



REPORT

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1 INTRODUCTION

1.1 Introduction

- 1.1.1 Croft have been instructed by Redrow Homes Limited to advise on the traffic and transportation issues relating to proposals to develop a site for residential purposes on Neddy Lane in the village of Billington near Clitheroe.
- This report has been prepared in support of a planning application for a proposed residential development. It provides information on the traffic and transport planning aspects of the development proposals and forms supplementary information to assist in the determination of a forthcoming planning application.
- 1.1.3 Following this introduction, Section 2 provides a description of the existing site and the development proposals, whilst Section 3 provides an assessment of the accessibility of the site by non-car modes including public transport.
- 1.1.4 Section 4 discusses the traffic impact of the proposed development, whilst Section 5 draws together the conclusions to this report.







2 DEVELOPMENT SITE AND PROPOSALS

2.1 Existing Site

- 2.1.1 The development site is located in the village of Billington. The location of the site can be seen at Plan 1.
- 2.1.2 The site is bordered to the north and west by undeveloped land and to the south and east by existing residential development.
- 2.1.3 The site has no formal access at present but borders the existing Dale View, an adopted highway, which serves a number of residential properties off a small cul-de-sac via its junction with Whalley Road to the east of the village centre.
- 2.1.4 Dale View is currently 5.5 metres wide with footways along the whole of the western side of the road and the majority of the eastern side. Dale View is subject to a 20 mph speed limit and has street lighting.
- Dale View meets with Whalley Road via a priority junction to the south of the site.

 Whalley Road runs approximately east-west through the village of Billington to Whalley to the east and Langho to the west. It has a 30 mph speed limit and also has street lighting and footways on both sides of the road.

2.2 Development Proposals

- 2.2.1 The proposals would provide 36 residential dwellings including 10 affordable units.
- The majority of the properties will have a minimum of two car parking spaces per dwelling, excluding garages. Eight affordable dwellings will have one space per dwelling with four shared visitor spaces.





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- 2.2.3 The existing vehicular access onto the site from Dale View will effectively involve an extension of the existing Dale View. The existing 'spurs' at the northern end of the existing Dale View are proposed to give way to the traffic accessing the application site via formal give-way markings at that point.
- The extension to Dale View into the site will continue to be 5.5 metres wide and have formal footways of 2 metres wide on each side.
- 2.2.5 The internal layout of the site is presented in **Plan 2** and the proposed site access arrangement is shown in **Plan 3**.
- 2.2.6 The internal layout has been designed to accord with the aspirations of Manual for Streets and to ensure that the priority within the site is given to pedestrians and cyclists and to limit vehicular speeds throughout the site. A 20 mph speed limit will be proposed.
- To demonstrate that a standard Lancashire refuse vehicle can access the site a formal swept path analysis has been carried out and is shown in **Plan 4**.







3 ACCESSIBILITY BY NON CAR MODES

3.1 Introduction

- 3.1.1 In order to accord with the aspirations of the National Planning Policy Framework (NPPF), any new proposals should extend the choice in transport and secure mobility in a way that supports sustainable development.
- 3.1.2 New proposals should therefore attempt to influence the mode of travel to the development in terms of gaining a shift in modal split towards non-car modes, thus assisting in meeting the aspirations of current national and local planning policy.
- 3.1.3 The accessibility of the proposed site has been considered by the following modes of transport:
 - Accessibility on foot;
 - Accessibility by cycle;
 - Accessibility by bus;
 - Accessibility by rail.

3.2 Access on Foot

3.2.1 It is important to create a choice of direct, safe, and attractive routes between where people live and where they need to travel in their day-to-day life. This philosophy clearly encourages the opportunity to walk whatever the journey purpose and also helps to create more active streets and a more vibrant neighbourhood.







- 3.2.2 Existing pedestrian footways of at least 2 metres in width are located on the western side of Dale View and on both sides of Whalley Road, these footways provide pedestrian linkages throughout the village of Billington. A formal 'zebra' style crossing exists around 100 metres to the west of the junction of Whalley Road/Dale View that allows a safe passage for pedestrians across Whalley Road.
- 3.2.3 A number of Public Rights of Way (PRoWs) are located in close proximity to the site as shown in Figure 3.1 below. Principally, routes 3-6-FP 40 and 3-6-FP 42 cross the site to the south-west and these will be retained as part of the development proposals.
- 3.2.4 Routes 3-6-FP 43 and 3-45-FP24 also provide a good pedestrian link between the site and Whalley town centre via The Sands. These routes are hard surfaced with street lighting and provide an efficient route for residents travelling to nearby local amenities within Whalley.

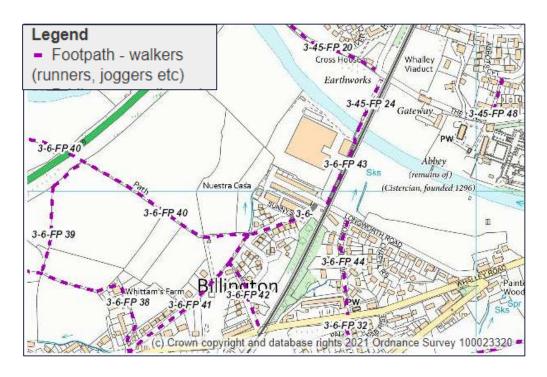


Figure 3.1 PROW Map Extract (Source: LCC)







- 3.2.5 Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car journeys, particularly those under 2 kilometres. The DFT National Travel Survey of 2018 confirms that 80% of all trips less than a mile (1.6km) are carried out on foot.
- The Institute of Highways and Transportation (IHT) document 'Guidelines for Providing for Journeys on Foot', also provides information on acceptable walking distances.

 Table 3.2 suggests distances for desirable, acceptable, and preferred maximum walks to 'town centres', 'commuting/schools' and 'elsewhere'. The 'preferred maximum' distances are shown below in Table 3.1.

Suggested Preferred Maximum Walk					
Town Centre Commuting/School Elsewhere					
8oom	2,000M	1,200M			

Table 3.1 IHT 'Providing for Journeys on Foot' Walk Distances

- 3.2.7 Manual for Streets (MfS) continues the theme of the acceptability of the 2,000 metre distance in paragraph 4.4.1. This states that 'walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPS13 states that walking offers the greatest potential to replace short car trips, particularly those under 2 km'.
- 3.2.8 Table 3.2 below summarises this guidance in tabular form.







'Comfortable' Walk	'Preferred Maximum' Walk	
8oom	2,000m	

Table 3.2 Manual for Streets Walk Distances

3.2.9 More specific guidance on the distances that children will walk to school is found in the July 2014 document published by the Department for Education (DfE) entitled 'Home to School Travel and Transport' statutory guidance document. This suggests that the maximum walking distance to schools is 2 miles (3.2 kilometres) for children under 8 and 3 miles (4.8 kilometres) for children over the age of 8. This is summarised below in Table 3.3.

Children under 8 Walk Distances	Children over 8 Walk Distances	
3,200m	4,800m	

Table 3.3 DfE Walk Distances to Schools

- 3.2.10 Further evidence that people will walk further than the suggested 'preferred maximum' distances in the IHT 'Providing for Journeys on Foot' is contained in a WYG Report entitled 'Accessibility How Far Do People Walk and Cycle'. This report refers to National Travel Survey (NTS) data for the UK as a whole, excluding London, and confirms the following 85th percentile walk distances:
 - All journey purposes 1,930 metres;
 - Commuting 2,400 metres;
 - Shopping 1,600 metres;





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- Education 3,200 or 4,800 metres;
- Personal business 1,600 metres.
- Overall, in Table 5.1, the document states that 1,950 square metres is the 85th percentile distance for walking as the main mode of travel. Table 3.4 below summarises the various 85th percentile walk distances suggested as guidelines in the WYG Study.

	Overall Recommended					
All Journeys	All Journeys Commuting Shopping Education Personal					
1,950m	2 , 100m	1 , 600m	3,200m/4,800m	1 , 600m	1,950m	

Table 3.4 WYG Report/NTS Data Walk Distances

- 3.2.12 In summary, the distance of 1,950 metres, or around 2 kilometres, represents an acceptable maximum walking distance for the majority of land uses although clearly the DfE guidance for walking to school is up to 3.2 kilometres.
- 3.2.13 Section 3.1 of the CIHT guidance 'Planning for Walking' mentioned earlier in this report provides a useful reminder of the health benefits of walking. This states that:
 - 'A brisk 20 minute walk each day could be enough to reduce an individual's risk of an early death.'
- 3.2.14 A 20-minute walk equates to a walking distance of around 1,600 metres.





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- 3.2.15 In light of the above review, a pedestrian catchment of 2 kilometres from the centre of the site, using all usable pedestrian routes, has been provided in **Plan 5** and provides an illustrative indication of the areas that can be reached based on a leisurely walk from the site.
- 3.2.16 In addition to the pedestrian catchment plan, a review of the proximity of local facilities such as pharmacies/doctor's surgeries, local shops/retail outlets and leisure facilities has been undertaken. The locations of such facilities in relation to the site are also shown in Plan 5.
- 3.2.17 The 2,000-metre pedestrian catchment illustrates that almost the entirety of Billington and Whalley falls within the 2km catchment.
- 3.2.18 Table 3.5 below, shows the walking distance from the centre of the site to several of the local key amenities in the immediate vicinity of the site. The table also confirms whether or not the particular amenity is within the 'preferred maximum' walk distances using the above guideline criteria.





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Local Amenity	Distance	Guidance Criteria	Meets with Guidance?
Children's Play Area	340m	1,600m	YES
Billington Village Store	58om	1,600m	YES
St Augustine's Roman Catholic High School	goom	4,800m	YES
Lloyds Pharmacy	1,060m	1,600m	YES
Whalley Medical Centre	1,070m	1,600m	YES
Co-op food store	1,120m	1,600m	YES
Whalley Parish Church	1,230m	1,600m	YES
Whalley Sub Post Office	1,320m	1,600m	YES
Whalley Village Centre	1,200	1,600	YES

Table 3.5 Distance from Site to Local Facilities

- 3.2.19 As can be seen in the above table, the site is located within close proximity to a number of key local amenities such as Billington Village Store, Lloyds Pharmacy, Whalley Medical Centre, Co-op food store, Whalley Parish Church and Whalley Sub Post Office. Employment opportunities are also located within a short walk of the site within Whalley and also at the industrial units off Longworth Road to the north-west of the site.
- 3.2.20 A direct footway connection exists between the site and the centre of Whalley village centre.
- 3.2.21 It is therefore considered that the existing pedestrian infrastructure will facilitate safe and direct pedestrian linkages between the site and local destinations.







3.3 Accessibility by Cycle

- 3.3.1 An alternative mode of travel to the site could be achieved by bicycle.
- 3.3.2 A distance of 5 kilometres is generally accepted as a distance where cycling has the potential to replace short car journeys. This distance equates to a journey of around 25 minutes based on a leisurely cycle speed of 12 kilometres per hour and would encompass Whalley and Clitheroe and numerous villages in between.
- 3.3.3 Regional Route 90 runs along Whalley Road and Regional Route 91 runs along Whalley Old Road to ensure cyclists have the opportunity to travel safely to and from the site.
- 3.3.4 The site can therefore be considered as being accessible by cycle.

3.4 Accessibility by Bus

- 3.4.1 An effective public transport system is essential in providing good accessibility for large parts of the population to opportunities for work, education, shopping, leisure and healthcare in the town and beyond.
- 3.4.2 The nearest bus stops to the site are situated along Whalley Road, with the closest stops around 350 metres south from the centre of the site, less than a 5 minute walk away. The eastbound bus stop has a formal bus shelter and both stops are located close to the 'zebra' crossing on Whalley Road to assist access for pedestrians.
- 3.4.3 Safe pedestrian access to the nearest bus stops to the site is provided for via the existing pedestrian footways on Whalley Road.
- 3.4.4 A summary of the services available from the nearest bus stops from the development site is provided in Table 3.6 below.





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Service	Pauta	Monday – Friday Frequency per hour				C-A	
No	Route	AM Peak	Midday	PM Peak	Eve	Sat	Sun
22	Shadsworth – Blackburn - Clitheroe	1	1	1	0	1	0.5
25	Blackburn Town Centre – Clitheroe Town Centre	1	1	1	1	0.5	0
280	Skipton-Clitheroe-Whalley - Preston	1	1	1	1	1	0.5

Table 3.6 Existing Bus Services Operating in the Vicinity of the Site

- 3.4.5 As can be seen from Table 3.6, the nearest bus stops to the site provides various services throughout the day to destinations such as Blackburn, Clitheroe and Preston.
- 3.4.6 These services operate from early morning until the evening providing the opportunity for residents to travel by public transport for commuting and leisure trips.
- 3.4.7 In addition to the bus services shown in table 3.6, there are also a number of school bus services which operate via the nearest bus stops on Whalley Road, providing access to schools including St Augustine's Roman Catholic High School, Bowland County High School, Ribblesdale High School and St Mary's College.
- 3.4.8 In order to demonstrate the level of accessibility some example journey times by bus are presented below Table 3.7 below.





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Destination	Duration
Clitheroe town centre	15 mins
Preston Bus Station	39 mins
Blackburn town centre	41 mins

Table 3.7 Example Bus Journey Times from the Site

- 3.4.9 The above table demonstrates that Clitheroe town centre is just a 15 minute bus journey from the site, Preston is a 39 minute bus journey and Blackburn is a 41 minute bus journey from the site.
- 3.4.10 It is therefore concluded that the proposed development site is accessible by bus.

3.5 Accessibility by Rail

- 3.5.1 The nearest train station to the site is in Whalley, which is situated approximately 2 kilometres from the site, around a 25 minute walk away.
- 3.5.2 A direct footway connection is provided between the site and the railway station. In addition, the majority of the bus services detailed above run through Whalley and also Langho to the south. These services actually run closer to Langho railway station as its located very close to the existing bus routes along Whalley Road.
- 3.5.3 Whalley and Langho stations offer hourly services to Manchester and Blackburn.
- 3.5.4 These services increase the opportunity for residents to travel further afield by public transport, with access to Manchester, which in turn provides frequent services to destinations throughout the UK







3.5.5 In conclusion, the proposed site can be considered as being accessible in terms of travel by rail.

3.6 Accessibility Summary

- 3.6.1 The proposals have been considered in terms of accessibility by non-car modes for the proposed development.
- 3.6.2 The following conclusions can be drawn from this section of the report:
 - The site is accessible on foot with the existing footway infrastructure allowing safe and direct access to a range of local amenities.
 - The site is well located to generate trips on foot and provides potential for a high degree of linked walk trips between the development and the surrounding area.
 - It has been demonstrated that the site is accessible by cycle, with the site being located very close to two regional cycle routes.
 - The close proximity of bus stops on Whalley Road, offering services to Clitheroe,
 Blackburn and Preston demonstrates that the propose development is highly accessible by bus.
 - Whalley rail station is situated less than a 25 minute walk of the site, offering hourly services to Manchester and Blackburn.
- 3.6.3 In light of the above, it is considered that site is highly accessible and able to cater for needs of the development's residents and visitors and assist in promoting a choice of travel modes other than the private car, as set out in NPPF.







4 TRAFFIC IMPACT ANALYSIS

4.1 Introduction

4.1.1 Having established that the proposed development site is accessible by modes of travel other than the private car, the following section considers the traffic impact of the development proposals on the local highway network.

4.2 Proposed Development

- 4.2.1 As previously stated, the development proposals will provide 36 dwellings.
- 4.2.2 In order to establish the vehicular trip rates for the proposed residential use reference has been made to the latest TRICS database. The parameters used to ascertain the vehicular trip rates for the proposed development are as follows:
 - Residential, Houses Privately Owned;
 - Range between 10 and 100 dwellings;
 - Greater London and Republic of Ireland sites excluded;
 - Weekday surveys only.
- 4.2.3 A summary of these trip rates and the likely level of trips that would occur as a result of the proposed development is included in Table 4.1, below, with the TRICS output being provided at **Appendix 1**.





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Mode	Period	Trip	Rate	Trips	
		Arr	Dep	Arr	Dep
Vehicle -	AM Peak Hour	0.139	0.364	5	13
	PM Peak Hour	0.323	0.160	12	6

Table 4.1 Proposed Development Trip Rates and Trips

4.2.4 As can be seen from the above table, the proposed development is predicted to result in 18 two-way vehicular trips during the weekday AM and PM peak period, which equates to less than one additional trip every 3 minutes even during the busiest periods of the day. This will result in an imperceptible impact on the local highway network.







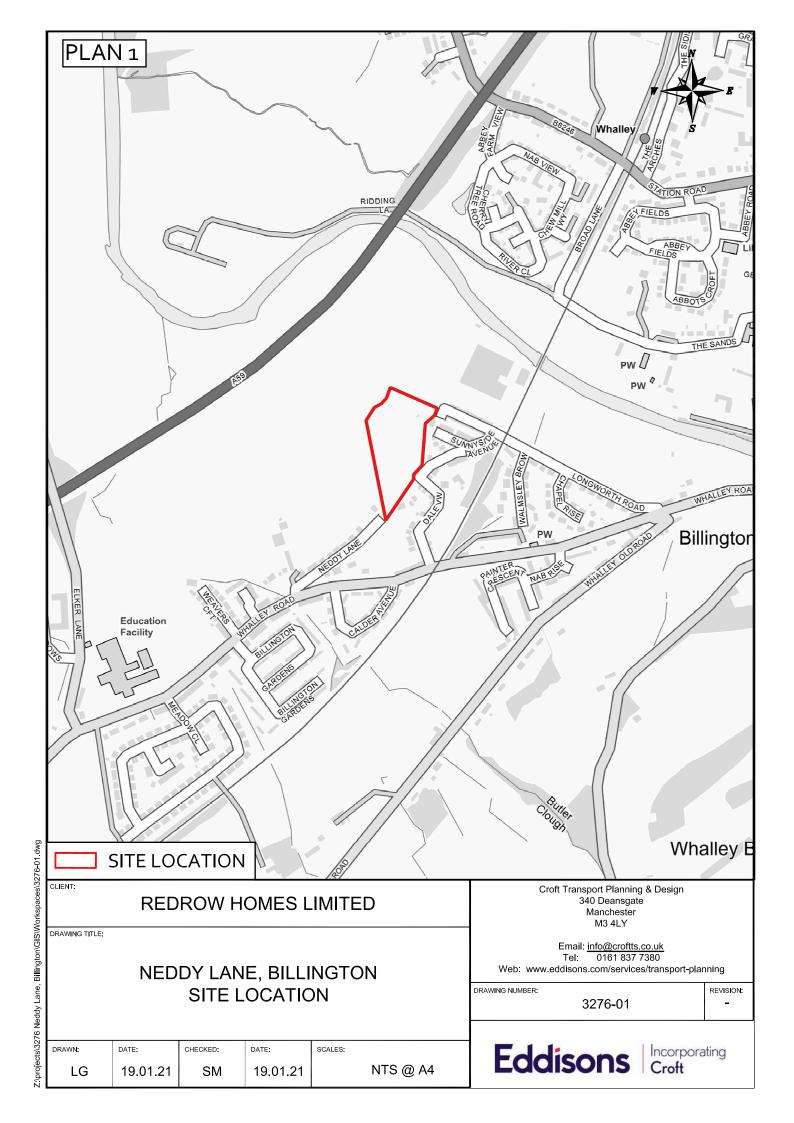
5 CONCLUSIONS

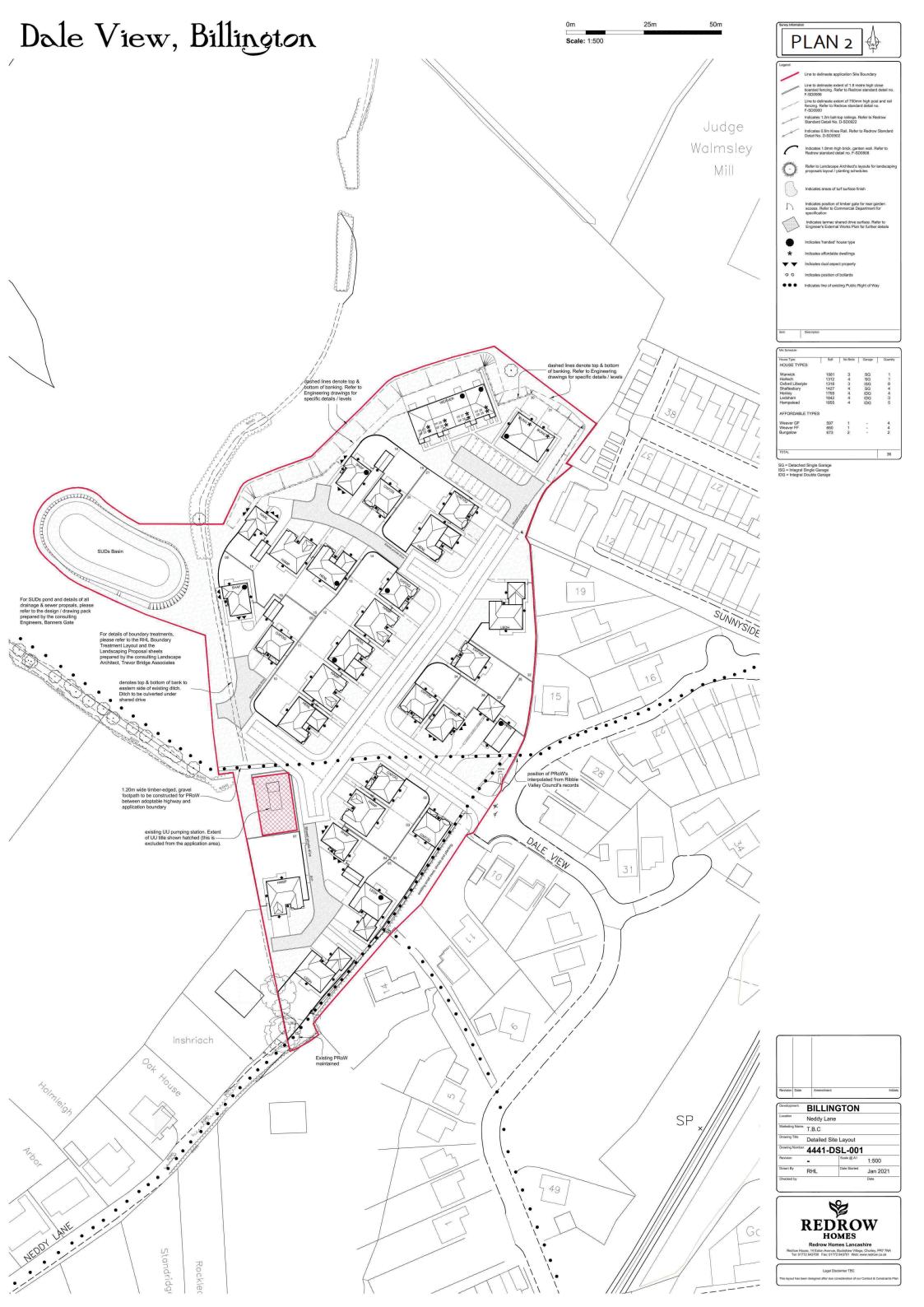
- This report has considered the traffic and transportation issues relating to proposals to develop a site for residential purposes on Neddy Lane in the village of Billington near Clitheroe.
- 5.1.2 The following conclusions have been drawn with regard to the proposed development:
 - The proposed development will be accessed by a safe, formalised, and efficient vehicular access arrangement.
 - The existing pedestrian infrastructure located in the vicinity of the site will enable safe pedestrian movement between the development site and the local services.
 - The site benefits from being located in close proximity to the bus stops located on Whalley Road which provides access to a range of regular and frequent services that are ideally placed to cater for the needs of the residents and visitors.
 - The site is also accessible by rail being located within a bus journey and a short walk of Whalley and Langho rail stations.
 - The proposed development can be adequately serviced in a safe and efficient manner.
 - The traffic impact is likely to be imperceptible on the surrounding highway network.
- 5.1.3 Based on the above it is the conclusion of this report that there are no material reasons why the proposed development should not be granted planning consent on highways or transportation grounds.

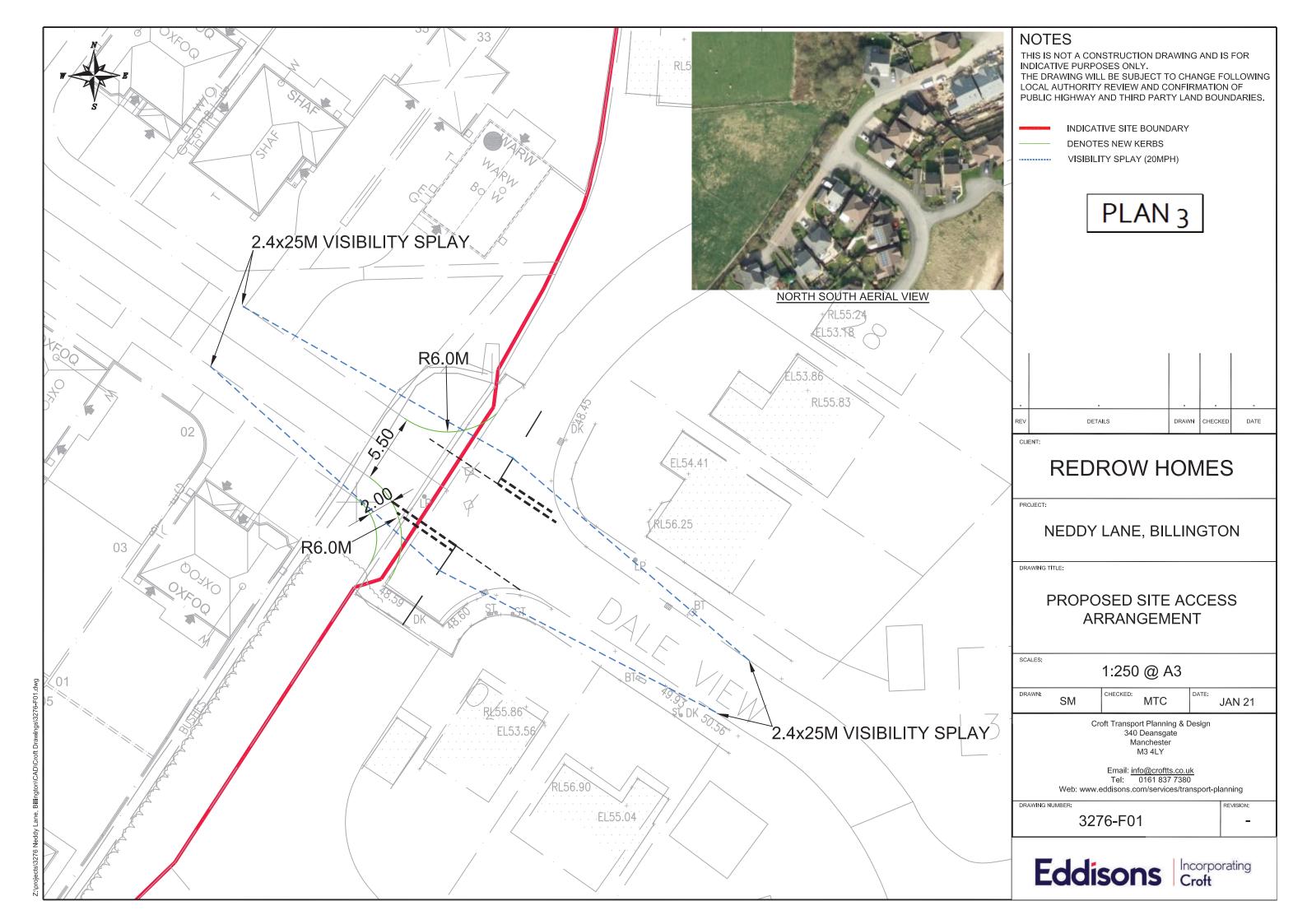


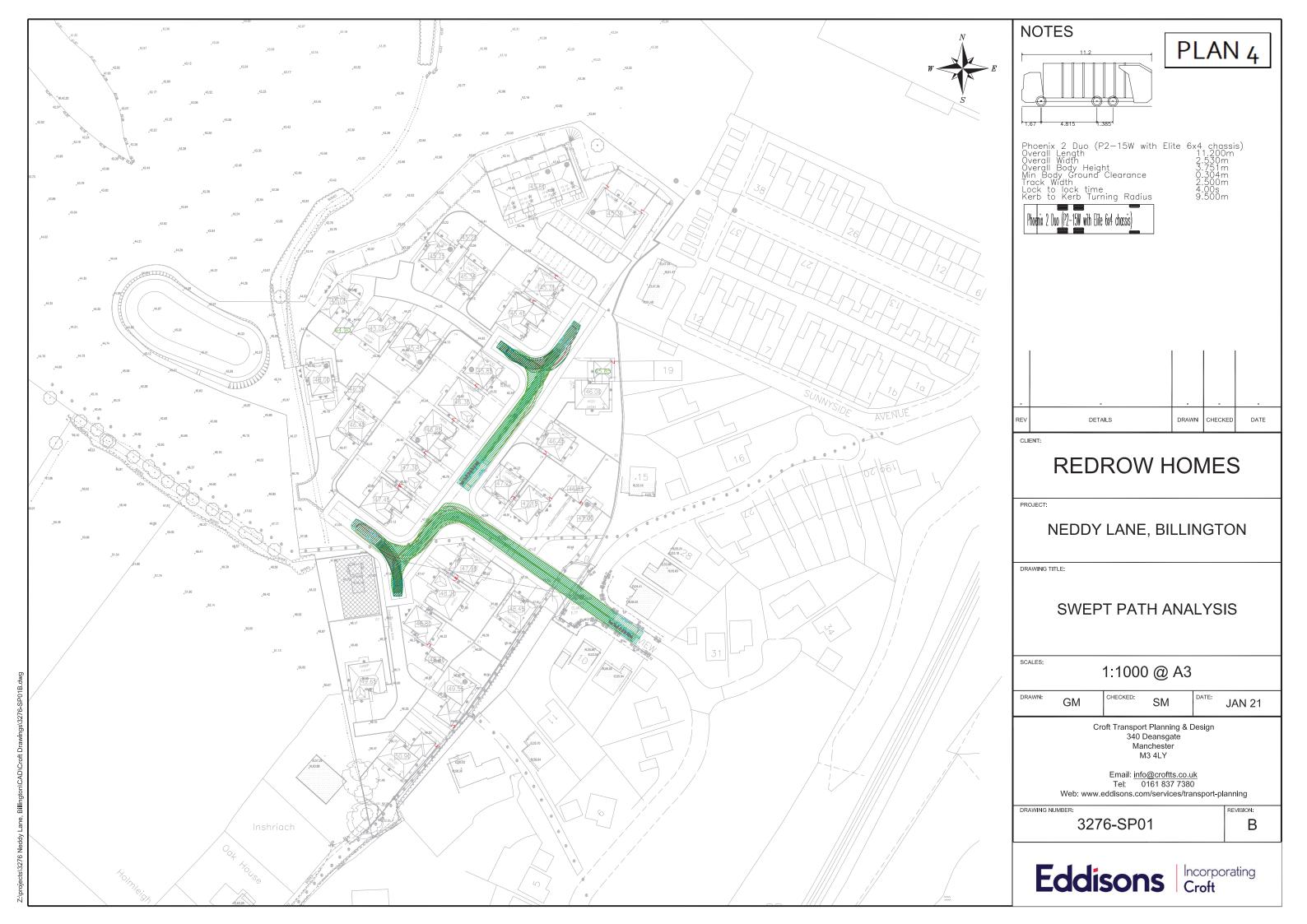


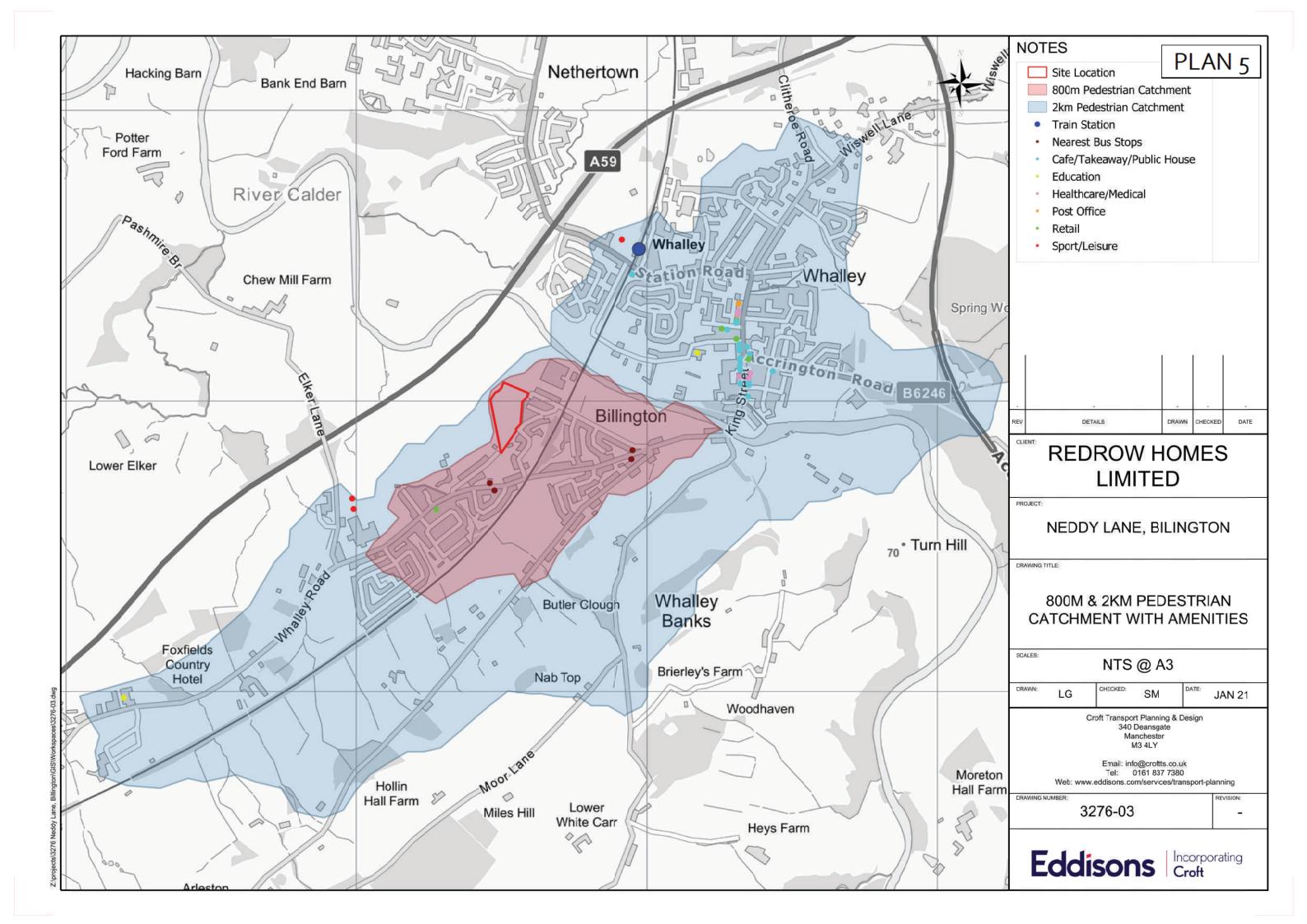
PLANS











APPENDICES

APPENDIX 1 TRICS Output

Calculation Reference: AUDIT-851401-210118-0151

Croft Transport Solutions 9 Jordan Street Manchester Licence No: 851401

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES

Sele	cted regions and areas:	
02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	EX ESSEX	1 days
	HC HAMPSHIRE	3 days
	KC KENT	1 days
	SC SURREY	1 days
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	2 days
	SM SOMERSET	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	6 days
	SF SUFFOLK	2 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	2 days
06	WEST MIDLANDS	,
	SH SHROPSHIRE	2 days
	ST STAFFORDSHIRE	2 days
	WK WARWICKSHIRE	3 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	, and the second
	NY NORTH YORKSHIRE	6 days
	SY SOUTH YORKSHIRE	1 days
80	NORTH WEST	•
	CH CHESHIRE	4 days
	LC LANCASHIRE	2 days
	MS MERSEYSIDE	1 days
09	NORTH	, and the second
	CB CUMBRIA	1 days
	DH DURHAM	2 days
	TW TYNE & WEAR	1 days
10	WALES	, and the second
	PS POWYS	2 days
	VG VALE OF GLAMORGAN	1 days
11	SCOTLAND	,
	FA FALKIRK	1 days
	HI HIGHLAND	1 days
		,

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

9 Jordan Street **Croft Transport Solutions** Manchester

Primary Filtering selection:

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

Parameter: No of Dwellings 10 to 99 (units:) Actual Range: Range Selected by User: 10 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

01/01/12 to 16/09/20 Date Range:

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:

14 days Monday Tuesday 10 days Wednesday 15 days Thursday 11 days Friday 6 days

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

<u>Selected survey types:</u>

Manual count 55 days Directional ATC Count 1 days

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

Selected Locations:

7 Edge of Town Centre Suburban Area (PPS6 Out of Centre) 24 25 Edge of Town

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:

Residential Zone 54 No Sub Category

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

Secondary Filtering selection:

Use Class:

C3 56 days

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

Population within 500m Range:

All Surveys Included

Licence No: 851401

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Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000	4 days
5,001 to 10,000	16 days
10,001 to 15,000	13 days
15,001 to 20,000	11 days
20,001 to 25,000	4 days
25,001 to 50,000	8 days

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

Population within 5 miles:

7 days
5 days
7 days
10 days
2 days
14 days
11 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	17 days
1.1 to 1.5	38 days

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

Travel Plan:

Yes 10 days No 46 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 55 days 2 Poor 1 days

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

DETACHED HOUSES

Croft Transport Solutions 9 Jordan Street Manchester Licence No: 851401

CAMBRI DGESHI RE

LIST OF SITES relevant to selection parameters

EASTFIELD ROAD PETERBOROUGH

CA-03-A-05

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings:

Survey date: MONDAY 17/10/16 Survey Type: MANUAL

CB-03-A-05 DETACHED/TERRACED HOUSING **CUMBRIA**

MACADAM WAY **PENRITH**

Edge of Town Centre Residential Zone

Total No of Dwellings: 50

Survey date: TUESDAY 21/06/16 Survey Type: MANUAL

CH-03-A-08 **CHESHI RE** DETACHED

WHITCHURCH ROAD

CHESTER

BOUGHTON HEATH

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 11

Survey date: TUESDAY 22/05/12 Survey Type: MANUAL

CH-03-A-09 **TERRACED HOUSES CHESHIRE**

GREYSTOKE ROAD MACCLESFIELD HURDSFIELD Edge of Town Residential Zone

Total No of Dwellings: 24

Survey date: MONDAY 24/11/14 Survey Type: MANUAL

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

MEADOW DRIVE **NORTHWICH** BARNTON Edge of Town

Residential Zone

Total No of Dwellings: 40

Survey date: TUESDAY 04/06/19 Survey Type: MANUAL **CHESHI**ŘE

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

LONDON ROAD NORTHWICH **LEFTWICH**

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 24

Survey date: THURSDAY 06/06/19 Survey Type: MANUAL

DC-03-A-08 **BUNGALOWS** DORSET

HURSTDENE ROAD BOURNEMOUTH CASTLE LANE WEST Edge of Town Residential Zone

Total No of Dwellings: 28

Survey date: MONDAY 24/03/14 Survey Type: MANUAL

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

GREENFIELDS ROAD BISHOP AUCKLAND

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 50

Survey date: TUESDAY 28/03/17 Survey Type: MANUAL SEMI-DETACHED & TERRACED

Croft Transport Solutions 9 Jordan Street Manchester Licence No: 851401

DURHAM

LIST OF SITES relevant to selection parameters (Cont.)

DH-03-A-03 PILGRIMS WAY DURHAM

Edge of Town Residential Zone

Total No of Dwellings:

Survey date: FRIDAY 19/10/18 Survey Type: MANUAL

DV-03-A-01 **TERRACED HOUSES**

BRONSHILL ROAD

TORQUAY

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 37

Survey date: WEDNESDAY 30/09/15 Survey Type: MANUAL

DV-03-A-03 11 TERRACED & SEMI DETACHED DEVON

LOWER BRAND LANE

HONITON

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 70

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

ES-03-A-05 MIXED HOUSES & FLATS **EAST SUSSEX** 12

RATTLE ROAD **NEAR EASTBOURNE** STONE CROSS Edge of Town Residential Zone

Total No of Dwellings: 99

Survey date: WEDNESDAY 05/06/19 Survey Type: MANUAL

EX-03-A-02 13 DETACHED & SEMI-DETACHED **ESSEX**

MANOR ROAD CHIGWELL GRANGE HILL Edge of Town Residential Zone

Total No of Dwellings:

Survey date: MONDAY 27/11/17 Survey Type: MANUAL

FA-03-A-01 SEMI-DETACHED/TERRACED FALKIRK 14

MANDELA AVENUE

FALKIRK

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 37

Survey date: THURSDAY 30/05/13 Survey Type: MANUAL

HC-03-A-21 TERRACED & SEMI-DETACHED 15 **HAMPSHIRE**

PRIESTLEY ROAD **BASINGSTOKE** HOUNDMILLS Edge of Town Residential Zone

Total No of Dwellings: 39

Survey date: TUESDAY 13/11/18 Survey Type: MANUAL

HC-03-A-22 HAMPSHI RE 16 MIXED HOUSES

BOW LAKE GARDENS NEAR EASTLEIGH **BISHOPSTOKE** Edge of Town Residential Zone

Total No of Dwellings: 40

Survey date: WEDNESDAY 31/10/18 Survey Type: MANUAL Croft Transport Solutions 9 Jordan Street Manchester Licence No: 851401

HAMPSHIRE

Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

HC-03-A-23 CANADA WAY LIPHOOK

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 62

HOUSES & FLATS

Survey date: TUESDAY 19/11/19 Survey Type: MANUAL

HI-03-A-14 SEMI-DETACHED & TERRACED **HIGHLAND**

KING BRUDE ROAD **INVERNESS**

SCORGUIE

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 40

Survey date: WEDNESDAY 23/03/16 Survey Type: MANUAL

KC-03-A-03 MIXED HOUSES & FLATS **KENT**

HYTHE ROAD **ASHFORD**

WILLESBOROUGH

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 51

Survey date: THURSDAY 14/07/16 Survey Type: MANUAL

LC-03-A-30 LANCASHI RE SEMI-DETACHED 20

WATSON ROAD **BLACKPOOL**

Edge of Town Centre

Residential Zone

Total No of Dwellings: 24

Survey date: FRIDAY 14/06/13 Survey Type: MANUAL

LC-03-A-31 21 **DETACHED HOUSES** LANCASHIRE

GREENSIDE PRESTON

COTTAM

Edge of Town Residential Zone

Total No of Dwellings:

32 Survey date: FRIDAY

17/11/17 Survey Type: MANUAL LINCOLNSHIRE 22 LN-03-A-03 SEMI DETACHED

ROOKERY LANE LINCOLN **BOULTHAM**

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 22

Survey date: TUESDAY 18/09/12

LN-03-A-04 DETACHED & SEMI-DETACHED LINCOLNSHIRE 23

EGERTON ROAD

LINCOLN

Edge of Town Centre

Residential Zone

Total No of Dwellings: 30

Survey date: MONDAY 29/06/15 Survey Type: MANUAL

MS-03-A-03 DETACHED MERSEYSI DE 24

BEMPTON ROAD LIVERPOOL

OTTERSPOOL

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 15

Survey date: FRIDAY 21/06/13 Survey Type: MANUAL Croft Transport Solutions 9 Jordan Street Manchester Licence No: 851401

LIST OF SITES relevant to selection parameters (Cont.)

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

YARMOUTH ROAD CAISTER-ON-SEA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings:

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

26 NF-03-A-02 **HOUSES & FLATS** NORFOLK

DEREHAM ROAD **NORWICH**

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 98

Survey date: MONDAY 22/10/12 Survey Type: MANUAL

NF-03-A-03 **DETACHED HOUSES** NORFOLK 27

HALING WAY **THETFORD**

Edge of Town Residential Zone

Total No of Dwellings: 10

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

28 NF-03-A-04 MIXED HOUSES NORFOLK

NORTH WALSHAM ROAD

NORTH WALSHAM

Edge of Town Residential Zone

Total No of Dwellings: 70

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

NF-03-A-05 29 MIXED HOUSES NORFOLK

HEATH DRIVE

HOLT

Edge of Town Residential Zone

Total No of Dwellings: 40

Survey date: THURSDAY 19/09/19 Survey Type: MANUAL

30 NF-03-A-10 MIXED HOUSES & FLATS NORFOLK

HUNSTANTON ROAD HUNSTANTON

Edge of Town Residential Zone

Total No of Dwellings: 17

Survey date: WEDNESDAY 12/09/18 Survey Type: DIRECTIONAL ATC COUNT NORTH YORKSHIRE

NY-03-A-08 31 **TERRACED HOUSES**

NICHOLAS STREET

YORK

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 21

Survey date: MONDAY 16/09/13 Survey Type: MANUAL NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE 32

GRAMMAR SCHOOL LANE

NORTHALLERTON

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 52

Survey date: MONDAY 16/09/13 Survey Type: MANUAL

NORTH YORKSHIRE

Croft Transport Solutions 9 Jordan Street Manchester

Page 8 Licence No: 851401

LIST OF SITES relevant to selection parameters (Cont.)

33 NY-03-A-10 HOUSES AND FLATS

BOROUGHBRIDGE ROAD

RIPON

Edge of Town No Sub Category

Total No of Dwellings: 71

Survey date: TUESDAY 17/09/13 Survey Type: MANUAL

4 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE HORSEFAIR

BOROUGHBRIDGE

Edge of Town Residential Zone

Total No of Dwellings: 23

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

35 NY-03-A-12 TOWN HOUSES NORTH YORKSHIRE

RACECOURSE LANE NORTHALLERTON

Edge of Town Centre Residential Zone

Total No of Dwellings: 47

Survey date: TUESDAY 27/09/16 Survey Type: MANUAL

36 NY-03-A-13 TERRACED HOUSES NORTH YORKSHIRE

CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND

Suburban Area (PPS6 Out of Centre)

Suburban Area (PPS6 Residential Zone

Total No of Dwellings: 10

Survey date: WEDNESDAY 10/05/17 Survey Type: MANUAL

37 PS-03-A-01 MIXED HOUSES POWYS

BRYN GLAS WELSHPOOL

Edge of Town Centre Residential Zone

Total No of Dwellings: 16

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

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

GUNROG ROAD WELSHPOOL

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 28

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

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

HIGH ROAD BYFLEET

> Edge of Town Residential Zone

Total No of Dwellings: 71

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

40 SF-03-A-05 DETACHED HOUSES SUFFOLK

VALE LANE

BURY ST EDMUNDS

Edge of Town

Residential Zone Total No of Dwellings: 18

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

Croft Transport Solutions 9 Jordan Street

Manchester

Licence No: 851401

LIST OF SITES relevant to selection parameters (Cont.)

SF-03-A-07 MIXED HOUSES **SUFFOLK**

FOXHALL ROAD **IPSWICH**

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 73

Survey date: THURSDAY 09/05/19 Survey Type: MANUAL

42 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHI RE

SANDCROFT **TELFORD** SUTTON HILL Edge of Town Residential Zone

Total No of Dwellings: 54

Survey date: THURSDAY 24/10/13 Survey Type: MANUAL

SH-03-A-06 SHROPSHI RE 43 **BUNGALOWS**

ELLESMERE ROAD **SHREWSBURY**

Edge of Town Residential Zone

Total No of Dwellings: 16

Survey date: THURSDAY 22/05/14 Survey Type: MANUAL

44 SM-03-A-01 **DETACHED & SEMI SOMERSET**

WEMBDON ROAD **BRIDGWATER** NORTHFIELD Edge of Town Residential Zone

Total No of Dwellings: 33

Survey date: THURSDAY 24/09/15 Survey Type: MANUAL

ST-03-A-06 STAFFORDSHI RE 45 SEMI-DET. & TERRACED

STANFORD ROAD WOLVERHAMPTON BLAKENHALL Edge of Town Centre No Sub Category

Total No of Dwellings: 17

Survey date: FRIDAY 09/05/14 Survey Type: MANUAL ST-03-A-08 **DETACHED HOUSES** STAFFORDSHI RE

46

SILKMORE CRESCENT **STAFFORD**

MEADOWCROFT PARK Edge of Town

Residential Zone Total No of Dwellings: 26

Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

SY-03-A-01 47 SEMI DETACHED HOUSES SOUTH YORKSHIRE

A19 BENTLEY ROAD DONCASTER BENTLEY RISE

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 54

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

SEMI-DETACHED 48 TW-03-A-02 **TYNE & WEAR**

WEST PARK ROAD **GATESHEAD**

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 16

Survey date: MONDAY 07/10/13 Survey Type: MANUAL SEMI-DETACHED & TERRACED

Licence No: 851401

9 Jordan Street Croft Transport Solutions Manchester

LIST OF SITES relevant to selection parameters (Cont.)

VALE OF GLAMORGAN

Survey Type: MANUAL

Survey Type: MANUAL

WARWICKSHIRE

WARWICKSHIRE

VG-03-A-01 ARTHUR STREET

BARRY

Edge of Town Residential Zone Total No of Dwellings:

12 08/05/17 Survey date: MONDAY

WK-03-A-02 **BUNGALOWS**

NARBERTH WAY **COVENTRY** POTTERS GREEN Edge of Town Residential Zone

Total No of Dwellings: 17

Survey date: THURSDAY 17/10/13

WK-03-A-03 **DETACHED HOUSES**

BRESE AVENUE WARWICK **GUYS CLIFFE**

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 23

Survey date: WEDNESDAY 25/09/19 Survey Type: MANUAL **WARWICKSHIRE**

WK-03-A-04 **DETACHED HOUSES** 52

DALEHOUSE LANE KENILWORTH

Edge of Town Residential Zone

Total No of Dwellings: 49

Survey date: FRIDAY 27/09/19 Survey Type: MANUAL

53 WL-03-A-02 SEMI DETACHED WILTSHIRE

HEADLANDS GROVE

SWINDON

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 27

22/09/16 Survey date: THURSDAY Survey Type: MANUAL WM-03-A-05 **TERRACED & DETACHED** WEST MIDLANDS 54

COUNDON ROAD

COVENTRY

Edge of Town Centre Residential Zone

Total No of Dwellings: 29

Survey date: MONDAY 21/11/16 Survey Type: MANUAL

WS-03-A-05 WEST SUSSEX 55 **TERRACED & FLATS**

UPPER SHOREHAM ROAD SHOREHAM BY SEA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 48

Survey date: WEDNESDAY 18/04/12 Survey Type: MANUAL

WS-03-A-10 WEST SUSSEX 56 MIXED HOUSES

TODDINGTON LANE LITTLEHAMPTON

WICK

Edge of Town Residential Zone

Total No of Dwellings: 79

Survey date: WEDNESDAY 07/11/18 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.

Croft Transport Solutions 9 Jordan Street Manchester

Licence No: 851401

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

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES		TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	56	40	0.077	56	40	0.293	56	40	0.370
08:00 - 09:00	56	40	0.139	56	40	0.364	56	40	0.503
09:00 - 10:00	56	40	0.151	56	40	0.180	56	40	0.331
10:00 - 11:00	56	40	0.134	56	40	0.159	56	40	0.293
11:00 - 12:00	56	40	0.152	56	40	0.161	56	40	0.313
12:00 - 13:00	56	40	0.166	56	40	0.162	56	40	0.328
13:00 - 14:00	56	40	0.167	56	40	0.166	56	40	0.333
14:00 - 15:00	56	40	0.160	56	40	0.192	56	40	0.352
15:00 - 16:00	56	40	0.253	56	40	0.180	56	40	0.433
16:00 - 17:00	56	40	0.284	56	40	0.163	56	40	0.447
17:00 - 18:00	56	40	0.323	56	40	0.160	56	40	0.483
18:00 - 19:00	56	40	0.246	56	40	0.151	56	40	0.397
19:00 - 20:00	1	97	0.062	1	97	0.052	1	97	0.114
20:00 - 21:00	1	97	0.031	1	97	0.021	1	97	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates: 2.345						2.404			4.749

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

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

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Parameter summary

Trip rate parameter range selected: 10 - 99 (units:)
Survey date date range: 01/01/12 - 16/09/20

Number of weekdays (Monday-Friday): 56
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 4
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.



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