



Proposed Mixed Use Development, Vale View, Egremont

Transport Assessment

June 2023

ECS Transport Planning Limited

Centrum Offices, 38 Queen Street, Glasgow, G1 3DX
www.ECSTransportPlanning.com

Client Name: Thomas Graham & Sons Ltd
Document Reference: 01
Project Number: 23001

Issue	Date	Prepared by	Checked by	Approved by
02	19.06.23	Steven Scott	Michael Summers	Michael Summers

Comments	Layout Updated
-----------------	----------------

Content

1. Introduction.....	1
2. Development Proposals.....	2
Existing Site & Surrounding Area	2
Development & Access Overview.....	3
Parking Provision	3
Servicing & Refuse Collection	4
3. Local & National Transport Policy	5
4. Existing Transport Network.....	8
Multi-Modal / People Trip Assessment	8
Sustainable Travel Opportunities.....	9
Summary.....	13
5. Vehicular Accessibility	14
Surrounding Road Network	14
Development Traffic.....	15
Summary.....	15
6. Summary & Conclusions	16
Summary.....	16
Conclusions	17

Figures

Figure 1: Site Location.....	2
Figure 2: Existing Site and Field Access	3
Figure 3: Vale View Site Frontage.....	3
Figure 4: Existing Footway Adjacent to Site.....	10
Figure 5: Vale View Footway.....	10
Figure 6: Walking Isochrone & Catchment.....	11
Figure 7: Cycle Routes	11
Figure 8: Public Transport Accessibility	13

Tables

Table 1: Builders Merchants Modal Split and Mode Share (Two-Way)	8
Table 2: Industrial Units Modal Split and Mode Share (Two-Way)	9
Table 3: Existing Bus Services.....	12
Table 4: Builders Merchants Trip Generation (3,686sqm)	15
Table 5: Industrial Trip Generation (2,764sqm).....	15

Appendices

- A. Scope
- B. Existing / Proposed Layouts & Vehicle Swept Paths
- C. TRICS Output

1. Introduction

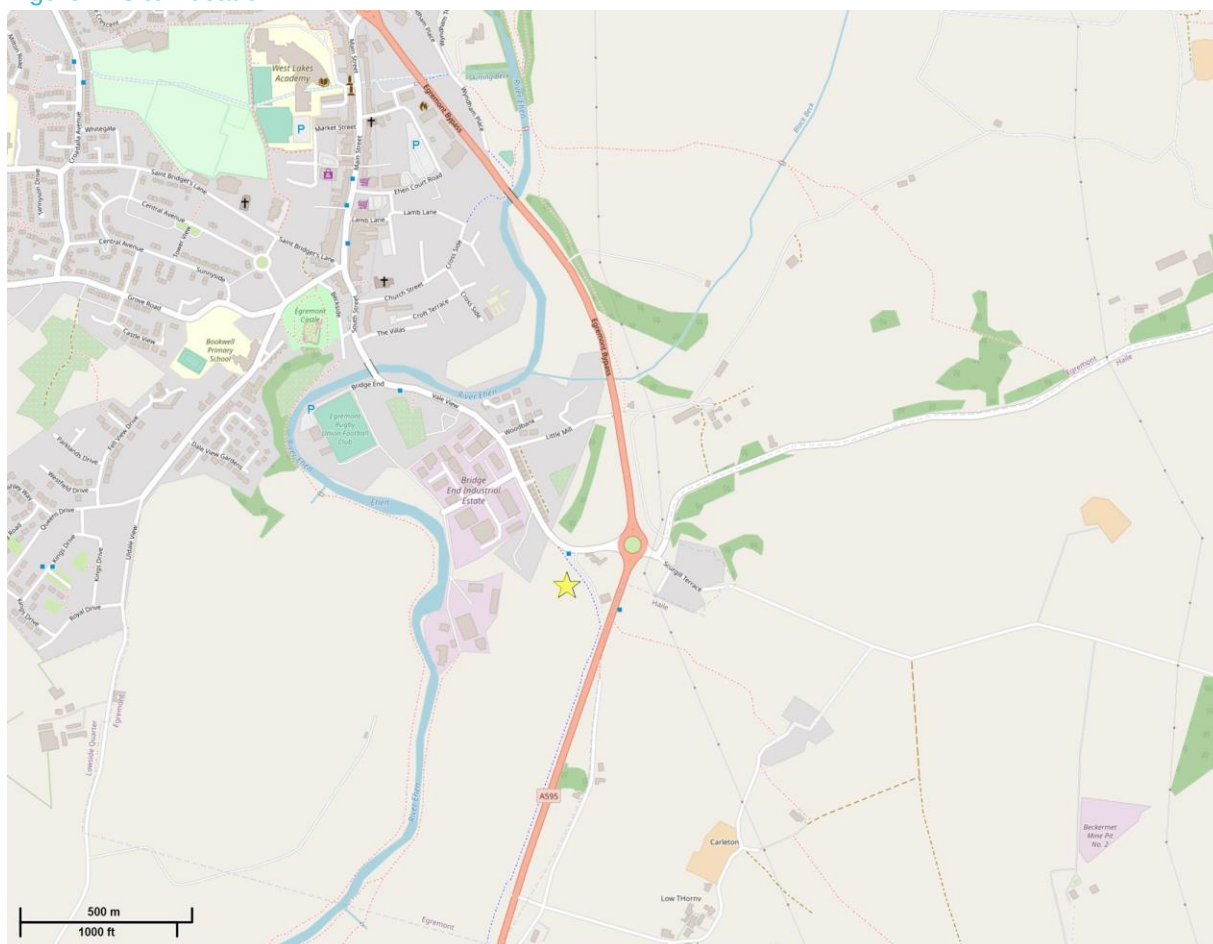
- 1.1. ECS Transport Planning Limited has been appointed by Thomas Graham & Sons Ltd to provide a Transport Assessment (TA) in support of a planning application for a mixed use development comprising a builders merchants and industrial 'starter units' on land adjacent to Vale View, Egremont.
- 1.2. The parameters of this study were detailed within correspondence with Cumbria County Council's Environment and Infrastructure Department (CCC) and National Highways (NH). Details of the scoping correspondence is contained within *Appendix A* for reference. Due to the requirement to lodge the planning application a response to the scoping letter was not available from either Highways Authority. As a result, should there be any material change to the scope of the assessment an updated TA will be lodged with Copeland Borough Council (CBC).
- 1.3. This report reviews and assesses the potential future travel demand for all modes of travel against the existing transport provision in the area, detailing, if necessary, what measures are required to enhance the accessibility of the development site and ensure the proposals meet the requirements of local and national transport planning policies. Reference has also been made to the following transport policies and guidance in the preparation of this report:-
 - National Planning Policy Framework (NPPF);
 - Cumbria Local Transport Plan Strategy;
 - Cumbria Design Guide; and
 - Copeland Borough Council Local Plan.
- 1.4. The findings of this study are based on experience of similar schemes, a review of the site, traffic observations and has been produced in accordance with the policy documents detailed above.
- 1.5. The subsequent chapters of this report conclude on the existing and future accessibility of the development site by all modes of transport, under the following headings:-
 - Development Proposals;
 - Local & National Transport Policy;
 - Existing Transport Network;
 - Development Traffic Demand;
 - Summary & Conclusions.

2. Development Proposals

Existing Site & Surrounding Area

- 2.1. Egremont is a market town and civil parish in Cumbria, situated just outside the Lake District National Park, five miles (eight kilometres) south of Whitehaven and on the River Ehen. The town, which lies at the foot of Uldale Valley and Dent Fell, has a long industrial heritage including dyeing, weaving and iron ore mining. It had a population of 7,444 in 2001, increasing to 8,194 at the 2011 Census.
- 2.2. The developable area is currently agricultural land accessed directly from Vale View and is bounded to the north by Vale View and commercial premises, east by the A595, south by further agricultural land and the west by Bridge End Industrial Estate.
- 2.3. The location of the development site, in a local context, is indicated by the yellow star within *Figure 1*.

Figure 1: Site Location



Based upon the Ordnance Survey's (1:1250) Map of 2021 with permission of the controller of Her Majesty's Stationery Office, Crown copyright reserved. ECS Transport Planning Ltd Centrum Offices, 38 Queen Street, Glasgow, G1 3DX. License No: 100055056

- 2.4. The developable area lies within with existing settlement boundary for Egremont, which is identified as one of the Borough's Key Service Centres, where opportunities for expansion of existing employment sites will be encouraged. The site is also identified as an employment site allocation under the current local plan, which would form an extension to the existing Bridge End Industrial Estate.
- 2.5. The site benefits from an existing field access which is utilised by agricultural vehicles. The field access provides direct access to the footway on Vale View which provides access to the A595 and the remainder of the settlement.
- 2.6. *Figures 2 & 3, overleaf, present the site in its current form. Figure 2 displays a view of the existing site and field access from Vale View, with Figure 3 showing a view of Vale View adjacent to the site boundary.*

Figure 2: Existing Site and Field Access



Figure 3: Vale View Site Frontage



- 2.7. Thomas Graham & Sons operate an existing builders merchants within the Bridge End Industrial Estate a short distance to the north west of the proposed site. The existing premises will be vacated and either leased or sold.

Development & Access Overview

- 2.8. The proposed development includes a replacement builders merchants including ancillary office and B2 industrial starter units. The main building, which includes the builders merchants, will be located in the southern area of the site and will be provided over three floors which is a reaction to the site topography. Car parking will be located to the north and east of the building with a lower and upper service yard located to the west and east, respectively.
- 2.9. The industrial starter units will be provided in the basement of the main building and standalone units on the northern boundary.
- 2.10. The scale of the proposed development is as follows:
- Builders merchants (including sales, storage and office space) - 3,686sqm; and
 - Industrial units – 2,764sqm.
- 2.11. The site will be accessed from Vale View via an industrial standard priority junction which has been designed to accommodate HGV's. Pedestrian access will be provided via the access junction and will connect to the existing footway on Vale View.
- 2.12. The layout of the proposed site is indicated in the Architects Plus scheme contained within *Appendix B*.

Parking Provision

- 2.13. Parking provision will be provided in accordance with the parameters outlined with the Cumbria County Council's parking standards for general, disabled and cycle parking.
- 2.14. Unfortunately, there is no guidance for Builders Merchants within the councils' standards with the most similar land use being Industrial. The standards outline the following for Industrial land uses:-
- Essential Operational Parking – 50m² of usable service space per 250m² gross floor area plus turning space
 - Disabled parking - 3% of car parking;
 - Cars - 1 space per 50m² GFA;
 - Pedal Cycles - number equivalent to 10% of car requirement, minimum of 2 spaces.
- 2.15. Based on an overall GFA of 6,450m² the above parking standards would allow for a maximum of 129 vehicle spaces. However, the parking provision is considered to be a significant overprovision for the

builders merchants given the current premises operates with 17 marked bays.

2.16. As a result, it is proposed to provide 88 parking spaces for the wider site which are distributed as follows:

- Builders merchants and basement industrial (1,774sqm) – 61 spaces;
- Staff spaces for builders merchants 9 spaces; and
- Industrial units to the north – 18 spaces.

2.17. Based on the above general parking provision, 3 disabled spaces will be provided and 8 bicycle spaces.

2.18. 2 Sheffield style cycle stands, providing four parking spaces, will be provided adjacent to the entrance for customers. A covered and secure cycle store which can accommodate up to 6 bicycles will be located between the staff parking on the eastern elevation of the building and the upper yard area.

Servicing & Refuse Collection

2.19. Swept path drawings contained within *Appendix B* illustrates that HGV's can safely access and egress the site in a forward gear.

3. Local & National Transport Policy

- 3.1. The planning system is used to make decisions about the future development and use of land in our towns, cities and countryside. It considers where development should happen and how development affects its surroundings. The system balances different interests, including transport, to make sure that land is used and developed in a way that creates high quality, sustainable places.
- 3.2. To inform this process, National and Local Government have developed a series of policy documents / statements and guidance in terms of transportation. As most forms of transport are fundamental to modern life, whether moving people to school, work, shopping or recreation, the integration of transport and land use is a key element to support economic growth, as well as, social inclusion. In reducing carbon footprint, the promotion of public transport is seen as key for new developments with walking and cycling taking also an important role.
- 3.3. The following provides an overview of the current national / central and local government policies and guidelines, which the development proposals and site will be reviewed against within this report.

National / Central Government Transport Planning Policy

The Government's White Paper

- 3.4. The White Paper 'The Future of Transport: A Network for 2030, Executive Summary, Paragraph 6' states that:-

"We need a transport network that can meet the challenges of a growing economy and the increasing demand for travel, but can also achieve our environmental objectives. This means coherent transport networks with:-

- *the road network providing a more reliable and free-flowing service for both personal travel and freight, with people able to make informed choices about how and when they travel;*
- *the rail network providing a fast, reliable and efficient service, particularly for interurban journeys and commuting into large urban areas;*
- *bus services that are reliable, flexible, convenient and tailored to local needs;*
- *making walking and cycling a real alternative for local trips; and*
- *ports and airports providing improved international and domestic links."*

National Planning Policy Framework

- 3.5. The revised National Planning Policy Framework (NPPF) was published on the 19th February 2019 setting out the Government's planning policies for England and how these are expected to be applied.
- 3.6. When considering the transport effects of a development, NPPF states that:

"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."

- 3.7. Plans or applications for development should take account of whether:

"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; and

c) 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."

- 3.8. Paragraph 109 advises 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.”

3.9. Paragraph 110 states that:

“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.”

Regional Transport Planning Policy / Guidance

Cumbria Local Transport Plan

3.10. The Local Transport Plan (LTP) is the statutory planning document that sets out the Council's vision, strategy and policies for transport.

3.11. The overriding objective of the Cumbria LTP is to ensure a high quality and resilient highway and transport network that everyone can access, which supports the development of a sustainable and prosperous low carbon economy and ensures Cumbria can be enjoyed.

Cumbria Design Guide

3.12. The Cumbria Design Guide provides advice and guidance on the design elements that combine to create commercial and residential developments in Cumbria. In November 2017, the County Council adopted its updated Design Guide. Parking standards are set out in Appendix 1 which are detailed within *Chapter 2* of this report for the proposed land uses.

Copeland Local Plan 2013-2028

3.13. The Copeland Local Plan was adopted in 2013. The Plan sets out planning policies for the Borough against which planning applications will be assessed. The Plan also allocated land for various uses, across the Borough, setting out a strategic vision for growth over the next 15 years. The key transportation policy is detailed below:

“Policy T1 – Improving Accessibility and Transport

The Council will support transport improvements that maximise accessibility for all modes of transport but particularly by foot, cycle and public transport.

A Priority will be given to improving the accessibility of the Borough's key development and regeneration sites, town and village centres, service, employment and transport hubs, and rural areas

B Where appropriate land will be allocated or safeguarded to facilitate the following transport priorities for the Borough:

i) Whitehaven Town Centre Transport Interchange

ii) Whitehaven Town Centre Enhancements Scheme

- iii) *Pow Beck spine road*
- iv) *A595 Whitehaven Eastern Relief Road / Bypass*
- v) *improvements to the A595*
- vi) *Improvements to the A5086*
- vii) *Maintaining and improving the stations, infrastructure and services on the Cumbria Coastal Railway*
- viii) *Improvements and enhancements of the footpath and cycle network to improve accessibility by these modes*

The Council will support schemes which improve transport including park and ride facilities for areas of employment and new development sites, freight transfer facilities and other rail-related improvements.

C Better connections will be sought outside the Borough to:

- i) *Key employment sites, service centres and transport hubs, including Lillyhall Business Park, employment zones in and the Port of Workington, Barrow in Furness and Carlisle*
- ii) *Regional and national transport links including the A66, M6, A595, A5092, A590 and West Coast Main Line*

D Planning obligations for developments at all major new development sites will be sought to mitigate their impact on the Borough's transportation system

E Transport system improvements must include measures to upgrade the environment, safety and convenience of the system and its setting

F A Parking Strategy will be developed to set out guidance for incorporating car parking in new developments with appropriate parking standards and for managing parking in the Borough

Detailed requirements for all transport developments are set out in Development Management Policy DM22."

Summary

- 3.14. As demonstrated within the following Chapters of this report, the proposed development will offer a genuine choice of travel to the site and promote social inclusion with short travel distances and support sustainable economic growth.
- 3.15. Both Local and National Government policy highlight the need to consider sustainable transportation modes when considering the likely impacts of development sites.
- 3.16. The promotion and connection to public transport is seen as key to providing an access strategy for new development, with walking and cycling taking an important role. The policies all highlight transport sustainability in terms of social inclusion, environmental impact, successful integration and safety.

4. Existing Transport Network

- 4.1. This chapter examines the existing transport network and considers if a genuine choice of transport mode exists in the vicinity of the development site. Both local and national government planning policies aim to promote travel by sustainable modes, with the overarching objective of reducing reliance on travel by private car, promoting social inclusion, and improving health and wellbeing of the local community. Policies all highlight transport sustainability under the banners of Economic Growth, Accessibility & Social Inclusion, Environment, Safety & Personal Security and Sustainability and Integration.
- 4.2. The promotion of public transport is seen as key to providing an access strategy for new developments, with walking and cycling taking an important role. The National Planning Policy Framework (NPPF) also supports the need for a sustainable approach to transportation planning. On this basis, the following provide an overview of the existing sustainable transport opportunities (i.e. walking, cycling, and public transport), and thereafter, the surrounding highway / traffic network, in line with the hierarchy of travel modes set out in NPPF.

Multi-Modal / People Trip Assessment

- 4.3. To determine the future person trips and travel choice of people associated with the proposed development reference was made to the Trip Rate Information and Computer System (TRICS) database. It should be recognised that the TRICS Database has limited surveys for the Builders Merchants land use category, however, the result from both land uses do reflect the expected typical trip profile. Given the nature of the land uses, accessible forms of travel are less likely to be utilised for visitors and customers and more likely to be utilised by staff.
- 4.4. The multi-modal travel trip rates for both land uses have been extracted from the database and the resulting peak multi-modal generation are detailed in *Table 1 & 2 below / overleaf:-*

Table 1: Builders Merchants Modal Split and Mode Share (Two-Way)

3,686m ² Builders Merchants	Weekday Peak		
	In	Out	Total
<i>Walking</i>			
PM Trip Rate (1200 - 1300)	0.038	0.028	0.066
No. of Walking Trips	1	1	2
<i>Cycling</i>			
PM Trip Rate (1300 - 1400)	0.019	0.009	0.028
No. of Cycle Trips	1	0	1
Public Transport			
PM Trip Rate (0800 - 0900)	0.057	0.000	0.057
No. of Public Transport Trips	2	0	2

Minor discrepancies are associated with rounding

- 4.5. The TRICS outputs and Census data are included in *Appendix C* for reference.
- 4.6. From the parameters adopted for the person trips detailed above, the remainder of this chapter presents a breakdown of the peak related future travel demand by each mode of transport generated by the proposed development. Each mode is classified according to the combined development peak related movements and measured in line with the existing transport provision.

Table 2: Industrial Units Modal Split and Mode Share (Two-Way)

2,764m ² Industrial Unit	Weekday Peak		
	In	Out	Total
Walking			
PM Trip Rate (1200 - 1300)	0.063	0.062	0.125
No. of Walking Trips	2	2	4
Cycling			
PM Trip Rate (1630 - 1730)	0.016	0.017	0.033
No. of Cycle Trips	0	1	1
Public Transport			
PM Trip Rate (1500 - 1600)	0.003	0.027	0.030
No. of Public Transport Trips	0	1	1

Minor discrepancies are associated with rounding

Sustainable Travel Opportunities

Pedestrian (Walking) Provision

Existing

- 4.7. Given the agricultural nature of the current use the site is bounded by a hedge and fence which controls general access. The field access to the site, located on Vale View adjacent to St Thomas Cross Garage, provides direct access to the existing footway which links the A595 and the main carriageway of Vale View which accesses the town.
- 4.8. The footway adjacent to the site is generally 2m in width and is shared with cyclists given it is designated as part of National Cycle Route (NCR) 72. The route benefits from street lighting and is shown within *Figure 3*.
- 4.9. To the north, the footway connects to the main Vale View carriageway which provides direct access to the town in the west and the A595 in the east. To the west, the footway on the south side of Vale View is generally 2m in width and provides a continuous link to the town centre. Near to the site, the footway on the north side of Vale View varies in width with a short section of narrower footway opposite the junction leading to the site.
- 4.10. A short distance to the west of the site, Vale View provides direct access to residential properties with residents parking on-street. The parking results reduced vehicle speeds given the narrower section of carriageway which makes it easier for pedestrians to cross.
- 4.11. Continuing toward the town centre, the footways are typical of an historic town centre with buildings and property boundaries extending to the back of the footway that ensures the route is overlooked, providing natural surveillance which is welcomed by pedestrians.
- 4.12. To the east of the site, the footways on both sides of Vale View connect to the A595 at the St Thomas Cross Roundabout. The footways provide access to the development on the east side of the carriageway and the bus stop to the south of the roundabout. The splitter islands on all approaches of the roundabout benefit from dropped kerbs which aids pedestrians when crossing all routes.
- 4.13. The footway adjacent to the A595 provides a continuous and segregated link to the settlement of Thornhill in the south.
- 4.14. *Figures 4 & 5*, overleaf, present the current footway infrastructure adjacent to the site. *Figure 4* displays a view of the footway adjacent to the eastern boundary of the site, with *Figure 5* showing a view of Vale View footway adjacent to the junction leading to the site.

Figure 4: Existing Footway Adjacent to Site

Figure 5: Vale View Footway



- 4.15. Existing footway facilities in the vicinity of the site are of good standard, typically a minimum of 2m in width and benefit from street lighting, providing links to bus stops and residential settlements.

Proposed

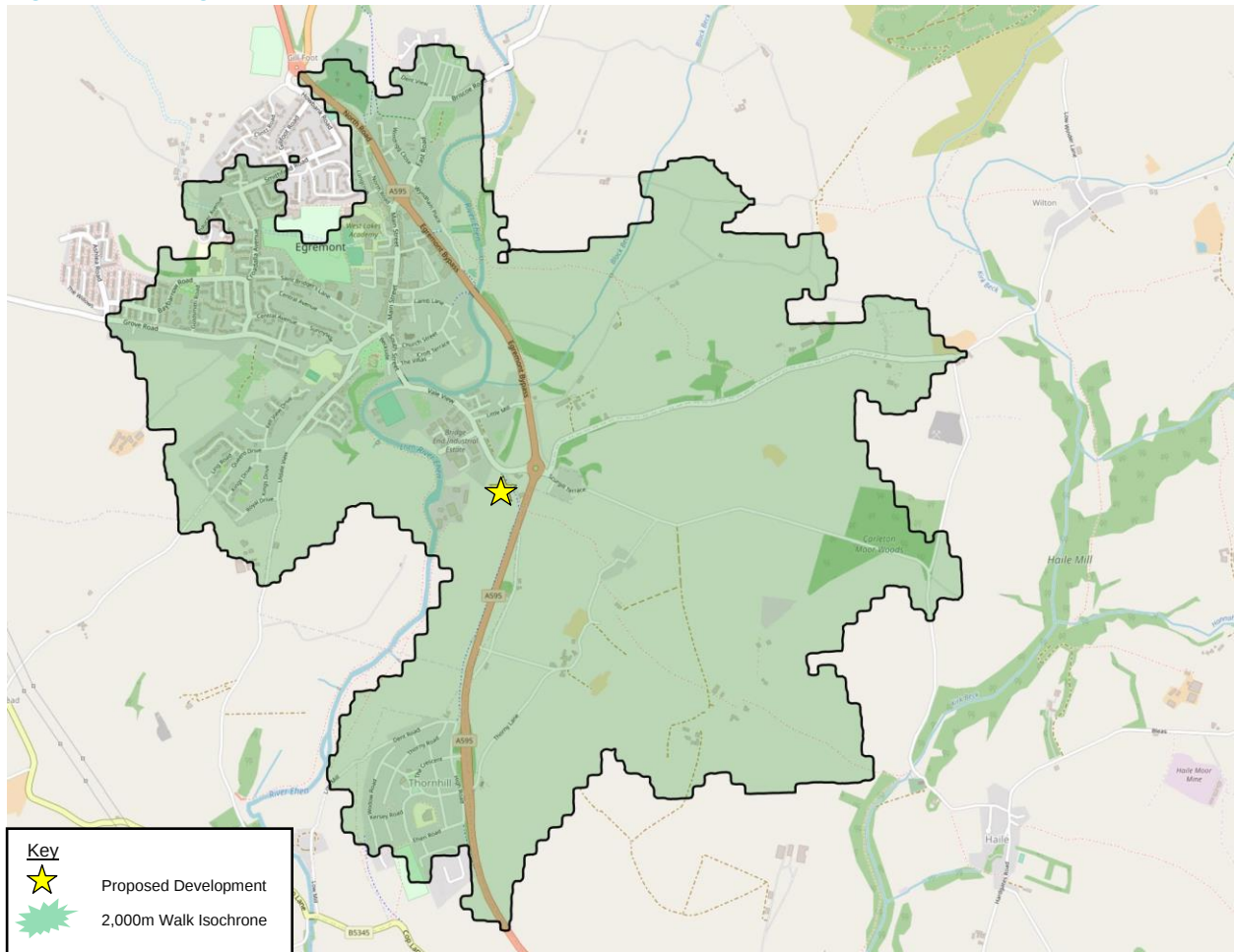
- 4.16. From *Tables 1 & 2*, the proposed development site could generate in the region of 6 (two-way) trips during the busiest hours.
- 4.17. The site will be accessed direct from Vale View with footways provided as part of the proposed vehicle access junction. The footways will provide a continuous link from the proposed buildings to the existing adopted footway infrastructure on Vale View.
- 4.18. Given the nature of the land uses proposed, walking trips to the site are likely to be predominantly by staff rather than customers and this is reflected in the generation figures. Nevertheless, the site benefits from good links to the wider settlement as detailed previously.
- 4.19. *Figure 4*, overleaf, presents a 25 minute (2,000m) walking isochrone in relation to the proposed development indicating that the majority of Egremont and Thornhill are within an acceptable walking distance of the site.
- 4.20. Given the location of the site, it is considered that the majority of walk-in trips will likely originate from the wider settlement to the north, with trips also generated from the adjacent industrial estate.
- 4.21. Based on the above, the proposed development is considered to be accessible on foot, via a network of well-maintained pedestrian links and facilities, from several locations within the surrounding catchment.

Cycle (Bicycle) Provision

Existing

- 4.22. There is limited designated cycle infrastructure in the vicinity of the site, however, the residential nature of the surrounding road network, within the settlement, is conducive to cycling with low vehicle speeds and volumes. Although there are no formal cycle facilities on the adjacent road network, the roads and surrounding area are well used by cyclists given presence of NCR 72.
- 4.23. NCR 72, known as Hadrian's Cycleway, takes cyclists on a ride through some of England's most wild and dramatic countryside. Follow the line of the Roman frontier for 170 miles (274 kilometres) from Ravenglass in Cumbria to South Shields in Tyne & Wear.
- 4.24. Locally, the route follows the segregated footpath on the A595 then diverts past the site on to Vale View, through the town before continuing north to Whitehaven. The route is shown on *Figure 7* with the site marked by a yellow star.

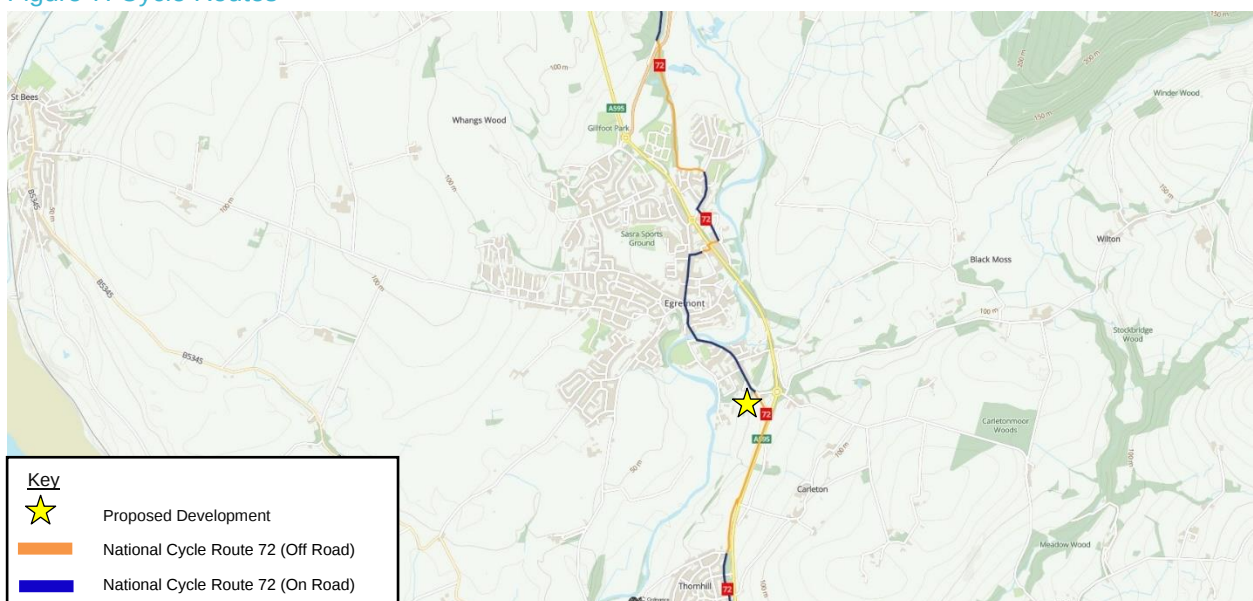
Figure 6: Walking Isochrone & Catchment



Based upon the Ordnance Survey's (1:1250) Map of 2021 with permission of the controller of Her Majesty's Stationery Office, Crown copyright reserved. ECS Transport Planning Ltd Centrum Offices, 38 Queen Street, Glasgow, G1 3DX. License No: 100055056

- 4.25. All of Egremont and Thornhill are within an 2,000m catchment of the development site, which equates to a cycle time of between 7 – 10 minutes. This indicates that cycling would be an attractive mode of travel for staff accessing the site.

Figure 7: Cycle Routes



Based upon the Ordnance Survey's (1:1250) Map of 2021 with permission of the controller of Her Majesty's Stationery Office, Crown copyright reserved. ECS Transport Planning Ltd Centrum Offices, 38 Queen Street, Glasgow, G1 3DX. License No: 100055056

Proposed

- 4.26. Based on the TRICS review and existing travel characteristics in the area, the number of cycling trips on the local network is only expected to increase by 2 two-way trip during busiest peak periods.
- 4.27. Cycle parking facilities will be provided on site for both the builders merchants and industrial units as detailed within *Chapter 2*. Sheffield Cycle Stands will be provided to accommodate customer and staff demand.
- 4.28. Given the location of the site and the infrastructure proposed, it is considered that the site will make a positive contribution toward encouraging cycling trips.
- 4.29. Based on the existing cycle opportunities, connections to cycle routes in the area and nature of the local highway network, it is considered that the anticipated demand for cycling can be adequately accommodated.

Public Transport Provision

Existing

- 4.30. This site is accessible by bus with the nearest stops to the developable area being located on Vale View and the A595 circa 150m to the north and east, respectively. Both stops benefit from flag poles, shelters and timetable information. The stop on the A595 also benefits from a lay-by given the strategic nature of the route. The main service provider is Stagecoach, with additional services available from Hobans 1923.
- 4.31. *Table 3* indicates that a frequent bus service is accessible from the site which provides access to the wider Egremont settlement area as well as Maryport, Workington, Thornhill and Whitehaven. Additional services are available from stops in the larger settlements previously detailed.
- 4.32. *Figure 8*, overleaf, indicates the location of public transport infrastructure and bus routes in the vicinity of the site.

Table 3: Existing Bus Services

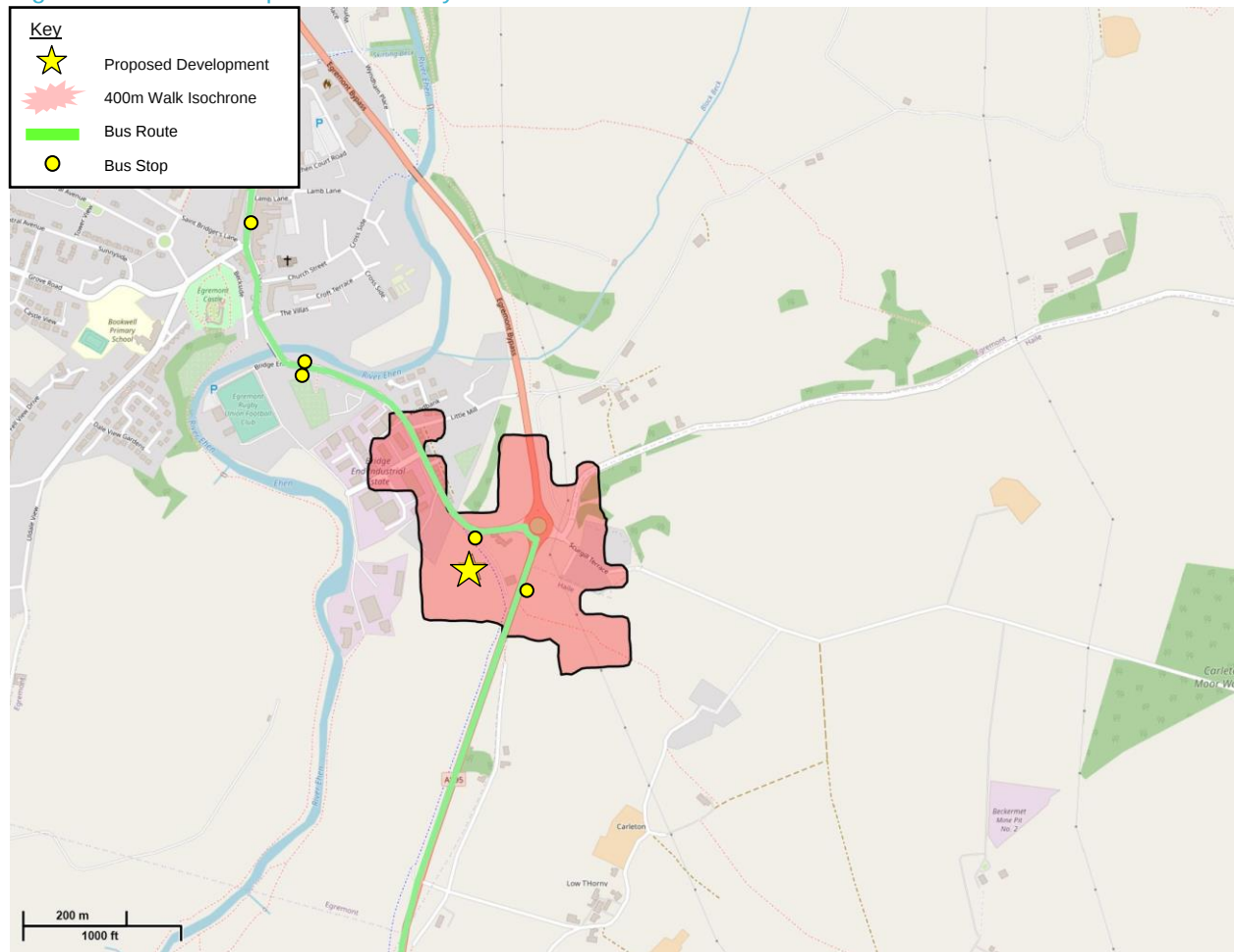
Operator	Service	Route	Frequency (mins)					
			Monday-Friday		Saturday		Sunday	
			Day	Night	Day	Night	Day	Night
Stagecoach	30	Thornhill / Frizington - Maryport	30	-	30	-	60	-
Hobans 1923	HB01	Whitehaven - Seascale	1 service	-	-	-	-	-

- 4.33. The site is located within a short walk of the available public transport services within the settlement which ensures that it is located in an appropriate location when considering accessibility.

Proposed

- 4.34. It is expected that there will be a demand for travelling by public transport to / from the development site at various times throughout the day, however, the largest demand will be associated with employment based trips associated with staff working at the site. As a result, this public transport review focuses on the peak commuting periods, with up to 3 (two-way) trips estimated to be generated during the busiest peak periods, respectively.
- 4.35. The proposed site layout and footway provision will connect the proposed development to the adopted footways on Vale View which will provide a direct connection to the existing bus stops on the route and the A595. Bus stops are located within 400m of the development site as per the recommended walking distances detailed within NPPF.
- 4.36. The bus services start before 6am and continue to 7pm which covers the opening times (8am – 5pm) of the proposed builders merchants which ensures that public transport will be a viable alternative for staff.

Figure 8: Public Transport Accessibility



Summary

- 4.37. In accordance with local and national transport policy, an assessment of the development proposals has been undertaken for all sustainable modes of travel. This indicates that the current walking and cycling provision in the area is sufficient to accommodate the expected future demand from the site.
- 4.38. The proposed footways provide direct connections to the existing footway network providing links with existing public transport facilities enhancing connectivity with the surrounding area. A workplace travel plan will be prepared to promote sustainable staff travel.
- 4.39. The site is accessible to a range of sustainable modes of transport, integrates well with the surrounding area thereby ensuring that the site is compliant with the national and local policies highlighted within *Chapter 3*.

5. Vehicular Accessibility

- 5.1. The following presents a review of the surrounding road network and details how the likely level of private car use will be generated.

Surrounding Road Network

- 5.2. This section of the report describes the most likely routes vehicles will travel to / from the development site from the main nearby settlements.

Existing

- 5.3. *Figure 1, Site Location*, identifies the site, surrounding road network and its environs. The site is ideally located for access to strategic transport links, such as, the A595(T).
- 5.4. The site currently benefits from a field access with Vale View on the eastern boundary of the site. This section of Vale View is a short cul-de-sac which currently provides access to a small number of commercial premises. The carriageway is wide throughout its length and currently experiences on-street parking given the lack of development on the west side of the route.
- 5.5. The road adjacent to the site connects to the main southern access road to Egremont which is also called Vale View. The routes connect in the form of a simple priority junction which is appropriate given the location and traffic volumes experienced on the route. The junction benefits from a visibility splay in excess of 2.4m x 60m as is required for a 30mph speed limit route within the CCC Guidelines.
- 5.6. Vale View connects the town centre with the A595 via St Thomas Cross Roundabout. Vale View is generally 8m adjacent to the site with footway on both sides of the carriageway. The route provides a key link to the Bridge End Industrial Estate from the strategic road network and the southern part of the settlement.
- 5.7. To the west of the site, Vale View provides direct access to residential and commercial properties as would be expected in an urban setting.
- 5.8. The A595 is a primary route in Cumbria, that starts in Carlisle, passes through Whitehaven and goes close to Workington, Cockermouth and Wigton. It passes Sellafield and Ravenglass before ending at the Dalton-in-Furness by-pass, in southern Cumbria, where it joins the A590 trunk road. The road is mostly single carriageway, apart from in central Carlisle, where it passes the castle as a busy dual carriageway road named Castle Way, and prior to that as Bridge Street and Church Street, where it passes close to the McVitie's or Carr's biscuit factory. The Lillyhall bypass is also dual carriageway.
- 5.9. Locally, the route provides an eastern bypass of Egremont and removes strategic through traffic from having to travel through the settlement. Traffic accessing the site would utilise the St Thomas Cross Roundabout which is a four arm roundabout providing the primary access to the southern area of Egremont.

Proposed

- 5.10. The site will be accessed from Vale View via an industrial standard priority junction which has been designed to accommodate HGV's. Visibility splay of 2.4m by 36m to the south and 56m to the north will be provided which reflects the available visibility given the presence of the nearby junction with Vale View and cul-de-sac nature of the route to the south. The visibility at the proposed junction is considered adequate given the limited traffic and low traffic speeds due to the cul-de-sac nature of the route.
- 5.11. The access road has been designed to industrial road standards consistent with CCC Guidelines and is demonstrated within the architects plans contained within *Appendix B*. The route will be a minimum of 7.3m throughout to ensure it can be utilised by the largest vehicle types at all times.
- 5.12. Following comments from CCC Highways on pedestrians crossing facilities and on-street parking, AL Daines & Partners prepared a revised junction layout which is included within *Appendix B* for reference. The revised layout includes formalised parking bays, waiting restrictions and provides an uncontrolled

pedestrian / cycleway crossing setback from the access give way line. Swept paths and visibility splays are also indicated within the plan.

- 5.13. The junction layout is intended to establish the principle of an access in this location and it is accepted that detailed design will be conditioned which will require to be agreed with CCC Highways via a Section 278.

Development Traffic

- 5.14. Trip rates for the proposed development were established from the TRICS database and are detailed within *Tables 4 & 5* for the builders merchants and industrial uses, respectively. The full TRICS outputs are included within *Appendix C* for reference.

Table 4: Builders Merchants Trip Generation (3,686sqm)

	Weekday AM Peak (0800-0900)			Weekday PM Peak (1670-1800)		
	In	Out	Total	In	Out	Total
3,686m²						
Trip Rate	0.665	0.519	1.184	0.105	0.286	0.391
Traffic Generation	25	12	44	4	11	15

Table 5: Industrial Trip Generation (2,764sqm)

	Weekday AM Peak (0800-0900)			Weekday PM Peak (1700-1800)		
	In	Out	Total	In	Out	Total
2,764m²						
Trip Rate	0.363	0.098	0.461	0.018	0.087	0.105
Traffic Generation	10	3	13	1	2	3

- 5.15. As would be expected of the proposed land uses, the greatest vehicle generation will occur in the morning. However, it should be noted that Thomas Graham opens at 8am so all staff arrive well in advance of this time, as such, the trip generation figures detailed above are likely to be onerous.
- 5.16. Discussion with the applicant has identified that a typical day would result in 10 HGV deliveries to the builders merchants. These vehicle movements are included in the generation detailed in the above tables. The remainder of the vehicle movements would be associated with staff and customer trips.
- 5.17. The proposals result in a maximum two-way generation of 57 and 18 vehicles in the AM and PM peak hours, respectively. Once the traffic distributions toward the town and the A595 it is evident that vehicle impact on nearby junctions will be negligible.

Summary

- 5.18. In summary, the nature of the surrounding highway network is sufficient to accommodate the likely limited traffic demands associated with the development proposals.

6. Summary & Conclusions

Summary

- 6.1. ECS Transport Planning Limited has been appointed by Thomas Graham & Sons Ltd to provide a Transport Assessment in support of a planning application for a mixed use development comprising a builders merchants and industrial 'starter units' on land adjacent to Vale View, Egremont.
- 6.2. The parameters of this study were detailed within correspondence with Cumbria County Council's Environment and Infrastructure Department and National Highways (NH). Details of the scoping correspondence is contained within *Appendix A* for reference. Due to the requirement to lodge the planning application a response to the scoping letter was not available from either Highways Authority. As a result, should there be any material change to the scope of the assessment an updated TA will be lodged with Copeland Borough Council.
- 6.3. This report reviews and assesses the potential future travel demand for all modes of travel against the existing transport provision in the area, detailing, if necessary, what measures are required to enhance the accessibility of the development site and ensure the proposals meet the requirements of local and national transport planning policies. Reference has also been made to the following transport policies and guidance in the preparation of this report:-
 - National Planning Policy Framework (NPPF);
 - Cumbria Local Transport Plan Strategy;
 - Cumbria Design Guide; and
 - Copeland Borough Council Local Plan.
- 6.4. The findings of this study are based on experience of similar schemes, a review of the site, traffic observations and has been produced in accordance with the policy documents detailed above.
- 6.5. The proposed development includes a replacement builders merchants including ancillary office and B2 industrial starter units. The main building, which includes the builders merchants, will be located in the southern area of the site and will be provided over three floors which is a reaction to the site topography. Car parking will be located to the north and east of the building with a lower and upper service yard located to the west and east, respectively.
- 6.6. The industrial starter units will be provided in the basement of the main building and standalone units on the northern boundary.
- 6.7. The scale of the proposed development is as follows:
 - Builders merchants (including sales, storage and office space) - 3,686sqm; and
 - Industrial units – 2,764sqm.
- 6.8. The site will be accessed from Vale View via an industrial standard priority junction which has been designed to accommodate HGV's. Pedestrian access will be provided via the access junction and will connect to the existing footway on Vale View.
- 6.9. A people trip assessment of the development proposals has been undertaken for all modes of travel which confirms that the walking, cycling and public transport provision in the area is sufficient to accommodate the expected future demand from the site with improvements.
- 6.10. Based on a review of similar developments, the development could generate a total of 57 and 18 vehicles in the AM and PM peak hours, respectively. Vehicle generation for the site is estimated to generate approximately 1 additional two-way car movement every minute, on average, on the wider road network during the worst-case peak hour which is not considered to be onerous.
- 6.11. The nature of the surrounding road network is considered sufficient to accommodate the likely limited traffic demands associated with the development proposals.

Conclusions

- 6.12. This Transport Assessment demonstrates that the development site will be accessible by sustainable modes of travel and integrate well within the existing transport network with the introduction of additional non-car promoting measures. In addition, the site can be accessed safely from the adjacent highway network by private vehicles without compromising the safety or efficiency of existing road users.

APPENDICES

A. Scope

Environment & Infrastructure
Cumbria County Council
Parkhouse Building
Baron way
Carlisle
CA6 4SJ

Direct Tel: 0844 443 0934
Direct Email: steven.scott@ecstransport.co.uk

Our Ref: 23001 Mixed Use, Egremont
Your Ref:

Date: 1st February 2023

(Email Only)

Dear Sirs,

PROPOSED MIXED USE DEVELOPMENT, VALE VIEW, EGREMONT

ECS Transport Planning (ECS) has been commissioned by Thomas Graham & Sons Ltd to prepare a Transport Assessment (TA) in support of a planning application for a mixed use development on land to the south of Vale View, Egremont.

The following presents an overview of the proposed development, including access strategy proposals, and our intended approach / methodology for undertaking the TA which will be prepared in accordance with the National Planning Policy Framework (NPPF)".

Development Proposals

Overview

Thomas Graham & Sons propose to move their existing builders merchants operation located within the Bridge End Industrial Estate, a short distance to the south east to a proposed site which is located adjacent to Vale View.

The site is currently agricultural land accessed directly from Vale View and is bounded to the north by Vale View and commercial premises, east by the A595, south by further agricultural land and the west by Bridge End Industrial Estate. The location of the site Architects Plus location plan enclosed.

The developable area lies within with existing settlement boundary for Egremont, which is identified as one of the Borough's Key Service Centres, where opportunities for expansion of existing employment sites will be encouraged. The site is also identified as an employment site allocation under the current local plan, which would form an extension to the existing Bridge End Industrial Estate.

The proposed development includes a replacement builders merchant including ancillary office and B2 industrial starter units. The industrial starter units will be provided in the basement of the builders merchants and standalone units on the northern boundary. The site will be accessed from Vale View via an industrial standard priority junction which has been designed to accommodate HGV's. The layout of the proposed site is indicated in the Architects Plus scheme plan enclosed.

The scale of the proposed development is as follows:

- Builders merchants (including sales, storage and office space) - 3,686sqm; and
- Industrial units – 2,764sqm.

Continued...

The following details the scope of study requirements for your comments.

1. Methodology

The development proposals will be assessed against national and local transport policy to establish the sites sustainability.

A review of existing walk, cycle and public transport availability in the surrounding area will be undertaken to ensure the current provision is supportive of the development proposals. Improvements to encourage travel by alternative modes will be identified, if considered necessary.

Although the very nature of the proposals (builders merchants) will attract car based customers, measures will be introduced as part of the proposed development that will seek to promote access by sustainable travel modes, particularly in relation to staff based journeys and customers from the surrounding area (i.e. local employees and residents).

We would appreciate if you could advise of any committed developments or infrastructure which would have a material impact on the proposed study area.

2. Trip Generation & Distribution

Proposed vehicular traffic generation has been established using the TRICS database for both land uses. The full TRICS output is enclosed with this letter. Trip rates and generation presented within *Tables 1 & 2*, below, have been based on the AM peak hour of 0800-0900 and the PM peak hour of 1700-1800

Table 1: Builders Merchants Vehicle Generation

3,686m ²	AM Peak (0800-0900)			PM Peak (1700-1800)		
	IN	OUT	TOTAL	IN	OUT	TOTAL
Trip Rate	0.665	0.519	1.184	0.105	0.286	0.391
Generation	25	12	44	4	11	15

Table 2: Industrial Units Vehicle Generation

2,764m ²	AM Peak (0800-0900)			PM Peak (1700-1800)		
	IN	OUT	TOTAL	IN	OUT	TOTAL
Trip Rate	0.363	0.098	0.461	0.018	0.087	0.105
Generation	10	3	13	1	2	3

Continued...

As Thomas Graham opens at 8AM, staff are all in the premises well before the typical commuter peak hours. As such, including the office area within the trip generation calculations is robust for the morning peak period.

The proposals result in a maximum two-way generation of 57 and 18 vehicles in the AM and PM peak hours, respectively. Once the traffic distributions toward the town and the A595 it is evident that vehicle impact on nearby junctions will be negligible. As a result, we would argue that detailed junction analysis is not required in this instance.

3. Parking & Servicing

Guidance on parking provision is detailed within the Cumbria County Council's parking standards for general, disabled and cycle parking.

Unfortunately, there is no guidance for builders merchants so industrial has been considered for the full site as this is likely to be the most applicable. The standards outline the following:-

- Essential Operational Parking – 50m² of usable service space per 250m² gross floor area plus turning space
- Disabled parking - 3% of car parking;
- Cars - 1 space per 50m² GFA;
- Pedal Cycles - number equivalent to 10% of car requirement, minimum of 2 spaces.

Based on an overall GFA of 6,450m² the above parking standards would allow for a maximum of 129 vehicle spaces. However, the parking provision is considered to be a significant overprovision for the builders merchants given the current premises operates with 17 marked bays.

As a result, it is proposed to provide 82 parking spaces for the wider site which are distributed as follows:

- Builders merchants and basement industrial (1,774sqm) – 58 spaces;
- Staff spaces for builders merchants 9 spaces; and
- Industrial units to the north – 15 spaces.

Based on the above 3 disabled spaces will be provided and 8 bicycle spaces.

4. Travel Plan Framework

The travel plan will contain information on walking / cycle routes, and public transport information, such as, location of bus stops and timetables with the aim of encouraging travel by sustainable modes and to reduce the reliance on the private car. The travel plan will be focused on encouraging staff to consider sustainable modes of travel as it is far more difficult to influence customer travel.

Continued...

Page 3 of 4
23001/MS

Should you wish to discuss any aspect of the above please don't hesitate to get in touch.

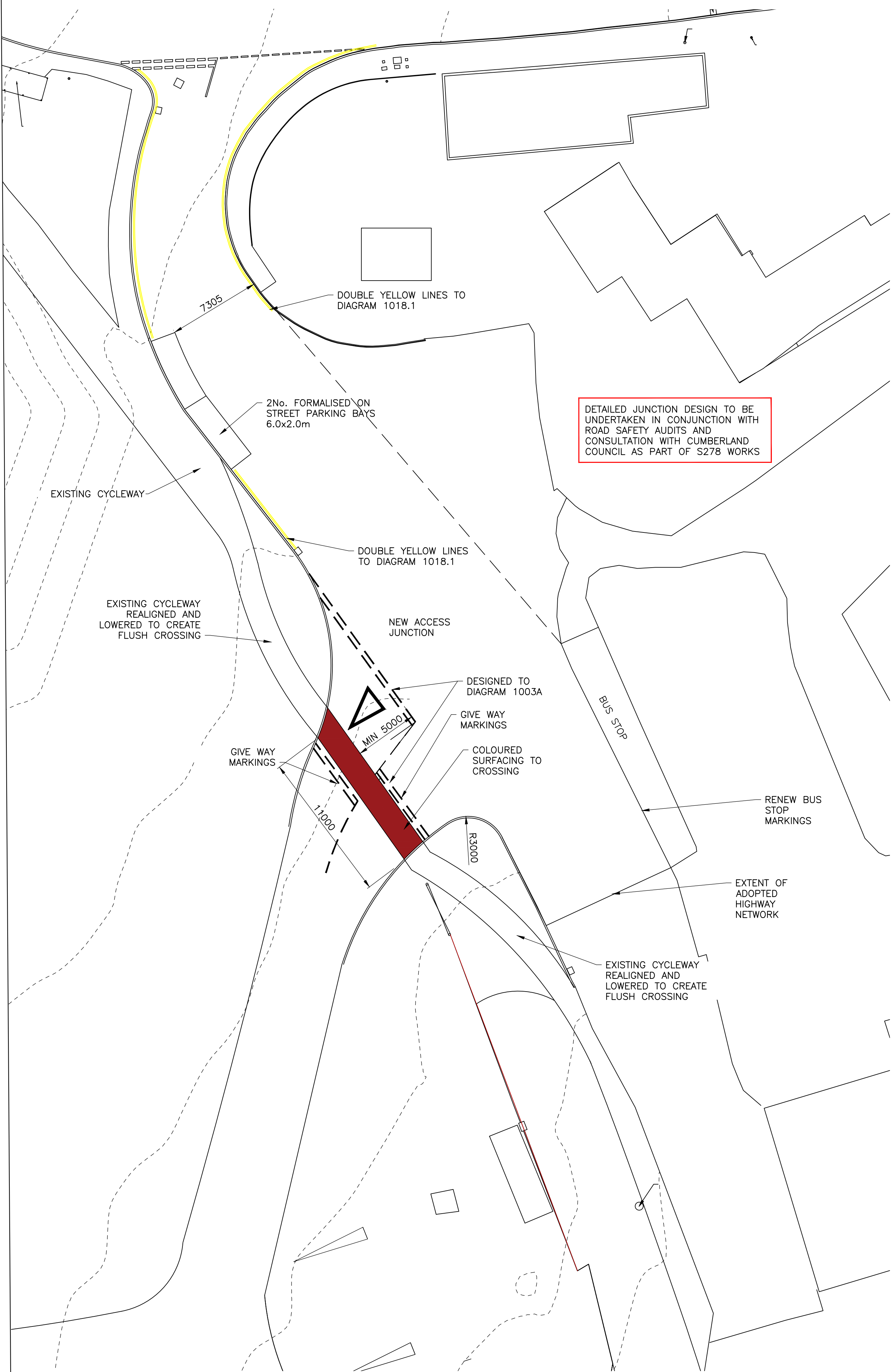
Yours Sincerely,

Michael Summers
Director

Cc Highways England
 Copeland Borough Council planning

Encls

B. Existing / Proposed Layouts & Vehicle Swept Paths



NEW ACCESS JUNCTION LAYOUT



SWEPT PATH AND VISIBILITY SPAY

- NOTES
1. THIS DESIGN IS BASED ON INFORMATION SUPPLIED BY THIRD PARTIES, AND MAYBE SUBJECT TO CHANGE RESULTING FROM UPDATES AVAILABLE FROM SAID PARTIES.
 2. THE DESIGN IS A FULL SET BACK, MARKED (BENT OUT) CROSSING IN ACCORDANCE WITH CYCLE INFRASTRUCTURE DESIGN LOCAL TRANSPORT NOTE 10 DATED JULY 2020.
 3. THE S278 WORKS PROPOSED ARE SUBJECT TO A STAGE 1 / 2 ROAD SAFETY AUDIT BEING UNDERTAKEN TO INFORM THE DESIGN

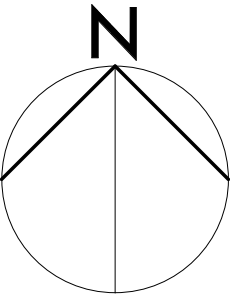
C	01-06-23	SM	VEHICLE TRACKING AND VISIBILITY SPLAY ADDED
B	30-05-23	PA	AMENDMENTS TO CROSSING DESIGN
A	12-05-23	PA	REVISED ACCESS ARRANGEMENT
REV	DATE	AUTHOR	NOTES
DRAWING STATUS		PRELIMINARY	
 A L DAINES & PARTNERS CONSULTING CIVIL & STRUCTURAL ENGINEERS 28 Castle Street, Carlisle, Cumbria CA3 8TP TEL 01228 527428 EMAIL mail@aldaines.co.uk WEB www.alldaines.co.uk		CLIENT THOMAS GRAHAM & SONS LTD	
		TITLE THOMAS GRAHAM, EGREMONT NEW ACCESS JUNCTION AND S278 WORKS	
DRAWN PA		DATE APR 23	SCALE 1:200 @A1
DRAWING NO. 21-C-16080-012			C

Site - subject of the application

Adjoining land - same owner as subject site

LEGEND

- 2.4m high mesh security fencing with matching security and personnel gates
- 1m high low level metal fencing with matching vehicle gates
- Access control barrier to staff car parking



Proposed Block Plan

Thomas Graham, Egremont

0m 10m 20m 30m 40m 50m

VISUAL SCALE 1:500 @ A1

This drawing is to be read in conjunction with all related drawings. Dimensions must be checked and verified on site before commencing work or producing shop drawings. The originator must be notified immediately of any discrepancy. This drawing is copyright and remains the property of Architects Plus, and may not be reproduced in any way without written consent from Architects Plus.

Victoria Galleries, Viaduct House, Victoria Viaduct,
Carlisle, Cumbria, CA3 8AN

ap@architectsplus.co.uk

01228 515144

WWW.ARCHITECTSPUS.CO.UK

Registered Office
Victoria Galleries, Victoria House,
Victoria Viaduct, Carlisle, Cumbria, CA3 8AN

Company Registration
Architects Plus (UK) Limited
Registered in England No. 4221140

Drawing

Proposed Block Plan

PL - Planning

Project

Thomas Graham, Egremont

Client name

Thomas Graham & Sons Ltd

RIBA stage

4 - Technical Design

Date

05.01.23

Drawn by

LC

Scale @ A1

1 : 500

Drawing number

20002-PL03

Revision

D

D	Amendments to site entrance following Client operational requirements.	LC	17.05.23	
C	Planning Application amendments following Planners comments	LC	14.03.23	
B	Planning Application amendments following Planners comments	LC	09.03.23	
A	Planning Application submission	LC	08.02.23	
Revision	Description	Drawn	Approved	Date

C. TRICS Output

Calculation Reference: AUDIT-654801-230131-0104

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : L - BUILDER'S MERCHANTS
TOTAL VEHICLES

Selected regions and areas:

05	EAST MIDLANDS	
	LN LINCOLNSHIRE	2 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	2 days
	WO WORCESTERSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	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: Gross floor area
Actual Range: 600 to 13051 (units: sqm)
Range Selected by User: 600 to 13051 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/96 to 11/06/13

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	1 days
Wednesday	1 days
Friday	2 days

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

Selected survey types:

Manual count	7 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:

Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	2
Edge of Town	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:

Industrial Zone	2
Commercial Zone	1
Residential Zone	2
Built-Up Zone	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	X days - Selected
Servicing vehicles Excluded	7 days - Selected

Secondary Filtering selection:

Use Class:

E(a) 7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 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	1 days
15,001 to 20,000	4 days
25,001 to 50,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	2 days
500,001 or More	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	3 days
1.1 to 1.5	4 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.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	7 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No 7 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 7 days

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

LIST OF SITES relevant to selection parameters

1	LN-01-L-01 WHARF ROAD GRANTHAM	JEWSON	LINCOLNSHIRE
	Edge of Town Centre Built-Up Zone Total Gross floor area:	6020 sqm	
	Survey date: MONDAY	15/11/10	Survey Type: MANUAL
2	LN-01-L-02 SOUTH PARADE GRANTHAM	JACKSON BUILDING CENTRE	LINCOLNSHIRE
	Edge of Town Centre Commercial Zone Total Gross floor area:	13051 sqm	
	Survey date: TUESDAY	11/06/13	Survey Type: MANUAL
3	WM-01-L-01 NEW ROAD BIRMINGHAM RUBERY	BUILDERS MERCH.	WEST MIDLANDS
	Edge of Town Residential Zone Total Gross floor area:	600 sqm	
	Survey date: FRIDAY	16/05/03	Survey Type: MANUAL
4	WM-01-L-02 CHARLOTTE ROAD BIRMINGHAM STIRCHLEY	SELCO	WEST MIDLANDS
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area:	5600 sqm	
	Survey date: WEDNESDAY	19/10/11	Survey Type: MANUAL
5	WO-01-L-01 WORCESTER ROAD BROMSGROVE	JEWSON	WORCESTERSHIRE
	Edge of Town No Sub Category Total Gross floor area:	1000 sqm	
	Survey date: FRIDAY	25/04/03	Survey Type: MANUAL
6	WO-01-L-02 NAVIGATION ROAD WORCESTER	JEWSON	WORCESTERSHIRE
	Edge of Town Industrial Zone Total Gross floor area:	5000 sqm	
	Survey date: MONDAY	15/06/09	Survey Type: MANUAL
7	WY-01-L-01 ST ANDREWS ROAD HUDDERSFIELD BRADLEY MILLS	BUILDERS MER.	WEST YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area:	3000 sqm	
	Survey date: MONDAY	17/03/03	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.

TRIP RATE for Land Use 01 - RETAIL/L - BUILDER'S MERCHANTS

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	1	5600	0.000	1	5600	0.000	1	5600	0.000
06:00 - 07:00	3	8224	0.122	3	8224	0.008	3	8224	0.130
07:00 - 08:00	7	4896	0.414	7	4896	0.228	7	4896	0.642
08:00 - 09:00	7	4896	0.665	7	4896	0.519	7	4896	1.184
09:00 - 10:00	7	4896	0.598	7	4896	0.627	7	4896	1.225
10:00 - 11:00	7	4896	0.697	7	4896	0.665	7	4896	1.362
11:00 - 12:00	7	4896	0.642	7	4896	0.619	7	4896	1.261
12:00 - 13:00	7	4896	0.546	7	4896	0.572	7	4896	1.118
13:00 - 14:00	7	4896	0.502	7	4896	0.557	7	4896	1.059
14:00 - 15:00	7	4896	0.534	7	4896	0.549	7	4896	1.083
15:00 - 16:00	7	4896	0.479	7	4896	0.479	7	4896	0.958
16:00 - 17:00	7	4896	0.347	7	4896	0.479	7	4896	0.826
17:00 - 18:00	7	4896	0.105	7	4896	0.286	7	4896	0.391
18:00 - 19:00	3	4533	0.191	3	4533	0.199	3	4533	0.390
19:00 - 20:00	1	5600	0.214	1	5600	0.357	1	5600	0.571
20:00 - 21:00	1	5600	0.000	1	5600	0.036	1	5600	0.036
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.056			6.180			12.236

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected: 600 - 13051 (units: sqm)
 Survey date range: 01/01/96 - 11/06/13
 Number of weekdays (Monday-Friday): 7
 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.

Calculation Reference: AUDIT-654801-230203-0224

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : L - BUILDER'S MERCHANTS
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
	WO WORCESTERSHIRE	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:	Gross floor area
Actual Range:	5000 to 5600 (units: sqm)
Range Selected by User:	5000 to 5600 (units: sqm)

Parking Spaces Range:	All Surveys Included
-----------------------	----------------------

Public Transport Provision:

Selection by:	Include all surveys
---------------	---------------------

Date Range:	07/01/05 to 19/10/11
-------------	----------------------

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	1 days
Wednesday	1 days

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

Selected survey types:

Manual count	2 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)	1
Edge of Town	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:

Industrial Zone	1
Residential Zone	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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	X days - Selected
Servicing vehicles Excluded	2 days - Selected

Secondary Filtering selection:

Use Class:

E(a) 2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 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:

15,001 to 20,000 1 days

25,001 to 50,000 1 days

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

Population within 5 miles:

100,001 to 125,000 1 days

500,001 or More 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 1 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.

Petrol filling station:

Included in the survey count 0 days

Excluded from count or no filling station 2 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No 2 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 2 days

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

LIST OF SITES relevant to selection parameters

1	WM-01-L-02	SELCO	WEST MIDLANDS
	CHARLOTTE ROAD		
	BIRMINGHAM		
	STIRCHLEY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	5600 sqm	
	Survey date: WEDNESDAY	19/10/11	Survey Type: MANUAL
2	WO-01-L-02	JEWSON	WORCESTERSHIRE
	NAVIGATION ROAD		
	WORCESTER		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	5000 sqm	
	Survey date: MONDAY	15/06/09	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.

TRIP RATE for Land Use 01 - RETAIL/L - BUILDER'S MERCHANTS
MULTI-MODAL CYCLISTS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	1	5600	0.000	1	5600	0.000	1	5600	0.000
06:00 - 07:00	1	5600	0.000	1	5600	0.000	1	5600	0.000
07:00 - 08:00	2	5300	0.009	2	5300	0.009	2	5300	0.018
08:00 - 09:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
09:00 - 10:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
10:00 - 11:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
11:00 - 12:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
12:00 - 13:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
13:00 - 14:00	2	5300	0.019	2	5300	0.009	2	5300	0.028
14:00 - 15:00	2	5300	0.000	2	5300	0.009	2	5300	0.009
15:00 - 16:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
16:00 - 17:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
17:00 - 18:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
18:00 - 19:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
19:00 - 20:00	1	5600	0.000	1	5600	0.000	1	5600	0.000
20:00 - 21:00	1	5600	0.000	1	5600	0.000	1	5600	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.028			0.027			0.055

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.*

TRIP RATE for Land Use 01 - RETAIL/L - BUILDER'S MERCHANTS
 MULTI-MODAL PEDESTRIANS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	1	5600	0.000	1	5600	0.000	1	5600	0.000
06:00 - 07:00	1	5600	0.018	1	5600	0.000	1	5600	0.018
07:00 - 08:00	2	5300	0.038	2	5300	0.000	2	5300	0.038
08:00 - 09:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
09:00 - 10:00	2	5300	0.028	2	5300	0.019	2	5300	0.047
10:00 - 11:00	2	5300	0.019	2	5300	0.009	2	5300	0.028
11:00 - 12:00	2	5300	0.028	2	5300	0.019	2	5300	0.047
12:00 - 13:00	2	5300	0.038	2	5300	0.028	2	5300	0.066
13:00 - 14:00	2	5300	0.009	2	5300	0.019	2	5300	0.028
14:00 - 15:00	2	5300	0.019	2	5300	0.028	2	5300	0.047
15:00 - 16:00	2	5300	0.028	2	5300	0.019	2	5300	0.047
16:00 - 17:00	2	5300	0.000	2	5300	0.038	2	5300	0.038
17:00 - 18:00	2	5300	0.009	2	5300	0.028	2	5300	0.037
18:00 - 19:00	2	5300	0.000	2	5300	0.009	2	5300	0.009
19:00 - 20:00	1	5600	0.000	1	5600	0.000	1	5600	0.000
20:00 - 21:00	1	5600	0.000	1	5600	0.018	1	5600	0.018
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.234			0.234			0.468

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: $COUNT/TRP \times FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 01 - RETAIL/L - BUILDER'S MERCHANTS
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	1	5600	0.000	1	5600	0.000	1	5600	0.000
06:00 - 07:00	1	5600	0.000	1	5600	0.000	1	5600	0.000
07:00 - 08:00	2	5300	0.009	2	5300	0.000	2	5300	0.009
08:00 - 09:00	2	5300	0.057	2	5300	0.000	2	5300	0.057
09:00 - 10:00	2	5300	0.019	2	5300	0.009	2	5300	0.028
10:00 - 11:00	2	5300	0.000	2	5300	0.009	2	5300	0.009
11:00 - 12:00	2	5300	0.000	2	5300	0.019	2	5300	0.019
12:00 - 13:00	2	5300	0.009	2	5300	0.000	2	5300	0.009
13:00 - 14:00	2	5300	0.009	2	5300	0.009	2	5300	0.018
14:00 - 15:00	2	5300	0.009	2	5300	0.009	2	5300	0.018
15:00 - 16:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
16:00 - 17:00	2	5300	0.000	2	5300	0.019	2	5300	0.019
17:00 - 18:00	2	5300	0.000	2	5300	0.009	2	5300	0.009
18:00 - 19:00	2	5300	0.000	2	5300	0.000	2	5300	0.000
19:00 - 20:00	1	5600	0.000	1	5600	0.000	1	5600	0.000
20:00 - 21:00	1	5600	0.000	1	5600	0.054	1	5600	0.054
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.112			0.137			0.249

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.

Calculation Reference: AUDIT-654801-230130-0102

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : C - INDUSTRIAL UNIT
 TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
05	EAST MIDLANDS	
	DY DERBY	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	2 days
08	NORTH WEST	
	LC LANCASHIRE	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: Gross floor area
 Actual Range: 150 to 4324 (units: sqm)
 Range Selected by User: 150 to 10000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 17/06/22

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	1 days
Tuesday	2 days
Thursday	3 days

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

Selected survey types:

Manual count	6 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)	6
------------------------------------	---

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:

Industrial Zone	6
-----------------	---

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	1 days - Selected
Servicing vehicles Excluded	7 days - Selected

Secondary Filtering selection:

Use Class:

Not Known 6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	4 days

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

Population within 5 miles:

125,001 to 250,000	3 days
250,001 to 500,000	2 days
500,001 or More	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	3 days
1.1 to 1.5	3 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 6 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 6 days

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

LIST OF SITES relevant to selection parameters

1	DV-02-C-02	ENERGY RECOVERY FACILITY	DEVON
	GRACE ROAD SOUTH		
	EXETER		
	MARSH BARTON TRAD. EST.		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	3513 sqm	
	Survey date: THURSDAY	06/07/17	Survey Type: MANUAL
2	DY-02-C-01	ENGINEERED PRODUCTS	DERBY
	PONTEFRAC STREET		
	DERBY		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	2600 sqm	
	Survey date: THURSDAY	25/06/15	Survey Type: MANUAL
3	LC-02-C-03	TIMBER SUPPLIES	LANCASHIRE
	GOLDEN HILL LANE		
	LEYLAND		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	150 sqm	
	Survey date: TUESDAY	06/11/18	Survey Type: MANUAL
4	NF-02-C-04	EXHIBITION DESIGN & MANUF.	NORFOLK
	FLETCHER WAY		
	NORWICH		
	UPPER HELLESDON		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	690 sqm	
	Survey date: THURSDAY	14/11/19	Survey Type: MANUAL
5	WM-02-C-04	FOUNDRY	WEST MIDLANDS
	STOURVALE ROAD		
	STOURBRIDGE		
	LYE		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	4324 sqm	
	Survey date: TUESDAY	21/11/17	Survey Type: MANUAL
6	WM-02-C-05	INDIAN CATERING	WEST MIDLANDS
	ICKNIELD STREET		
	BIRMINGHAM		
	HOCKLEY		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	256 sqm	
	Survey date: MONDAY	22/11/21	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 SURVEYS

Site Ref	Survey Date	Reason for Deselection
NN-02-C-01	22/10/20	covid
TV-02-C-02	04/09/20	covid

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	5	2255	0.071	5	2255	0.018	5	2255	0.089
07:30 - 08:00	5	2255	0.062	5	2255	0.035	5	2255	0.097
08:00 - 08:30	5	2255	0.177	5	2255	0.027	5	2255	0.204
08:30 - 09:00	5	2255	0.186	5	2255	0.071	5	2255	0.257
09:00 - 09:30	6	1922	0.069	6	1922	0.052	6	1922	0.121
09:30 - 10:00	6	1922	0.121	6	1922	0.130	6	1922	0.251
10:00 - 10:30	6	1922	0.069	6	1922	0.035	6	1922	0.104
10:30 - 11:00	6	1922	0.052	6	1922	0.043	6	1922	0.095
11:00 - 11:30	6	1922	0.069	6	1922	0.078	6	1922	0.147
11:30 - 12:00	6	1922	0.113	6	1922	0.078	6	1922	0.191
12:00 - 12:30	6	1922	0.182	6	1922	0.130	6	1922	0.312
12:30 - 13:00	6	1922	0.113	6	1922	0.156	6	1922	0.269
13:00 - 13:30	6	1922	0.087	6	1922	0.121	6	1922	0.208
13:30 - 14:00	6	1922	0.061	6	1922	0.052	6	1922	0.113
14:00 - 14:30	6	1922	0.095	6	1922	0.078	6	1922	0.173
14:30 - 15:00	6	1922	0.017	6	1922	0.043	6	1922	0.060
15:00 - 15:30	6	1922	0.078	6	1922	0.069	6	1922	0.147
15:30 - 16:00	6	1922	0.035	6	1922	0.078	6	1922	0.113
16:00 - 16:30	6	1922	0.035	6	1922	0.173	6	1922	0.208
16:30 - 17:00	6	1922	0.009	6	1922	0.147	6	1922	0.156
17:00 - 17:30	6	1922	0.009	6	1922	0.052	6	1922	0.061
17:30 - 18:00	6	1922	0.009	6	1922	0.035	6	1922	0.044
18:00 - 18:30	6	1922	0.000	6	1922	0.035	6	1922	0.035
18:30 - 19:00	6	1922	0.000	6	1922	0.009	6	1922	0.009
19:00 - 19:30	1	256	0.000	1	256	0.000	1	256	0.000
19:30 - 20:00	1	256	0.000	1	256	0.000	1	256	0.000
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.719			1.745			3.464

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	150 - 4324 (units: sqm)
Survey date range:	01/01/14 - 17/06/22
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
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.

Calculation Reference: AUDIT-654801-230203-0240

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : C - INDUSTRIAL UNIT
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

03	SOUTH WEST	
	DV DEVON	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
09	NORTH	
	CB CUMBRIA	1 days
10	WALES	
	CF CARDIFF	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: Gross floor area
 Actual Range: 690 to 14125 (units: sqm)
 Range Selected by User: 690 to 43325 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 10/11/21

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:

Tuesday	1 days
Wednesday	1 days
Thursday	3 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)	3
Edge of Town	2

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:

Industrial Zone	5
-----------------	---

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	3 days - Selected
Servicing vehicles Excluded	2 days - Selected

Secondary Filtering selection:

Use Class:

Not Known 5 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	2 days
15,001 to 20,000	1 days
25,001 to 50,000	2 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
75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	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	2 days
1.1 to 1.5	3 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	CB-02-C-01	DOMINO'S PIZZA	CUMBRIA
	COWPER ROAD		
	PENRITH		
	GILWILLY IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	2950 sqm	
	Survey date: TUESDAY	10/06/14	Survey Type: MANUAL
2	CF-02-C-02	BAKERY	CARDIFF
	MAES-Y-COED ROAD		
	CARDIFF		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	14125 sqm	
	Survey date: THURSDAY	06/10/16	Survey Type: MANUAL
3	DV-02-C-02	ENERGY RECOVERY FACILITY	DEVON
	GRACE ROAD SOUTH		
	EXETER		
	MARSH BARTON TRAD. EST.		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	3513 sqm	
	Survey date: THURSDAY	06/07/17	Survey Type: MANUAL
4	NF-02-C-04	EXHIBITION DESIGN & MANUF.	NORFOLK
	FLETCHER WAY		
	NORWICH		
	UPPER HELLESDON		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	690 sqm	
	Survey date: THURSDAY	14/11/19	Survey Type: MANUAL
5	WK-02-C-01	MACHINE ENGINEERING	WARWICKSHIRE
	CASTLE MOUND WAY		
	RUGBY		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	9216 sqm	
	Survey date: WEDNESDAY	10/11/21	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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	690 - 14125 (units: sqm)
Survey date date range:	01/01/14 - 10/11/21
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
05:30 - 06:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
06:00 - 06:30	2	6083	0.008	2	6083	0.000	2	6083	0.008
06:30 - 07:00	2	6083	0.008	2	6083	0.000	2	6083	0.008
07:00 - 07:30	5	6099	0.000	5	6099	0.007	5	6099	0.007
07:30 - 08:00	5	6099	0.003	5	6099	0.000	5	6099	0.003
08:00 - 08:30	5	6099	0.007	5	6099	0.000	5	6099	0.007
08:30 - 09:00	5	6099	0.003	5	6099	0.000	5	6099	0.003
09:00 - 09:30	5	6099	0.003	5	6099	0.000	5	6099	0.003
09:30 - 10:00	5	6099	0.000	5	6099	0.000	5	6099	0.000
10:00 - 10:30	5	6099	0.000	5	6099	0.000	5	6099	0.000
10:30 - 11:00	5	6099	0.000	5	6099	0.003	5	6099	0.003
11:00 - 11:30	5	6099	0.003	5	6099	0.000	5	6099	0.003
11:30 - 12:00	5	6099	0.000	5	6099	0.000	5	6099	0.000
12:00 - 12:30	5	6099	0.000	5	6099	0.000	5	6099	0.000
12:30 - 13:00	5	6099	0.000	5	6099	0.000	5	6099	0.000
13:00 - 13:30	5	6099	0.010	5	6099	0.003	5	6099	0.013
13:30 - 14:00	5	6099	0.003	5	6099	0.000	5	6099	0.003
14:00 - 14:30	5	6099	0.000	5	6099	0.010	5	6099	0.010
14:30 - 15:00	5	6099	0.000	5	6099	0.003	5	6099	0.003
15:00 - 15:30	5	6099	0.000	5	6099	0.003	5	6099	0.003
15:30 - 16:00	5	6099	0.000	5	6099	0.000	5	6099	0.000
16:00 - 16:30	5	6099	0.000	5	6099	0.000	5	6099	0.000
16:30 - 17:00	5	6099	0.000	5	6099	0.007	5	6099	0.007
17:00 - 17:30	5	6099	0.016	5	6099	0.010	5	6099	0.026
17:30 - 18:00	5	6099	0.003	5	6099	0.000	5	6099	0.003
18:00 - 18:30	5	6099	0.000	5	6099	0.007	5	6099	0.007
18:30 - 19:00	5	6099	0.000	5	6099	0.000	5	6099	0.000
19:00 - 19:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
19:30 - 20:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
20:00 - 20:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
20:30 - 21:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.067			0.053			0.120

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.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
MULTI-MODAL PEDESTRIANS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
05:30 - 06:00	2	6083	0.016	2	6083	0.000	2	6083	0.016
06:00 - 06:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
06:30 - 07:00	2	6083	0.016	2	6083	0.000	2	6083	0.016
07:00 - 07:30	5	6099	0.026	5	6099	0.010	5	6099	0.036
07:30 - 08:00	5	6099	0.007	5	6099	0.000	5	6099	0.007
08:00 - 08:30	5	6099	0.007	5	6099	0.003	5	6099	0.010
08:30 - 09:00	5	6099	0.010	5	6099	0.007	5	6099	0.017
09:00 - 09:30	5	6099	0.007	5	6099	0.003	5	6099	0.010
09:30 - 10:00	5	6099	0.013	5	6099	0.007	5	6099	0.020
10:00 - 10:30	5	6099	0.003	5	6099	0.003	5	6099	0.006
10:30 - 11:00	5	6099	0.013	5	6099	0.013	5	6099	0.026
11:00 - 11:30	5	6099	0.007	5	6099	0.007	5	6099	0.014
11:30 - 12:00	5	6099	0.010	5	6099	0.010	5	6099	0.020
12:00 - 12:30	5	6099	0.013	5	6099	0.013	5	6099	0.026
12:30 - 13:00	5	6099	0.007	5	6099	0.003	5	6099	0.010
13:00 - 13:30	5	6099	0.013	5	6099	0.013	5	6099	0.026
13:30 - 14:00	5	6099	0.023	5	6099	0.023	5	6099	0.046
14:00 - 14:30	5	6099	0.013	5	6099	0.013	5	6099	0.026
14:30 - 15:00	5	6099	0.010	5	6099	0.013	5	6099	0.023
15:00 - 15:30	5	6099	0.013	5	6099	0.010	5	6099	0.023
15:30 - 16:00	5	6099	0.013	5	6099	0.013	5	6099	0.026
16:00 - 16:30	5	6099	0.003	5	6099	0.013	5	6099	0.016
16:30 - 17:00	5	6099	0.033	5	6099	0.039	5	6099	0.072
17:00 - 17:30	5	6099	0.030	5	6099	0.023	5	6099	0.053
17:30 - 18:00	5	6099	0.026	5	6099	0.010	5	6099	0.036
18:00 - 18:30	5	6099	0.020	5	6099	0.020	5	6099	0.040
18:30 - 19:00	5	6099	0.010	5	6099	0.000	5	6099	0.010
19:00 - 19:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
19:30 - 20:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
20:00 - 20:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
20:30 - 21:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.362			0.269			0.631

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.

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT
 MULTI-MODAL PUBLIC TRANSPORT USERS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
05:30 - 06:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
06:00 - 06:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
06:30 - 07:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
07:00 - 07:30	5	6099	0.007	5	6099	0.003	5	6099	0.010
07:30 - 08:00	5	6099	0.000	5	6099	0.000	5	6099	0.000
08:00 - 08:30	5	6099	0.010	5	6099	0.000	5	6099	0.010
08:30 - 09:00	5	6099	0.013	5	6099	0.000	5	6099	0.013
09:00 - 09:30	5	6099	0.000	5	6099	0.000	5	6099	0.000
09:30 - 10:00	5	6099	0.003	5	6099	0.000	5	6099	0.003
10:00 - 10:30	5	6099	0.007	5	6099	0.000	5	6099	0.007
10:30 - 11:00	5	6099	0.000	5	6099	0.000	5	6099	0.000
11:00 - 11:30	5	6099	0.000	5	6099	0.003	5	6099	0.003
11:30 - 12:00	5	6099	0.000	5	6099	0.000	5	6099	0.000
12:00 - 12:30	5	6099	0.000	5	6099	0.000	5	6099	0.000
12:30 - 13:00	5	6099	0.000	5	6099	0.000	5	6099	0.000
13:00 - 13:30	5	6099	0.003	5	6099	0.000	5	6099	0.003
13:30 - 14:00	5	6099	0.000	5	6099	0.003	5	6099	0.003
14:00 - 14:30	5	6099	0.003	5	6099	0.013	5	6099	0.016
14:30 - 15:00	5	6099	0.000	5	6099	0.003	5	6099	0.003
15:00 - 15:30	5	6099	0.003	5	6099	0.007	5	6099	0.010
15:30 - 16:00	5	6099	0.000	5	6099	0.020	5	6099	0.020
16:00 - 16:30	5	6099	0.000	5	6099	0.000	5	6099	0.000
16:30 - 17:00	5	6099	0.000	5	6099	0.003	5	6099	0.003
17:00 - 17:30	5	6099	0.003	5	6099	0.003	5	6099	0.006
17:30 - 18:00	5	6099	0.007	5	6099	0.000	5	6099	0.007
18:00 - 18:30	5	6099	0.003	5	6099	0.007	5	6099	0.010
18:30 - 19:00	5	6099	0.003	5	6099	0.007	5	6099	0.010
19:00 - 19:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
19:30 - 20:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
20:00 - 20:30	2	6083	0.000	2	6083	0.000	2	6083	0.000
20:30 - 21:00	2	6083	0.000	2	6083	0.000	2	6083	0.000
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			0.065			0.072			0.137

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.