake District.

Accident Data

- 3.9 A review of accident records for the local highway network has been undertaken using data available on the Crashmap website. Crashmap uses data collected by the police about road traffic crashes occurring on British roads where someone is injured. This data is approved by the National Statistics Authority and reported on by the Department for Transport each year.
- 3.10 The Crashmap analysis has been undertaken for the most recent five year period, between 2016 and 2020 and is summarised in **Figure 3.3** below.

Figure 3.3: Crashmap Data



3.11 The accident data is then summarised by year in **Table 3.1** below.

Table 3.1: Recorded Accident Data by Year

	Slight	Serious	Fatal
2016	3	0	0
2017	3	0	0
2018	1	0	0
2019	0	0	0
2020	1	0	0
Total	8	0	0

- 3.12 **Table 3.1** confirms that while a total of 8 incidents have occurred on the highway network in the vicinity of the site, the majority of these occurred in 2016 and 2017, which no incidents recorded in 2019 and only 1 in 2020. Significantly none of the incidents resulted in a serious injury.
- 3.13 It is therefore concluded that there are no accident blackspots on the highway network in the vicinity of the site.

4 Accessibility by Sustainable Modes of Travel

Introduction

- 4.1 The National Planning Policy Framework states that opportunities to promote walking, cycling and public transport use should be identified and pursued.
- 4.2 This section of the report therefore considers the accessibility of the site by the following modes of transport:
 - Accessibility on foot;
 - Accessibility by cycle; and
 - Accessibility by public transport.

Accessibility on Foot

- 4.3 The site is well located to encourage journeys to be undertaken on foot.
- 4.4 The Institution of Highways and Transportation (IHT) document 'Guidelines for Providing for Journeys on Foot' (2000) contains suggested acceptable walking distances for pedestrians without mobility impairment for some common facilities. Table 3.2 of the document states that the acceptable maximum walking distance for commuting trips is 2 kilometres. A maximum distance for pedestrians to town centre facilities such as a food store is considered to be 1 kilometre.
- 4.5 The more recent CIHT document 'Planning for Walking' (2015) affirms this by stating that 80% of journeys shorter than a mile (approximately 1.6 kilometres) are made wholly on foot.
- 4.6 An analysis of the pedestrian routes in the area has been completed to identify areas situated within 1 and 2 kilometre catchments; this is presented in **Plan 4**. The plan illustrates that the 1 kilometre catchment includes the areas of Richmond Hill and Hesingham together with amenities including a Spa Convenience store with ATM, a library, pub/ restaurants, Copeland Pool and Fitness Centre, Hesingham Community Primary School, The Whitehaven Academy, Kie Park and places of worship.
- 4.7 Meanwhile the 2 kilometre catchment extends to include Jericho Primary School, Corkickle as well as the outskirts of Whitehaven town centre from where further amenities including a supermarket, pharmacies and a post office are available.
- 4.8 Pedestrian movements in the vicinity of the site are well catered for, with street lit footways provided on both sides of Cleator Moor Road in the vicinity of the site. Pedestrian connections across Cleator Moor Road are also served by a signal controlled pedestrian crossing which is provided just west of Queens Close and which provides safe connections to The Whitehaven Academy as well as the eastbound bus stop on Cleator Moor Road.

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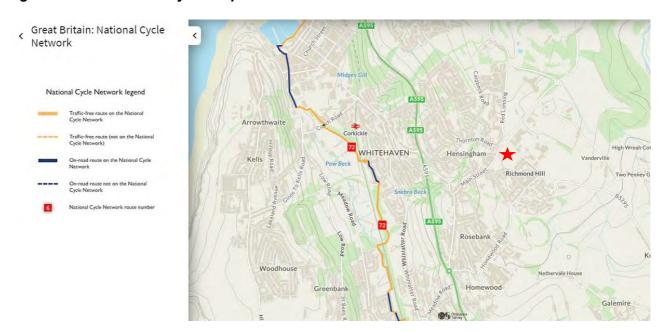
4.9 To the west of the site pedestrian islands, including dropped kerbs and tactile paving are provided on all arms of the Cleator Moor Road/ Main Street mini-roundabout junction, which provide safe connections to areas west of Main Street including Jericho Primary School. The comprehensive pedestrian infrastructure then continues south on Main Street towards Whitehaven town centre, with connections across the A595 served by push button pedestrian facilities at the A595 junction with Inkerman Terrace, which includes tactile paving, dropped kerbs, and guard railing.

4.10 The site is therefore considered accessible on foot.

Accessibility by Cycle

- 4.11 Cycling is becoming an increasingly popular mode of transport and is an effective mode for short trips. The Department for Transport's (DfT) Local Transport Note 2/08 Cycle Infrastructure Design (2008) states that, 'many utility cycle journeys are under 3 miles (5 km) although for commuters a trip distance of over 5 miles (8 km) is not uncommon'.
- 4.12 With this in mind, **Plan 5** displays a 5 kilometre cycle catchment from the site. This would equate to a journey of around 25 minutes using a leisurely cycle speed of 12 kilometres per hour. Based upon the above guidance this catchment represents the lower threshold of the potential cycle catchment of the site.
- 4.13 This plan illustrates that the 5 kilometre cycle catchment of the site incorporates the entirety of the Whitehaven, Cleator Moor to the south east, along with surrounding rural communities. The catchment area therefore covers extensive employment opportunities, along with a range of other local amenities. Significantly it also includes Corkickle and Whitehaven stations.
- 4.14 To support trips by bicycle National Cycle Network (NCN) route 72 runs to the west of the site. This route provides a combination of traffic free and on-road cycle routes which connect Whitehaven with Workington to the north and Egremont and Sellafield to the south. A SUSTRANS exert of the route close to the site is provided in **Figure 4.1** below, with the site identified by a red star.

Figure 4.1: SUSTRANS Cycle Map



4.15 The site is therefore considered accessible by bicycle.

Accessibility by Public Transport

Bus Accessibility

- 4.16 The IHT document 'Guidelines for Planning for Public Transport in Developments' (1999) suggests that the maximum walking distance to the nearest bus stop should not exceed 400 metres.
- 4.17 The closest bus stops to the site are located on Cleator Moor Road. Of these the westbound stop is located on the site frontage, with the eastbound stop located approximately 120 metres east of the site. Both stops provide a shelter, with the eastbound stop also providing a bus lay-by.
- 4.18 Both bus stops can be safely reached from the site via the existing pedestrian network, with the eastbound stop safely accessible via the pedestrian crossing located on Cleator Moor Road.
- 4.19 **Table 4.1** below provides a summary of the bus services that operate on Cleator Moor Road.

Table 4.1: Frequency of bus services stopping on Cleator Moor Road

		Frequency per Hour					
0			Monday	- Friday		C-4	Cur
Service	Route	AM Peak	Daytime	PM Peak	Evening	Sat	Sun
30	Maryport – Workington – Whitehaven – Egremont	2	2	2	2	2	1 every 2 hours

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- 4.20 Table 4.1 confirms that the Number 30 bus service operates on Cleator Moor Road. This provides regular weekday peak and off-peak services, as well as regular services at weekends, to main destinations including Maryport, Workington, Whitehaven and Egremont, as well as a multitude of local destinations. The service therefore caters well for both employment, retail and leisure based trips.
- 4.21 The site is therefore concluded to be accessible by bus.

Rail Accessibility

- 4.22 Corkickle rail station is located on Station Road approximately 2 kilometres from the site. While the station is at the edge of the site's walking catchment it is well within the site's cycling catchment area and therefore offers the opportunity for linked rail/ bicycle trips.
- 4.23 Services from Corkickle station are operated by Northern Rail who allow bicycles on their services without reservations being required. The station accommodates hourly services which operate between Carlisle and Barrow-in-Furness, with local stops including Wigton, Aspatria, Sellafield (request stop), Workington and Kirkby-in-Furness. Additional services are also operated to Grange-over-Sands, Carnforth and Lancaster.
- 4.24 The site is therefore considered to be accessible by rail.

5 Proposed Development

Introduction

5.1 This section of the report provides a description of the proposed development, site access arrangements, and traffic generation.

Development Proposals

- 5.2 The planning application proposes the development of a total of 37 residential dwellings. These are to comprise:
 - 4 x 2 bedroom houses;
 - 23 x 3 bedroom houses; and
 - 10 x 4 bedroom houses.

Access Arrangements

- Vehicle access to the majority of the site is proposed from a new priority controlled junction with Cleator Moor Road. A general arrangement drawing of the proposed access has been prepared and this is included as **Plan 6**. This plan demonstrates that visibility splays of 2.4 metres x 43 metres are achievable in both directions from the site access, as is required by design guidance for roads with a 30mph speed limit.
- 5.4 In addition, Plots 1 4 are to be served from a private driveway. This is to be located on the eastern edge of the site frontage and in the same position as an existing site access point. It is noted that the traffic flows using this private access following the development proposals will be significantly lower than the flow which used the access when the site was occupied by its former use.
- 5.5 The existing site access on the western edge of the site frontage will be closed with the footpath to be reinstated.
- 5.6 The internal site layout has been designed in accordance with Cumbria County Council's residential design guidance. The initial section of access road will feature a 5.5 metre carriageway along with a 2 metre footway provided on the western side of the carriageway. Further into the site the secondary roads will be formed of a 4.8 metre carriageway also featuring a 2 metre footway on one side of the road. Beyond the main sections of carriageway, Plots 5-7, 12-15 and 26-28 will be served by 'shared drives'.

Pedestrian/Cycle Access

5.7 Pedestrian and cycle access to the site will be achieved from the proposed junction with Cleator Moor Road. A 2 metre footway is then provided which forms a continuous link through the site, serving all residential properties and also linking with the shared drives, where pedestrians and vehicles will share road space.

A second pedestrian access to the site is proposed from the south via a footpath link which is to connect the development with an adjacent residential development also being brought forward by Gleeson Homes under application 4/20/2334/0R1. This connection will further enhance the connectivity of the site to the amenities located to the south, as well as providing benefits for those residents located in the neighbouring development, most notably towards The Whitehaven Academy.

Car Parking

- 5.9 The development will provide a total of 92 car parking spaces, with the proposed provision reflective of Cumbria Council's residential car parking standards of:
 - 2 space/ 2 bed dwelling;
 - 2.5 spaces/ 3 bed dwelling;
 - 2.5 spaces/ 4 bed dwelling; and
 - 1 visitor space/ 5 dwellings.
- 5.10 **Plan 7** provides a Car Parking Plan for the development, which illustrates how spaces will be provided across the site.

Servicing

- 5.11 In terms of refuse collection all properties will be accessible based upon Manual for Streets guidance, which states that once a turning movement has been completed a vehicle should ideally reverse no more than 12 metres, and that from this point refuse collectors should not have to walk more than 25 metres to collect bins.
- 5.12 The internal site layout has been tracked using an 11.2 metre refuse vehicle. This assessment is presented as **Plan 8** and confirms that a refuse vehicle can safely manoeuvre through the site and turn using the turning heads provided.

Traffic Impact Assessment

- 5.13 The former uses on the site have all been cleared and as such there is no existing trip generation associated with it.
- 5.14 To understand the potential traffic generation of the proposed development reference has been made to the TRICS database (version 7.7.2) for the 'Residential Houses Privately owned' range of sites. The assessment has focused upon sites in comparable locations (suburban/Edge of Town sites) and of a similar scale.
- 5.15 The trip rates and resultant traffic generation associated with 37 dwellings are summarized in **Table 5.1** for typical network AM and PM peak hours, with the full TRICS report provided at **Appendix A**.

Table 5.1: Proposed Development Trip Rates and Trip Generation

	Trip	Trip Generation			
	Arr	Dep	Arr	Dep	2-way
08:00-09:00	0.125	0.327	5	12	17
17:00-18:00	0.294	0.109	11	4	15

- 5.16 As **Table 5.1** demonstrates, the proposed development is forecast to generate 17 two-way vehicle trips during the AM peak hour, and 15 two-way trips during the PM peak hour. In both peaks this equates to less than one an additional vehicle movement approximately every 3 minutes.
- 5.17 Such an increase would be within the fluctuations in traffic flow that the surrounding highway network would experience on a daily basis, and as such it can be robustly concluded that the development will have no material impact upon the safe or efficient operation of the surrounding highway network.
- 5.18 It is therefore concluded that the proposed development should be acceptable in traffic generation terms.

6 SUMMARY AND CONCLUSIONS

Summary

- 6.1 Vectos has been commissioned by Gleeson Homes to advise on traffic and transport issues in relation to a proposed residential development in Whitehaven.
- 6.2 The planning application proposes a residential development comprising 37 dwellings, with primary vehicle access to the site proposed via a priority controlled junction with Cleator Moor Road, and a second private access to serve Plots 1 4 provided in the same location as the existing eastern site access.
- 6.3 The Transport Statement draws the following key conclusions:
 - In accordance with planning policy guidance, which promotes sustainable development, the site has been demonstrated to be accessible on foot, by cycle and by public transport.
 The site is located within easy walking and cycling distance of a range of day-to-day amenities and benefits from convenient access to public transport.
 - A review of historical collision data has demonstrated that there are no existing highway safety issues in the vicinity of the site.
 - The internal site layout has been designed in accordance with Cumbria County Council's residential design guidance. The site will provide internal roads consisting of a 5.5 and then 4.8 metre carriageway, with accompanying 2 metre footway. A number of shared private driveway will also be provided, each serving less than 5 dwellings.
 - The level of car parking proposed is considered appropriate given the scale of development and the total provision is in accordance with the Council's adopted parking standards.
 - An AutoTRACK assessment of the internal road layout has demonstrated that the proposed development can be appropriately serviced using an 11.2 metre refuse vehicle.
 - A review of the traffic impact of the development has demonstrated that the development is forecast to generate 17 and 15 two-way vehicle movements in the AM and PM peak hours respectively, equating to less than an additional vehicle movement every 3 minutes in both peaks. It has been robustly concluded that such increases in traffic flow would be within the fluctuations that the surrounding highway network would experience on a daily basis, and as such will have no material impact upon the safe or efficient operation of the surrounding highway network.

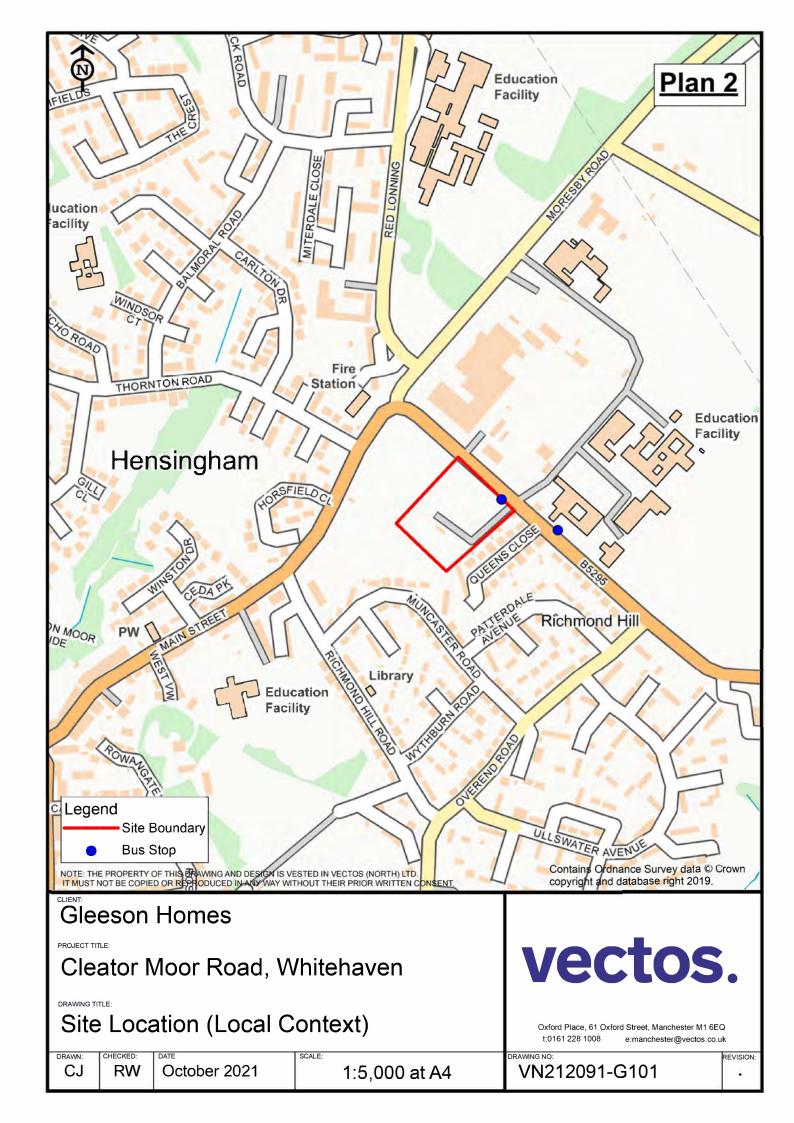
Conclusion

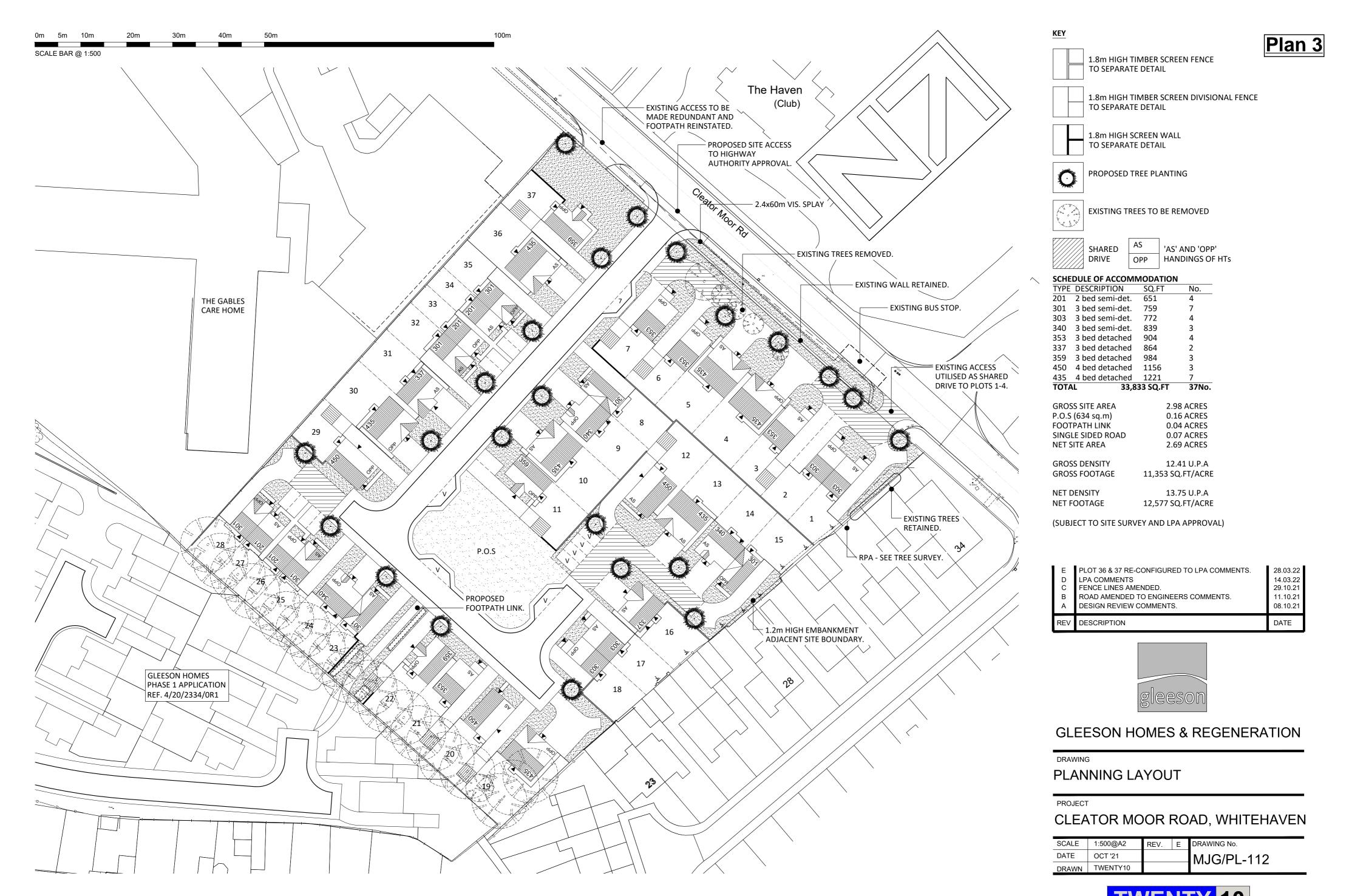
6.4 The development site is in a sustainable location, would not have a detrimental impact upon either the operation or safety of the local highway network, provides an appropriate quantum of car parking, and can be safely serviced.

- 6.5 The National Planning Policy Framework states that "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".
- This report has demonstrated that the proposed development would have no impact upon highway safety and that the residual cumulative impacts of the proposed development would not be severe. Therefore, in accordance with NPPF guidance there are no reasons why the planning application should be refused on highway or transportation grounds.

Plans

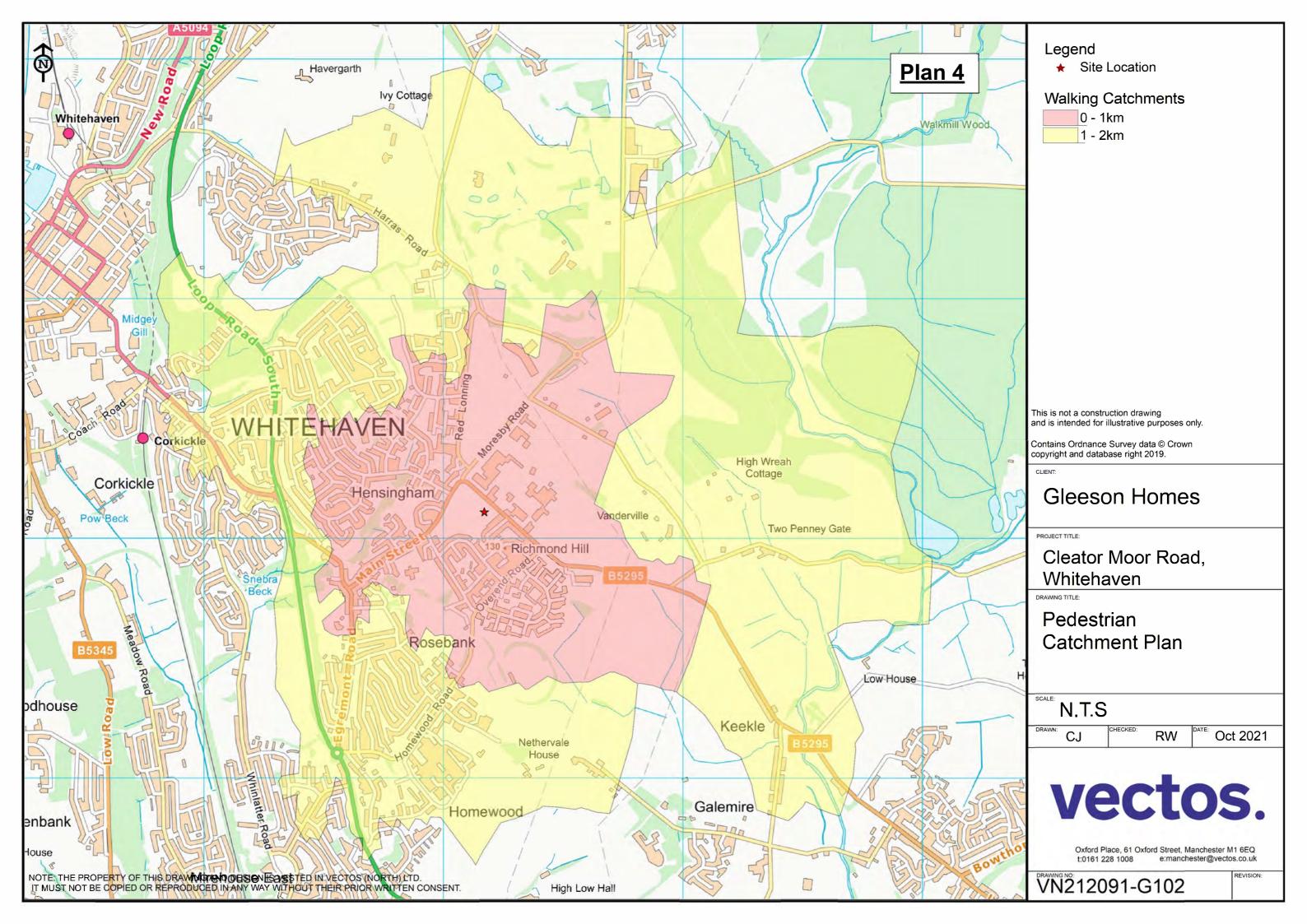


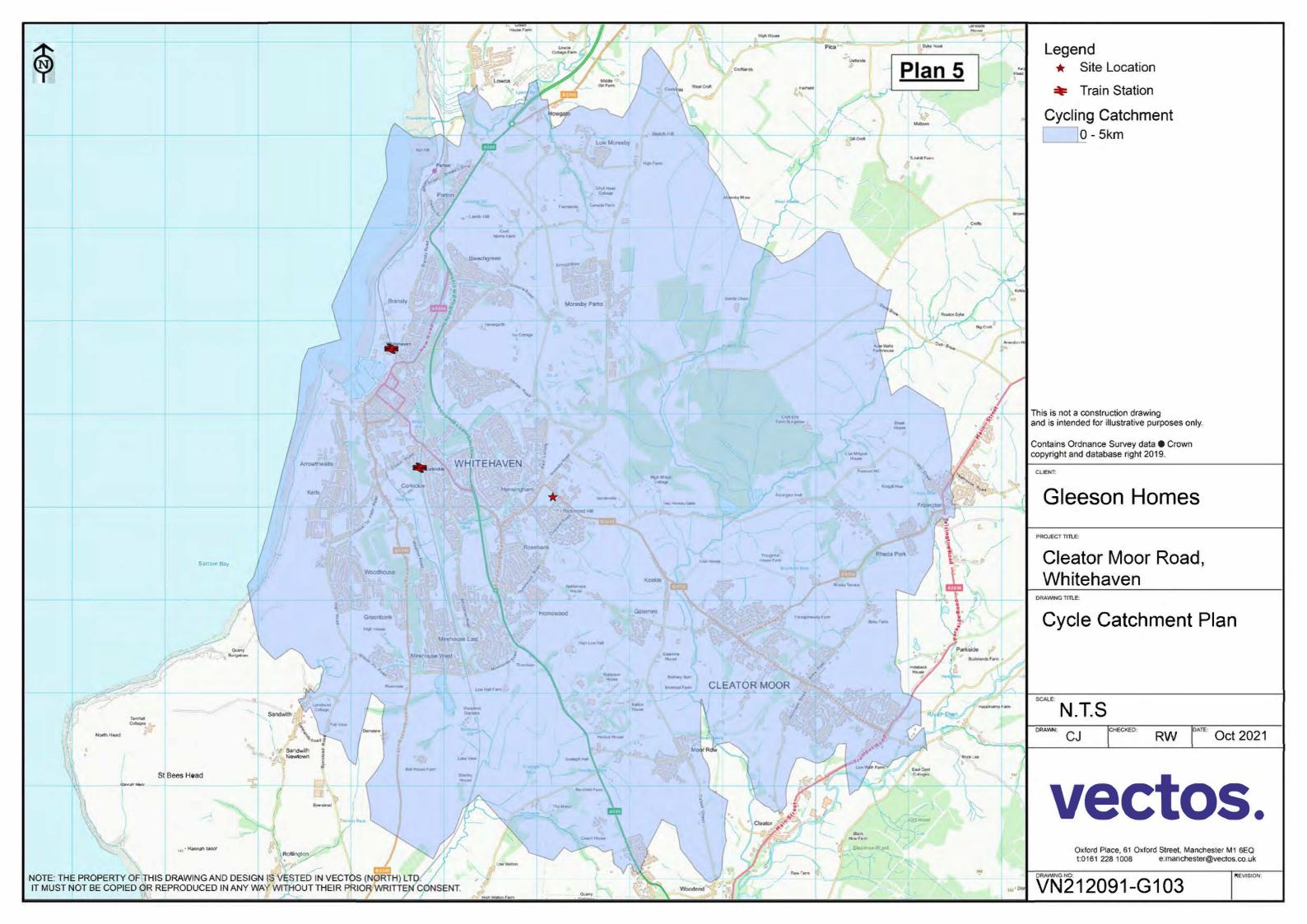




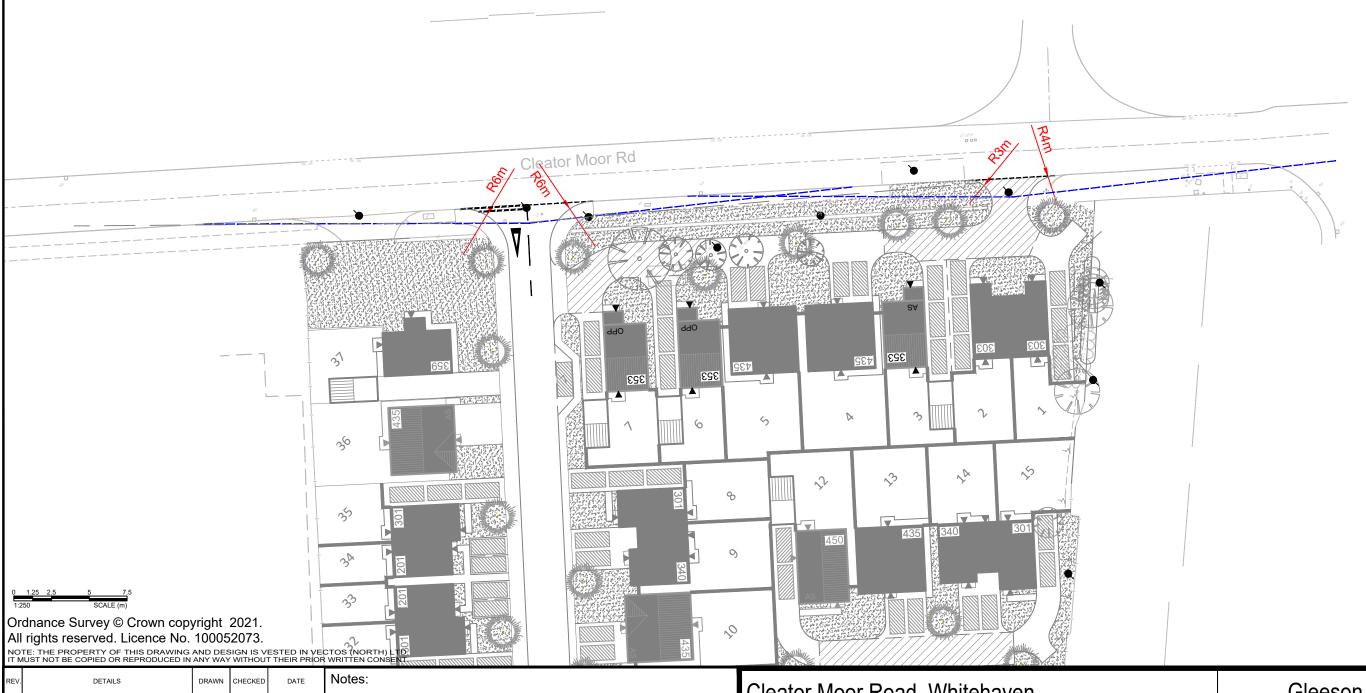
CLEATOR MOOR ROAD, WHITEHAVEN

DESIGN AND PLANNING









REV	. DETAILS	DRAWN	CHECKED	DATE	Notes:
Α	Updated site layout	CG		30.06.2022	1. This is not a construction drawing and is intended for illustrative purposes only. 2. White lining is indicative only. Key Visibility Splay at Junction - 2.4m x 43m for a 30 mph road speed (Manual for Streets)

Cleator I	Moor F	Road,	Whiteh	aven

Proposed Site Access Arrangement

DRAWN:	CHECKED:	DATE:	SCALES:
DJR	RW	29.10.21	1:500

Gleeson Homes



4th Floor Oxford Place, 61 Oxford Street, Manchester, M1 6EQ 0161 228 1008 e: manchester@vectos.co.uk

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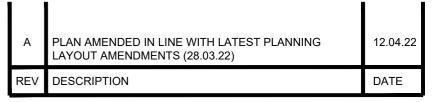
1 A



KEY

Car Parking Spaces (92no.)

Plan 7





GLEESON HOMES & REGENERATION

DRAWING

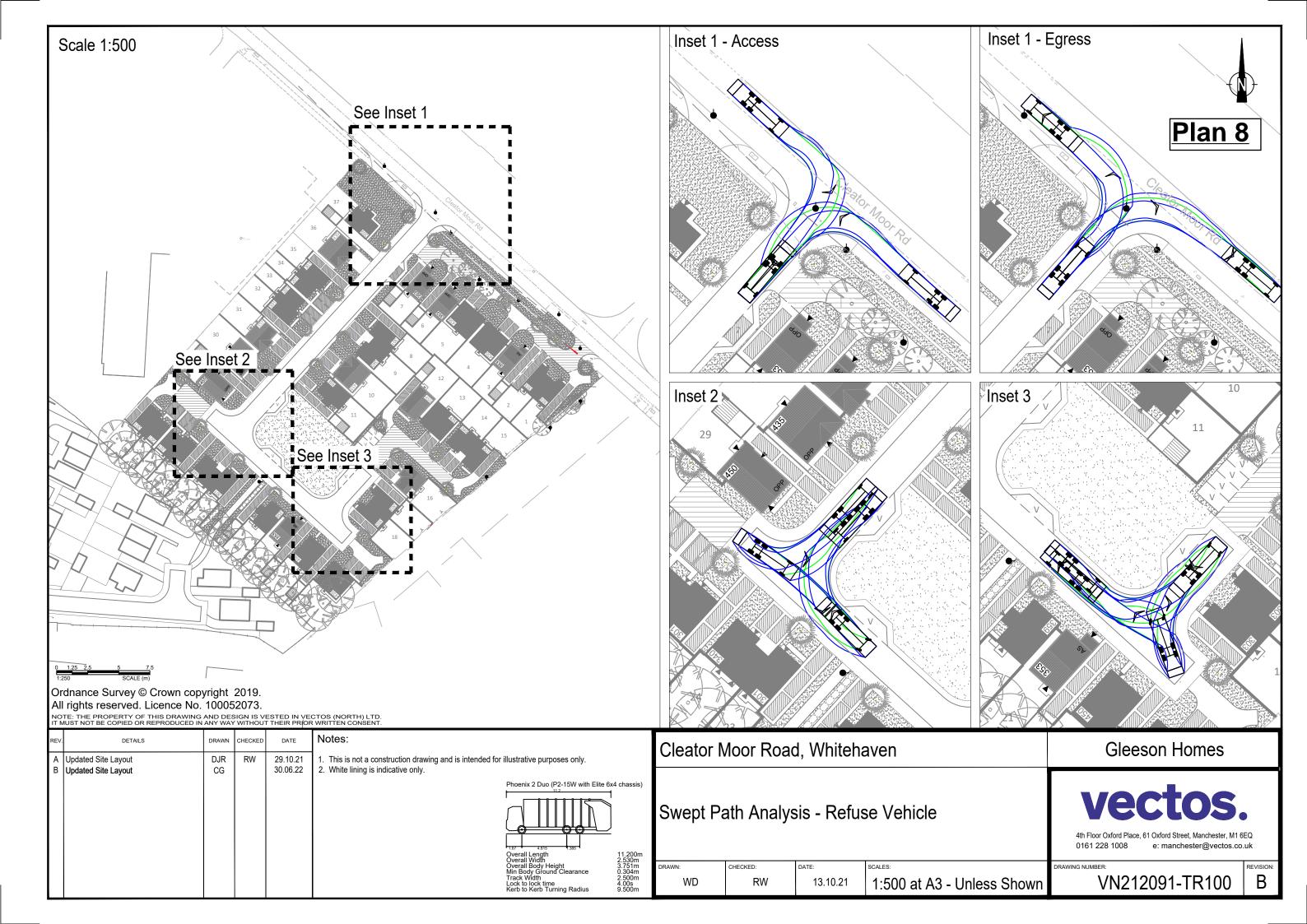
CAR PARKING PLAN

PROJEC

CLEATOR MOOR ROAD, WHITEHAVEN

SCALE	1:500@A2	REV.	Α	DRAWING No.
DATE	OCT '21			MJG/PL-112-3
DRAWN	TWENTY10			1000/1 2 112 0





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Appendix		

Appendix A	
Residential/ Houses Privately Owned TRICS Output File	

Licence No: 715001

Calculation Reference: AUDIT-715001-200731-0726

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED

VEHICLES

Selected regions and areas:

02 SOUTH EAST SC SURREY 1 days SOUTH WEST 03 DV DEVON 1 days EAST ANGLIA 04 4 days NF NORFOLK 1 days **SUFFOLK** 05 **EAST MIDLANDS** LN LINCOLNSHIRE 1 days 06 WEST MIDLANDS SHROPSHIRE SH 1 days 07 YORKSHIRE & NORTH LINCOLNSHIRE NORTH YORKSHIRE NY 2 days 08 NORTH WEST СН CHESHIRE 2 days **NORTH** 09 DH DURHAM 1 days **WALES** 10 PS **POWYS** 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: No of Dwellings Actual Range: 10 to 71 (units:) Range Selected by User: 10 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included
Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 19/11/19

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 3 days Tuesday 4 days Wednesday 4 days Thursday 4 days

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

Selected survey types:

Manual count 15 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:

Suburban Area (PPS6 Out of Centre) 7
Edge of Town 8

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:

Licence No: 715001

Calculation Reference: AUDIT-715001-200731-0726

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED

VEHICLES

Selected regions and areas:

02 SOUTH EAST SC SURREY 1 days SOUTH WEST 03 DV DEVON 1 days EAST ANGLIA 04 4 days NF NORFOLK 1 days **SUFFOLK** 05 **EAST MIDLANDS** LN LINCOLNSHIRE 1 days 06 WEST MIDLANDS SHROPSHIRE SH 1 days 07 YORKSHIRE & NORTH LINCOLNSHIRE NORTH YORKSHIRE NY 2 days 08 NORTH WEST СН CHESHIRE 2 days **NORTH** 09 DH DURHAM 1 days **WALES** 10 PS **POWYS** 1 days

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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: No of Dwellings Actual Range: 10 to 71 (units:) Range Selected by User: 10 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included
Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 19/11/19

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 3 days Tuesday 4 days Wednesday 4 days Thursday 4 days

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

Selected survey types:

Manual count 15 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:

Suburban Area (PPS6 Out of Centre) 7
Edge of Town 8

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:

Licence No: 715001

Calculation Reference: AUDIT-715001-200731-0726

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED

VEHICLES

Selected regions and areas:

02 SOUTH EAST SC SURREY 1 days SOUTH WEST 03 DV DEVON 1 days EAST ANGLIA 04 4 days NF NORFOLK 1 days **SUFFOLK** 05 **EAST MIDLANDS** LN LINCOLNSHIRE 1 days 06 WEST MIDLANDS SHROPSHIRE SH 1 days 07 YORKSHIRE & NORTH LINCOLNSHIRE NORTH YORKSHIRE NY 2 days 08 NORTH WEST СН CHESHIRE 2 days **NORTH** 09 DH DURHAM 1 days **WALES** 10 PS **POWYS** 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: No of Dwellings Actual Range: 10 to 71 (units:) Range Selected by User: 10 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included
Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 19/11/19

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 3 days Tuesday 4 days Wednesday 4 days Thursday 4 days

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

Selected survey types:

Manual count 15 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:

Suburban Area (PPS6 Out of Centre) 7
Edge of Town 8

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:

Licence No: 715001

Calculation Reference: AUDIT-715001-200731-0726

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED

VEHICLES

Selected regions and areas:

02 SOUTH EAST SC SURREY 1 days SOUTH WEST 03 DV DEVON 1 days EAST ANGLIA 04 4 days NF NORFOLK 1 days **SUFFOLK** 05 **EAST MIDLANDS** LN LINCOLNSHIRE 1 days 06 WEST MIDLANDS SHROPSHIRE SH 1 days 07 YORKSHIRE & NORTH LINCOLNSHIRE NORTH YORKSHIRE NY 2 days 08 NORTH WEST СН CHESHIRE 2 days **NORTH** 09 DH DURHAM 1 days **WALES** 10 PS **POWYS** 1 days

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Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 19/11/19

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.

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Suburban Area (PPS6 Out of Centre) 7
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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:

Licence No: 715001

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 15 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 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	8 days
10,001 to 15,000	4 days

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

Population within 5 miles:

4 days
3 days
4 days
3 days
1 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	5 days
1.1 to 1.5	10 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:

Yes	4 days
No	11 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 15 days

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

3rd Floor, Oxford Place, 61 Oxford St Manchester Vectos (North) Limited

Licence No: 715001

LIST OF SITES relevant to selection parameters

SEMI-DETACHED & TERRACED **CHESHIRE** CH-03-A-10

MEADOW DRIVE NORTHWICH **BARNTON** Edge of Town Residential Zone

Total No of Dwellings: 40

Survey date: TUESDAY 04/06/19 Survey Type: MANUAL

24

CH-03-A-11 **TOWN HOUSES CHESHI RE**

LONDON ROAD **NORTHWICH LEFTWICH**

Suburban Area (PPS6 Out of Centre)

Residential Zone Total No of Dwellings:

Survey date: THURSDAY 06/06/19

Survey Type: MANUAL

DH-03-A-01 SEMI DETACHED **DURHAM**

GREENFIELDS ROAD **BISHOP AUCKLAND**

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 50

Survey date: TUESDAY 28/03/17 Survey Type: MANUAL

DV-03-A-03 TERRACED & SEMI DETACHED DEVON

LOWER BRAND LANE

HONITON

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 70

Survey date: MONDAY 28/09/15 Survey Type: MANUAL

LN-03-A-03 SEMI DETACHED LINCOLNSHIRE

ROOKERY LANE LINCOLN **BOULTHAM**

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 22

Survey date: TUESDAY 18/09/12 Survey Type: MANUAL

SEMI DET. & BUNGALOWS NF-03-A-01 **NORFOLK**

YARMOUTH ROAD CAISTER-ON-SEA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 27

Survey date: TUESDAY 16/10/12 Survey Type: MANUAL

NF-03-A-03 **DETACHED HOUSES** NORFOLK

HALING WAY THETFORD

Edge of Town Residential Zone

Total No of Dwellings: 10

Survey date: WEDNESDAY 16/09/15 Survey Type: MANUAL

NF-03-A-04 MIXED HOUSES **NORFOLK**

NORTH WALSHAM ROAD NORTH WALSHAM

Edge of Town Residential Zone

Total No of Dwellings: 70

Survey date: WEDNESDAY 18/09/19 Survey Type: MANUAL

Licence No: 715001

LIST OF SITES relevant to selection parameters (Cont.)

9 NF-03-A-05 MI XED HOUSES NORFOLK HEATH DRIVE

HOLT

Edge of Town Residential Zone

Total No of Dwellings: 40

Survey date: THURSDAY 19/09/19 Survey Type: MANUAL
O NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE

GRAMMAR SCHOOL LANE

NORTHALLERTON

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 52

Survey date: MONDAY 16/09/13 Survey Type: MANUAL
11 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE

HORSEFAIR BOROUGHBRIDGE

> Edge of Town Residential Zone

Total No of Dwellings: 23

Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

12 PS-03-A-02 DETACHED/SEMI-DETACHED POWYS

GUNROG ROAD WELSHPOOL

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 28

Survey date: MONDAY 11/05/15 Survey Type: MANUAL

13 SC-03-A-04 DETACHED & TERRACED SURREY

HIGH ROAD BYFLEET

Edge of Town
Residential Zone
Total No of Dwelling

Total No of Dwellings: 71

Survey date: THURSDAY 23/01/14 Survey Type: MANUAL

14 SF-03-A-05 DETACHED HOUSES SUFFOLK

VALE LANE BURY ST EDMUNDS

Edge of Town Residential Zone

Total No of Dwellings: 18

Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL

15 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHIRE

SANDCROFT TELFORD SUTTON HILL Edge of Town Residential Zone

Total No of Dwellings: 54

Survey date: THURSDAY 24/10/13 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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection				
CH-03-A-09	Development of terraced houses				
HC-03-A-23	Development includes flats				
NY-03-A-10	Development includes flats				
SH-03-A-06	Development of bungalows				

Licence No: 715001

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED VEHICLES

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	15	40	0.067	15	40	0.292	15	40	0.359
08:00 - 09:00	15	40	0.125	15	40	0.327	15	40	0.452
09:00 - 10:00	15	40	0.170	15	40	0.190	15	40	0.360
10:00 - 11:00	15	40	0.135	15	40	0.172	15	40	0.307
11:00 - 12:00	15	40	0.150	15	40	0.164	15	40	0.314
12:00 - 13:00	15	40	0.157	15	40	0.152	15	40	0.309
13:00 - 14:00	15	40	0.155	15	40	0.137	15	40	0.292
14:00 - 15:00	15	40	0.152	15	40	0.197	15	40	0.349
15:00 - 16:00	15	40	0.262	15	40	0.170	15	40	0.432
16:00 - 17:00	15	40	0.250	15	40	0.150	15	40	0.400
17:00 - 18:00	15	40	0.294	15	40	0.109	15	40	0.403
18:00 - 19:00	15	40	0.217	15	40	0.114	15	40	0.331
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates: 2.134 2.174						2.174		4.308	

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: 10 - 71 (units:)
Survey date date range: 01/01/12 - 19/11/19

Number of weekdays (Monday-Friday): 15
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 5
Surveys manually removed from selection: 4

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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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