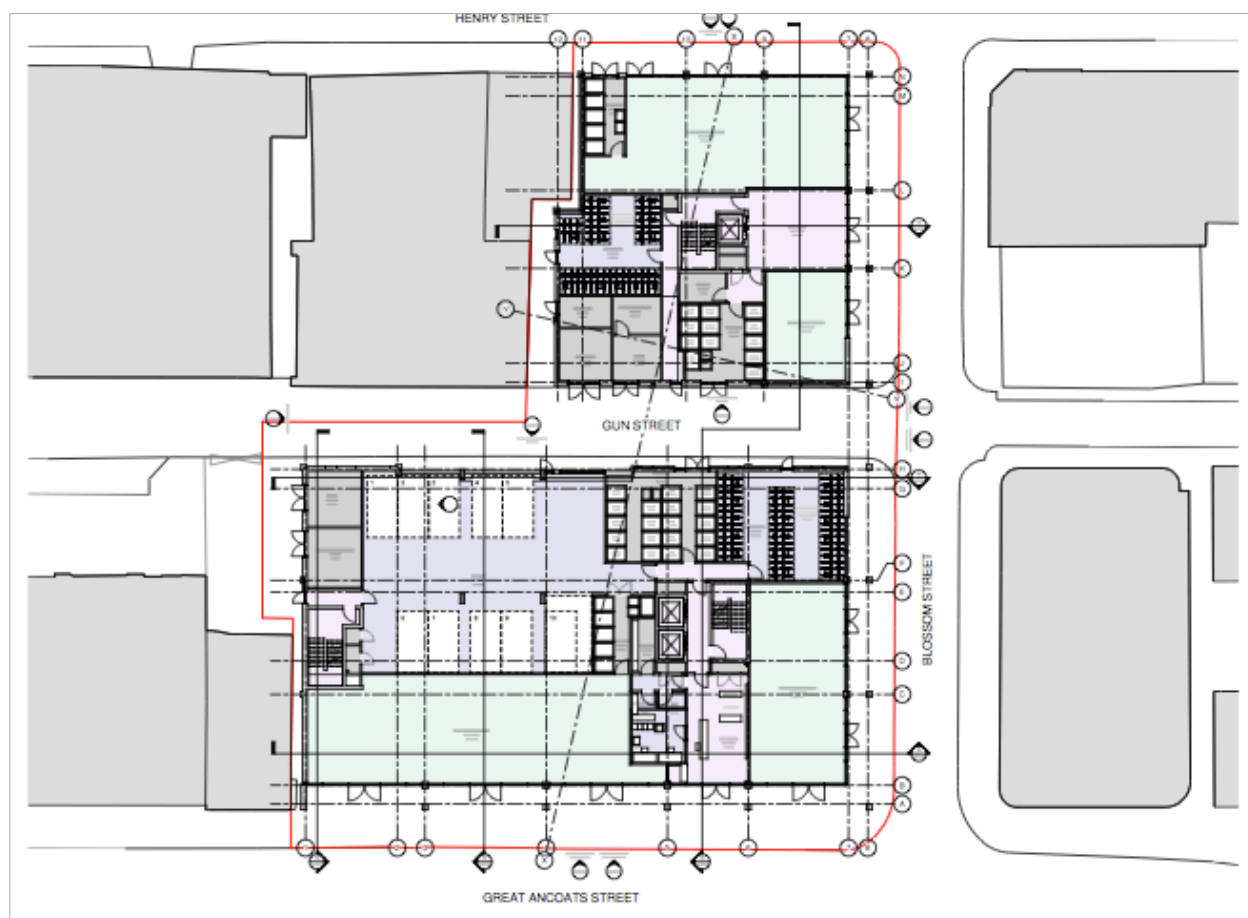




Blossom Street, Ancoats
Mulbury Homes (Blossom Street) Ltd
Transport Statement

160907/SK21589/TS01(-02)
September 2016

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Project	Document	Rev	Description	Authorised by	Signed	Date
SK21589	TS01	-00	Draft for comment	L Speers	LGS	06/05/2016
SK21589	TS01	-01	Final draft	L Speers	LGS	12/05/2016
SK21589	TS01	-02	Updated layout	L Speers	LGS	07/09/2016

1 INTRODUCTION

Background

- 1.1 SK Transport Planning Ltd (SK) has been appointed by Mulbury Homes (Blossom Street) Ltd to prepare a Transport Statement (TS) in support of a planning application for the demolition of existing buildings and redevelopment of the site for two residential buildings (145 apartments) with ground floor commercial uses. The proposed layout is attached as appendix a.
- 1.2 The site is currently occupied by a number of commercial/light industrial premises and a private commuter car park. Existing and historic vehicle access points have been/are provided from Great Ancoats Street, Blossom Street, Gun Street and Henry Street.
- 1.3 The site is located in Manchester city centre, north of Great Ancoats Street. The site benefits from an exceptional level of accessibility to facilities in the regional centre and is well served by all modes of transport infrastructure. The proposal includes measures to encourage sustainable trip making (such as 100% cycle parking) and accommodate casual car use requirements (such as membership to the Enterprise Car Club and the provision of a new Enterprise Car Club bay to serve the local area). As such, the site presents a sound opportunity to deliver a highly sustainable development that meets the needs of future occupiers and enables residents to meet their daily travel requirements without needing to own or use a car.
- 1.4 The proposal includes 10 parking spaces on site (7% provision) and arrangements have been made with NCP for future residents to purchase a season ticket should they wish to store a car. The total parking provision for the site, including NCP parking, is 30%. This level of provision is commensurate with the accessibility level of the site, local area car ownership levels and parking provision at other residential sites in the city centre. The site also benefits from existing on-street parking restrictions that limit the duration of stay during the period of the restriction to two hours to prevent long-stay parking and limit the practicability of a resident storing a car on street.

Scope

- 1.5 The TS assesses the traffic, transport, parking and accessibility impact of the proposal. The document has been prepared in line with guidance as set out in Manchester City Council (MCC) SPD 'Guide to Development in Manchester' and 'Local Development Framework Core Strategy', Transport for Greater Manchester (TfGM 'Transport for Sustainable Communities', and national guidance as detailed in the National Planning Policy Framework (NPPF), National Planning Practice Guidance (NPPG), and Department for Transport (DfT) 'Guidance on Transport Assessment'.
- 1.6 On the basis of the above, the TS considers the following elements:
 - Existing operation of local transport and parking infrastructure
 - Sustainable, access, servicing and parking proposals
 - Accordance with prevailing policy
 - Accessibility impact
 - Traffic and road safety impact
 - Parking impact

2 EXISTING SITUATION

Site Location

- 2.1 The site is located to the north of Great Ancoats Street in Manchester city centre in Ancoats, as shown on figure 2.1. The site is bounded to the southwest by Great Ancoats Street, to the northwest by existing commercial/residential premises, to the northeast by Henry Street and to the southeast by Blossom Street. Gun Street bisects the site northwest-southeast.
- 2.2 The site is currently occupied by a number of commercial/light industrial premises and a commuter car park. Existing and historic vehicle access points have been previously or are currently provided from Great Ancoats Street, Blossom Street, Gun Street and Henry Street.

- 2.3 There are no loading restrictions present in the local area and large vehicles (including refuse collection) have been observed servicing commercial and residential premises from kerbside.

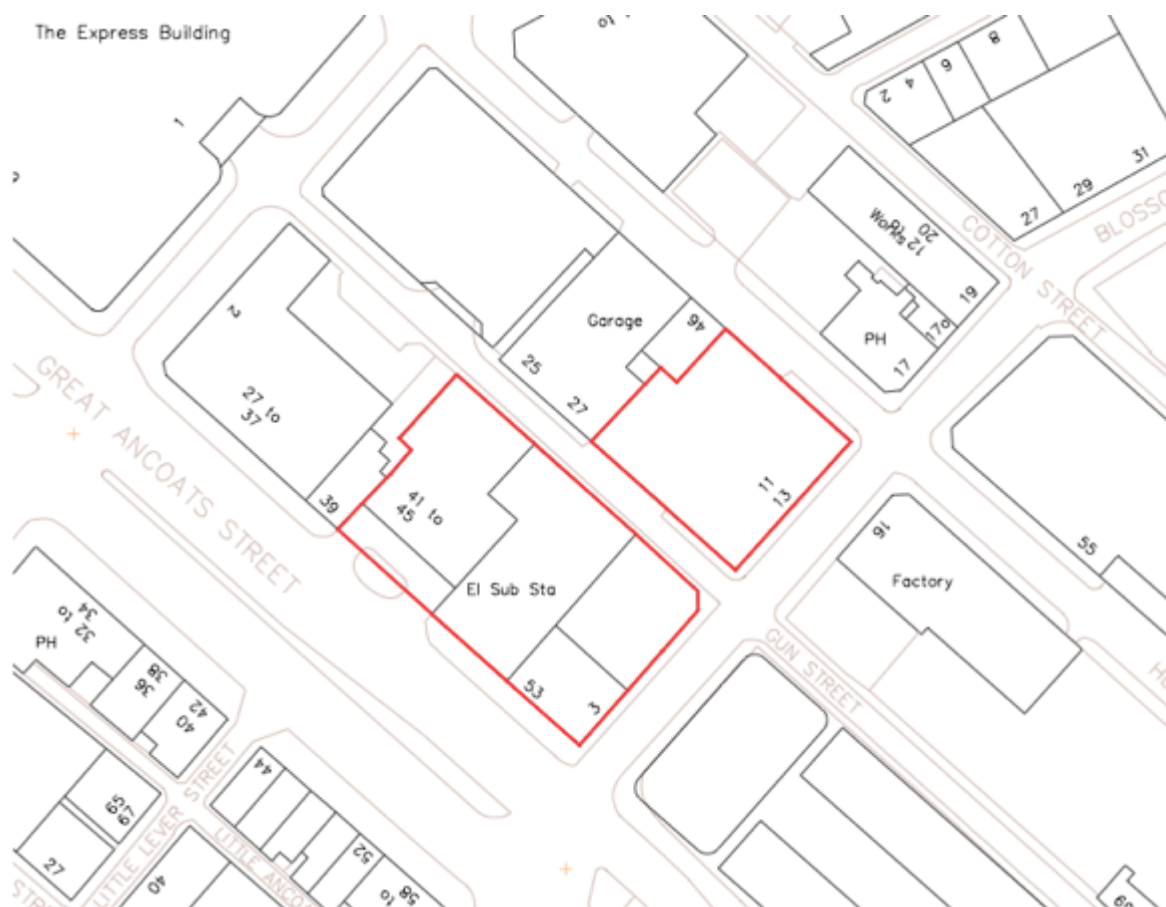


Figure 2.1: Site Location

Local Highway Network

- 2.4 The A665 Great Ancoats Street is a dual carriageway ring road encircling Manchester city centre. Two through lanes are consistently maintained in each direction and major junctions are signal controlled. Controlled pedestrian crossing facilities are provided at regular intervals at signal junctions and stand alone pelican crossings. The road is subject to a 30mph speed restriction in the vicinity of the site and wide footways are available.
- 2.5 Access to the site from Great Ancoats Street is provided via the signalised junction of Newton Street/Great Ancoats Street/Blossom Street. The area surrounding the site, north of Great Ancoats Street, is a 20mph speed zone and controlled parking zone.
- 2.6 A 7.5t weight restriction is in place on the Blossom Street approach of the signalised junction, however this restriction is not repeated or present on any other section of Blossom Street (including the absence of a matching Blossom Street weight restriction on the approach egress).
- 2.7 Access can also be gained to the site from a number of other junctions surrounding the site, including the following:
- Great Ancoats Street/Lever Street/George Leigh Street (one-way northbound)
 - Great Ancoats Street/Jersey Street
 - Great Ancoats Street/Redhill Street
 - Oldham Road/Carnell Street
 - Oldham Road/Sherratt Street (one-way westbound)

- 2.8 The routes surrounding the site benefit from good quality public realm infrastructure, generally having wide footways, with raised tables provided at minor junctions. Blossom Street has standard width footways on either carriageway edge and street lighting present. Parking restrictions are in place along the length of Blossom Street, with double yellow lines in place on the section adjacent to Great Ancoats Street. Right turns from Great Ancoats Street into Blossom street are not permitted. Historically Blossom Street provided access to the existing car park on the eastern end of the site. Continuing north Blossom Street opens up to provide a large landscaped square. Pay and Display parking bays are provided along the eastern carriageway edge.
- 2.9 Gun Street bisects the site northwest-southeast from George Leigh Street to Blossom Street. Gun Street has parking restrictions (single yellow lines) along its length. Gun Street provides rear access to commercial and residential properties fronting Great Ancoats Street and Henry Street, including access to existing buildings on the site. Access is also provided from Gun Street to the existing car park on the eastern end of the site.
- 2.10 Henry Street bounds the site to the northeast and has footways along both carriageway edges and street lighting present. Henry Street provides access to the existing commercial property on the northern edge of the site.

On-street Parking

Characteristics

- 2.11 The site sits within a controlled parking zone governed by single yellow lines (Monday to Saturday, 8am to 6pm) and a number of Pay and Display parking bays. The parking bays limit duration of stay during the period of the restriction to two hours to prevent long-stay parking and limit the practicability of a resident storing a car on street. There is a residents' parking scheme in operation in the area, but this is only applicable to residents of 23-57 George Leigh Street.
- 2.12 The nearest on-street parking bays to the site are located on Blossom Street, Henry Street, Jersey Street, Redhill Street, Newton Street and Houldsworth Street. Additional marked out spaces are available throughout the area. These include two Enterprise Car Club spaces on Tariff Street and an electric vehicle charging space on Port Street.
- 2.13 Disabled on-street parking spaces are provided on Redhill Street and on George Leigh Street. MCC promotes use of standard parking bays for blue badge holding residents and visitors. Blue badge holders are permitted to park for free for an unlimited time in standard parking bays and are allowed to park for a maximum of three hours in unmarked areas where there are no loading restrictions.
- 2.14 Table 2.1 shows legitimate parking space available in the study area. This table shows the parking space available during the day (when the parking restrictions are in force) and in the evening when the parking restrictions are lifted and parking is permissible on single yellow lines.

Location	Street Geometry			Parking Capacity	
	Section	Total Length	Available Length	Evening	Daytime
George Leigh Street	Gt Ancoats St - Cotton St	144	114	19	0
	Cotton St - Bengal St	310	marked bays	37	37
Blossom Street	Gt Ancoats St - Cotton St	108	72	12	0
	Cotton St - Bengal St	280	268	45	9
Jersey Street	Gt Ancoats St - Cotton St	108	102	17	0
	Cotton St - Bengal St	252	240	40	0
Redhill Street	West	168	156	26	11
	East	210	210	35	4
Loom Street		312	144	24	0
Hood Street		264	132	22	0
Gun Street*	North	66	0	0	0
	South	66	42	7	0
Pickford Street		160	0	0	0
Henry Street	North	210	150	25	0
	South	216	180	30	3
Cotton Street	North	88	0	0	0
	South	114	0	0	0
Cornell Street		136	0	14	14
Sherratt Street		72	60	10	0
Murray Street		240	108	18	0
Bengal Street	NE	168	156	26	0
	SW	144	138	23	2
			Total	430	80

Table 2.1: Existing On-street Parking Supply (in vehs)

Demand

- 2.15 Parking occupancy surveys have been undertaken at various times during the day and week to allow an understanding of typical parking demand in the area associated with existing residential and commercial developments. The surveys were undertaken during the following periods:
- Weekday afternoon
 - Weekday evening
 - Weekday night time/early morning
 - Weekend afternoon
- 2.16 The surveys captured all vehicles parked in the area at the time the observations were made, including vehicles parked on yellow lines and waiting taxis. Delivery vehicles are recorded separately.
- 2.17 Full survey details and occupancy analysis are presented in appendix c and the findings of the surveys are summarised in table 2.2.

Location	Wed 06.01.16 14.30	Thu 07.01.16 20.00	Fri 18.01.16 04.00	Tue 02.02.16 20.30	Wed 03.02.16 05.00	Sat 06.02.16 15.00	Supply (Daytime)	Supply (Evening)
George Leigh St	12 (57%)	16 (40%)	20 (50%)	29 (73%)	8 (20%)	6 (29%)	21	40
Blossom St	10 (111%)	19 (34%)	12 (21%)	15 (26%)	7 (12%)	10 (111%)	9	57
Jersey St	6 (46%)	21 (45%)	14 (30%)	20 (43%)	13 (28%)	1 (8%)	13	47
Redhill St	5 (33%)	13 (21%)	7 (11%)	11 (18%)	9 (15%)	4 (27%)	15	61
Loom St	0 (N/A)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (N/A)	0	24
Hood St	0 (N/A)	1 (5%)	3 (14%)	1 (5%)	0 (0%)	1 (N/A)	0	22
Gun St	0 (N/A)	0 (0%)	1 (8%)	4 (30%)	3 (23%)	3 (N/A)	0	13
Pickford St	0 (N/A)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (N/A)	0	16
Henry St	1 (33%)	7 (13%)	6 (11%)	6 (11%)	4 (29%)	3 (100%)	3	55
Cotton St	0 (N/A)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (N/A)	0	23
Cornell St	16 (114%)	9 (64%)	6 (43%)	11 (79%)	7 (39%)	10 (71%)	14	14
Sherratt St	0 (N/A)	2 (20%)	2 (20%)	0 (0%)	0 (0%)	0 (0%)	0	10
Murray St	0 (N/A)	8 (44%)	9 (50%)	5 (28%)	7 (39%)	0 (0%)	0	18
Bengal St	2 (50%)	4 (8%)	0 (0%)	6 (12%)	5 (10%)	3 (75%)	4	49
All locations	52 (66%)	100 (22%)	80 (18%)	108 (24%)	64 (14%)	41 (52%)	79	449

Table 2.2: Existing On-street Parking Demand (in vehs)

- 2.18 The surveys show daytime parking levels at between 52%-66%, demonstrating a substantial degree of available capacity during this period. During this period parking restrictions prohibit to long-stay parking and restrict the practicability of a resident storing a vehicle on-street.
- 2.19 Surveys were also undertaken during periods when the parking restrictions are not in force, between 6pm and 8am. There are very low levels of parking demand during these periods.
- 2.20 The surveys also recorded a noticeable difference between evening activity and that occurring in the middle of the night/early morning. The early morning parking activity can be entirely attributed to residents in the area. The parking in the early evening is a mixture of resident and commercial activity.
- 2.21 Higher levels of parking activity were recorded in both evening surveys, with occupancy levels between 22%-24%, compared with the overnight occupancy levels of 14%-18%.
- 2.22 The surveys show that there is sufficient parking capacity to accommodate existing demand levels and the area is operating significantly below accepted stress levels (95%). On this basis, it is not envisaged that any additional parking created by consented developments in the area will materially alter parking conditions and can be adequately accommodated within the area.

Off-street Parking Facilities

- 2.23 Table 2.3 shows that there are nearly 4,500 off-street car parking spaces within a short walk (ten minutes) of the site.

Location	Operator	Walk Distance (m)	Walk Time (mins)	Spaces
Port Street	Citipark	280	4	150
Tariff Street	Citipark	350	4	45
Tariff Street	Citipark	350	4	232
Ducie Street	Citipark	700	4	125
Dale Street	Citipark	400	5	265
Cable Street	Euro Car Parks	400	5	33
Goulden Street	Euro Car Parks	450	6	32
Piccadilly	NCP	600	8	712
Northern Quarter	NCP	400	5	700
Arndale	NCP	800	10	1383
Shudehill	NCP	800	10	777
Total				4454

Table 2.3: Off-street Parking Spaces

- 2.24 All of the off-street car parks offer season ticket and contract lease arrangements. The use of NCP car parks by residents is a key component of MCC's published central area parking strategy. NCP has confirmed that the four car parks (3,572 spaces) nearby are currently operating at 70% capacity.
- 2.25 The pedestrian routes connecting the site to the NCP car parks have been examined and are deemed to be of good quality. Footways are of standard expected from a city centre location with signalised crossings provided across all major routes and pedestrians only having to cross minor roads with out signal control. The minor road crossing locations benefit from lower traffic and speed conditions. A plan showing the pedestrian routes to the NCP car parks is attached as appendix d.

Existing Network Traffic Flows

- 2.26 Table 2.4 shows the existing traffic flows on the routes surrounding the site. The traffic flows have been taken from the DfT database.

Link	AADT (in vehs)
Great Ancoats Street (N)	35162
Great Ancoats Street (S)	30009
Newton Street	11117
Lever Street	3747
Oldham Road	20219

Table 2.4: Existing Network Traffic Flows (two-way flows)

Road Safety Characteristics

- 2.27 A review of the GMTU accident database has been undertaken. The database shows that there have been no accidents in the previous three-year period on Blossom Street, Gun Street or Henry Street. A number of accidents have occurred on Great Ancoats Street at the junction with Blossom Street, but these were all classified as slight and the number of accidents is in keeping with the level of traffic using this strategic highway route.

3 ACCESSIBILITY

Access on Foot

- 3.1 The site is well connected to key destinations by a comprehensive network of pedestrian routes, typical of its city centre location. Pedestrian provision is generally of good condition with frequent dropped kerb and tactile paving provision. The immediate area is subject to a 20mph speed limit with suitable carriageway surfacing in place to slow vehicle speeds. Footways are in place to connect to the wider network. Signalised crossing facilities are provided on Great Ancoats Street at the junction with Blossom Street and at the junction of Great Ancoats Street/Lever Street.
- 3.2 Two-thirds of all journeys in the UK are under-five miles and short distance trips offer the greatest opportunity for changes in travel behaviour. DfT best practice guidance states that walking has the potential to substitute for car trips under 2km.
- 3.3 Figure 3.1 shows a 2km walking catchment from the site representing a walk time of 25 minutes, using an average walking speed of 80 m/min. The walking catchments have been derived using the interactive walkit.com tool, a pedestrian journey planning system promoted by both MCC and TfGM.

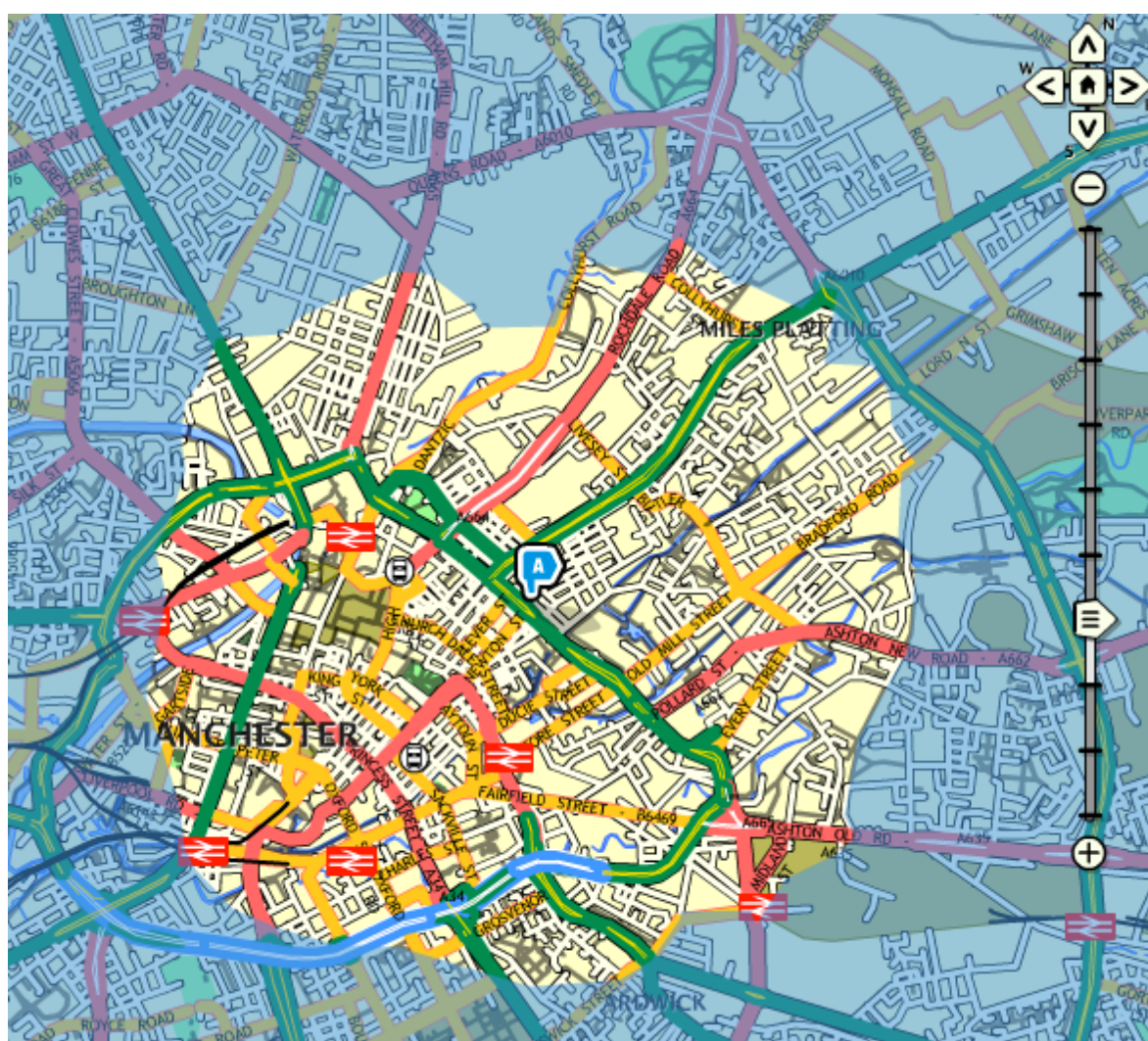


Figure 3.1: 2km Walking Catchment
[source: TfGM 2016]

- 3.4 The walking catchment shows that the site sits within 2km of the retail, business and civic core of the regional centre.
- 3.5 The existing pedestrian infrastructure surrounding the site provides a good basis for future trips by residents to key destinations. The close proximity of the site to a key city centre destinations

and local area amenities, means that journeys on foot are likely to be a significant mode choice for future residents.

Access by Cycle

- 3.6 Figure 3.2 shows the site relates well to existing cycle routes. The site sits within a 20mph zone that provides a suitable environment for cycle trips into the city centre. Marked cycle routes are also present along the site frontage on Great Ancoats Street, with a toucan crossing facility provided at the junction of Great Ancoats Street and Oldham Street.

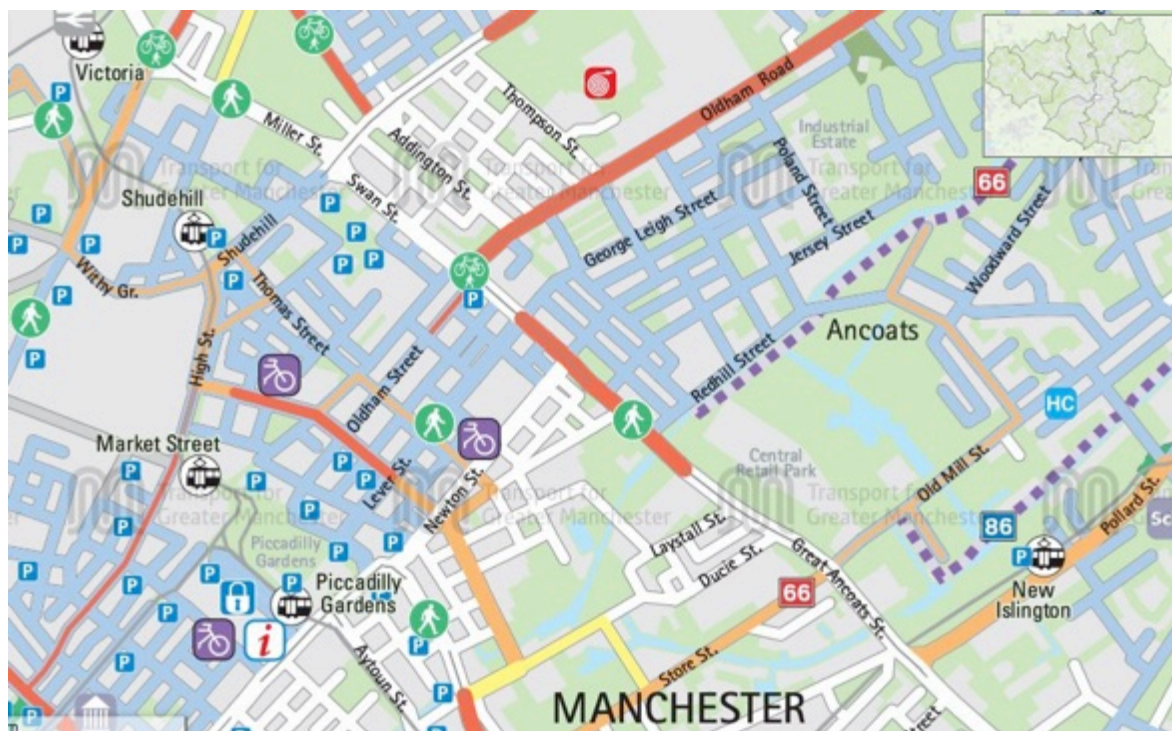


Figure 3.2: Existing Cycle Routes
[source: TfGM 2016]

- 3.7 Access can also be gained via Redhill Street to the regional and national cycle network, including Regional Route 86 (Medlock Valley), National Route 66 (Rochdale Canal) and National Route 60 (Manchester Cycleway). Access can also be gained to route 60 via Hilton Street to the south of the site. These routes provide both leisure and utility connections to the wider region.
- 3.8 Local Sustainable Transport Fund proposals (Access to Regional Centre Scheme) are scheduled in the local area to enhance cycle facilities in the immediate area, including the provision of a two-way cycle route on Port Street, the upgrade of the existing signalised pedestrian crossing on Great Ancoats Street (east of Port Street) to provide a toucan facility, and the introduction of 20mph speed limit on Port Street, Dean Street and Houldsworth Street.
- 3.9 In 2013 Greater Manchester was awarded £20 million Cycle City Ambition Grant funding to support proposals to improve cycling facilities throughout the region and support a 12 year cycle strategy to 2025. Velocity aims to increase bike mode share by 10% of all journeys during this period. The proposal includes the delivery of major new cycleway infrastructure and the roll out of ambitious cycle promotion and education programmes.
- 3.10 Cycling has the potential to substitute for car trips up to 5km in length, equating to a cycle journey time of 25 minutes at a leisurely pace. To provide an indication of the areas that are within a 5km cycling distance of the site TfGM promoted cyclestreets.net journey planning software has been used.
- 3.11 Table 3.1 shows typical cycle times, based on a cruising cycle speed to key destinations using cyclestreets.net. All routes have been measured using an unhurried cycle speed of 16kph.

Amenity Type	Location	Cycle Time (mins)
Education	University of Manchester	14
Employment	Spinningfields	12
Train Station	Piccadilly Station	6
City Centre	Market Street	4
Employment	Salford Quays	24

Table 3.1: Cycle Accessibility
[source: Cyclestreets.net 2016]

- 3.12 It is shown that opportunities exist for access by cycle from the site to areas of the city using existing suitable routes.

Access by Bus

- 3.13 Existing bus stops are located within a short walk of the site on Great Ancoats Street, Lever Street, Oldham Street and Dale Street. The bus stops are all within a five minute walk of the site.
- 3.14 TfGM's interactive bus tool shows that the bus stops within 400m/five minutes of the site are served by over 1,450 buses per day (Monday to Friday). These services provide comprehensive coverage of city centre and regional destinations. The services also provide good coverage of early morning, evening and weekend periods.
- 3.15 It is reasonable to expect that people will walk further than 400m to access bus services due to the high frequency and assortment of services available in central areas. Opportunities exist for residents to access bus interchange facilities at Shudehill and Piccadilly Gardens, located 650m and 700m from the site, respectively.
- 3.16 Access can also be gained to Routes 1 and 3 of the Metroshuttle bus service, which stops 450m away from the site on the A6 (Piccadilly). The Metroshuttle is a free bus service providing frequent routes around the city centre to link key destinations.
- 3.17 The Cross City Bus Package will create or enhance over 25 miles of bus routes and is one of the largest investments in Greater Manchester's bus network in decades. The package will significantly improve bus travel into and across the city centre. The scheme will improve reliability and frequency of many bus routes.
- 3.18 The site is well placed for opportunities to access by a number of bus services. Existing bus services provide good frequency coverage of all the key periods of trip demand.

Access by Train

- 3.19 The site is located 700m from Piccadilly Station. Piccadilly Station is the main rail interchange in Manchester with existing services offering coverage of destinations across Greater Manchester region and the UK.
- 3.20 The Ordsall Chord proposal is a Network Rail led improvement scheme that is currently under construction. The scheme will introduce a new rail link to connect Manchester Piccadilly, Oxford Road and Victoria stations. This connection will remove a bottleneck to the south of Piccadilly Station and free up space on the network. The benefit of the proposal includes:
- Two new fast trains per hour between Manchester Victoria and Liverpool
 - Six fast trains, instead of four, per hour between Manchester and Leeds
 - Faster train journeys between Manchester, Leeds and Liverpool
 - A new direct service through Manchester city centre to Manchester Airport
 - Faster journey times to Hull, Newcastle and the Northeast
- 3.21 Good opportunities exist for future residents to access key regional and national destinations by train.

Access by Tram

- 3.22 Metrolink services can be accessed at from Piccadilly Gardens Metrolink Station, Shudehill Interchange and New Islington Metrolink Station, 700m, 650m and 700m from the site, respectively. Existing Metrolink services provide high-frequency services on the Altrincham, Eccles, East Didsbury, Mediacity, Ashton, the airport, Rochdale and Bury.
- 3.23 The Second City Crossing is currently under construction to provide a second Metrolink line through the centre of Manchester. The Second City Crossing will increase the capacity, flexibility and reliability of all of Metrolink's new lines. This scheme is part of a wider public transport improvement system across Manchester that includes the new tram line, bus priority scheme and dedicated cycle lanes.
- 3.24 Good opportunities exist for future residents to access key destinations in Greater Manchester by tram.

Greater Manchester Accessibility Level

- 3.25 A Greater Manchester Accessibility Level (GMAL) calculation has been undertaken for the site. A GMAL is calculated using the interactive tool managed and maintained by TfGM for use in assessing the accessibility by non-car modes of a development site. The tool measures AM Peak accessibility by public transport of a point of interest and provides a score between 1 and 8, where 1 is a low level of accessibility and 8 is the highest level of accessibility.
- 3.26 The site has a GMAL of 8, indicating that the site benefits from the highest level of accessibility.

Casual Car Use

- 3.27 Table 3.2 shows the nearest existing Enterprise Car Club vehicles to the proposal site. There are six vehicles located within eight minutes walk of the site, with the nearest vehicles conveniently located a four minute walk away on Tariff Street.

Location	Number of Vehicles	Walk Distance (m)	Journey Time (mins)
High Street M4 1BD	2	650	8
CHIPS New Islington M4 6BU	1	900	11
Tib Street M4 1SH	1	600	8
Ducie Street M1 2DE	1	600	8
Piccadilly Place M1 3BG	2	850	11
Tariff Street M1 2FJ	2	350	4

Table 3.2: Enterprise Car Club Vehicle Locations

- 3.28 Enterprise also provides longer-term car hire solutions. Enterprise operates from The Grand in Manchester and provides a drop-off vehicle service to local residents' doors. The combination of the two car hire services means that both short and long term occasional vehicle hire needs can be offered to residents in Manchester. Enterprise has confirmed that long term vehicle hire rates are offered at 50% of usual list price at the weekend to allow local residents to hire cars for weekend breaks, etc.
- 3.29 The Enterprise Car Club provides a MCC/TfGM supported solution that complements the sustainable transport system and to meet occasional vehicle needs of residents. The Car Club enables members to benefit from low cost, convenient and greener motoring, and a more sustainable pattern of living that negates the requirement to own and store a car.

4 PROPOSAL

Layout

- 4.1 The proposal seeks to demolish the existing buildings on site and redevelop the site for two residential buildings (Class C3) with ground floor commercial uses (Class A1, A2, A3, A5, B1 and/or D1) with associated highways and other works.
- 4.2 The proposal will deliver a total of 145 private rental sector (PRS) apartments in the two new purpose built blocks. The proposed ground floor layout is attached as appendix a.

Pedestrian Access

- 4.3 Pedestrian access to Block A is provided from Great Ancoats Street into the main residential reception area. Pedestrian access points for the ground floor commercial units are provided directly from the street frontage on Great Ancoats Street and Blossom Street.
- 4.4 Pedestrian access to Block B is provided from Blossom Street for the residential use. Pedestrian access points for the ground floor commercial units are provided directly from the street frontage on Blossom Street and Henry Street.
- 4.5 The travel plan and welcome pack will include maps showing appropriate routes to key city centre destinations and public transport nodes. Other measures are proposed as part of the travel plan to encourage safe movements from the site on foot.

Cycle Access

- 4.6 Cycle parking is provided at a provision of just over 1 space per unit, with 86 cycle parking spaces provided in the building fronting Great Ancoats Street and 61 cycle parking spaces provided in the building fronting Henry Street.
- 4.7 Eleven cycle parking stands (22 spaces) are currently provided on Cutting Room Square, a short walk from the site, for use by visitors to the development.
- 4.8 Other measures are proposed as part of the site travel plan to facilitate future movements by cycle.

Parking Design Review

Option 1 (Proposal)

- 4.9 Tim Groom Architects has undertaken a full design review of opportunities to provide parking on-site as part of the development proposal. This review has been undertaken in the context of both the principles of good Place Making, financial viability of the site, and discussions with MCC.
- 4.10 The proposed scheme (attached as appendix a) provides 10 parking bays on site (7%) provision at ground floor level. The public realm and active frontage requirements has been a key driver in shaping the design and development of the scheme. Throughout Ancoats there exists potential for a high quality public realm that can be realised by the occurrence of smaller pockets of spaces that emerge between buildings.
- 4.11 The street space of Great Ancoats Street and the formalised space of Cutting Room Square are two key spaces of public realm that have been considered in developing the design of the scheme. It is critical for the design of the scheme to make a valued contribution to connecting these spaces and, importantly, for the design to assist in activating the frontages of both Great Ancoats Street and Blossom Street. The proposal creates an opportunity to begin to change the character of the Great Ancoats Street into an active pedestrian environment.
- 4.12 The proposed parking solution allows an active frontage of Great Ancoats Street, Blossom Street and Henry Street to allow a significant contribution to be made towards the quality and character of the public realm in the area surrounding the site.
- 4.13 In providing an element of car parking whilst also providing 145 apartments (the target for investor interest), the proposal ensures the financial viability of the scheme. The applicant has confirmed

that this would align with the objectives of the likely funder of the scheme in that it delivers an excellent quality scheme with the benefit of a small level of on-site parking, whilst also creating active frontage in keeping with the characteristics of the area.

- 4.14 Further details are provided below on the parking strategy that is to be adopted for residents and visitors to the site.

Option 2

- 4.15 Option 2 considered the provision of a basement level of parking below Block A. This option would provide 30 spaces at basement and ground floor level with access from Gun Street. To allow this option to work a car lift would be required.
- 4.16 The applicant has advised that this option would not work from a financial viability perspective.

Option 3

- 4.17 Option 3 allows for a total of 28 parking bays all at ground or street level, with the parking being provided in Block A.
- 4.18 This option is the most detrimental to the quality and character of the public realm. There are no active frontages with the parking pushed hard against the Great Ancoats Street frontage in order to maximise the car park capacity without creating a prohibitively expensive basement. The quality of the street space in terms of Great Ancoats, Blossom and Gun Street would be detrimentally impacted and be unpleasant and unattractive.
- 4.19 The applicant has confirmed that the loss of the commercial units at ground level as a result of the car parking would also render the scheme financially unviable.

Option 4

- 4.20 Option 4 allows for a total of 15 parking bays all at ground level, with five of the parking spaces being provided in Block B. This option would remove the commercial space and active frontage on Blossom Street and Henry Street.
- 4.21 The applicant has confirmed that, on balance, the minimal parking benefit does not compensate for the loss of important active frontage and commercial space.

Car Access

- 4.22 The proposal includes parking on site for ten vehicles (including one disabled space) accessed from Gun Street.
- 4.23 NCP has confirmed that annual season tickets for 34 spaces can be offered to future residents at a discounted rate of £999 per annum in the any of the nearest car parks to the site (shown in appendix d and listed below).
- Manchester Northern Quarter (700 spaces): 5 minute walk
 - Manchester Printworks (777 spaces): 10 minute walk
 - Manchester Arndale (1383 spaces): 10 minute walk
 - Manchester Piccadilly (712 spaces): 8 minute walk
- 4.24 The cost of the parking equates to an effective day rate of £2.74, compared to an average list price daily rate of £15. Confirmation of this arrangement is attached as appendix e.
- 4.25 The total parking proposed for the site is 44 spaces, equating to a 30% provision. This level of parking is commensurate with the accessibility characteristics of the site, local area car ownership levels and the level of parking provided at other developments in the city centre (as shown in table 4.1).

Application Reference	Development	Scale (units)	Provision	Notes
105505/FO/2014/C1	Cambridge Street	282	27%	
107722/FO/2014/N2	1 Angel Gardens	458	33%	
110014/NMC/2015/C1	River Street	430	7%	
109467/FO/2015/N1	Edinburgh Castle	21	0%	
109287/FO/2015/C2	Port Street	135	0%	
106249/FO/2014/N2	275 Great Ancoats Street	111	36%	
107245/FO/2014/C2	Store Street	357	27%	
110276/FO/2015/C2	Store Street	34	0%	
106021/FO/2014/C2	Jacksons Warehouse	91	33%	All parking provided off-site at Citi Park Car Park
106490/FO/2014/C2	Albion Street/Trafford Street	172	28%	All parking provided off-site at NCP Car Park

Table 4.1: Residential Parking Provision

Visitors

- 4.26 The parking surveys detailed in section 2 show that there is space on street in existing Pay & Display bays to meet demand associated with visitors who travel to the site by car.
- 4.27 The proposal includes funding of a Traffic Regulation Order (TRO) to provide an additional parking bay on Blossom Street to meet the needs of disabled visitors. The proposed parking layout is attached as appendix f.

Parking Strategy Overview

- 4.28 Research shows that there is a strong relationship between accessibility and car ownership, with developments with high levels of accessibility having lower than average car ownership levels.
- 4.29 Research also shows that the more parking provided in a new development, the more attractive living there becomes to potential residents who prioritise car ownership when making locational choices. As a result the more parking provided at a new development, the higher the household car ownership level. This relationship has been found to be true for all incomes, locations and accessibility levels. The opposite is also true, with the low parking developments being attractive to people who do not prioritise car ownership or use. On this basis, the applicant is confident that the development can be successfully marketed with the level of parking proposed and that it will appeal to residents who do not prioritise car ownership when making the decision about where to live.
- 4.30 The site meets the criteria required by policy and research for the introduction of a low parking level development. Local parking restrictions are in place to deter on-street parking and the site benefits from an exceptional level of accessibility.
- 4.31 The applicant is supportive of adopting measures to allow future occupiers to meet their daily travel requirements without needing to own a car. Measures are included within the proposal to make this a reality. The development will be underpinned by a robust travel plan that will include promotional and infrastructure measures to assist residents to adequately meet their travel needs, including occasional vehicle use. Further details of the measures proposed are outlined below.
- 4.32 NCP has confirmed that space is available in nearby off-street car parks. The resident will be able to purchase a season ticket at an NCP car park at the discounted rate offered for residents as part of MCC's central parking strategy.
- 4.33 Measures are included within the proposal to provide the level of parking is commensurate with the site's accessibility level, local area car ownership levels and that provided at other city centre developments.
- 4.34 Measures are also included within the proposal to meet the needs of future visitors to the site.

Casual Car Use

- 4.35 Enterprise Car Club provides a MCC/TfGM supported solution that complements Manchester's sustainable transport system and to meet casual vehicle needs of residents who do not own a car. The initiative enables members to benefit from low cost, convenient and greener motoring, and a more sustainable pattern of living that negates the requirement to own and store a car.
- 4.36 Enterprise Car Club offers pay as you go motoring, with vehicles available to hire for as little as 30 minutes per trip. The vehicles are available 24/7 and members of the scheme can easily access vehicles on demand by reserving on line. The Enterprise Car Club can save motorists up to £3,500 a year on costs usually associated with fuel, insurance, servicing, MOT, cleaning and parking.
- 4.37 The merger of Enterprise and City Car Club now provides residents with solutions for longer term vehicle hire, for use when a resident wants to travel further afield on holiday, for example. From the Enterprise base at Piccadilly vehicles can be provided to meet longer car hire demand. The vehicles can be booked in advance and dropped off at the residence as required. Enterprise Car Club has confirmed that a 50% discount is offered to residents hiring a car at the weekend.
- 4.38 The proposal includes funding of the cost of the TRO application to provide a new Car Club bay on Blossom Street (as shown in appendix f). Enterprise Car Club has agreed that if the applicant funds the TRO cost, it will move a vehicle into the space. The introduction of a space in this location will also provide a wider benefit to other residents of the Cutting Room Square area.
- 4.39 In addition to funding the cost of the providing a new Car Club space on Blossom Street, the applicant will also fund the cost of one year's 'taster' membership to the Enterprise Car Club for each household.
- 4.40 Enterprise Car Club has also confirmed that it will work alongside the applicant in the promotion of Enterprise vehicle hire as a solution for residents who do not own a car. This includes a launch day for the site and the provision of material for inclusion in the travel plan and resident welcome packs.
- 4.41 The travel plan and welcome pack will also include details of local taxi companies that can be used by residents.

Servicing and Refuse Collection

- 4.42 All uses on site are currently serviced from kerbside on the most appropriate frontage for the building on Gun Street, Blossom Street or Henry Street. The proposal retains the existing kerbside servicing arrangements.
- 4.43 The bin stores and maintenance areas for each block are located with access from Gun Street. Bins will be moved to appropriate locations on collection day. Swept paths have been undertaken showing that refuse vehicles can manoeuvre on Gun Street and are attached appendix g.

Framework Travel Plan

- 4.44 The applicant is supportive of the introduction of measures to allow future occupiers to meet their daily travel requirements without needing to own a car and to underpin the proposed site parking level. A framework travel plan has been prepared for the site and is attached as appendix c, with a summary provided in table 4.2.

Walking Toolkit:		
Measure	Responsibility	Timescale
Walking route information and initiatives on site website and welcome pack	Travel Plan Co-ordinator	On occupation
Promote www.walkbudi.com and www.walkit.com	Travel Plan Co-ordinator	On occupation
Cycling Toolkit:		
Measure	Responsibility	Timescale
Provide storage for 147 resident bikes	Contractor	Part of development
Promotion of Cutting Room Square cycle parking for visitors	Travel Plan Co-ordinator	On occupation
Provide cycle route map links in welcome pack and on website	Travel Plan Co-ordinator	On occupation
Promote local and national cycling events/initiatives in line with TfGM promotions, such as Adult Cycle Training	Travel Plan Co-ordinator	On occupation, on-going
Promote www.bikebudi.com or similar as promoted by TfGM	Travel Plan Co-ordinator	Within 6 months
Investigate bike purchase discount for residents with local retailer	Travel Plan Co-ordinator/Operator	Within 6 months
Public Transport Toolkit:		
Measure	Responsibility	Timescale
Provide link to TfGM journey planning software on website and in welcome pack	Travel Plan Co-ordinator	On occupation
Promotion of TfGM integrated ticketing schemes in welcome pack	Travel Plan Co-ordinator	On-going as each unit is occupied
Efficient Vehicle Use Toolkit:		
Measure	Responsibility	Timescale
Provide parking levels commensurate with location and accessibility of the site, NPPF and local policy	Contractor	Part of development
Fund TRO application for new Car Club and disabled parking bays on Blossom Street	Contractor	Part of development
Provide literature relating to existing Enterprise Car Club scheme and a year 'taster' membership for each household in welcome pack	Travel Plan Co-ordinator	On-going as each unit is occupied
Provide local taxi company numbers in welcome pack	Travel Plan Co-ordinator	On occupation
Promote accessibility and parking level of the proposal as part of site marketing literature	Travel Plan Co-ordinator	3 months prior to occupation
Promote NCP season parking arrangements	Travel Plan Co-ordinator	3 months prior to occupation
Undertake Car Club launch event	Enterprise	6 months after occupation
Promotion and Marketing Toolkit:		
Measure	Responsibility	Timescale
Appoint travel plan co-ordinator and issue details to MCC	Contractor	3 months prior to occupation
Produce welcome packs and develop travel page on website	Travel Plan Co-ordinator	On occupation
Promote of TfGM supported initiatives and groups, such as Walk to Work Week, Better by Cycle CTC, Walking for Health, Walking Works and others, as advertised on the TfGM website travelplan.org.uk .	Travel Plan Co-ordinator	On-going
Investigate local grants available from TfGM	Travel Plan Co-ordinator	Part of development

Table 4.2: Travel Plan Measures

Access Strategy Summary

- 4.45 The site benefits from excellent access to a range of transport modes, including cycle infrastructure, bus, train and tram services, and is within close proximity of key regional centre destinations. As such the potential for sustainable trip making is high. A GMAL calculation undertaken for the site shows that it benefits from the highest level of accessibility, with a score of 8.
- 4.46 Analysis of local area travel patterns shows that existing residents in the area have a high propensity for sustainable trip making and that there is a lower than average car ownership level.
- 4.47 The proposal site offers a strong opportunity to develop sustainable residential accommodation in the city centre. Analysis shows that the site has an exceptional level of accessibility that is commensurate with future resident movement requirements.
- 4.48 The proposal includes a commitment to delivering measures to further enhance access opportunities for future residents and to allow them to meet their daily travel needs without needing to own a car. These measures include: a level of car parking commensurate with future resident requirements; 100% cycle parking provision; funding of infrastructure to allow an Enterprise Car Club to be located near the site; funding for a year's membership to the Car Club; and, provision for visitors and disabled site users.
- 4.49 Unlike other land uses (such as retail and employment developments), the future users of the site have a choice of renting an apartment within this development in the knowledge that there is a low level of on-site parking available. The rental of the apartment will be based on life style and circumstances, and should the potential resident prioritise ownership of a vehicle then it is reasonable to expect that they will not choose to live at this site.
- 4.50 In line with prevailing policy, recent research and future tenant characteristics, the location and end user of the site is appropriate for the low parking level proposed. On this basis, and by pursuing such a strategy, the applicant is confident that the apartments can be successfully marketed to future residents who do not prioritise car ownership when making locational choices. If a resident who does not have a parking space on site, wishes to store a vehicle then an arrangement has been made with NCP to accommodate this demand.
- 4.51 The TS shows that the surrounding area is subject to existing parking controls that will restrict opportunities for overspill parking, limit dis-amenity effects and reduce the impact on road safety levels. The existing parking restrictions will assist in reinforcing the low level of parking proposed on site.
- 4.52 It is anticipated that visitors to the site will access by non-car modes. However, should a visitor arrive by car then this TS shows that space is available to park a car for short periods on-street or in nearby off-street parking areas. A new disabled parking space is proposed on-street on Blossom Street to meet the needs of visitors with limited mobility.
- 4.53 The location, existing connections and development proposals are forecast to result in a highly accessible development that meets local and national policy aspirations, meets the needs of future residents and removes the reliance on the private car.

5 TRIP FORECAST

Local Area Travel Patterns

- 5.1 2011 Census data has been used to establish existing movement patterns in the local area.
- 5.2 The site sits within the Ancoats and Clayton ward and within medium level output area Manchester 055. As the site is located in the city centre and better replicates travel patterns associated with a city centre site it is more appropriate to use more detailed Census data provided at medium output level area, than ward data that includes suburban areas in Clayton.

Mode Share

- 5.3 Table 5.1 shows journey to work mode share for the medium output area (Manchester 055), whole ward (Ancoats and Clayton), local authority (Manchester) and the region (Greater

Manchester).

Mode	Manchester 055 (local area)	Ancoats & Clayton (ward)	Manchester (local authority)	Greater Manchester (built up area)
Work at Home	4%	3%	3%	4%
Public Transport	26%	29%	28%	16%
Car Driver	18%	30%	45%	61%
Car Passenger	2%	3%	5%	6%
Bicycle	2%	3%	4%	2%
Foot	48%	32%	14%	11%

Table 5.1: Mode Share

- 5.4 Table 5.1 shows that existing residents in the area have a high propensity for sustainable trip making, with only a small proportion currently driving to work. This is attributed to the close proximity of the area to destinations in the regional centre, the good quality of local walking, cycling and public transport routes, and the lower than average car ownership levels.
- 5.5 The level of daily car use for the immediate local area is considerably lower and the take up of sustainable trip making significantly higher than that found at ward, local authority or regional level. This again is a consequence of the exceptional level of accessibility of the area and also as residents who work in the city centre do not need to use a car to drive to work.
- 5.6 As the level of parking provided with the development is constrained future daily car use will be lower at the development than is found on average across the area. This is because the proposal is likely to appeal to future residents who do not prioritise car ownership and who work in an area that can be accessed from the site on foot, by cycle or by using public transport.

Car Ownership

- 5.7 Table 5.2 shows the number of households within the local area that do not own a car, compared to ward, local authority and regional levels.

Household Type	Manchester 055 (local area)	Ancoats & Clayton (ward)	Manchester (local authority)	Greater Manchester (built up area)
No Car	63%	52%	37%	24%

Table 5.2: Car Ownership

- 5.8 The car ownership data shows that the majority of households in the area function without needing to own a car.
- 5.9 Research (detailed in section 6) shows that the more parking provided in a new development, the more attractive living there becomes to people who prioritise car ownership when making locational choices. As a result the more parking provided at a new development, the higher the household car ownership level. This relationship has been found to be true for all incomes, locations and accessibility levels. The opposite is also true, with the low parking developments being attractive to people who do not prioritise car ownership or use. This being the case two developments next to each other can have very different car ownership levels, dependent upon the level of parking provided on-site.
- 5.10 As the proposal will be marketed as a sustainable destination with a commensurate level of parking provided, it can be concluded that the car ownership level for the development will be lower than the average for the local area.

Traffic Generation

- 5.11 Future traffic associated has been forecast using the TRICS database. The TRICS output is attached as appendix h with a summary of the unconstrained trip rates provided in table 5.3.

Trip Rate per Unit	IN	OUT	TOTAL	Traffic Flows	IN	OUT	TOTAL
AM	0.055	0.163	0.218	AM	8	24	32
PM	0.109	0.081	0.190	PM	16	12	28

Table 5.3: Unconstrained Trip Rates and Traffic Flows

- 5.12 A significant number of the TRICS survey sites have a higher level of parking than proposed at the development, with seven of the ten sites having parking levels in excess of 100%. The proposal will provide a 7% parking level on site. The use of TRICS surveys with substantially higher parking provision will have an effect on the site traffic generation and the parking accumulation assessment.
- 5.13 To allow a more accurate forecast the site traffic generation has been constrained based on the proposed site parking level. On this basis, a parking accumulation using the unconstrained trip rates has been undertaken.
- 5.14 The resulting AM and PM peak trip rates are shown in table 5.4.

Trip Rate per Unit	IN	OUT	TOTAL	Traffic Flows	IN	OUT	TOTAL
AM	0.016	0.049	0.065	AM	2	7	10
PM	0.049	0.029	0.078	PM	7	4	11

Table 5.4: Constrained Trip Rates and Traffic Flows

- 5.15 The traffic flows shown in table 5.4 are a robust estimate of future site traffic as the flows include movements associated with service/delivery movements and are based on privately owned apartments.

6 POLICY CONTEXT

National Policy

- 6.1 The National Planning Policy Framework (NPPF), published in 2012, consolidates previous national planning policy guidance into one document. At the heart of the policy is the presumption in favour of sustainable development that supports economic growth and vibrant communities. NPPF supports development that balances economic, social and environmental gains, while taking into account local circumstances and opportunities.
- 6.2 NPPF and National Planning Practice Guidance (NPPG) support reduced parking levels at highly accessible residential developments. Both documents support a presumption in favour of sustainable development and state that local authorities should:
- ‘...actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable.’
- 6.3 NPPF requires all developments that generate significant amounts of movement to be supported by a Transport Statement or Transport Assessment, and states at paragraph 32 that decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site
- safe and suitable access to the site can be achieved for all people
- improvements are proposed to limit significant impacts of development

6.4 Paragraph 32 of NPPF also states that:

‘Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.’

- 6.5 NPPF does not provide development scale thresholds for the assessment of transport impact or significance. Best practice has typically supported the use of DfT ‘Guidance on Transport Assessment’. The DfT document was withdrawn in 2014 and replaced with the advice in National Planning Practice Guidance (NPPG). However, TfGM TA guidance still references the DfT guidance and it is still pertinent to the assessment of development impacts in Manchester.
- 6.6 DfT guidance sets a threshold of development significance of 30 vehicles per hour and/or 100 vehicles per day. The net impact of the proposal is less than this on a typical daily basis and so it is concluded that the proposal will not have an impact on the surrounding network or road safety conditions.
- 6.7 The proposal accords with paragraphs 17, 30 and 32 of NPPF and provides safe and suitable access for all people and the city centre location of the site offers opportunities for sustainable trip making. The development includes measures that are commensurate with the scale, impact and nature of the proposal to facilitate and maximise access by sustainable modes and minimise further traffic, road safety and parking impact of the proposal.
- 6.8 When considering appropriate levels of parking at a development, NPPF states that consideration should be given to the following criteria:
- The accessibility of the development
 - The type, mix and use of the development
 - The availability of and opportunities for public transport trips
 - Local car ownership levels
 - An overall need to reduce the use of high-emission vehicles
- 6.9 In line with NPPF, the site is located in a highly sustainable and accessible city centre location and that opportunities to access by non-car modes are very high. The TS shows that typically future residents will undertake the majority of daily trips to facilities within the city centre. These facilities are connected to the site by an excellent network of pedestrian, cycling and public transport routes. The parking level and transport strategy proposed is commensurate with the accessible location of the site and future site occupiers.
- 6.10 The TS also shows that the demand for parking surrounding the site is not at stress levels and that the parking restrictions currently in place will assist in restricting nuisance parking.

Local Policy

- 6.11 Manchester City Council’s (MCC) adopted parking standards are outlined in appendix b of the ‘Local Development Framework Core Strategy Development Plan Document’. Paragraph 11.17 states that:

‘The Council recognises that policy is an essential facility for many developments, but will ensure that the level of parking complements its commitment to sustainable transport, through reducing emissions and congestion.’

- 6.12 There are no adopted residential parking standards in Manchester. Notwithstanding this, adopted policy supports a reduction in parking levels when consideration is given to accessibility of the particular site.

- 6.13 Further guidance is provided in Transport for Greater Manchester's 'Transport for Sustainable Communities: A Guide for Developers' (2014). The TfGM policy document supports developments that:
- Maximise accessibility
 - Reduce the need to travel by car
 - Make the best use of existing infrastructure
 - Encourage active travel
- 6.14 TfGM's guidance also states that developments should be located in and have:
- '...areas with good public transport links and most accessible locations... good pedestrian and cycle links to key local facilities... to provide low carbon access for short local journeys'
- 6.15 TfGM guidance also supports the introduction of restricted parking at new developments and identifies this as the most important method of influencing future travel behaviour. The TfGM document was produced post-NPPF and supports the underlying principles therein.
- 6.16 The development site meets the requirements of local policy guidance. The site is well located to encourage trips by non-car modes to both city centre and regional destinations. The site is also well connected to existing infrastructure for all travel modes and the development proposes measures to further enhance accessibility and reduce the dependence on the car.
- 6.17 The development proposal meets relevant adopted local and national policy requirements.

Research

- 6.18 In 2012 TfL published a research report ('Residential Parking Provision in New Developments'). This study provides an improved understanding of the relationship between development parking provision and levels of car ownership.
- 6.19 The research was underpinned by a large-scale postal survey of 800 developments across London and 3,000 residents. The study examined a good sample of income types and locations across London, to provide a representative cross section of society.
- 6.20 The key findings of the study are that:
- There is a strong relationship between public transport accessibility and car ownership – as public transport accessibility increases, car ownership in new developments falls
 - The more parking provided in a new development, the more attractive living there becomes to car owning households: people choose housing locations to meet their needs and priorities
 - The more parking provided at a new development, the higher the household car ownership level. Where there is more parking, there are more cars. This is true for all groups, all incomes and all locations
 - Developments with more parking produce more car travel.
- 6.21 The study finds that parking is an important factor in some people's decision on where to live. In general, residents select a home location that meets their specific mobility, travel and car ownership needs. The more parking provided the more the development appeals to car owning people and/or people who prioritise car use when deciding where to live. Converse to this, the less parking provided the more the development appeals to people who do not prioritise car ownership or use when making the decision on where to live.
- 6.22 Importantly, the evidence shows that developments with more parking have higher levels of car ownership and produce more car travel than developments with less parking. This is even the case where the development is similar in all other aspects, such as resident characteristics accessibility and location. This shows that an area can have developments that provide parking and developments that operate successfully with lower levels of parking or no parking at all.
- 6.23 The findings of the TfL research are supported by research reported by Melia ('Carfree and Low Car Development' 2014). Melia's study shows that many residents of car-free/low parking

developments are higher income people who either make an environmental decision not to own a car, or pick an accessible housing location where their daily travel needs can be met by other modes, and so don't prioritise car ownership and/or use. These residents tend to display pro-urban characteristics, favouring higher density living in flats and a better take up of walking and public transport.

- 6.24 Melia, Chatterjee and Clark also report ('Life Events and Travel Behaviour' 2014) also report that car ownership is strongly associated with life stages, such as moving house, changing jobs, having children or retiring. At this time people will make a decision on whether a car is needed based on life characteristics, employment destination and type of urban area resided in. The 2014 Melia *et al* study found that car ownership and the desire to use a car was typically lower for residents living in inner urban areas where public transport is better and parking more difficult. Residents in these areas have been typically found to live without a car through choice, not income constraint.
- 6.25 Recent research undertaken across the UK shows that low parking developments can effectively meet resident's travel needs where suitably located. It is clearly demonstrated that the proposal site meets all of the established criteria for a low parking level proposal.

7 IMPACT

Traffic and Road Safety Impact

- 7.1 The site is currently occupied by a number of industrial use buildings and a commuter car park, and as such generates traffic onto the surrounding highway network that will be removed once the site has been redeveloped.
- 7.2 The traffic forecast detailed in section 5 shows that the site is forecast to generate a negligible level of traffic in the AM and PM peak periods, at 10 and 11 total vehicle movements respectively. The level of traffic generated by the proposal is below the DfT significance threshold, even when the net effect of the proposal (i.e. the comparison to the site's current generating potential) is not acknowledged in the assessment.
- 7.3 In reality, given the site's location adjacent to the regional centre and the likelihood that future residents will work in the city centre, the proposal will generate even less than shown. It is considered likely that residents of the site will not use their cars to undertake typical daily travel movements particularly as measures are proposed to promote access to key amenities using the excellent sustainable transport infrastructure in the area.
- 7.4 The historic road safety record for the surrounding area has been examined. The analysis shows that there are no existing accident hotspots on roads serving the sites. The proposal will result in a negligible change in traffic associated with the site and as a result will not significantly change the road safety conditions near the site.
- 7.5 The assessment has fully considered pedestrian routes that serve the site and connect to local amenities. This assessment shows that there are safety measures in place to enable pedestrians to cross major highway routes and that other routes serving the site are low speed, low trafficked routes that create a suitable environment for pedestrian movements.
- 7.6 Measures are in place to restrict nuisance parking on surrounding streets. The proposal and transport strategy has been developed to deter resident car use and appeal to residents who do not own a car. On this basis, the proposal will not result in a significant road safety or amenity impact on local streets from resident parking. The parking surveys show that there is space in appropriate locations to meet the occasional needs of visitors to the site.
- 7.7 The TS shows that the proposal will not result in a severe impact on local highway conditions or road safety levels.

Parking Impact

- 7.8 The site sits within a controlled parking zone governed by single yellow lines (Monday to Saturday, 8am to 6pm) and a number of Pay & Display parking bays. The parking bays limit the

duration of stay during the period of the restriction to two hours to prevent long-stay parking. These controls also limit the practicability of a resident storing a car on street.

- 7.9 A parking accumulation exercise has been undertaken for the site car park (table 7.1). This shows that the parking demand generated can be accommodated on site.

Assessment Period	Site Parking Demand
07:00-08:00	7
08:00-09:00	2
09:00-10:00	1
10:00-11:00	1
11:00-12:00	1
12:00-13:00	1
13:00-14:00	0
14:00-15:00	0
15:00-16:00	1
16:00-17:00	2
17:00-18:00	5
18:00-19:00	7

Table 7.1: Site Parking Accumulation

- 7.9 An audit has been undertaken of legitimate on-street parking spaces during the day and in the evening. Surveys have also been undertaken of key periods of commercial and residential activity (during the day, in the evening and during the night). The surveys show that the on-street parking facilities are currently operating under capacity, below accepted stress levels, and that there is capacity to meet occasional parking demand created by visitors to the site.
- 7.10 A review of public off-street parking areas shows that there are over 4,500 spaces within a ten-minute walk of the site. NCP offer season ticket arrangements for residents in central areas of Manchester and has confirmed that 34 spaces can be offered to future residents who wish to store a car at a discounted rate. NCP has also confirmed that the four car parks for which the spaces can be offered are currently operating at only 70% capacity.
- 7.11 To meet casual car use requirements of residents who do not own a car Enterprise Car Club has confirmed that it will move a vehicle to the local area. The applicant has agreed to fund the TRO required for the new Car Club parking bay on Blossom Street and also a year's membership to the Car Club.
- 7.12 The assessment shows that the proposal will have a low impact on local parking facilities.

Suitability for Low Parking Provision

- 7.13 Prevailing policy and research supports the reductions in parking provision at locations that meet specific criteria, such as large urban centres with good public transport accessibility, and where future residents will include people who do not prioritise car ownership. Specifically guidance states that the following criteria should be met when proposing low levels of on-site parking:
- High level of accessibility, inner city/city centre location, and short distance to amenities
 - Resident requirements
 - Local car ownership levels
 - Existing on-street parking restrictions

- 7.14 The proposal has been assessed below against the NPPF criteria to determine the suitability of the parking level proposed to meet future resident requirements.

Accessibility and Location

- 7.15 The site is located in Manchester city centre, just to the north of Great Ancoats Street. Existing walking and cycling infrastructure in the area is good, with frequent crossings providing links to key destinations. Initial analysis shows that access can be easily gained to key services and amenities on foot or by cycle, within accepted walk/cycle distances. Existing pedestrian and cycle infrastructure is commensurate with the site's city centre location and provides a good basis for future trips to city centre destinations.
- 7.16 The site is served by over 1,400 buses per day. Access can be gained to Piccadilly station within 9 minutes and Shudehill Interchange in 8 minutes. A Greater Manchester Accessibility Level calculation has been undertaken, which shows that the site has a GMAL of 8. This is the highest level of accessibility and is commensurate with that found at nearby city centre sites.
- 7.17 The following measures are proposed to enhance access to the site by non-car modes:
- Travel Plan
 - Parking Management Strategy
 - 30% car parking provision (7% on site and 23% off site)
 - Funding for an on-street disabled parking bay for use by visitors
 - Funding for a Car Club parking bay on Blossom Street
 - Funding of Car Club membership (one year for one household member)
 - Confirmation from Enterprise that a vehicle will be moved to Blossom Street
 - 100% resident cycle parking provision
 - Promotion of visitor cycle parking in Cutting Room Square
 - Disabled parking on site for residents
 - Provision of new disabled parking bay on Blossom Street for visitors

Resident Requirements

- 7.18 Unlike other land uses (such as retail and employment developments), the future users of the site have a choice of renting an apartment within this development in the knowledge that there is a low level of on-site parking. The rental of the apartment will be based on life style and circumstances, and should the potential resident prioritise ownership of a vehicle then it is reasonable to expect that they will not choose to live at this site.
- 7.19 A large study undertaken by TfL finds that parking is an important factor in some people's decision on where to live. In general, residents select a home location that meets their specific mobility, travel and car ownership needs. Importantly, the evidence shows that developments with more parking have higher levels of car ownership and produce more car travel than developments with less parking. This is even the case where the development is similar in all other aspects, such as resident characteristics accessibility and location. This shows that just because an area already has residential development with parking, that doesn't mean that a low level of parking at another, new development in the same location can't also be successful.
- 7.20 The findings of the TfL research are supported by research reported by Melia ('Carfree and Low Car Development' 2014). Melia's study shows that many residents of low parking developments are higher income people who either make an environmental decision not to own a car, or pick an accessible housing location where their daily travel needs can be met by other modes, and so don't prioritise car ownership and/or use. These residents tend to display pro-urban characteristics, favouring higher density living in flats and a better take up of walking and public transport.
- 7.21 Melia, Chatterjee and Clark also report ('Life Events and Travel Behaviour' 2014) also report that car ownership is strongly associated with life stages, such as moving house, changing jobs, having children or retiring. At this time people will make a decision on whether a car is needed based on life characteristics, employment destination and type of urban area resided in. The 2014 Melia *et al* study found that car ownership and the desire to use a car is typically lower for residents living in inner urban areas where public transport is better and parking more difficult.

Residents in these areas have been typically found to live without a car through choice, not because of income constraint.

- 7.22 The site will be marketed honestly as a sustainable development with low level of on-site parking. The applicant is confident that the proposal will appeal to future residents who do not prioritise car ownership and meet the pro-urban characteristics outlined in recent research.

Parking Restrictions

- 7.23 The site sits within a controlled parking zone governed by single yellow lines (Monday to Saturday, 8am to 6pm) and a number of Pay & Display parking bays. The parking bays limit duration of stay during the period of the restriction to two hours to prevent long-stay parking and also limits the practicability of a resident storing a car on street.
- 7.24 Parking surveys have been undertaken and these show that there is sufficient spare capacity to meet any demand created by visitors to the site.
- 7.25 There are currently no disabled parking bays in the immediate area. The proposal includes the provision of a new disabled parking bay on Blossom Street to meet visitor requirements.

Car Ownership Levels

- 7.26 2011 Census data shows that it is practicable to live within the local area without owning a car and that existing residents successfully meet their daily travel needs by other modes.
- 7.27 Research (detailed in section 6) also that the more parking provided at a new development, the higher the household car ownership level. This relationship has been found to be true for all incomes, locations and accessibility levels. The opposite is also true, with the low parking developments being attractive to people who do not prioritise car ownership or use.

8 CONCLUSIONS

- 8.1 SK Transport Planning has been appointed by Mulbury Homes (Blossom Street) Ltd to prepare a Transport Statement in support of a planning application for the development of 145 Private Rental Sector (PRS) apartments at a site in Manchester city centre.
- 8.2 The site has an exceptional level of accessibility and is well located to encourage trips by non-car modes to both city centre and regional destinations. The site benefits from the highest level of accessibility by public transport (GMAL level 8). The site is also well connected to existing infrastructure for all travel modes and the development proposes measures to further enhance accessibility and reduce the dependence on the car including a high level of secure cycle parking provision within the building, close proximity to a car club vehicle, and the adoption of a travel plan.
- 8.3 Some parking is provided on site and an arrangement has been made with NCP to allow residents to purchase season tickets for nearby car parks. Provision is made within the proposal to meet the needs of disabled residents and visitors. Measures are also proposed to meet resident casual car use requirements. The existing parking regime in the area around the site precludes the potential for resident overspill parking to result in a nuisance on the highway.
- 8.4 The Transport Statement shows that the proposal can be suitably and safely serviced, including provision for refuse collections, in line with existing site arrangements.
- 8.5 The proposal is shown to meet the requirements of local and national policy, and the residual impact of the proposal is soundly shown to not be significant.

Appendix A

Appendix B

160907/SK21589/FTP01(-01)
BLOSSOM STREET, ANCOATS
FRAMEWORK TRAVEL PLAN

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Project	Document	Rev	Description	Authorised by	Signed	Date
SK21589	FTP01	-00	Draft for comment	L Speers	LGS	11/05/2016
SK21589	FTP01	-01	Updated layout	L Speers	LGS	07/09/2016

1 INTRODUCTION

Background

- 1.1 SK Transport Planning Ltd (SK) has been appointed by Mulbury Homes (Blossom Street) Ltd to prepare a framework travel plan in support of a planning application in support of a planning application for the demolition of existing buildings and redevelopment of the site for two residential buildings (145 apartments) with ground floor commercial uses.
- 1.2 The site is located in Manchester city centre, north of Great Ancoats Street. The site benefits from an exceptional level of accessibility to facilities in the regional centre and is well served by all modes of transport infrastructure. The proposal includes measures to encourage sustainable trip making (such as 100% cycle parking) and accommodate casual car use requirements (such as membership to the Enterprise Car Club and the provision of a new Enterprise Car Club bay to serve the local area). As such, the site presents a sound opportunity to deliver a highly sustainable development that meets the needs of future occupiers and enables residents to meet their daily travel requirements without needing to own or use a car. The transport strategy proposed for the site is commensurate with the site's location, local area characteristics, and urban dweller requirements.
- 1.3 The site is currently occupied by a number of commercial/light industrial premises and a private commuter car park. Existing and historic vehicle access points have been/are provided from Great Ancoats Street, Blossom Street, Gun Street and Henry Street.

Transport Statement Summary

- 1.4 A Transport Statement (TS) has been produced to assess the impact of the proposal. This document (SK reference SK21589_TS01_(-02)) should be referred to for full details of the proposal, including layout information and the forecast traffic and parking impact.
- 1.5 In summary, the TS shows that the proposal will generate less traffic than that associated with the extant site uses. Full details are provided in the TS of the existing parking restrictions and parking opportunities in the local area, and measures that are proposed at the development to minimise amenity, parking and road safety impact.
- 1.6 The TS demonstrates that the site is well located in a city centre to allow easy access to key employment, leisure and retail destinations. It is also shown that the majority of future residents are expected to work within the city centre and will travel to these destinations on foot, cycle or by public transport.
- 1.7 The TS shows that, In line with national and local adopted policy, the sustainable location of the site and existing local area parking restrictions support the level of parking proposed to serve the site. To support occasions when a resident, who does not own a car, requires the use of a vehicle strategies are included with the proposal to help them to do so.
- 1.8 The TS concludes that the proposal meets the requirements of local and national policy, and that there will be no significant residual transport impacts as a result of the proposal.

Framework Travel Plan Structure

- 1.9 To support the findings of the TS the framework travel plan outlines policy interventions and measures that are commensurate with the impact of the proposal. In summary, the following information is included in the framework:
 - Information on existing transport services to the site and travel patterns
 - Measures included within the proposal to enhance accessibility
 - Identification of a travel plan co-ordinator
 - Measures and resource allocation to promote the travel plan
 - Mechanisms for monitoring and reviewing the travel plan

The Process

- 1.10 A travel plan is a tool for managing access to a site that aims to promote access by sustainable modes. It contains a package of measures designed to meet the objective to reduce car use generated from the site by supporting sustainable modes of transport and measures that will build on the good location of the site.
- 1.11 A travel plan should include a mixture of infrastructure measures and marketing measures to assist the plan to meet defined objectives. Within a travel plan there is a need to set objectives, targets and indicators, the purpose of which is to monitor change and review policies to meet the needs of the users of the site.
- 1.12 The travel plan process is not a one-off, static event, but a constantly evolving strategy that should grow and adapt to meet the travel patterns and needs of the end users of the site. The travel plan outlines the accessibility of the site, infrastructure measures proposed as part of the development and management and policy measures for adoption upon occupation of the site.
- 1.13 The measures outlined in the travel plan are based on those submitted with the planning application and have been drawn from UK and local area best practice. Specifically, the measures and initiatives included in the framework acknowledge TfGM adopted residential travel plan checklist as outlined in the 2013 document 'Transport for Sustainable Communities', emerging guidance taken from TfGM's travelplan.org.uk website, and other travel plan measures adopted at city centre sites.

Benefits

- 1.14 Travel plans result in a variety of benefits to the occupiers of a development and the wider community, including:
 - Promoting active and healthy lifestyles
 - Reducing demand for parking
 - Providing sustainable and vibrant communities
 - Reducing road safety and congestion issues
 - Reducing carbon emissions and improving local air quality issues

Aims & Objectives

- 1.15 The main aims of a travel plan is to reduce the environmental effects of transport associated with developments and raise awareness of non-car means of access. In this instance the main aim of the travel plan is to outline a sustainable and deliverable strategy that will assist future residents live at the site without needing to own or use a car to meet their daily travel requirements.
- 1.16 A secondary aim of the travel plan is to outline an action plan for the proposal that clearly defines the strategy and monitoring measures to be adopted to meet the defined objectives and also local requirements. To this end, the framework plan sets the identification of the following elements as the objective of this stage in the process:
 - Roles and responsibilities
 - Existing access opportunities & likely travel patterns
 - Targets & indicators
 - Awareness raising & promotion
 - Measures to reduce car ownership levels
 - Monitoring & implementation methods

2 ACCESSIBILITY

Site Location

- 2.1 The site is located to the north of Great Ancoats Street in Manchester city centre in Ancoats, as shown on figure 2.1. The site is bounded to the southwest by Great Ancoats Street, to the

northwest by existing commercial/residential premises, to the northeast by Henry Street and to the southeast by Blossom Street. Gun Street bisects the site northwest-southeast.

- 2.2 The site is currently occupied by a number of commercial/light industrial premises and a commuter car park. Existing and historic vehicle access points have been previously or are currently provided from Great Ancoats Street, Blossom Street, Gun Street and Henry Street.
- 2.3 There are no loading restrictions present in the local area and large vehicles (including refuse collection) have been observed servicing commercial and residential premises from kerbside.



Figure 2.1: Site Location

Access on Foot

- 2.4 The site is well connected to key destinations by a comprehensive network of pedestrian routes, typical of its city centre location. Pedestrian provision is generally of good condition with frequent dropped kerb and tactile paving provision. The immediate area is subject to a 20mph speed limit with suitable carriageway surfacing in place to slow vehicle speeds. Footways are in place to connect to the wider network. Signalised crossing facilities are provided on Great Ancoats Street at the junction with Blossom Street and at the junction of Great Ancoats Street/Lever Street.
- 2.5 Two-thirds of all journeys in the UK are under-five miles and short distance trips offer the greatest opportunity for changes in travel behaviour. DfT best practice guidance states that walking has the potential to substitute for car trips under 2km.
- 2.6 Figure 2.2 shows a 2km walking catchment from the site representing a walk time of 25 minutes, using an average walking speed of 80 m/min. The walking catchments have been derived using the interactive walkit.com tool, a pedestrian journey planning system promoted by both MCC and TfGM.

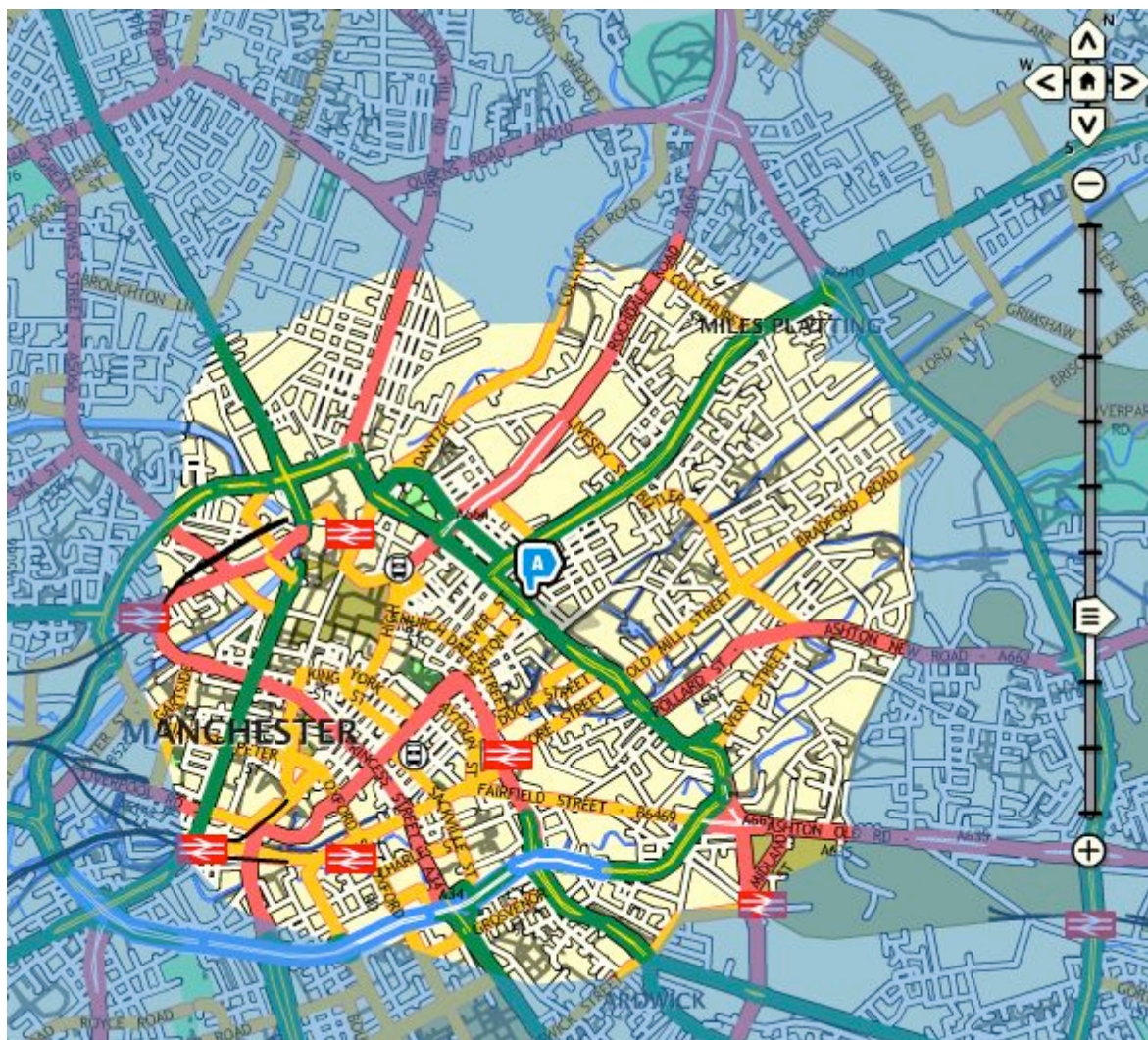


Figure 2.2: 2km Walking Catchment
[source: TfGM 2016]

- 2.7 The walking catchments show that, in line with IHT guidance the site, sits within 800m of town centre facilities located around Piccadilly, Shudehill, the Northern Quarter and Market Street. It is also demonstrated that the retail, business and civic core of the regional centre is within 2km of the site.
- 2.8 The existing pedestrian infrastructure surrounding the site provides a good basis for future trips by residents to key destinations. The close proximity of the site to a key city centre destinations and local area amenities, means that journeys on foot are likely to be a significant mode choice for future residents.

Access by Cycle

- 2.9 Figure 2.3 shows the site relates well to existing cycle routes. The site sits within a 20mph zone that provides a suitable environment for cycle trips into the city centre. Marked cycle routes are also present along the site frontage on Great Ancoats Street, with a toucan crossing facility provided at the junction of Great Ancoats Street and Oldham Street.



Figure 2.3: Existing Cycle Routes
[source: TfGM 2016]

- 2.10 Access can also be gained via Redhill Street to the regional and national cycle network, including Regional Route 86 (Medlock Valley), National Route 66 (Rochdale Canal) and National Route 60 (Manchester Cycleway). Access can also be gained to route 60 via Hilton Street to the south of the site. These routes provide both leisure and utility connections to the wider region.
- 2.11 Local Sustainable Transport Fund proposals (Access to Regional Centre Scheme) are scheduled in the local area to enhance cycle facilities in the immediate area, including the provision of a two-way cycle route on Port Street, the upgrade of the existing signalised pedestrian crossing on Great Ancoats Street (east of Port Street) to provide a toucan facility, and the introduction of 20mph speed limit on Port Street, Dean Street and Houldsworth Street.
- 2.12 In 2013 Greater Manchester was awarded £20 million Cycle City Ambition Grant funding to support proposals to improve cycling facilities throughout the region and support a 12 year cycle strategy to 2025. Velocity aims to increase bike mode share by 10% of all journeys during this period. The proposal includes the delivery of major new cycleway infrastructure and the roll out of ambitious cycle promotion and education programmes.
- 2.13 Cycling has the potential to substitute for car trips up to 5km in length, equating to a cycle journey time of 25 minutes at a leisurely pace. To provide an indication of the areas that are within a 5km cycling distance of the site TfGM promoted cyclestreets.net journey planning software has been used.
- 2.14 Table 2.1 shows typical cycle times, based on a cruising cycle speed to key destinations using cyclestreets.net. All routes have been measured using an unhurried cycle speed of 16kph.

Amenity Type	Location	Cycle Time (mins)
Education	University of Manchester	14
Employment	Spinningfields	12
Train Station	Piccadilly Station	6
City Centre	Market Street	4
Employment	Salford Quays	24

Table 2.1: Cycle Accessibility
[source: Cyclestreets.net 2016]

- 2.15 It is shown that opportunities exist for access by cycle from the site to areas of the city using existing suitable routes.
- 2.16 The site is well placed for future access by cycle using existing local infrastructure.

Access by Bus

- 2.17 Existing bus stops are located within a short walk of the site on Great Ancoats Street, Lever Street, Oldham Street and Dale Street. The bus stops are all within a five minute walk of the site.
- 2.18 TfGM's interactive bus tool shows that the bus stops within 400m/five minutes of the site are served by over 1,450 buses per day (Monday to Friday). These services provide comprehensive coverage of city centre and regional destinations. The services also provide good coverage of early morning, evening and weekend periods.
- 2.19 It is reasonable to expect that people will walk further than 400m to access bus services due to the high frequency and assortment of services available in central areas. Opportunities exist for residents to access bus interchange facilities at Shudehill and Piccadilly Gardens, located 650m and 700m from the site, respectively.
- 2.20 Access can also be gained to Routes 1 and 3 of the Metroshuttle bus service, which stops 450m away from the site on the A6 (Piccadilly). The Metroshuttle is a free bus service providing frequent routes around the city centre to link key destinations.
- 2.21 The Cross City Bus Package will create or enhance over 25 miles of bus routes and is one of the largest investments in Greater Manchester's bus network in decades. The package will significantly improve bus travel into and across the city centre. The scheme will improve reliability and frequency of many bus routes.
- 2.22 The site is well placed for opportunities to access by a number of bus services. Existing bus services provide good frequency coverage of all the key periods of trip demand.

Access by Train

- 2.23 The site is located and 700m from Piccadilly Station. Piccadilly Station is the main rail interchange in Manchester with existing services offering coverage of destinations across Greater Manchester region and the UK.
- 2.24 The Ordsall Chord proposal is a Network Rail led improvement scheme that is currently under construction. The scheme will introduce a new rail link to connect Manchester Piccadilly, Oxford Road and Victoria stations. This connection will remove a bottleneck to the south of Piccadilly Station and free up space on the network. The benefit of the proposal includes:
- Two new fast trains per hour between Manchester Victoria and Liverpool
 - Six fast trains, instead of four, per hour between Manchester and Leeds
 - Faster train journeys between Manchester, Leeds and Liverpool
 - A new direct service through Manchester city centre to Manchester Airport
 - Faster journey times to Hull, Newcastle and the Northeast
- 2.25 Good opportunities exist for future residents to access key regional and national destinations by train.

Access by Tram

- 2.26 Metrolink services can be accessed at from Piccadilly Gardens Metrolink Station, Shudehill Interchange and New Islington Metrolink Station, 700m, 650m and 700m from the site, respectively. Existing Metrolink services provide high-frequency services on the Altrincham, Eccles, East Didsbury, Mediacity, Ashton, the airport, Rochdale and Bury.
- 2.27 The Second City Crossing is currently under construction to provide a second Metrolink line through the centre of Manchester. The Second City Crossing will increase the capacity, flexibility and reliability of all of Metrolink's new lines. This scheme is part of a wider public transport improvement system across Manchester that includes the new tram line, bus priority scheme and dedicated cycle lanes.
- 2.28 Good opportunities exist for future residents to access key destinations in Greater Manchester by tram.

Greater Manchester Accessibility Level

- 2.29 A Greater Manchester Accessibility Level (GMAL) calculation has been undertaken for the site. A GMAL is calculated using the interactive tool managed and maintained by TfGM for use in assessing the accessibility by non-car modes of a development site. The tool measures AM Peak accessibility by public transport of a point of interest and provides a score between 1 and 8, where 1 is a low level of accessibility and 8 is the highest level of accessibility.
- 2.30 The site has a GMAL of 8, indicating that the site benefits from the highest level of accessibility.

Casual Car Use

- 2.31 Table 2.2 shows the nearest existing Enterprise Car Club vehicles to the proposal site. There are six vehicles located within eight minutes walk of the site, with the nearest vehicles conveniently located a four minute walk away on Tariff Street.

Location	Number of Vehicles	Walk Distance (m)	Journey Time (mins)
High Street M4 1BD	2	650	8
CHIPS New Islington M4 6BU	1	900	11
Tib Street M4 1SH	1	600	8
Ducie Street M1 2DE	1	600	8
Piccadilly Place M1 3BG	2	850	11
Tariff Street M1 2FJ	2	350	4

Table 2.2: Enterprise Car Club Vehicle Locations

- 2.32 Enterprise also provides longer-term car hire solutions. Enterprise operates from The Grand in Manchester and provides a drop-off vehicle service to local residents' doors. The combination of the two car hire services means that both short and long term occasional vehicle hire needs can be offered to residents in Manchester. Enterprise has confirmed that long term vehicle hire rates are offered at 50% of usual list price at the weekend to allow local residents to hire cars for weekend breaks, etc.
- 2.33 The Enterprise Car Club provides a MCC/TfGM supported solution that complements the sustainable transport system and to meet occasional vehicle needs of residents. The Car Club enables members to benefit from low cost, convenient and greener motoring, and a more sustainable pattern of living that negates the requirement to own and store a car.

Access by Car

- 2.34 The A665 Great Ancoats Street is a dual carriageway ring road encircling Manchester city centre. Two through lanes are consistently maintained in each direction and major junctions are signal controlled. Controlled pedestrian crossing facilities are provided at regular intervals at signal junctions and stand alone pelican crossings. The road is subject to a 30mph speed restriction in the vicinity of the site and wide footways are available.
- 2.35 Access to the site from Great Ancoats Street is provided via the signalised junction of Newton Street/Great Ancoats Street/Blossom Street. The area surrounding the site, north of Great Ancoats Street, is a 20mph speed zone and controlled parking zone.
- 2.36 A 7.5t weight restriction is in place on the Blossom Street approach of the signalised junction, however this restriction is not repeated or present on any other section of Blossom Street (including the absence of a matching Blossom Street weight restriction on the approach egress).
- 2.37 Access can also be gained to the site from a number of other junctions surrounding the site, including the following:
- Great Ancoats Street/Lever Street/George Leigh Street (one-way northbound)
 - Great Ancoats Street/Jersey Street
 - Great Ancoats Street/Redhill Street
 - Oldham Road/Carnell Street
 - Oldham Road/Sherratt Street (one-way westbound)
- 2.38 Gun Street bisects the site northwest-southeast from George Leigh Street to Blossom Street. Gun Street has parking restrictions (single yellow lines) along its length. Gun Street provides rear access to commercial and residential properties fronting Great Ancoats Street and Henry Street, including access to existing buildings on the site. Access is also provided from Gun Street to the existing car park on the eastern end of the site.
- 2.39 Henry Street bounds the site to the northeast and has footways along both carriageway edges and street lighting present. Henry Street provides access to the existing commercial property on the northern edge of the site.

On-street Parking

- 2.40 The site sits within a controlled parking zone governed by single yellow lines (Monday to Saturday, 8am to 6pm) and a number of Pay and Display parking bays. The parking bays limit duration of stay during the period of the restriction to two hours to prevent long-stay parking and limit the practicability of a resident storing a car on street. There is a residents' parking scheme in operation in the area, but this is only applicable to residents of 23-57 George Leigh Street.
- 2.41 The nearest on-street parking bays to the site are located on Blossom Street, Henry Street, Jersey Street, Redhill Street, Newton Street and Houldsworth Street. Additional marked out spaces are available throughout the area as shown in the TS. These include two Enterprise Car Club spaces on Tariff Street and an electric vehicle charging space on Port Street.
- 2.42 Disabled on-street parking spaces are provided on Redhill Street and on George Leigh Street. MCC promotes use of standard parking bays for blue badge holding residents and visitors. Blue badge holders are permitted to park for free for an unlimited time in standard parking bays and are allowed to park for a maximum of three hours in unmarked areas where there are no loading restrictions.
- 2.43 The TS provides full details of the legitimate parking space available in the study area. Parking occupancy surveys have been undertaken at various times during the day and week to allow an understanding of typical parking demand in the area associated with existing residential and commercial developments. The details of the survey method and results are discussed in detail in the TS.
- 2.44 The surveys show daytime parking levels at between 52%-66%, demonstrating a substantial degree of available capacity during this period. During this period parking restrictions prohibit long-stay parking and restrict the practicability of a resident storing a vehicle on-street.

- 2.45 Surveys were also undertaken during periods when the parking restrictions are not in force, between 6pm and 8am. The surveys show that there are very low levels of parking demand during these periods also.

Off-street Parking Facilities

- 2.46 The TS shows that there are nearly 4,500 off-street car parking spaces within a short walk (ten minutes) of the site. All of the off-street car parks offer season ticket and contract lease arrangements. The use of NCP car parks by residents is a key component of MCC's published central area parking strategy. NCP has confirmed that the four car parks (3,572 spaces) closest to the development are currently operating at 70% capacity.

3 PROPOSAL

Layout

- 3.1 The proposal seeks to demolish the existing buildings on site and redevelop the site for two residential buildings (Class C3) with ground floor commercial uses (Class A1, A2, A3, A5, B1 and/or D1) with associated highways and other works.
- 3.2 The proposal will deliver a total of 145 private rental sector (PRS) apartments in the two new purpose built blocks. The proposed ground floor layout is provided in appendix a of the TS.

Pedestrian Access

- 3.3 Pedestrian access to Block A is provided from Great Ancoats Street into the main residential reception area. Pedestrian access points for the ground floor commercial units are provided directly from the street frontage on Great Ancoats Street and Blossom Street.
- 3.4 Pedestrian access to Block B is provided from Blossom Street for the residential use. Pedestrian access points for the ground floor commercial units are provided directly from the street frontage on Blossom Street and Henry Street.
- 3.5 The travel plan and welcome pack will include maps showing appropriate routes to key city centre destinations and public transport nodes. Other measures are proposed as part of the travel plan to encourage safe movements from the site on foot.

Cycle Access

- 3.6 Cycle parking is provided at a provision of 1 space per unit, with 86 cycle parking spaces provided in the building fronting Great Ancoats Street and 61 cycle parking spaces provided in the building fronting Henry Street.
- 3.7 Eleven cycle parking stands (22 spaces) are currently provided on Cutting Room Square, a short walk from the site, for use by visitors to the development.
- 3.8 Other measures are proposed as part of the site travel plan to facilitate future movements by cycle.

Car Access

- 3.9 The proposal includes parking on site for ten vehicles (including one disabled space) accessed from Gun Street.
- 3.10 NCP has confirmed that annual season tickets for 34 spaces can be offered to future residents at a discounted rate of £999 per annum in the any of the nearest car parks to the site (shown in the TS and listed below).

- Manchester Northern Quarter (700 spaces): 5 minute walk
- Manchester Printworks (777 spaces): 10 minute walk

- Manchester Arndale (1383 spaces): 10 minute walk
- Manchester Piccadilly (712 spaces): 8 minute walk

- 3.11 The cost of the parking equates to an effective day rate of £2.74, compared to an average list price daily rate of £15. Confirmation of this arrangement is provided in the TS.
- 3.12 The total parking proposed for the site is 44 spaces, equating to a 30% provision. This level of parking is more than commensurate with the accessibility characteristics of the site, local area car ownership levels and the level of parking provided at other developments in the city centre (as shown in the TS).

Visitors

- 3.13 The parking surveys detailed in section 2 show that there is space on street in existing Pay & Display bays to meet demand associated with visitors who travel to the site by car.
- 3.14 The proposal includes funding of a Traffic Regulation Order (TRO) to provide an additional parking bay on Blossom Street to meet the needs of disabled visitors. The proposed parking layout is attached as appendix f of the TS.

Casual Car Use

- 3.15 Enterprise Car Club provides a MCC/TfGM supported solution that complements Manchester's sustainable transport system and to meet casual vehicle needs of residents who do not own a car. The initiative enables members to benefit from low cost, convenient and greener motoring, and a more sustainable pattern of living that negates the requirement to own and store a car.
- 3.16 Enterprise Car Club offers pay as you go motoring, with vehicles available to hire for as little as 30 minutes per trip. The vehicles are available 24/7 and members of the scheme can easily access vehicles on demand by reserving on line. The Enterprise Car Club can save motorists up to £3,500 a year on costs usually associated with fuel, insurance, servicing, MOT, cleaning and parking.
- 3.17 The merger of Enterprise and City Car Club now provides residents with solutions for longer term vehicle hire, for use when a resident wants to travel further afield on holiday, for example. From the Enterprise base at Piccadilly vehicles can be provided to meet longer car hire demand. The vehicles can be booked in advance and dropped off at the residence as required. Enterprise Car Club has confirmed that a 50% discount is offered to residents hiring a car at the weekend.
- 3.18 The proposal includes funding of the cost of the TRO application to provide a new Car Club bay on Blossom Street (shown in appendix f of the TS). Enterprise Car Club has agreed that if the applicant funds the TRO cost, it will move a vehicle into the space. The introduction of a space in this location will also provide a wider benefit to other residents of the Cutting Room Square area.
- 3.19 In addition to funding the cost of the providing a new Car Club space on Blossom Street, the applicant will also fund the cost of one year's 'taster' membership to the Enterprise Car Club for each household.
- 3.20 Enterprise Car Club has also confirmed that it will work alongside the applicant in the promotion of Enterprise vehicle hire as a solution for residents who do not own a car. This includes a launch day for the site and the provision of material for inclusion in the travel plan and resident welcome packs.

Transport Strategy

- 3.21 The proposal site offers a strong opportunity to develop sustainable residential accommodation in the city centre. Analysis shows that the site has an exceptional level of accessibility that is commensurate with future resident movement requirements.
- 3.22 The site benefits from excellent access to a range of transport modes, including cycle infrastructure, bus, train and tram services, and is within close proximity of key city centre

destinations. The GMAL calculation undertaken for the site shows that it benefits from the highest level of accessibility, with a score of 8. As such, the potential for sustainable trip making is high.

- 3.23 Analysis of local area travel patterns shows that existing residents in the area have a high propensity for sustainable trip making and there a lower than average car ownership level.
- 3.24 The proposal includes a commitment to delivering infrastructure to further enhance access opportunities for future residents and to allow them to meet their daily travel needs without needing to own a car. These measures include a high proportion of cycle parking, funding of infrastructure to allow an Enterprise Car Club to be located near the site, and membership to the car club. Enterprise Car Club has also confirmed that it will provide literature for issue to the residents and will undertake formal launch day events at the site.
- 3.25 Unlike other land uses (such as retail and employment developments), the future users of the site have a choice of renting an apartment within this development in the knowledge that there is a low level of on-site parking. The rental of the apartment will be based on life style and circumstances, and should the potential resident prioritise ownership of a vehicle then it is reasonable to expect that they will not choose to live at this site.
- 3.26 A large study undertaken by TfL finds that parking is an important factor in some people's decision on where to live. In general, residents select a home location that meets their specific mobility, travel and car ownership needs. Importantly, the evidence shows that developments with more parking have higher levels of car ownership and produce more car travel than developments with less parking. This is even the case where the development is similar in all other aspects, such as resident characteristics accessibility and location. This shows that just because an area already has residential development with parking, that doesn't mean that a low level of parking at another, new development in the same location can't also be successful.
- 3.27 The TS shows that the surrounding area is subject to existing parking controls that will restrict opportunities for overspill parking, limit dis-amenity to other people in the city centre and reduce the impact on the operation of the highway network. The existing parking restrictions will assist in reinforcing the parking levels proposed.
- 3.28 It is anticipated that visitors to the site will access by non-car modes. However, should a visitor arrive by car then this TS shows that space is available to park a car for short periods on-street or in nearby off-street parking areas. Provision is also made within the proposal for both disabled residents and visitors.
- 3.29 In summary the following measures are proposed to support the development:
 - Parking Management Strategy
 - 30% car parking provision (7% on site and 23% off site)
 - Funding for an on-street disabled parking bay for use by visitors
 - Funding for a Car Club parking bay on Blossom Street
 - Funding of Car Club membership (one year for one household member)
 - Confirmation from Enterprise that a vehicle will be moved to Blossom Street
 - 100% resident cycle parking provision
 - Promotion of visitor cycle parking in Cutting Room Square
 - Disabled parking on site for residents
 - Provision of new disabled parking bay on Blossom Street for visitors
- 3.30 The location, existing connections and development proposals are forecast to result in a highly accessible development that meets local and national policy aspirations, meets the needs of future residents and removes the reliance on the private car.

4 TOOLKIT

- 4.1 The toolkit and implementation plan outlined in table 4.1 have been developed to acknowledge and complement the site's location, existing available sustainable connections, the needs of city centre dwellers and the site layout. The toolkit draws measures from TfGM's current adopted residential travel plan toolkit (outlined in the document 'Transport for Sustainable Development' and on the travelplan.org.uk website).

Walking Toolkit:		
Measure	Responsibility	Timescale
Walking route information and initiatives on site website and welcome pack	Travel Plan Co-ordinator	On occupation
Promote www.walkbudi.com and www.walkit.com	Travel Plan Co-ordinator	On occupation
Cycling Toolkit:		
Measure	Responsibility	Timescale
Provide storage for 147 resident bikes	Contractor	Part of development
Promotion of Cutting Room Square cycle parking for visitors	Travel Plan Co-ordinator	On occupation
Provide cycle route map links in welcome pack and on website	Travel Plan Co-ordinator	On occupation
Promote local and national cycling events/initiatives in line with TfGM promotions, such as Adult Cycle Training	Travel Plan Co-ordinator	On occupation, on-going
Promote www.bikebudi.com or similar as promoted by TfGM	Travel Plan Co-ordinator	Within 6 months
Investigate bike purchase discount for residents with local retailer	Travel Plan Co-ordinator/Operator	Within 6 months
Public Transport Toolkit:		
Measure	Responsibility	Timescale
Provide link to TfGM journey planning software on website and in welcome pack	Travel Plan Co-ordinator	On occupation
Promotion of TfGM integrated ticketing schemes in welcome pack	Travel Plan Co-ordinator	On-going as each unit is occupied
Efficient Vehicle Use Toolkit:		
Measure	Responsibility	Timescale
Provide parking levels commensurate with location and accessibility of the site, NPPF and local policy	Contractor	Part of development
Fund TRO application for new Car Club and disabled parking bays on Blossom Street	Contractor	Part of development
Provide literature relating to existing Enterprise Car Club scheme and a year 'taster' membership for each household in welcome pack	Travel Plan Co-ordinator	On-going as each unit is occupied
Provide local taxi company numbers in welcome pack	Travel Plan Co-ordinator	On occupation
Promote accessibility and parking level of the proposal as part of site marketing literature	Travel Plan Co-ordinator	3 months prior to occupation
Promote NCP season parking arrangements	Travel Plan Co-ordinator	3 months prior to occupation
Undertake Car Club launch event	Enterprise	6 months after occupation
Promotion and Marketing Toolkit:		
Measure	Responsibility	Timescale
Appoint travel plan co-ordinator and issue details to MCC	Contractor	3 months prior to occupation
Produce welcome packs and develop travel page on website	Travel Plan Co-ordinator	On occupation
Promote of TfGM supported initiatives and groups, such as Walk to Work Week, Better by Cycle CTC, Walking for Health, Walking Works and others, as advertised on the TfGM website travelplan.org.uk .	Travel Plan Co-ordinator	On-going
Investigate local grants available from TfGM	Travel Plan Co-ordinator	Part of development

Table 4.1: Toolkit Measures

5 MONITORING

Targets

- 5.1 DfT recommends that action based targets should also be set for new developments, based on specific milestones or indicators.
- 5.2 Interim action based targets are more appropriate for this stage of the proposal and the following have been set:
- Identify travel plan co-ordinator three months prior to occupation
 - Produce welcome packs one month prior to occupation
 - Undertake travel surveys within three months of first occupation

Monitoring Schedule

- 5.3 The first travel surveys will be undertaken within three months of first occupation of the development. Following this time surveys will be undertaken annually for the life of the plan.
- 5.4 The plan will be monitored using a simple questionnaire, gathering information on location of employment, usual mode of travel, car ownership and parking location (where applicable).
- 5.5 Once the first surveys have been undertaken, the plan will be updated and a new version issued to MCC within 6 months of first occupation. This revised plan will acknowledge the findings of the first travel survey.

Appendix C

	Street Geometry			Parking Capacity										Occupied (cars)		On yellow	Delivery Vehs	All vehicles excl loading		Other
	Section	Total Length	Available Length	SYL	Marked	Resident	Disabled	Loading	Taxi	Electric	Car Club	Evening	Daytime	(No. Veh)	%	lines (daytime)		(No. Veh)	%	
George Leigh Street	Gt Ancoats St - Cotton St	144	114	19	0							19	0		0%		1	0		
	Cotton St - Bengal St	310	marked bays	0	21	16						21	21	12	57%			12		+12 resident
Blossom Street	Gt Ancoats St - Cotton St	108	72	12								12	0		0%		1	0		
	Cotton St - Bengal St	280	268	36	9							45	9	7	78%	3		10		
Jersey Street	Gt Ancoats St - Cotton St	108	102	17								17	0		0%	1	1	1		
	Cotton St - Bengal St	252	240	17	13							30	13	5	38%			5		
Redhill Street	West	168	156	15	8		3					26	11	4	36%			4		
	East	210	210	31	4							35	4	1	25%			1		
Loom Street		312	144	24								24	0		0%			0		
Hood Street		264	132	22								22	0		0%			0		
Gun Street	North	155	80	13								13	0		0%			0		
	South	155	101	16								16	0		0%			0		
Pickford Street		160	0									0	0		0%			0		
Henry Street	North	210	150	25								25	0		0%		1	0		
	South	216	180	27	3							30	3	0	0%	1		1		
Cotton Street	North	88	58	10								10	0		0%			0		
	South	114	80	13								13	0		0%			0		
Cornell Street		136	0		14							14	14	14	100%	2		16		
Sherratt Street		72	60	10								10	0		0%			0		
Murray Street		240	108	18								18	0		0%		1	0		
Bengal Street	NE	168	156	26								26	0		0%			0		
	SW	144	138	21	2							23	4	2	50%			2		
Total												449	79	45	57%	7	5	52	66%	

	Street Geometry			Parking Capacity										Occupied (cars)		On yellow	Delivery Vehs	Other
	Section	Total Length	Available Length	SYL	Marked	Resident	Disabled	Loading	Taxi	Electric	Car Club	Evening	Daytime	(No. Veh)	%	lines (daytime)		
George Leigh Street	Gt Ancoats St - Cotton St	144	114	19	0							19	0	5	26%			
	Cotton St - Bengal St	310	marked bays	0	21	16						21	21	11	52%			+12 resident
Blossom Street	Gt Ancoats St - Cotton St	108	72	12								12	0	2	17%			
	Cotton St - Bengal St	280	268	36	9							45	9	17	38%			
Jersey Street	Gt Ancoats St - Cotton St	108	102	17								17	0	5	29%			
	Cotton St - Bengal St	252	240	17	13							30	13	16	53%			
Redhill Street	West	168	156	15	8		3					26	11	8	31%			
	East	210	210	31	4							35	4	5	14%			
Loom Street		312	144	24								24	0	0	0%			
Hood Street		264	132	22								22	0	1	5%			
Gun Street	North	155	80	13								13	0	0	0%			
	South	155	101	16								16	0	0	0%			
Pickford Street		160	0									0	0	0	0%			
Henry Street	North	210	150	25								25	0	0	0%			
	South	216	180	27	3							30	3	7	23%			
Cotton Street	North	88	58	10								10	0	0	0%			
	South	114	80	13								13	0	0	0%			
Cornell Street		136	0		14							14	14	9	64%			
Sherratt Street		72	60	10								10	0	2	20%			
Murray Street		240	108	18								18	0	8	44%			
Bengal Street	NE	168	156	26								26	0	0	0%			
	SW	144	138	21	2							23	4	4	17%			
Total												449	79	100	22%			

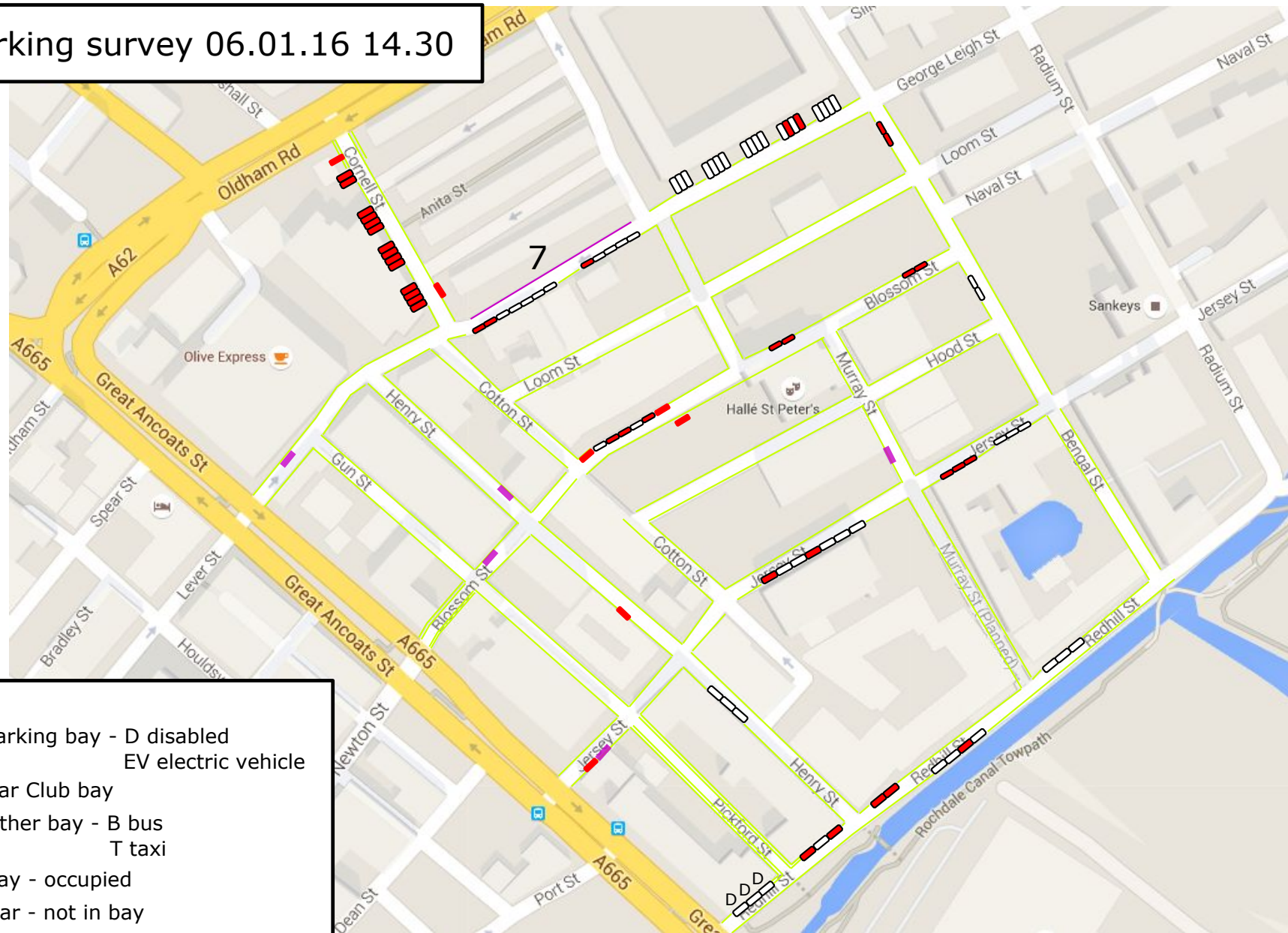
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	Section	Total Length	Available Length	SYL	Marked	Resident	Disabled	Loading	Taxi	Electric	Car Club	Evening	Daytime	(No. Veh)	%	lines (daytime)		
George Leigh Street	Gt Ancoats St - Cotton St	144	114	19	0							19	0	5	26%			
	Cotton St - Bengal St	310	marked bays	0	21	16						21	21	15	71%			
Blossom Street	Gt Ancoats St - Cotton St	108	72	12								12	0	2	17%			
	Cotton St - Bengal St	280	268	36	9							45	9	10	22%			
Jersey Street	Gt Ancoats St - Cotton St	108	102	17								17	0	5	29%			
	Cotton St - Bengal St	252	240	17	13							30	13	9	30%			
Redhill Street	West	168	156	15	8		3					26	11	5	19%			
	East	210	210	31	4							35	4	2	6%			
Loom Street		312	144	24								24	0	0	0%			
Hood Street		264	132	22								22	0	3	14%			
Gun Street	North	155	80	13								13	0	0	0%			
	South	155	101	16								16	0	1	6%			
Pickford Street		160	0									0	0	0	0%			
Henry Street	North	210	150	25								25	0	0	0%			
	South	216	180	27	3							30	3	6	20%			
Cotton Street	North	88	58	10								10	0	0	0%			
	South	114	80	13								13	0	0	0%			
Cornell Street		136	0		14							14	14	6	43%			
Sherratt Street		72	60	10								10	0	2	20%			
Murray Street		240	108	18								18	0	9	50%			
Bengal Street	NE	168	156	26								26	0	0	0%			
	SW	144	138	21	2							23	4	0	0%			
Total												449	79	80	18%			

	Street Geometry			Parking Capacity										Occupied (cars)		On yellow	Delivery Vehs	Other
	Section	Total Length	Available Length	SYL	Marked	Resident	Disabled	Loading	Taxi	Electric	Car Club	Evening	Daytime	(No. Veh)	%	lines (daytime)		
George Leigh Street	Gt Ancoats St - Cotton St	144	114	19	0							19	0	12	63%			
	Cotton St - Bengal St	310	marked bays	0	21	16						21	21	17	81%			+7 resident
Blossom Street	Gt Ancoats St - Cotton St	108	72	12								12	0	3	25%			
	Cotton St - Bengal St	280	268	36	9							45	9	12	27%			
Jersey Street	Gt Ancoats St - Cotton St	108	102	17								17	0	10	59%			
	Cotton St - Bengal St	252	240	17	13							30	13	10	33%			
Redhill Street	West	168	156	15	8		3					26	11	6	23%			
	East	210	210	31	4							35	4	5	14%			
Loom Street		312	144	24								24	0	0	0%			
Hood Street		264	132	22								22	0	1	5%			
Gun Street	North	155	80	13								13	0	2	15%			
	South	155	101	16								16	0	2	13%			
Pickford Street		160	0									0	0	0	0%			
Henry Street	North	210	150	25								25	0	0	0%			
	South	216	180	27	3							30	3	6	20%			
Cotton Street	North	88	58	10								10	0	0	0%			
	South	114	80	13								13	0	0	0%			
Cornell Street		136	0		14							14	14	11	79%			
Sherratt Street		72	60	10								10	0	0	0%			
Murray Street		240	108	18								18	0	5	28%			
Bengal Street	NE	168	156	26								26	0	1	4%			
	SW	144	138	21	2							23	4	5	22%			
Total												449	79	108	24%			

	Street Geometry			Parking Capacity										Occupied (cars)		On yellow	Delivery Vehs		Other
	Section	Total Length	Available Length	SYL	Marked	Resident	Disabled	Loading	Taxi	Electric	Car Club	Evening	Daytime	(No. Veh)	%	lines (daytime)			
George Leigh Street	Gt Ancoats St - Cotton St	144	114	19	0							19	0	2	11%				
	Cotton St - Bengal St	310	marked bays	0	21	16						21	21	6	29%				+8 resident
Blossom Street	Gt Ancoats St - Cotton St	108	72	12								12	0	0	0%				
	Cotton St - Bengal St	280	268	36	9							45	9	7	16%				
Jersey Street	Gt Ancoats St - Cotton St	108	102	17								17	0	6	35%				
	Cotton St - Bengal St	252	240	17	13							30	13	7	23%				
Redhill Street	West	168	156	15	8		3					26	11	4	15%				
	East	210	210	31	4							35	4	5	14%				
Loom Street		312	144	24								24	0	0	0%				
Hood Street		264	132	22								22	0	0	0%				
Gun Street	North	155	80	13								13	0	1	8%				
	South	155	101	16								16	0	2	13%				
Pickford Street		160	0									0	0	0	0%				
Henry Street	North	210	150	25								25	0	0	0%				
	South	216	180	27	3							30	3	8	27%				
Cotton Street	North	88	58	10								10	0	0	0%				
	South	114	80	13								13	0	0	0%				
Cornell Street		136	0		14							14	14	4	29%				
Sherratt Street		72	60	10								10	0	0	0%				
Murray Street		240	108	18								18	0	7	39%				
Bengal Street	NE	168	156	26								26	0	0	0%				
	SW	144	138	21	2							23	4	5	22%				
Total												449	79	64	14%				

	Street Geometry			Parking Capacity										Occupied (cars)		On yellow	Delivery Vehs	All vehicles excl loading		Other
	Section	Total Length	Available Length	SYL	Marked	Resident	Disabled	Loading	Taxi	Electric	Car Club	Evening	Daytime	(No. Veh)	%	lines (daytime)		(No. Veh)	%	
George Leigh Street	Gt Ancoats St - Cotton St	144	114	19	0							19	0		0%			0		
	Cotton St - Bengal St	310	marked bays	0	21	16						21	21	6	29%			6		+6 resident
Blossom Street	Gt Ancoats St - Cotton St	108	72	12								12	0		0%	2		2		
	Cotton St - Bengal St	280	268	36	9							45	9	7	78%	1		8		
Jersey Street	Gt Ancoats St - Cotton St	108	102	17								17	0		0%			0		
	Cotton St - Bengal St	252	240	17	13							30	13	1	8%			1		
Redhill Street	West	168	156	15	8		3					26	11	4	36%			4		
	East	210	210	31	4							35	4	0	0%			0		
Loom Street		312	144	24								24	0		0%			0		
Hood Street		264	132	22								22	0		0%	1		1		
Gun Street	North	155	80	13								13	0		0%			0		
	South	155	101	16								16	0		0%	3		3		
Pickford Street		160	0									0	0		0%			0		
Henry Street	North	210	150	25								25	0		0%	2		2		
	South	216	180	27	3							30	3	1	33%			1		
Cotton Street	North	88	58	10								10	0		0%			0		
	South	114	80	13								13	0		0%			0		
Cornell Street		136	0		14							14	14	10	71%			10		
Sherratt Street		72	60	10								10	0		0%			0		
Murray Street		240	108	18								18	0		0%			0		
Bengal Street	NE	168	156	26								26	0		0%			0		
	SW	144	138	21	2							23	4	3	75%			3		
Total												449	79	32	41%	9	0	41	52%	

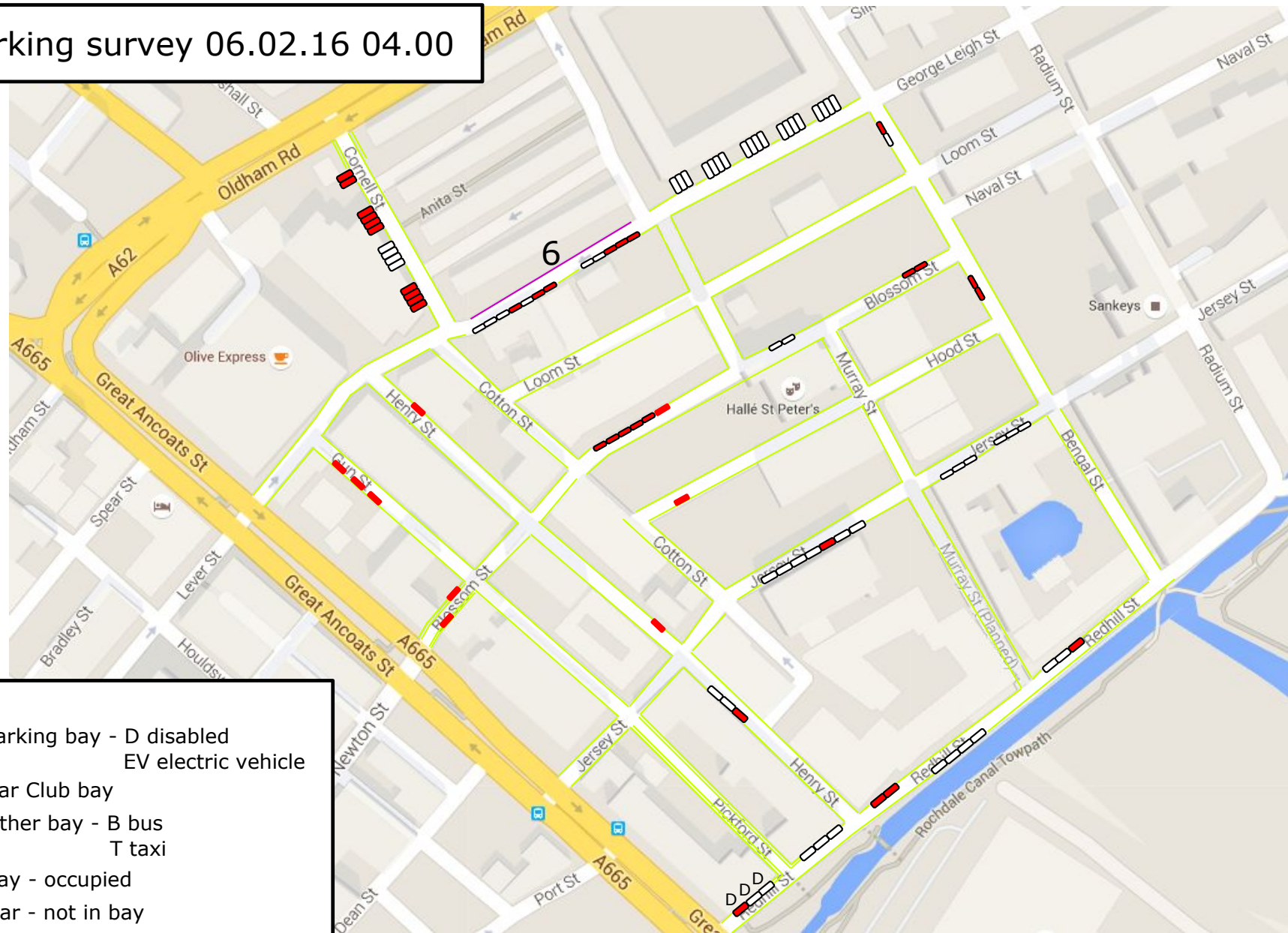
Parking survey 06.01.16 14.30



Key

-  Parking bay - D disabled
EV electric vehicle
-  Car Club bay
-  Other bay - B bus
T taxi
-  Bay - occupied
-  Car - not in bay
-  Van
-  Skip
-  Resident only parking
-  Single yellow line
-  Double yellow line

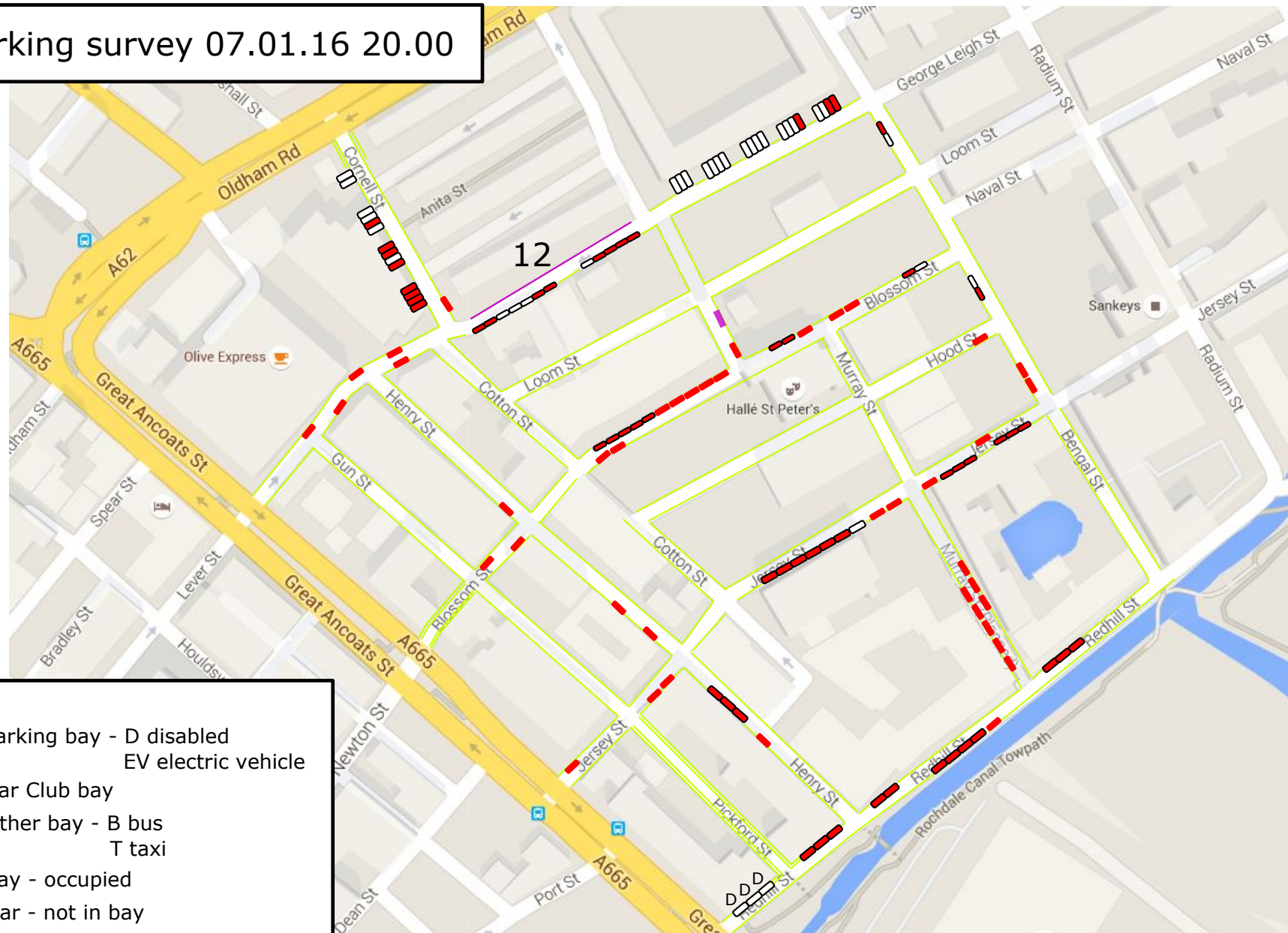
Parking survey 06.02.16 04.00



Key

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EV electric vehicle
-  Car Club bay
-  Other bay - B bus
T taxi
-  Bay - occupied
-  Car - not in bay
-  Van
-  Skip
-  Resident only parking
-  Single yellow line
-  Double yellow line

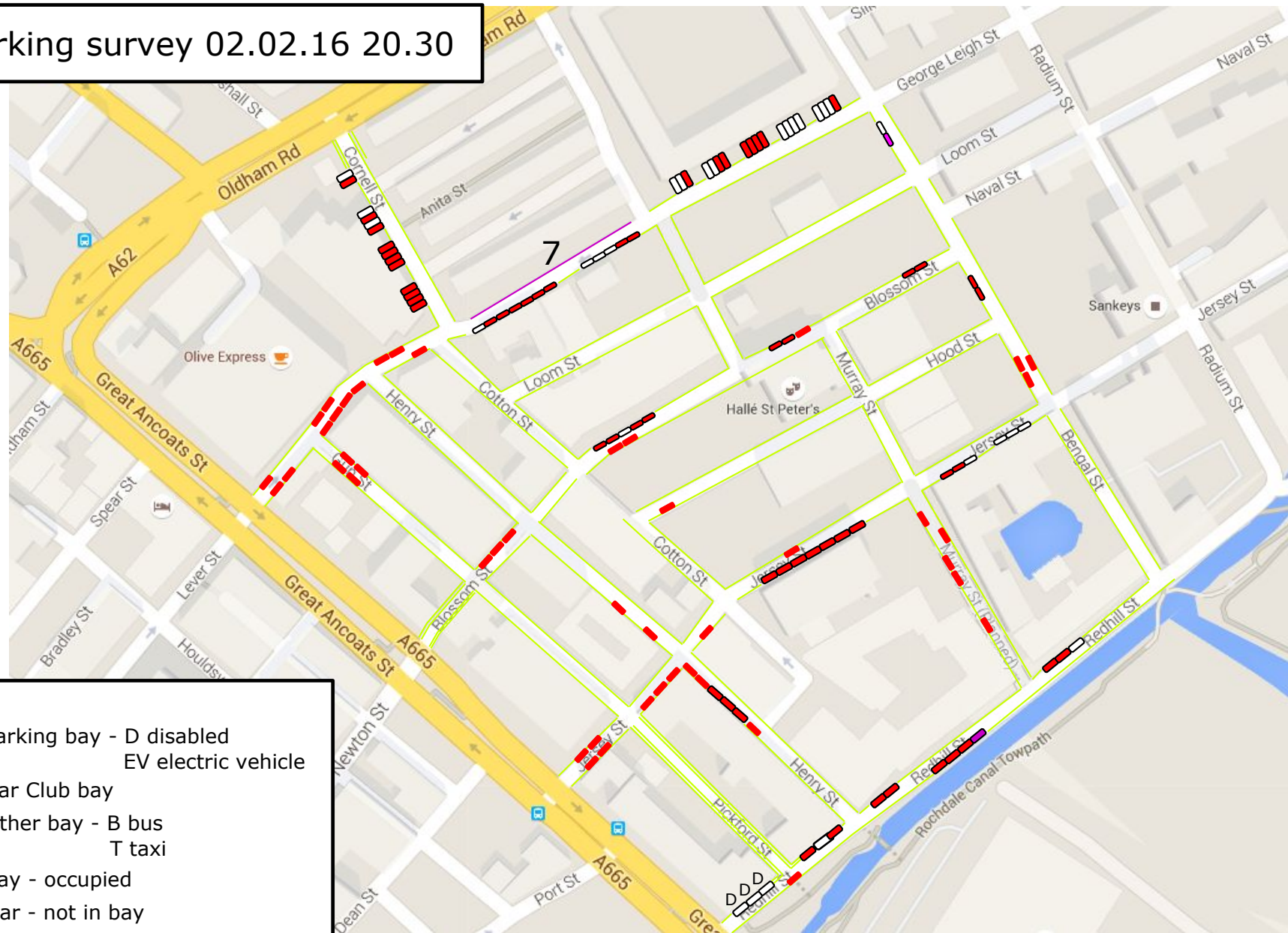
Parking survey 07.01.16 20.00



Key

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EV electric vehicle
-  Car Club bay
-  Other bay - B bus
T taxi
-  Bay - occupied
-  Car - not in bay
-  Van
-  Skip
-  Resident only parking
-  Single yellow line
-  Double yellow line

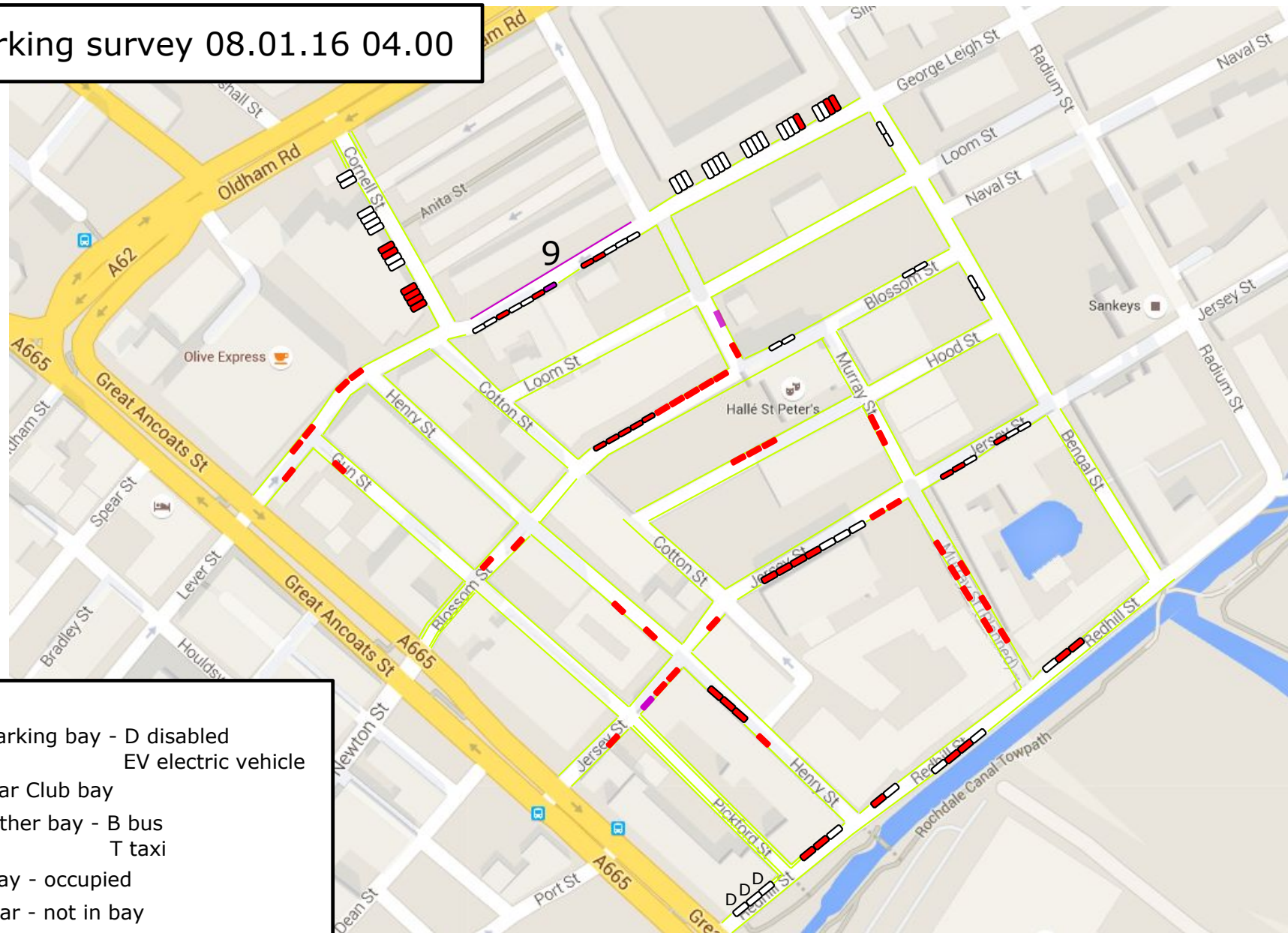
Parking survey 02.02.16 20.30



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EV electric vehicle
-  Car Club bay
-  Other bay - B bus
T taxi
-  Bay - occupied
-  Car - not in bay
-  Van
-  Skip
-  Resident only parking
-  Single yellow line
-  Double yellow line

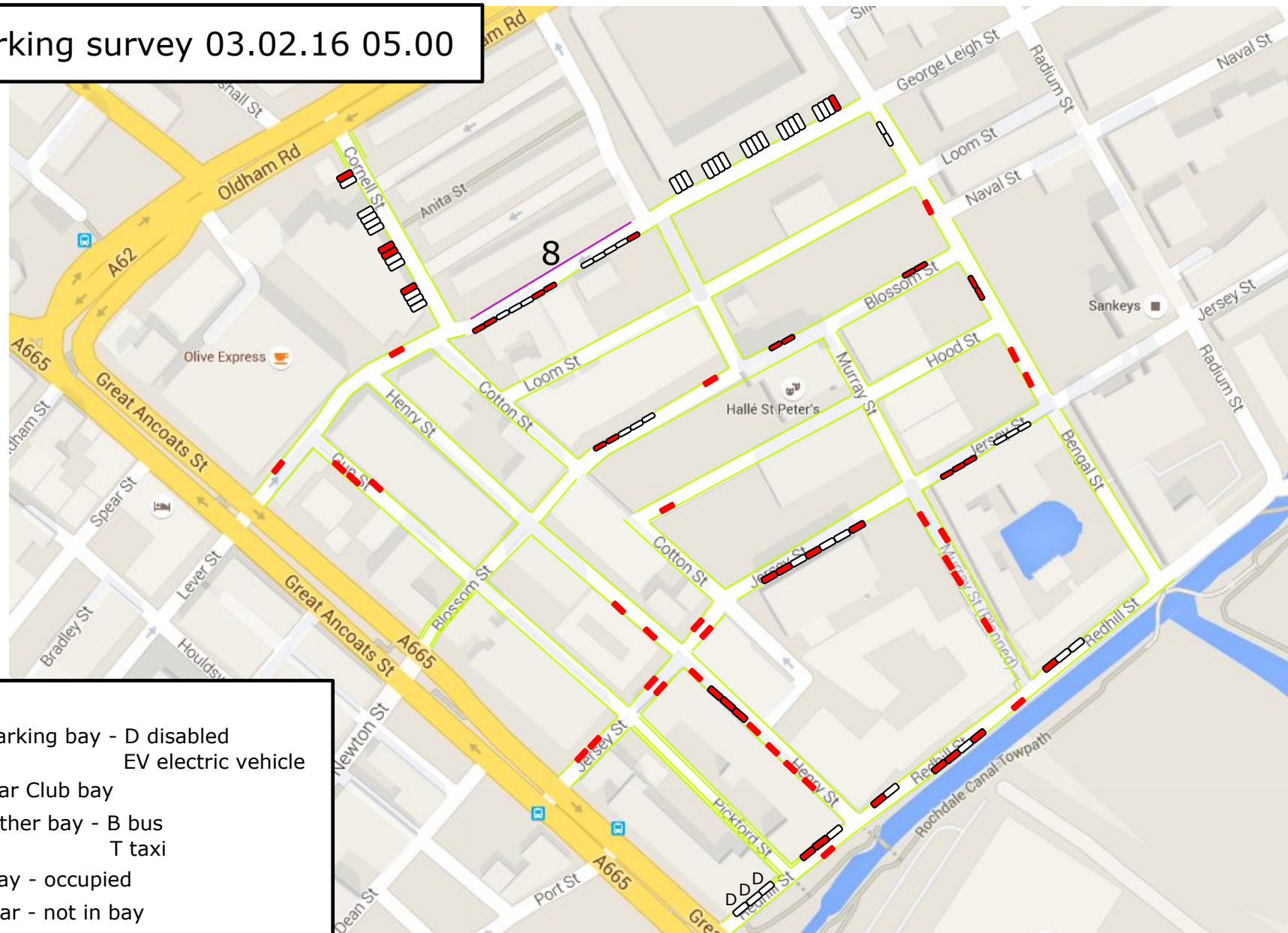
Parking survey 08.01.16 04.00



Key

-  Parking bay - D disabled
EV electric vehicle
-  Car Club bay
-  Other bay - B bus
T taxi
-  Bay - occupied
-  Car - not in bay
-  Van
-  Skip
-  Resident only parking
-  Single yellow line
-  Double yellow line

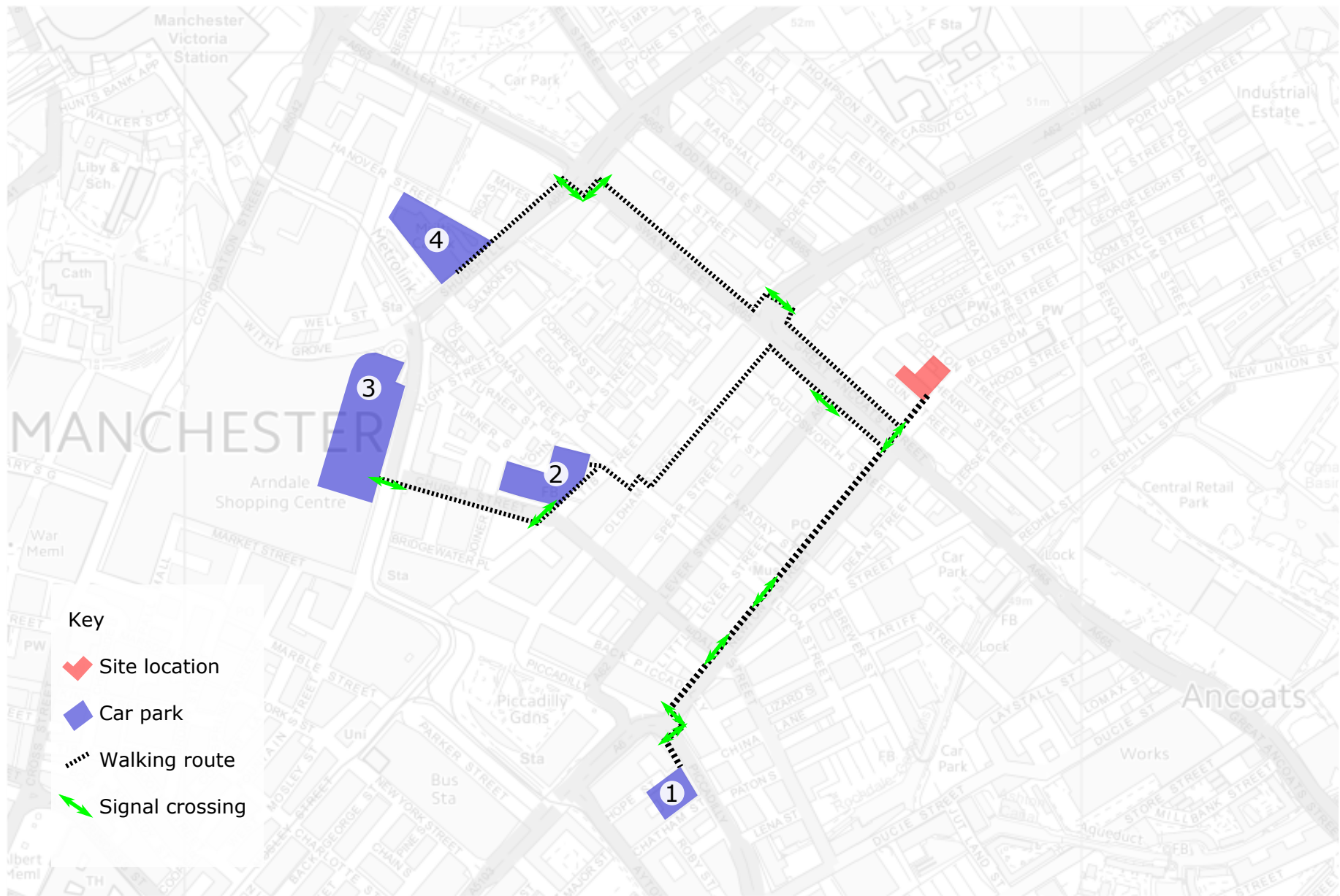
Parking survey 03.02.16 05.00



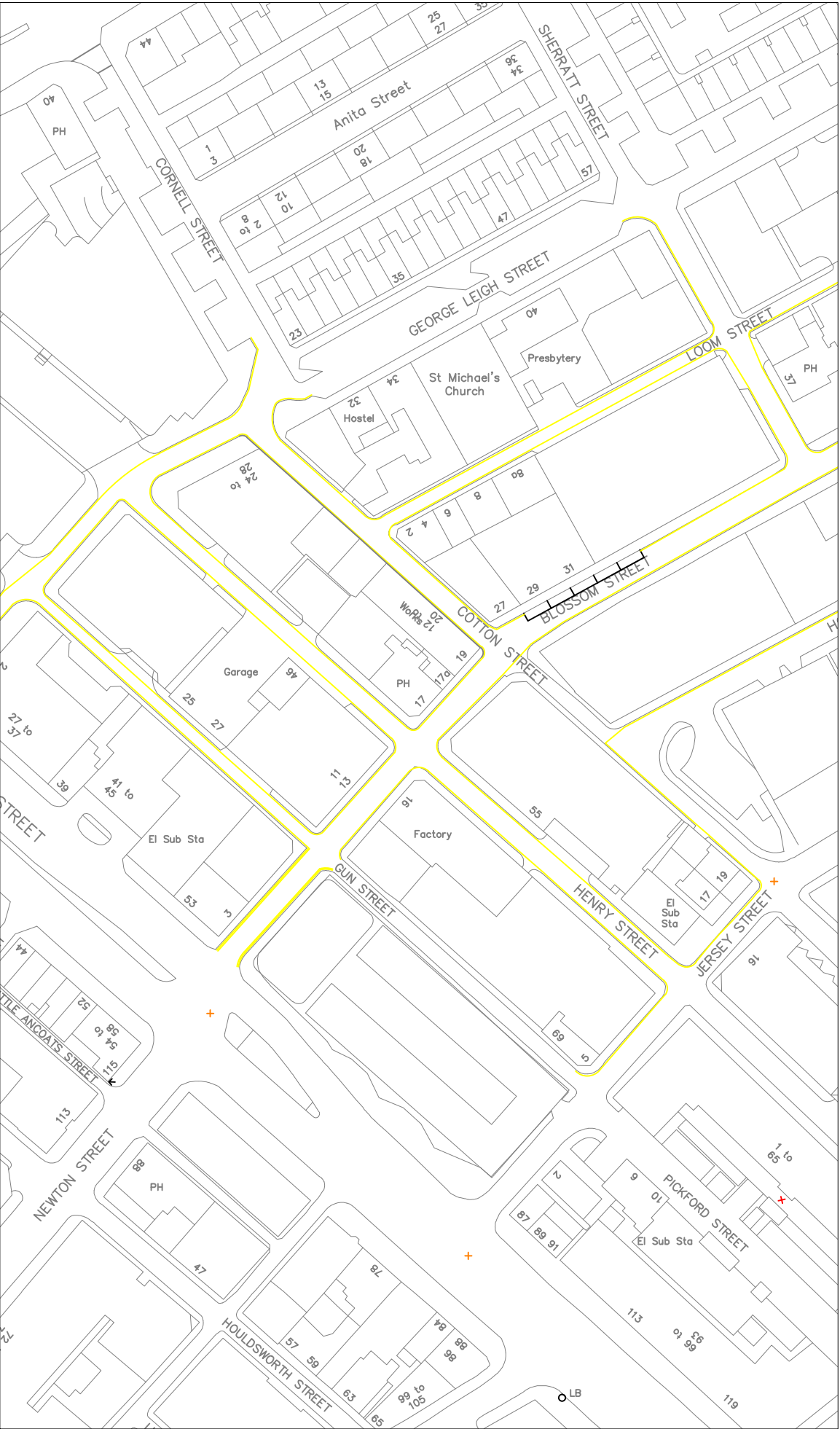
Key

-  Parking bay - D disabled
EV electric vehicle
-  Car Club bay
-  Other bay - B bus
T taxi
-  Bay - occupied
-  Car - not in bay
-  Van
-  Skip
-  Resident only parking
-  Single yellow line
-  Double yellow line

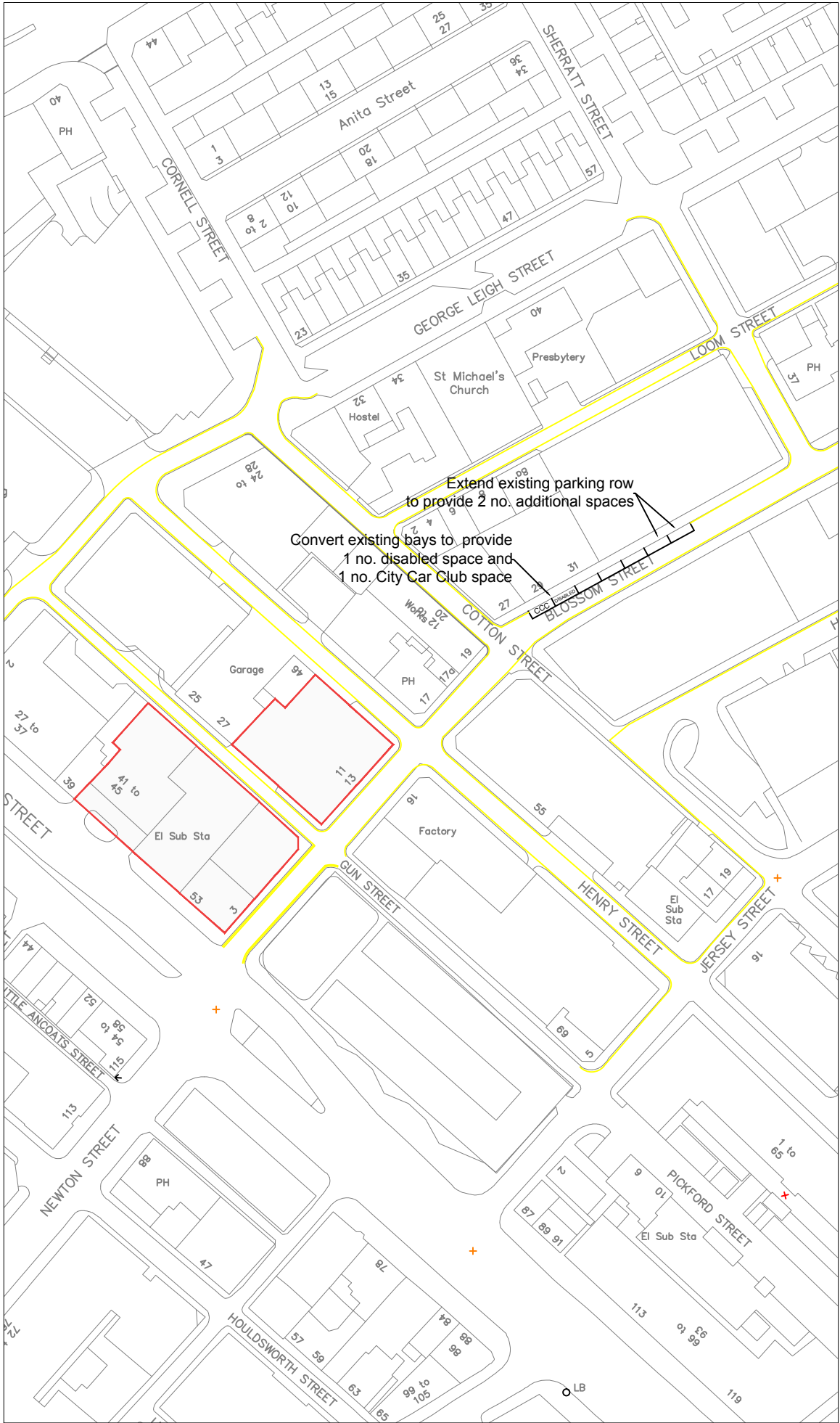
Appendix D



Appendix E



Existing



Proposed

THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED AND ONLY WRITTEN DIMENSIONS SHALL BE USED

NOTES

Revision Details	By	Date	Suffix
	Check		

Drawing Number
SK21589-001

Blossom Street
Drawing Title
Proposed amendments to on-street parking

Scale at A3
1:1250

Drawn	Approved
JAT	LGS

Check	Date
LGS	03.03.16

Appendix F



Subject to Head of Sales Approval

Delivering a car parking solution for SK Transport Planning – Blossom Street, Great Ancoats



Subject to Head of Sales Approval

6th May 2016

Introduction

Firstly along with NCP, I would like to thank you for the opportunity to present a parking solution for you within Manchester City Centre.

NCP are the largest commercial car park operator in the UK with over 75 years experience.

We have over 500 car parks across the UK and 100% of our energy comes from green sources so we take our environmental responsibilities very seriously.

We are passionate about parking and committed to providing an outstanding parking experience for our Customers.

I work for NCP as a Key Account Manager and my key areas are Manchester, Stockport & Chester as well as looking after large National Companies around the UK.

As your Account Manager I will be looking after your business and helping with your parking needs within the city.

I know that parking is a real issue in all city centres & this is something we can really help your business with.

I believe that parking is one of the most important parts of everyday life and my aim as your account manager is to make your journey stress free & safe but at the same time offering you the best rates for parking within the city centre & also offering you the best service with a personal touch.



Subject to Head of Sales Approval



Customer Control Centre

All pay stations, car entry and exit barriers are linked to our Customer Control Centre. This is a unique service within the car parking industry. The CCC is a 24/7 service, which means there is always someone available to help. The Team can control the barriers remotely should there be a problem with a ticket. They are also in direct contact with our local Operations team who can also be called on to help.

Proposal for season tickets

This is a great way to save money on your parking without the hassle of queuing to pay for your ticket afterwards.

You will receive a Yellow card which you pop in to the machine on the way in to lift the barriers and you do the same when you leave.

All of our season tickets renew automatically to save you the hassle and there is no need to remember the renewal date, I will do that for you.

The Cost of a Season Ticket

Car Park	Annual	Spaces Needed		Normal Day Rate	Effective Daily Rate
Manchester Residential Pass – Northern Quarter, Piccadilly, Shudehill or Arndale	£999	34		£15	£2.74

Please note that the daily rate is calculated based on parking an average of 365 days per year.

I'm sure you will find all this information helpful in making your decision on the best option available for your business & I look forward to working with you in the future.

If you do have any questions before next week please don't hesitate to call me.

Subject to Head of Sales Approval



Kind regards

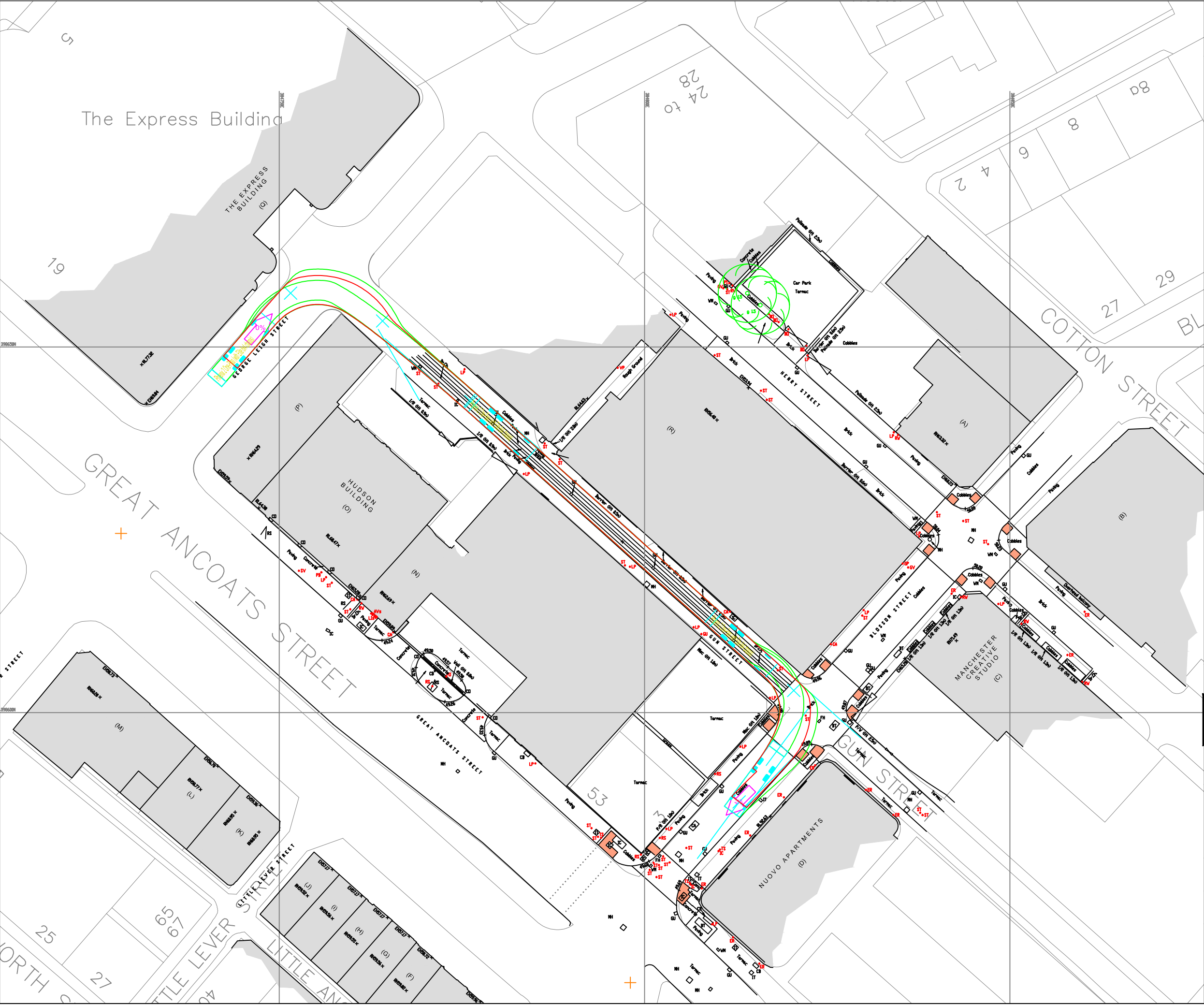
Anthony Watt
Field Sales Area Manager
National Car Parks Limited
M: 07827 89 55 77 | E: anthony.watt@ncp.co.uk | W: www.ncp.co.uk

Disclaimer

This proposal is not and should not be construed by you as a contractual or legally binding offer and NCP shall only be bound by such terms as are agreed between you and NCP in writing on the terms of our standard terms and conditions. This proposal remains subject to contract and may be amended by NCP at anytime.

Subject to Head of Sales Approval

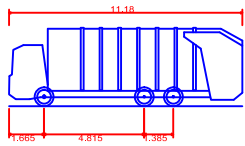
Appendix G



THIS DRAWING MAY BE USED ONLY FOR
THE PURPOSE INTENDED AND ONLY
WRITTEN DIMENSIONS SHALL BE USED

NOTES

Vehicle profile



Phoenix 2 One-Pass (with Elite 6x4 chassis)
Overall Length 11.180m
Overall Width 2.550m
Overall Body Height 3.760m
Min Body Ground Clearance 0.312m
Track Width 2.550m
Lock to Lock Time 4.00 sec
Kerb to Kerb Turning Radius 10.150m

Revision Details	By	Date	Suffix
	Check		

Drawing Number
SK21589-002

Blossom Street, Manchester

Drawing Title
Swept Path Analysis
11m Refuse Collection Vehicle

Scale at A3
1:500

Drawn JAT	Approved LGS
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Check LGS	Date 10.05.16
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Appendix H

Calculation Reference: AUDIT-443201-160422-0405

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLESSelected regions and areas:

02	SOUTH EAST	
	EX ESSEX	2 days
	SC SURREY	1 days
03	SOUTH WEST	
	DC DORSET	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days
	GM GREATER MANCHESTER	2 days
09	NORTH	
	CB CUMBRIA	1 days
10	WALES	
	FS FLINTSHIRE	1 days
11	SCOTLAND	
	HI HIGHLAND	1 days
	SA SOUTH AYRSHIRE	1 days
	SR STIRLING	2 days

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

Filtering Stage 2 selection:

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

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

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/07 to 26/05/15

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

Selected survey days:

Monday	2 days
Tuesday	4 days
Wednesday	3 days
Thursday	4 days
Friday	3 days

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

Selected survey types:

Manual count	16 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:

Town Centre	4
Edge of Town Centre	12

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	8
Built-Up Zone	6
No Sub Category	2

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.

Filtering Stage 3 selection:

Use Class:

C3	16 days
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This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

10,001 to 15,000	6 days
15,001 to 20,000	3 days
20,001 to 25,000	1 days
25,001 to 50,000	6 days

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

Population within 5 miles:

50,001 to 75,000	5 days
75,001 to 100,000	4 days
125,001 to 250,000	3 days
250,001 to 500,000	2 days
500,001 or More	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	13 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	16 days
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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.

LIST OF SITES relevant to selection parameters

1	CB-03-C-01	BLOCK OF FLATS		CUMBRIA
	KING STREET			
	CARLISLE			
	Town Centre			
	Built-Up Zone			
	Total Number of dwellings:	40		
	Survey date: THURSDAY	12/06/14		Survey Type: MANUAL
2	CH-03-C-01	BLOCKS OF FLATS		CHESHIRE
	NEW CRANE STREET			
	CHESTER			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	60		
	Survey date: FRIDAY	17/10/08		Survey Type: MANUAL
3	DC-03-C-01	BLOCKS OF FLATS		DORSET
	ABBOTSBURY ROAD			
	WEYMOUTH			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	27		
	Survey date: TUESDAY	08/07/08		Survey Type: MANUAL
4	EX-03-C-01	FLATS		ESSEX
	WESTCLIFF PARADE			
	WESTCLIFF			
	SOUTHEND-ON-SEA			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	6		
	Survey date: TUESDAY	22/10/13		Survey Type: MANUAL
5	EX-03-C-02	BLOCK OF FLATS		ESSEX
	WESTCLIFF PARADE			
	WESTCLIFF			
	SOUTHEND-ON-SEA			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	94		
	Survey date: TUESDAY	22/10/13		Survey Type: MANUAL
6	FS-03-C-01	BLOCK OF FLATS		FLINTSHIRE
	WREXHAM STREET			
	MOLD			
	Edge of Town Centre			
	Built-Up Zone			
	Total Number of dwellings:	30		
	Survey date: MONDAY	06/07/09		Survey Type: MANUAL
7	GM-03-C-02	BLOCK OF FLATS		GREATER MANCHESTER
	WHITWORTH STREET W.			
	MANCHESTER			
	Town Centre			
	Built-Up Zone			
	Total Number of dwellings:	154		
	Survey date: THURSDAY	13/10/11		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	GM-03-C-03	BLOCK OF FLATS		GREATER MANCHESTER
	FAIRFIELD STREET			
	MANCHESTER			
	Town Centre			
	Built-Up Zone			
	Total Number of dwellings:	20		
	Survey date: FRIDAY	14/10/11		Survey Type: MANUAL
9	HI-03-C-01	FLATS		HIGHLAND
	SHORE STREET			
	INVERNESS			
	Town Centre			
	Residential Zone			
	Total Number of dwellings:	38		
	Survey date: WEDNESDAY	20/05/09		Survey Type: MANUAL
10	NF-03-C-01	BLOCKS OF FLATS		NORFOLK
	PAGE STAIR LANE			
	KING'S LYNN			
	Edge of Town Centre			
	Built-Up Zone			
	Total Number of dwellings:	51		
	Survey date: THURSDAY	11/12/14		Survey Type: MANUAL
11	SA-03-C-01	BLOCK OF FLATS		SOUTH AYRSHIRE
	RACECOURSE ROAD			
	AYR			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	51		
	Survey date: TUESDAY	16/09/14		Survey Type: MANUAL
12	SC-03-C-01	FLATS		SURREY
	HEATHCOTE ROAD			
	CAMBERLEY			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	140		
	Survey date: MONDAY	21/07/08		Survey Type: MANUAL
13	SF-03-C-01	BLOCKS OF FLATS		SUFFOLK
	STATION HILL			
	BURY ST EDMUNDS			
	Edge of Town Centre			
	Built-Up Zone			
	Total Number of dwellings:	85		
	Survey date: THURSDAY	18/12/14		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

14	SR-03-C-01	FLATS		STIRLING
	FORTHSIDE WAY			
	STIRLING			
	Edge of Town Centre			
	No Sub Category			
	Total Number of dwellings:	80		
	Survey date: WEDNESDAY	18/06/14		Survey Type: MANUAL
15	SR-03-C-02	FLATS		STIRLING
	ROSEBERRY TERRACE			
	STIRLING			
	Edge of Town Centre			
	Residential Zone			
	Total Number of dwellings:	48		
	Survey date: WEDNESDAY	18/06/14		Survey Type: MANUAL
16	WM-03-C-03	FLATS		WEST MIDLANDS
	LODE LANE			
	SOLIHULL			
	Edge of Town Centre			
	No Sub Category			
	Total Number of dwellings:	60		
	Survey date: FRIDAY	21/09/07		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 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	62	0.034	16	62	0.111	16	62	0.145
08:00 - 09:00	16	62	0.055	16	62	0.163	16	62	0.218
09:00 - 10:00	16	62	0.058	16	62	0.076	16	62	0.134
10:00 - 11:00	16	62	0.077	16	62	0.077	16	62	0.154
11:00 - 12:00	16	62	0.067	16	62	0.075	16	62	0.142
12:00 - 13:00	16	62	0.089	16	62	0.073	16	62	0.162
13:00 - 14:00	16	62	0.075	16	62	0.104	16	62	0.179
14:00 - 15:00	16	62	0.081	16	62	0.086	16	62	0.167
15:00 - 16:00	16	62	0.084	16	62	0.061	16	62	0.145
16:00 - 17:00	16	62	0.109	16	62	0.081	16	62	0.190
17:00 - 18:00	16	62	0.164	16	62	0.097	16	62	0.261
18:00 - 19:00	16	62	0.119	16	62	0.070	16	62	0.189
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.012			1.074			2.086

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.

Parameter summary

Trip rate parameter range selected:	6 - 154 (units:)
Survey date range:	01/01/07 - 26/05/15
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TAXIS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	62	0.003	16	62	0.003	16	62	0.006
08:00 - 09:00	16	62	0.000	16	62	0.001	16	62	0.001
09:00 - 10:00	16	62	0.000	16	62	0.000	16	62	0.000
10:00 - 11:00	16	62	0.002	16	62	0.002	16	62	0.004
11:00 - 12:00	16	62	0.003	16	62	0.003	16	62	0.006
12:00 - 13:00	16	62	0.002	16	62	0.002	16	62	0.004
13:00 - 14:00	16	62	0.004	16	62	0.004	16	62	0.008
14:00 - 15:00	16	62	0.003	16	62	0.002	16	62	0.005
15:00 - 16:00	16	62	0.003	16	62	0.003	16	62	0.006
16:00 - 17:00	16	62	0.004	16	62	0.004	16	62	0.008
17:00 - 18:00	16	62	0.004	16	62	0.002	16	62	0.006
18:00 - 19:00	16	62	0.002	16	62	0.003	16	62	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.030			0.029			0.059

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.

Parameter summary

Trip rate parameter range selected:	6 - 154 (units:)
Survey date range:	01/01/07 - 26/05/15
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL OGVS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	62	0.000	16	62	0.000	16	62	0.000
08:00 - 09:00	16	62	0.001	16	62	0.000	16	62	0.001
09:00 - 10:00	16	62	0.002	16	62	0.003	16	62	0.005
10:00 - 11:00	16	62	0.001	16	62	0.001	16	62	0.002
11:00 - 12:00	16	62	0.001	16	62	0.000	16	62	0.001
12:00 - 13:00	16	62	0.001	16	62	0.002	16	62	0.003
13:00 - 14:00	16	62	0.001	16	62	0.001	16	62	0.002
14:00 - 15:00	16	62	0.001	16	62	0.001	16	62	0.002
15:00 - 16:00	16	62	0.000	16	62	0.000	16	62	0.000
16:00 - 17:00	16	62	0.001	16	62	0.001	16	62	0.002
17:00 - 18:00	16	62	0.000	16	62	0.000	16	62	0.000
18:00 - 19:00	16	62	0.000	16	62	0.000	16	62	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.009			0.009			0.018

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.

Parameter summary

Trip rate parameter range selected: 6 - 154 (units:)
 Survey date date range: 01/01/07 - 26/05/15
 Number of weekdays (Monday-Friday): 16
 Number of Saturdays: 0
 Number of Sundays: 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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL CYCLISTS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	62	0.002	16	62	0.008	16	62	0.010
08:00 - 09:00	16	62	0.001	16	62	0.003	16	62	0.004
09:00 - 10:00	16	62	0.003	16	62	0.004	16	62	0.007
10:00 - 11:00	16	62	0.002	16	62	0.004	16	62	0.006
11:00 - 12:00	16	62	0.004	16	62	0.002	16	62	0.006
12:00 - 13:00	16	62	0.002	16	62	0.007	16	62	0.009
13:00 - 14:00	16	62	0.001	16	62	0.003	16	62	0.004
14:00 - 15:00	16	62	0.002	16	62	0.001	16	62	0.003
15:00 - 16:00	16	62	0.004	16	62	0.003	16	62	0.007
16:00 - 17:00	16	62	0.000	16	62	0.001	16	62	0.001
17:00 - 18:00	16	62	0.013	16	62	0.002	16	62	0.015
18:00 - 19:00	16	62	0.006	16	62	0.001	16	62	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.040			0.039			0.079

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.

Parameter summary

Trip rate parameter range selected:	6 - 154 (units:)
Survey date range:	01/01/07 - 26/05/15
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	62	0.020	16	62	0.061	16	62	0.081
08:00 - 09:00	16	62	0.027	16	62	0.147	16	62	0.174
09:00 - 10:00	16	62	0.035	16	62	0.104	16	62	0.139
10:00 - 11:00	16	62	0.057	16	62	0.067	16	62	0.124
11:00 - 12:00	16	62	0.056	16	62	0.085	16	62	0.141
12:00 - 13:00	16	62	0.085	16	62	0.087	16	62	0.172
13:00 - 14:00	16	62	0.085	16	62	0.073	16	62	0.158
14:00 - 15:00	16	62	0.087	16	62	0.063	16	62	0.150
15:00 - 16:00	16	62	0.100	16	62	0.067	16	62	0.167
16:00 - 17:00	16	62	0.131	16	62	0.100	16	62	0.231
17:00 - 18:00	16	62	0.167	16	62	0.074	16	62	0.241
18:00 - 19:00	16	62	0.104	16	62	0.045	16	62	0.149
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.954			0.973			1.927

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.

Parameter summary

Trip rate parameter range selected:	6 - 154 (units:)
Survey date date range:	01/01/07 - 26/05/15
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	62	0.001	16	62	0.053	16	62	0.054
08:00 - 09:00	16	62	0.003	16	62	0.064	16	62	0.067
09:00 - 10:00	16	62	0.002	16	62	0.022	16	62	0.024
10:00 - 11:00	16	62	0.004	16	62	0.011	16	62	0.015
11:00 - 12:00	16	62	0.014	16	62	0.011	16	62	0.025
12:00 - 13:00	16	62	0.010	16	62	0.017	16	62	0.027
13:00 - 14:00	16	62	0.005	16	62	0.013	16	62	0.018
14:00 - 15:00	16	62	0.007	16	62	0.002	16	62	0.009
15:00 - 16:00	16	62	0.026	16	62	0.004	16	62	0.030
16:00 - 17:00	16	62	0.029	16	62	0.009	16	62	0.038
17:00 - 18:00	16	62	0.066	16	62	0.003	16	62	0.069
18:00 - 19:00	16	62	0.024	16	62	0.002	16	62	0.026
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.191			0.211			0.402

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.

Parameter summary

Trip rate parameter range selected: 6 - 154 (units:)
 Survey date range: 01/01/07 - 26/05/15
 Number of weekdays (Monday-Friday): 16
 Number of Saturdays: 0
 Number of Sundays: 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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	16	62	0.061	16	62	0.255	16	62	0.316
08:00 - 09:00	16	62	0.092	16	62	0.421	16	62	0.513
09:00 - 10:00	16	62	0.109	16	62	0.228	16	62	0.337
10:00 - 11:00	16	62	0.167	16	62	0.182	16	62	0.349
11:00 - 12:00	16	62	0.159	16	62	0.201	16	62	0.360
12:00 - 13:00	16	62	0.211	16	62	0.208	16	62	0.419
13:00 - 14:00	16	62	0.194	16	62	0.220	16	62	0.414
14:00 - 15:00	16	62	0.193	16	62	0.182	16	62	0.375
15:00 - 16:00	16	62	0.249	16	62	0.160	16	62	0.409
16:00 - 17:00	16	62	0.301	16	62	0.210	16	62	0.511
17:00 - 18:00	16	62	0.458	16	62	0.207	16	62	0.665
18:00 - 19:00	16	62	0.286	16	62	0.142	16	62	0.428
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.480			2.616			5.096

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.

Parameter summary

Trip rate parameter range selected:	6 - 154 (units:)
Survey date range:	01/01/07 - 26/05/15
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	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.