

**The Transport for Greater Manchester  
(Light Rapid Transit System) (Trafford Park  
Extension) Order**

**Transport Assessment**

## Issue and Revision Record

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## **Executive Summary**

The purpose of this Transport Assessment (TA) is to support the Transport & Works Act Order (TWAo) application for the Trafford Park Line (TPL) by assessing the impact the proposals have on the highway network, highway users, both motorised and non-motorised and public transport users in the scheme and outlying areas. Impacts resulting from the scheme's introduction may be positive or negative. Where a negative impact is identified appropriate mitigation measures have been considered.

The Greater Manchester Strategy (GMS) (2009) sets out an agreed strategy for delivery by the Greater Manchester Combined Authority and the Local Enterprise Partnership. The refreshed GMS 2013-2020 identifies the TPL as a long standing investment priority, a key transport priority and Trafford Park as a key employment area.

The proposed TPL consists of an approximately 5.5 km twin track extension to the Metrolink network, along with six new stops, providing a link between Manchester city centre and the employment and regeneration areas of Trafford Park and the Trafford Centre retail and leisure complex.

This TA considers the impact of the scheme on the following categories;

### **Traffic**

TfGM has undertaken extensive traffic modelling work and detailed assessment of the scheme proposals to identify what impact the proposed TPL will have on the highway and its users.

The online junctions have been assessed and it was identified that the majority of junctions would be expected to continue to operate within capacity after the implementation of TPL. The remodelling of the Parkway Circle into a series of signalised junctions results in improvement over the Do Minimum situation in both 2020 and 2035.

An assessment has been undertaken to identify any off-line junctions not on the TPL alignment which may be directly affected by the introduction of the scheme. In total, five junctions across the whole of Trafford Park were identified as having a deteriorating volume to capacity ratio. However, only one of these junctions is likely to require a physical intervention the details of which will be developed in conjunction with TMBC and GMUTC as part of the ongoing scheme development.

It can be concluded from the modelling that the TPL can be introduced into the DM scenario with limited overall impact on the highway network.

## **Buses**

Currently, buses form the primary component of public transport in Trafford Park. As a result of the TPL scheme, the routing of some bus services will be diverted to accommodate the proposed highway modifications. Mitigation measures have been proposed that demonstrate each diverted bus service can still operate after the implementation of the TPL. The re-routing will limit the penetration of bus services at the north-west end of Westinghouse Road in the westbound direction. The fact that only one regular service (291) serves this movement would indicate there is limited demand in this area so this impact is considered marginal.

However, it is noted that the operation of bus services is de-regulated in Greater Manchester. Bus routings for commercial services are determined by bus operating companies, in liaison with TfGM, and may change over time.

Both commercial and subsidised bus services are reviewed by the operators and TfGM, and their routings will evolve to serve the changing developments and commercial environment following the introduction of Metrolink. It is not expected that the proposed highway modifications consequent on the introduction of Metrolink will of themselves lead to the withdrawal of any bus routes.

## **Light Rail**

Extending the Metrolink network with the proposed scheme will increase public transport access from Greater Manchester to the existing employment, leisure and tourism market within Trafford Park. This in turn has the potential to attract more businesses and leisure activities to locate within Trafford Park. Coupled with anticipated commercial and residential development opportunities over the next 15 years the expansion of the Metrolink network through Trafford Park has the potential to assist development. The TPL scheme can therefore be considered as a priority for both TfGM and TMBC in line with published policy.

The assumed service frequency currently proposed for the TPL is five trams per hour in each direction to serve the Trafford Park area and the Trafford Centre, offering as a minimum an additional hourly capacity for 1,000 passengers per direction. The services are currently assumed to operate to Crumpsall on the Bury Line. This will increase the total number of trams operating on the core section of the network to 40 trams per hour.

The operational modelling undertaken in support of the 2CC scheme indicated that 45 trams per hour operating on this section of the network is within the capacity of the existing infrastructure. Consequently the introduction of the TPL scheme will not have a detrimental effect on the wider operation of the Metrolink network.

Higher service frequencies are likely to be employed on the TPL at times of high demand e.g. during events at Old Trafford or EventCity or during peak shopping periods at the intu Trafford Centre. These services will likely be provided by modifying the overall service pattern thereby remaining within the 45 trams per hour operating on the core section of the network.

### **Heavy Rail**

Whilst the TPL scheme will not interface with the existing local heavy rail lines or rail stations within Trafford Park, owing to the significant existing connections between Metrolink and the heavy rail network elsewhere it will improve linkages between the Trafford Park area and the mainline railway network. This will offer a high quality and reliable public transport alternative to the private car to access areas of employment from areas of Greater Manchester with higher population, higher deprivation and lower car ownership. The TPL scheme will expand access to the existing employment, leisure and tourism market within the Trafford Park area to the wider conurbation. This in turn will add to the attractiveness for businesses and leisure activities to locate within Trafford Park.

### **Active Modes**

The scheme design involves no physical segregation or other design features that might impact on or constrain open and free movements by pedestrians. The TPL scheme will in general pose no greater direct impact upon pedestrians or cyclists than exists today. The illustrative design generally retains or re-provides the formal cycle facilities that exist today. Additionally, new cycle facilities have been included as part of the TPL scheme, including a new cycleway adjacent to the north-eastbound Park Way carriageway which will significantly reduce the severance effect of the existing highway network.

Whilst the scheme will involve changes to footways, it is considered that the benefits that will result from the introduction of TPL, such as new controlled crossing facilities, will be of significant benefit to and enhance the safety of pedestrians and cyclists.

### **Parking**

A number of informal on-street parking spaces will be displaced on Warren Bruce Road; however alternative parking locations already exist in close proximity. The scheme results in small impacts on the car parking associated with private developments. These impacts are not considered to have a detrimental impact on these developments. The need for mitigation or replacement provision will be made in agreement/discussion with the individual stakeholder.

The provision of a circa 200 capacity park and ride car park will offer a new sustainable travel option for people travelling through Trafford Park, resulting in a positive impact.

### **Taxis**

The existing taxis rank provision will be maintained albeit the temporary taxi rank on Sir Alex Ferguson Way is proposed to be relocated to Victoria Place. However, taxis will be affected by the changes to the highway network consequent on the introduction of the Metrolink alignment. This assessment has concluded that the highway network changes are not significant and therefore it is concluded there will be no material impact upon taxi services.

### **Servicing & Access**

The implementation of the proposed TPL scheme will alter some existing access routes requiring vehicles to re-route. However, the proposed diversions are not considered to present a material impact on general access within the wider Trafford Park area.

Where the proposed TPL scheme has an impact upon existing access arrangements to individual properties it has been demonstrated that in relatively few cases where existing accesses cannot be retained, alternative access arrangements can be provided. Therefore it is considered that there will be no detrimental impact from the TPL scheme upon servicing and access.

### **Road Safety**

In summary, the TPL scheme should result in a positive impact upon highway safety along the scheme corridor. Whilst the implementation of a tram may introduce potential for collisions with tram vehicles or vehicles disobeying prohibited turns, the TPL scheme has been designed to minimise these conflicts. It is envisioned that the junction layouts and improvements could reduce vehicle collisions along the corridor. Given the objectives of the TPL scheme, the scheme should result in a decrease in congestion and encourage tram travel, reducing existing pressures on highway safety. It is concluded that the TPL scheme will be beneficial to highway safety.

### **Events**

The TPL will provide additional public transport capacity for visitors to the Trafford Park area and in particular those attending events at the Old Trafford Football Stadium, EventCity and the intu Trafford Centre and associated leisure activities. In this way the TPL will further enhance Trafford Park's capability to host sports events, public exhibitions and trade shows.

The TPL scheme has specifically been developed so that it can be, as far as is practicable, insulated from the impact of events and the prevailing highway conditions. The scheme, apart from highway crossings will be segregated from other road traffic thereby providing resilience and reliability of tram operations during times of highway congestion that can arise from events within the area, such as those frequently held at Old Trafford Football Stadium, Event City and the Trafford Centre retail and leisure complex. The scheme includes a number of crossovers to allow trams to be turned around prior to reaching the terminus. These will allow a level of operation to be maintained should the highway be blocked for whatever reason.

The TPL is being designed to support regular events that occur at the Old Trafford Football Stadium, EventCity and the intu Trafford Centre. It is likely that in support of these events additional tram vehicles would be deployed to provide additional passenger capacity.

A wide variety of special events are staged in Trafford Park. They vary in character from large static events, such those hosted at Event City, to sporting events over large sections of highway. The routes of sports events such as the marathons and cycle rides will be discussed and agreed with event organisers, Greater Manchester Police and Trafford Metropolitan Borough Council, in order to minimise mutual impacts on the events and TPL services.

### **Construction**

Trafford Park is an employment centre with different businesses operating for 24 hours a day and 7 days a week. Continual access to the city will be required at all times during the construction of the TPL. Temporarily the construction of the TPL will affect the movement of traffic. Appropriate arrangements will be required to facilitate vehicular and pedestrian access to allow Trafford Park to continue to function and it will ultimately be the responsibility of the contractor to prepare a Construction Management Plan to demonstrate how the construction impacts will be minimised.

Underpinning the management of impacts is the draft Code of Construction Practice (CoCP), developed by TfGM for the construction of the TPL, which addresses the contractor's general obligations with respect to minimising the impact of construction activities on local residents, businesses, the general public and the surroundings in the vicinity of the works. The CoCP applies to the construction phase of the TPL scheme, and will be in addition to statutory regulations. The contractor, his servants, agents and employees will be required to comply in full with the terms of the CoCP, and to incorporate it in any contract or sub-contract relating to any aspect of the scheme.

Extensive planning and liaison will be required between the contractor, TfGM and TMBC. It will be necessary to continue the planning exercise and revise plans throughout the construction of the works. TfGM will continue to liaise with stakeholders through-out the construction phase to minimise disruption.

### **Overall Conclusion**

Based on the summaries provided above it can be concluded the TPL scheme can be introduced without causing significant detriment to the existing highway, the wider public transport system and its users. Generally the scheme will result in positive benefits for the users of Trafford Park and the proposals and mitigation measures to offset impacts are wholly aligned with the visions of TMBC, LTP3 and other complementary schemes.

## **1 Introduction**

### **1.1 Existing Metrolink Routes**

1.1.1 Since its launch in 1992, with the opening of the Phase 1 Altrincham and Bury Lines, including a short section of on-street running through the city centre and a link to Piccadilly Station, Metrolink has become an essential part of Greater Manchester's public transport network. In 2000 the Phase 2 Eccles extension was fully opened.

1.1.2 The implementation of Phase 3 extensions has significantly expanded the Metrolink network which now carries approximately 30 million passengers per year and currently comprises 92.5km of track and 92 stops over the following six lines:

- Altrincham Line;
- Bury Line;
- Eccles Line & MediaCityUK spur;
- East Didsbury Line (completed in May 2013)
- Ashton-under-Lyne Line (completed in October 2013);
- Oldham and Rochdale Line (completed in January 2014 including the town centre sections); and
- Airport Line (opening November 2014)

1.1.3 The existing Metrolink network is shown in Figure 1.1 overleaf.

### **1.2 Future Metrolink Expansion**

1.2.1 Transport for Greater Manchester (TfGM) secured a Transport and Works Act Order in 2013 for the construction of a second line across Manchester City Centre, known as Second City Crossing (2CC). 2CC will run for approximately 1.3 km connecting to the existing Metrolink city centre crossing in the locality of Manchester Central Convention Complex and Victoria Station. The scheme includes two stops at St. Peter's Square and Exchange Square. Construction work has commenced and the new line is expected to be completed in 2017.

1.2.2 The high frequency, accessible services that connect people across Greater Manchester to businesses, retail and leisure facilities have proved extremely popular.



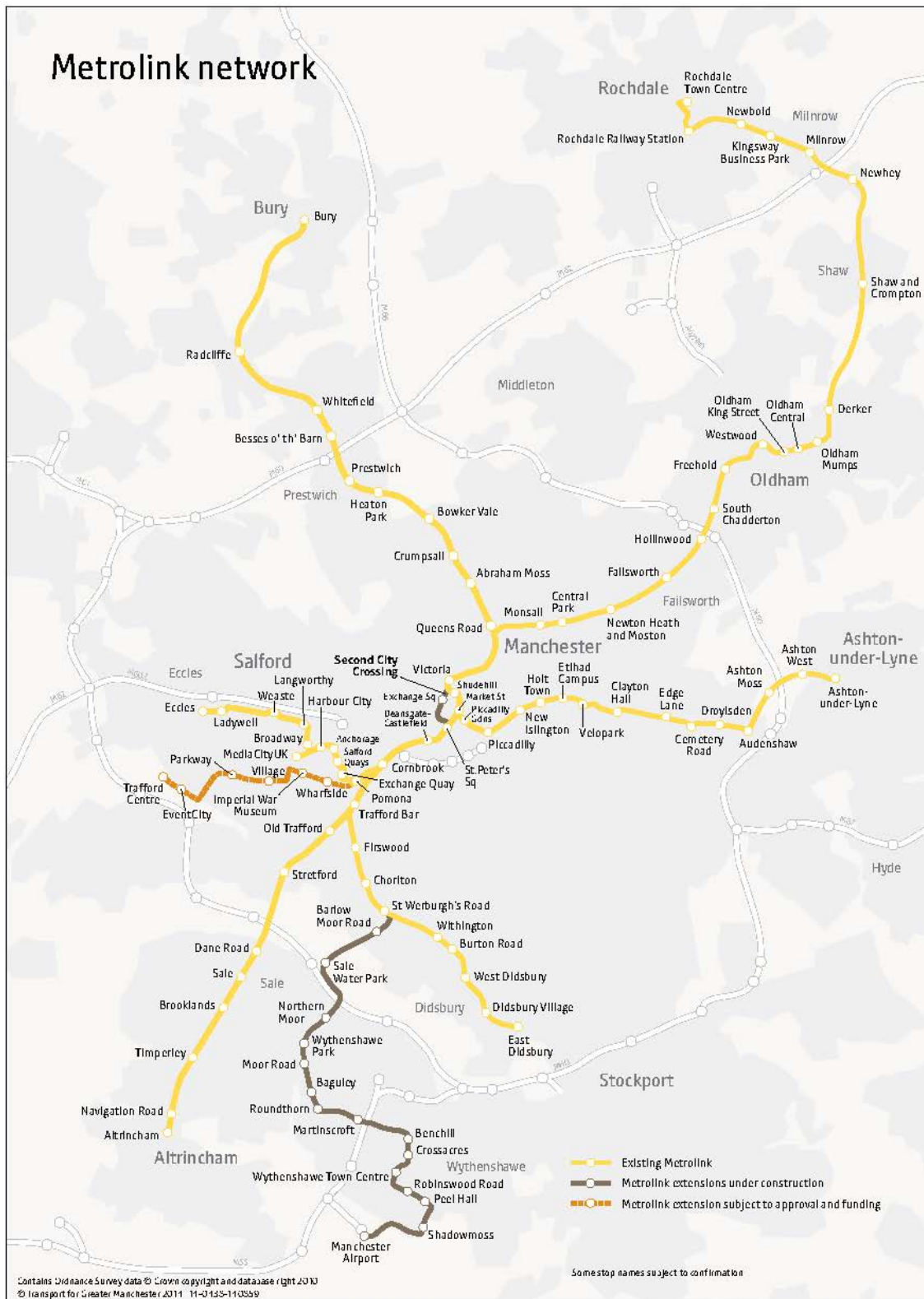


Figure 1.1 – The Metrolink Network (October 2014)

### **1.3 Trafford Park & Trafford Centre Rectangle**

#### **Base Line Conditions**

- 1.3.1 Trafford Park, located just to the west of the Regional Centre of Greater Manchester, is a significant employment and leisure site and one of the largest and most successful industrial parks in the UK, employing over 35,000 people. Trafford Park has virtually no residential population which means that those who are employed in Trafford Park need to be able to travel there by private car, public transport or use active modes. However, it is documented in Trafford Metropolitan Borough Council's (TMBC) Core Strategy (2012) that congestion and a lack of public transport choice is constraining future sustainable development within Trafford Park and the Trafford Centre Rectangle (TCR), both of which are currently major generators of car trips.
- 1.3.2 Traffic demand for the Trafford Centre complex and neighbouring attractions also results in congestion on the surrounding highway network. This is particularly the case during traditional shopper and leisure peak periods such as weekends and evenings, in the school holidays and the run up to the Christmas holidays and during the January sales period and does not always occur during the traditional AM and PM peaks.
- 1.3.3 Bus services to the Trafford Centre are frequently impacted by sporting and other events held at Old Trafford Football Stadium, Old Trafford Cricket Ground and Event City. During times when attendees are accessing or egressing these venues, observations show that journey times can be significantly extended. Bus boarding and alighting surveys undertaken in November 2012 have indicated that public transport mode share to the Trafford Centre is currently around only 6%, which is significantly less than other similar shopping centres. For example, Merry Hill (West Midlands), Lakeside (Essex) and Bluewater (Kent) have approximately 10%, 12% and 13% PT mode share respectively, while MetroCentre (Tyne & Wear) and Meadowhall (South Yorkshire) have achieved approximately 18%. Data collected by intu, the owners of the Trafford Centre, indicate that the mode share to the Centre by active modes is 2%, broken down as follows;
- 1% cycling
  - 1% walking

This is despite provision of cycle parking at the intu Trafford Centre and a network of pedestrian and cycle routes throughout Trafford Park.

### Future Growth

- 1.3.4 Within the Trafford Park Growth Strategy, the Trafford Park area is identified as the principal location for employment development within Trafford. Within the TMBC Core Strategy, Trafford Park is acknowledged to have a very significant role to play in the economy of the region and more specifically in terms of achieving a significant improvement in the performance of the sub-regional economy. In addition, Salford City Council and TMBC Planning Guidance identify an area of Trafford Park on the south bank of the Manchester Ship Canal to be developed as part of MediaCityUK. The first phase of MediaCityUK (in Salford) is now complete, open and occupied, with Phase 2 planning consent secured. The success of the existing MediaCityUK phase on the north bank of the Manchester Ship Canal, and the support of the local planning authorities to create ‘high value, hi-tech industries as well as maximising the tourism and leisure potential...’ suggests that future planning applications would be received positively although they may be constrained by the availability of sustainable travel choices.
- 1.3.5 The Trafford Local Plan (January 2012) describes the TCR as a key strategic part of Trafford, forming the western part of Trafford Park. Within the Trafford Local Plan the Council considers that the TCR can deliver:
- 1,050 residential units comprising predominantly accommodation suitable for families on the land known as “Trafford Quays”, commercial office (B1) space and community facilities;
  - 15 hectares of land for employment activity, a proportion of which is suitable for high quality commercial (B1) development, in line with Policy W1;
  - New community facilities to support those people using the development; and
  - A high quality (4\* minimum) hotel and conference facility, in the region of 200 bed spaces located close to Junction 9 of the M60 (at the eastern end of the Trafford Centre)
- 1.3.6 Due to the popularity of city centre living, the Regional Centre is experiencing an increased number of developments. In addition, there is an anticipated growth in population, along with an increasing number of university graduates remaining in the city. This, combined with the planned developments in the Trafford Park area and their dislocation from the Regional Centre, has the potential to add significant pressure on the existing transport network within and around Trafford Park, through business and leisure commuting activities. If no improvements are made to the existing transport network, sustainable development within Trafford Park will be difficult.

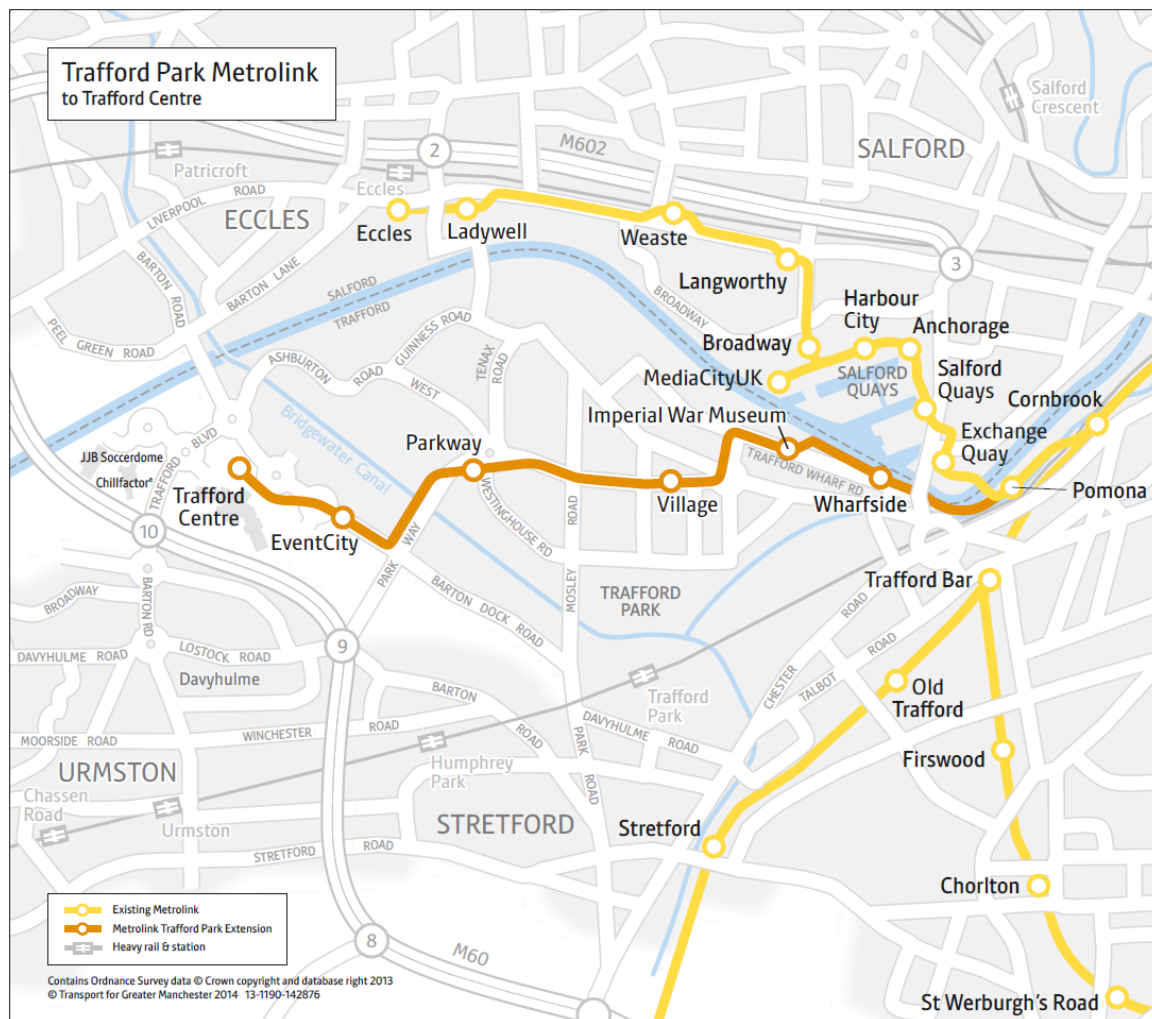
- 1.3.7 The Greater Manchester Strategy (GMS) (2009) sets out an agreed strategy for delivery by the Greater Manchester Combined Authority and the Local Enterprise Partnership. The refreshed GMS 2013-2020 identifies the TPL as a long standing investment priority, a key transport priority and Trafford Park as a key employment area. The GMS also identifies an Earn Back model as providing scope to extend Greater Manchester Transport Fund (GMTF) spending power by up to a further £500 million by 2020, enabling the delivery of further key transport priorities including the Metrolink extension to Trafford Park.
- 1.3.8 In addition to the TPL, the current Local Transport Plan (LTP3) identifies a further extension of Metrolink beyond the Trafford Centre to the City of Salford Stadium and Port Salford. LTP3 goes on to state that the extension will provide greatly improved public transport to the largest concentration of employment outside the Regional Centre.

#### **1.4 Metrolink Trafford Park Line (TPL) Proposals**

- 1.4.1 The proposed TPL consists of an approximately 5.5 km twin track extension to the Metrolink network, along with six new stops, providing a link between Manchester city centre and the employment and regeneration areas of Trafford Park and the Trafford Centre retail and leisure complex. The route and proposed stop locations can be seen in Figure 1.2.
- 1.4.2 The extension will generally comprise a segregated tram route which will minimise the interaction with and delay from other road traffic, thereby providing resilience and reliability of tram operations during times of highway congestion that can arise from events within the area, such as those frequently held at Old Trafford Football Stadium and the Trafford Centre retail and leisure complex. The tram route will be integrated into the existing urban realm through the use of appropriate design and finishes that complement and enhance the existing built environment.
- 1.4.3 The proposed scheme diverges from the existing Metrolink network at the elevated Pomona Metrolink stop, located adjacent to the Manchester Ship Canal (MSC), in the east to connect to the Trafford Centre in the west.
- 1.4.4 Expanding the existing Metrolink network through Trafford Park will provide a high quality and reliable public transport alternative to the private car to access areas of employment from areas of Greater Manchester with higher populations, levels of deprivation and low car ownership. The TPL scheme will expand access to the existing employment, leisure and tourism market within the Trafford Park area to the wider conurbation. This in turn will add to the attractiveness for businesses and leisure activities to locate within Trafford Park. Coupled with anticipated commercial and residential development

opportunities over the next 15 years, the expansion of the Metrolink network through Trafford Park has the potential to provide a catalyst for development.

- 1.4.5 The service to be operated on the TPL is currently assumed to continue northwards via Victoria to terminate at Crumpsall on the existing Bury Line. This will be subject to operational service patterns and demand on the network. This service would provide a direct connection between areas of deprivation in north Manchester and employment opportunities in Trafford Park, as well as assisting to alleviate overcrowding on current services on the Bury line.
- 1.4.6 The proposed names of the tram stops which form part of the TPL scheme proposals and which are used throughout this document are subject to further approval and could change.



**Figure 1.2 – TPL Route Map**

## **1.5 Scheme Objectives**

### **1.5.1 The TPL scheme objectives are to;**

- stimulate regeneration and economic growth, improve public transport provision and provide a visible commitment to public transport infrastructure to encourage inward investment leading to a higher density of development, allowing Trafford Park to perform a greater strategic role in the growth of Greater Manchester's economy;
- improve public transport connections to employment sites in Trafford Park to increase access to employment, especially for those in areas of north, east and south Greater Manchester; and
- enhance the capacity of the public transport network to support sustainable growth of leisure and retail activity. An attractive, high quality, reliable alternative to the private car to encourage modal shift, reducing traffic congestion and its environmental and economic impacts. In addition, the scheme should promote greater social equality and accessibility for vulnerable groups by providing enhanced public transport access where car use is currently seen by many as the only option. Enhanced accessibility to employment to allow vulnerable groups to more actively participate in the economy.

### **1.5.2 An attractive, high quality, reliable alternative to the private car is anticipated to encourage economic growth, modal shift, reducing traffic congestion and its environmental and economic impacts. In addition, the scheme will promote greater social equality and accessibility for vulnerable groups by providing enhanced public transport access where car use is currently seen by many as the only option. Accessibility to employment will allow vulnerable groups to participate more actively in the economy.**

## **2 The Transport Assessment**

### **2.1 Background**

- 2.1.1 The implementation of the TPL will provide an important part of new public transport infrastructure, and in this respect, does not represent a traditional land use development that increases demand for car-based travel. In conjunction with the remainder of the Metrolink network, the TPL will cater for increased travel demand as it improves public transport accessibility to the major employment and commercial sites within Trafford Park, and enhances Metrolink's integration with all modes of transport. It will therefore have an impact on all transport modes within the locality through which it passes.

### **2.2 Purpose of the Study**

- 2.2.1 This Transport Assessment (TA) study (the Study) examines the permanent changes the TPL scheme will have on the transport network. This provides an understanding of how the scheme will function alongside other transport modes and how it may affect highway and public transport users. The changes resulting from the implementation of the scheme may be positive or negative. Where a significant impact is identified the measures designed to avoid, reduce or remedy any potential adverse consequences are detailed.
- 2.2.2 This TA has been prepared in accordance with the Department for Transport's (DfT) 2007 Guidance on Transport Assessment (GTA), which presents a qualitative assessment based on value judgements aided by statistical information. It examines the impacts on all modes of transport such as public transport, cycling and walking, which may be affected by the presence of the tram line within Trafford.
- 2.2.3 Traffic modelling and analysis forms a significant element of the assessment. The TA considers the junctions directly affected by the TPL to determine appropriate control interfaces as well as those away from the route where a significant impact on junction operation has been identified. The TA summarises the detailed analysis that has been undertaken.
- 2.2.4 This TA provides an examination and understanding of the implications of the scheme on transportation issues. It is intended to complement the information provided in the Environmental Statement (ES) concerning transportation issues and accompanies the Transport and Works Act Order (TWAO) application for the scheme.

## **2.3 Geographic Extent of the Study**

2.3.1 Section 5.13 describes how the area of influence of the scheme has been derived and used for the purpose of understanding the likely impacts of predicted changes in traffic flow following the introduction of TPL. The impacts on other modes have generally been considered along the corridor through which the scheme will pass and the adjacent highway network; including:

- Trafford Wharf Road (from Trafford Road to Warren Bruce Road)
- Warren Bruce Road
- Village Way
- Park Way
- Barton Dock Road

2.3.2 TMBC, as the local planning and highway authority, has been involved in the derivation of the extent of the study and with the methodology adopted.

## **2.4 Structure of the Assessment**

2.4.1 The TA is structured as follows:

- Section 3 – Scheme Proposals & Description
- Section 4 – Policy Review
- Section 5 – Impact on Traffic
- Section 6 – Impact on Bus Services
- Section 7 – Impact on Light Rail
- Section 8 – Impact on Heavy Rail
- Section 9 – Impact on Active Travel Modes
- Section 10 – Impact on Parking
- Section 11 – Impact on Taxis
- Section 12 – Impact on Access and Servicing
- Section 13 – Impact on Road Safety
- Section 14 – Impact on Events
- Section 15 – Impact of Construction



### **3 Scheme Proposals & Description**

#### **3.1 Introduction**

- 3.1.1 The proposed TPL consists of an approximately 5.5 km twin track extension to the Metrolink network, along with six new stops, providing a link between Manchester city centre and the employment and regeneration areas of Trafford Park and the Trafford Centre retail and leisure complex. The route and proposed stop locations are presented in Figure 1.2.
- 3.1.2 The extension will generally comprise a segregated tram route. Segregation will minimise the interaction with and delay from other road traffic thereby providing resilience and reliability of tram operations during times of highway congestion that can arise from events within the area, such as those frequently held at Old Trafford Football Stadium and the Trafford Centre retail and leisure complex. The tram route will cross the highway at-grade at junctions and these will need to be remodelled.
- 3.1.3 The scheme has been designed to provide a similar specification to the remainder of the Metrolink network. The design has taken full account of relevant design standards and guidance. This includes the Office of Rail Regulation Railway Safety Publication 2 Guidance on Tramways which sets out guidance on issues to be considered in the design and operation of tram schemes, as well as the alignment design parameters adopted by TfGM for the design of the Phase 3 Extensions.
- 3.1.4 The proposed scheme diverges from the existing Metrolink network at the elevated Pomona Metrolink stop. From here, the proposed alignment will continue westwards immediately adjacent to the southern bank of the Manchester Ship Canal, passing underneath the Trafford Road bridges. The proposed alignment continues westbound along the quayside of the canal before turning inland to run in a segregated alignment in the centre of Trafford Wharf Road before turning south in a segregated alignment to the western side of Warren Bruce Road, crossing Village Circle roundabout and turning west on to A5081 Village Way, where it runs in a segregated corridor to the north of Village Way until just prior to Parkway Circle.

- 3.1.5 The existing Parkway Circle roundabout is proposed to be remodelled into a series of signalised junctions. The remodelled series of junctions will;
- help alleviate the existing peak period congestion;
  - accommodate the tram route; and
  - release existing highway land for development, such as the proposed Park and Ride site.
- 3.1.6 Just prior to the existing Parkway Circle the proposed alignment will cross from the northern to the southern side of Village Way to serve the proposed park and ride facility before continuing to cross A5081 Park Way. It is then anticipated the alignment will continue in a south-westerly direction, crossing the Bridgewater Canal on a new bridge, adjacent to and segregated from the north-eastbound carriageway of the A5081 Park Way before turning right to run in a north-westerly direction along the north side of Barton Dock Road. The proposed alignment then crosses over the highway in the vicinity of the Trafford Centre footbridge (which links the Trafford Centre and Barton Square developments) to terminate in the vicinity of the Selfridges entrance of the Trafford Centre. The tram will be afforded priority through the junctions it passes through.
- 3.1.7 This section of the TA provides a more detailed overview of the key changes to the existing highway that will arise from the implementation of the proposed TPL and should be read in conjunction with the illustrative Technical Development (TD) scheme plans (drawings MMD-327551-DR-010-001 to 011) included in Appendix A. For those not familiar with the route corridor a summary of the existing conditions is provided in Appendix B.
- 3.1.8 The inclusion of a tram route within the existing Trafford Park urban environment will result in modifications to the existing highway network to benefit vehicular traffic and those travelling by active modes i.e. pedestrian and cyclists. The trams will operate on a fixed and clearly identified route and require an uninterrupted passage through the street in which they operate to achieve the most efficient service. The traffic management proposals (which include significant segregation of the tram route from other vehicular traffic) aim to control and manage all traffic efficiently, whilst enabling a reliable journey time for the tram that is resilient to the prevailing highway conditions. It is therefore intended to introduce changes to the highway layout and Traffic Regulation Orders (TROs) that will, as far reasonably possible, provide a clear passage for the tram. The proposed highway changes are summarised on drawings MMD-327551-DR-100-061 to 064 included in Appendix C.

3.1.9 For the purposes of describing the proposed TPL route and assessing its impacts, the anticipated route corridor has been broken down into the five sections described below and shown in Figure 3.1:

- Section 1 – Pomona Stop to Wharfside Stop
- Section 2 – Wharfside Stop to Warren Bruce Road
- Section 3 – Village Way (including Village Circle)
- Section 4 – Parkway Circle and Park Way
- Section 5 – Barton Dock Road (Park Way to Trafford Centre stop)

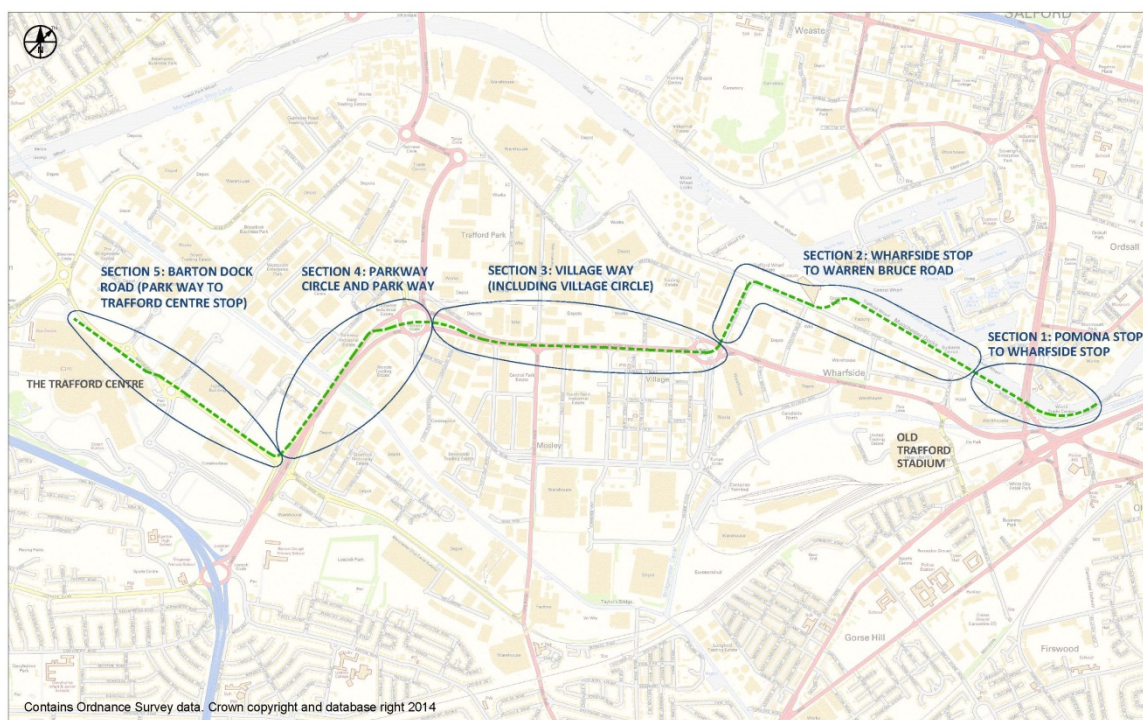


Figure 3.1 – TPL Assessment Zones

### 3.2 Section 1 – Pomona Stop to Wharfside Stop (TD plan Nos. 001 & 002)

3.2.1 The proposed TPL route commences at the existing Pomona tram stop and instead of turning to the north-west to follow the existing Eccles Line, the tracks are proposed to continue in a westerly direction to flank the southern bank of the Manchester Ship Canal (MSC). The tram route will descend from the Pomona Viaduct to ground level via a new structure.

- 3.2.2 Once at ground level the tram route will run adjacent to the Manchester Ship Canal, passing beneath the Trafford Road bridges, through openings designed and constructed for the route in the late 1990s, to the proposed location of the Wharfside stop. The scheme retains the existing canal side path and the connection between Pomona Strand and the canal side path. New retaining walls / embankments will be required to accommodate the level difference between the tram route and Pomona Strand
- 3.2.3 The proposed location of the Wharfside stop will require some land acquisition (such as the Samuel Platt's public house) and the prohibition of vehicular access to Trafford Wharf Road between its junctions with Victoria Place and Sir Alex Ferguson Way. Similarly vehicle access to Wharf End will also be prohibited. However both roads will remain open to pedestrians and cyclists. This will, in addition to providing space for crowd management (corralling and ticket checking facilities), enable the enhancement of the urban realm and interface with other proposed developments in this area. The developments include the potential Clippers Quay Bridge and the Manchester Ship Canal water taxi landing stages that are currently being promoted by Salford City Council.
- 3.2.4 To mitigate the prohibition of vehicular access referred to above it is proposed to;
- relocate the affected property accesses to Victoria Place;
  - relocate the existing on-street parking from Wharf End to the remodelled junction of Trafford Wharf Road / Victoria Place; and
  - re-open the junction of Victoria Place and Sir Alex Ferguson Way for east – west movements.
- 3.2.5 Re-opening the Victoria Place and Sir Alex Ferguson Way junction is proposed instead of allowing traffic to re-route to Wharfside Way and turn right onto Sir Alex Ferguson Way to access Trafford Wharf Road because;
- traffic approaching from the north, Trafford Road (A5063) would have to navigate around the White City gyratory to access Wharfside Way adding additional journey length, time and traffic load onto this junction. Given the nature of the developed urban environment modifications to the gyratory are not considered practicable;
  - initial analysis of the Wharfside Way / Sir Alex Ferguson Way / Sir Matt Busby Way junction indicated that the additional traffic load would result in this junction operating over capacity; and
  - bus services that use the eastern of Trafford Wharf Road would have to divert to a new route and this would affect bus stop provision at the eastern end of Trafford Wharf Road.

- 3.2.6 On highway safety grounds, the re-opening the Victoria Place and Sir Alex Ferguson Way junction will require Sir Alex Ferguson Way to be closed at its junction with Wharfside Way for all movements with the exception of the left turn from Wharfside Way onto Sir Alex Ferguson Way. This closure is not consider detrimental as access from the west is unaffected and access from the east remains, albeit directly onto Trafford Wharf Road rather than via Wharfside Way.
- 3.2.7 In terms of track infrastructure, a trailing crossover is currently proposed on the western side of Wharfside stop. This will permit additional vehicles to be routed into the inbound platform to provide additional inbound capacity during events such as those at the Old Trafford Football Stadium.
- 3.2.8 This section of the route has a limited impact on other transport modes owing to its significant segregation. Therefore it is discussed in less detail within the remainder of this Study.

### **3.3 Section 2 – Wharfside Stop to Warren Bruce Road (TD plan Nos. 002 to 005)**

- 3.3.1 From Wharfside stop the proposed tram route will continue westwards along the southern quayside of the Manchester Ship Canal as far as the industrial unit to the east of the Quay West building. This will require the acquisition and demolition of properties in the area of the Wharfside Business Centre and the remodelling of the public realm along the canal quayside although pedestrian and cycle access will be retained. At the industrial unit to the east of the Quay West building the alignment will turn in land, requiring the acquisition and demolition of this property, to reach a second stop that will be located off highway within the car park of the Quay West development. This stop (Imperial War Museum) will serve the areas around the Imperial War Museum North and ITV studios and the Lowry and MediaCityUK developments located on the northern bank of the Manchester Ship Canal, which are easily accessible via existing footbridges. The access to the Quay West development will need to be relocated / remodelled.
- 3.3.2 From the Imperial War Museum stop, the alignment continues westwards, via a signalised junction, to run segregated in the centre of Trafford Wharf Road. Land acquisition (generally comprising landscaping and part of the frontage to the Rank Hovis Trafford Mills) will be required to accommodate the realignment / widening of Trafford Wharf Road. The existing accesses to Trafford Mills from Trafford Wharf Road will be retained but restricted to left-in, left-out movements. Similarly the accesses to the Imperial War Museum North (IWMN) development are also proposed to be restricted to left-in, left-out movements only.

- 3.3.3 To mitigate the impact on egress from the IWMN development for westward movements it is proposed to provide a new junction on Wharfside Way with Waterside for southbound movements only. This will also mitigate the impacts of the proposed modifications to the Wharfside Way / Sir Alex Ferguson Way junction for properties on Waterside and Trafford Wharf Road.
- 3.3.4 With the introduction of the new junction controlling tram and traffic conflicts to the west of the Imperial War Museum stop, Elevator Road at its junction with Trafford Wharf Road is proposed to be made left-in / left-out.
- 3.3.5 The existing footway and cycleway provision along Trafford Wharf Road will be retained / re-provided and bus stops will be relocated taking account of the new highway layout.
- 3.3.6 At the junction of Trafford Wharf Road / Warren Bruce Road, which will be remodelled to accommodate the proposed tramway, the proposed tramway will turn south to run segregated along the western side. A turn back siding is proposed, to allow additional trams to be entered into service in the inbound direction (towards Manchester city centre) as required, for example during events such as those at Old Trafford Football Stadium, to maximise the passenger carrying capacity. To accommodate this facility it is proposed to reduce the carriageway width so that the existing on-street existing parking is removed, however the existing single lane in each direction is retained. The existing cycle facility is anticipated to be relocated to the eastern side where a shared surface would then be provided. Highway crossing facilities would be improved by the introduction of signalled pedestrian crossings facilities within the re-modelled junction. These proposals align with wider plans being promoted separately by TfGM for the provision of improved cycle facilities within the Trafford Park area as part of active travel initiatives.

### **3.4 Section 3 – Village Way, including Village Circle (TD plan Nos. 005 to -007)**

- 3.4.1 On reaching Village Circle (a signalised roundabout) it is proposed that the tram route will pass through the middle of the roundabout to turn west to run along Village Way (A5081). This will necessitate the remodelling of the Warren Bruce Road and Village Way entries and exits of the roundabout to accommodate tram movements. The eastbound and westbound carriageways of Village Way on the immediate approach to / exit from the roundabout will also need to be realigned to accommodate the tram route and avoid the need to acquire and demolish property on the northern side.

3.4.2 The proposed tram route will continue to run westward, in a segregated corridor to the north of A5081 Village Way, to a third stop (Village) proposed to be located just east of Third Avenue. This stop will serve the commercial area known as Village and surrounding environs. Third Avenue is anticipated to be closed to vehicular traffic at the junction with Village Way. A new turning area, suitable for HGVs, will be provided on Third Avenue to retain access and servicing to properties located on the eastern side of Third Avenue. A new private means of access for HGVs is also proposed off Third Avenue to the land and works (CHEP UK Ltd) that lies to the west along with a new HGV egress to Trafford Park Road. Beyond the stop the tram route is anticipated to continue to run in a segregated corridor on the northern side of Village Way until its approach to Parkway Circle.

3.4.3 Land acquisition, along with the remodelling of Village Way and its junctions with Fifth Avenue and Mosley Road, will be required to form the segregated tram route as described above. The existing accesses to CHEP UK Ltd and Illingworth Ingham, which will be crossed by the tram route, will be remodelled or re-provided. To minimise the overall land take required the central reservation will be removed between Fifth Avenue and Village Way, the right turn into Fifth Avenue and Mosley Road will be prohibited and the eastbound carriageway will be narrowed to one lane for around 100m between its junctions with Mosley Road and Fifth Avenue in the eastbound direction.

3.4.4 To mitigate the proposed movement prohibitions it is proposed to;

- open the northern end of Mosley Road to two-way movements and permit traffic to turn left on to Mosley Road from Trafford Park Road; and
- provide a new junction between Park Way and Westinghouse Road which allows access to the centre of the Trafford Park area.

### **3.5 Parkway Circle and Park Way (TD plan Nos. 007 & 008)**

3.5.1 The proposals at Parkway Circle will significantly modify this area. To deliver the improvements described in paragraph 3.1.5, it is proposed to reconfigure the roundabout as a series of signalised junctions as follows:

- Realigned Ashburton Road West / Tenax Road junction.
- Village Way / Park Way / Tenax Road junction (Parkway Junction).
- Realigned Westinghouse Road / Park Way junction.

- 3.5.2 The proposed layout retains all movements with the exception of;
- the right turn and ahead movements from Westinghouse Road. These routes could be accessed from Mosley Road, Fifth Avenue or Europa Way; and
  - u-turning traffic. Such movements would be available using other roads in the Trafford Park area noting that Village Way, Westinghouse Road and Europa Way form a circular network around the central portion of the Trafford Park area and Tenax Road, Trafford Park Road and Village Way form a circular network to the north.
- 3.5.3 The proposed tram route will cross Village Way to the east of the new Village Way / Park Way / Tenax Road junction to run around the southern side of the junction. Here it will connect to the fourth stop (Parkway) at the proposed park and ride site, before crossing Park Way at the new realigned Westinghouse Road / Park Way junction to run along the western side of Park Way. An eastbound slip road will be provided from Village Way to Ashbridge in order to maintain property access.
- 3.5.4 Beyond the Parkway stop, the alignment will cross Park Way to run along its western side. The tram route is anticipated to be supported on a new earthwork embankment and a new single span bridge over the Bridgewater Canal. Beyond the new bridge it is proposed the tram route will ramp down to the existing ground level by Barton Dock Road, which will require new retaining walls to accommodate the level difference and to minimise land acquisition. It is proposed to include a new shared footpath and cycleway alongside the tram route, which will improve connectivity for active modes between the central Trafford Park area and Trafford Centre developments and residential areas to the south. This connectivity for active modes is currently very poor.
- 3.5.5 At detailed design stage, in conjunction with TMBC as local highway authority, the existing speed limits will be reviewed in and around the area of the proposed junction remodelling.



### **3.6 Section 5 – Barton Dock Road (Park Way to Trafford Centre Stop) (TD plan Nos. 008 to 011)**

- 3.6.1 At Barton Dock Road the anticipated alignment turns right and runs in a north-westerly direction in the existing verge to the north of Barton Dock Road, in its own corridor, crossing Mercury Way and running adjacent to the EventCity development. To accommodate the tram route crossing at Mercury Way it will be necessary to signalise the junction of Barton Dock Road / Mercury Way, which is currently a priority junction. The proposals retain all traffic movements. For the safe and efficient operation of the junction, the proposed layout introduces segregated left and right turn facilities from Barton Dock Road into Mercury Way. This segregation will;
- properly direct drivers making different movements; and
  - allow tram and traffic movements to be run safely at the same time.
- 3.6.2 A fifth stop (EventCity) is anticipated to be located on the western side of Phoenix Way serving EventCity, Barton Square and providing access to the eastern end of the Trafford Centre via the existing footbridge.
- 3.6.3 As with Parkway Circle it is proposed to convert the Peel Circle roundabout into a signalised junction. This will not only provide for the effective control of tram and traffic movements but will release land for the provision of the stop. The proposed junction will comprise a cross roads of Barton Dock Road / Phoenix Way / Festival Way, with all movements being permitted with the exception of the left turn into Phoenix Way. This is proposed to be re-provided to the west of the Barton Square development via a new access routed along the corridor previously promoted for the TPL in the 1990s. This proposed arrangement will allow tram and ahead traffic movements on Barton Dock Road to run simultaneously. Importantly the proposed junction will include pedestrian crossing facilities to cater for the significant movements across Barton Dock Road and Phoenix Way during events at EventCity. It is also proposed to provide cycle facilities along the new access west of Barton Square to link the cycle facilities on Barton Dock Road with the Bridgewater Canal.
- 3.6.4 The intu Trafford Centre car park access is proposed be remodelled. Existing count data indicates that the majority of the traffic entering the car park approaches from the east and a significant proportion exists to the west. Accordingly dedicated accesses for these movements are provided within the proposals from and to Barton Dock Road. It is proposed that all other movements will be provided from a new car park access road. This proposal will require the existing surface car park (adjacent to the decked car park) to be remodelled.

- 3.6.5 A trailing crossover is proposed to the east of the EventCity stop to allow trams to be turned back should there be an incident in the Trafford Centre area which would prevent a tram from reaching the terminus.
- 3.6.6 Beyond the stop, the alignment is proposed cross Barton Dock Road to run in the verge / emergency access road on its southern side adjacent to the intu Trafford Centre car parks before reaching the Trafford Centre stop. Both facing and trailing crossovers are proposed to be provided to route trams into the platforms. The Trafford Centre stop is proposed in the vicinity of the Selfridges entrance of the intu Trafford Centre and improvements to the pedestrian access between the stop location and intu Trafford Centre mall entrance are proposed.
- 3.6.7 The proposed TPL scheme includes an improved walking route between the Metrolink stop and the Trafford Centre Bus Station to provide for passengers wishing to interchange between public transport modes at the Trafford Centre.

### **3.7 Operations**

- 3.7.1 The service to be operated on the TPL is currently assumed to continue northwards via Victoria to terminate at Crumpsall on the existing Bury Line. Any enhancement works required to provide turnback facilities do not form part of the Transport and Work Act Order. It is anticipated they will be implemented under General Permitted Development Rights, and are therefore not considered further within this assessment.
- 3.7.2 The TPL will in general be designed to accommodate the operation of double unit trams operating at ten trams per hour. However, a greater service frequency may be used at certain times, for example to enhance the capacity for moving crowds after events at the Old Trafford Football Stadium or at Event City. The minimum service frequency for the TPL is currently assumed to be five single trams per hour in each direction to serve the Trafford Park area and the Trafford Centre, offering as a minimum an additional hourly capacity for 1,000 passengers per direction (assuming normal loading).
- 3.7.3 The estimated journey time between Pomona and the Trafford Centre is approximately 15.
- 3.7.4 The increased tram frequency within the city centre was assessed as part of the Transport Assessment for the Metrolink Second City Crossing (2CC) and is therefore not considered further within this assessment.

### **3.8 Scheme Delivery**

- 3.8.1 A procurement strategy will be developed which could be similar to the recent expansion with a single construction contract.

## 4 Policy Review

4.1.1 This chapter provides an overview of the planning policy of most relevance to the proposed Metrolink TPL. Relevant planning policy has been considered at three levels:

- National
- Sub Regional
- Local

## 4.2 National Policy

### ‘National Planning Policy Framework’ (2012)

4.2.1 The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied. The Town and Country Planning Act 1990 requires that applications for planning permission must be determined in accordance with the Development Plan, unless material considerations indicate otherwise. The National Planning Policy Framework must be taken into account in the preparation of local and neighbourhood plans and is a material consideration in planning decisions.

4.2.2 Supporting sustainable development is the overarching purpose of the planning system. There are three dimensions to sustainable development: economic, social and environmental, which is discussed in further detail below;

- **An economic role** – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation;
- **A social role** - supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of the present and future generations; and
- **An environmental role** – contributing to protecting and enhancing our natural, built and historic environment.

4.2.3 Chapter 4 ‘Promoting Sustainable Transport’, identifies the important role that transport can play in facilitating sustainable development and contribute to wider sustainability and health objectives. *“The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel”.*

- 4.2.4 Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. Of particular relevance to this Transport Assessment, paragraph 31 notes, “Local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development, including... transport investment necessary to support strategies for the growth of ports, airports or other major generators of travel demand in their areas.”
- 4.2.5 All developments that generate significant amounts of movement should be supported by a Transport Statement or a Transport Assessment that takes account of whether;
- the opportunities for sustainable transport modes have been taken up to reduce the need for major transport infrastructure;
  - safe and suitable access to the site can be achieved for all people; and
  - improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe. The cumulative impacts of the TPL scheme will be addressed in the accompanying Environmental Statement.

**‘Creating growth, cutting carbon: making sustainable local transport happen’,  
January 2011**

- 4.2.6 In 2011 the Department for Transport (DfT) produced a White Paper entitled ‘Creating Growth, Cutting Carbon – Making Sustainable Local Transport Happen’. This maintains the focus on enabling sustainable mode choices and active travel to reduce dependency on car journeys through greater integration with local land use planning. The 2011 White Paper also looks to decentralise planning and economic power through the Localism Bill and Regional Growth Funds/ Local Enterprise partnerships. This document emphasises;
- the contribution of transport to the economy;
  - the challenge of cutting carbon from the transport system;
  - the challenge of making the best use of existing infrastructure to reduce; congestion; and
  - the promotion of sustainable modes.

- 4.2.7 It is considered that TPL will provide opportunities to improve public transport access to Trafford Park, one of the main employment centres in Greater Manchester. It is anticipated that the scheme could reduce vehicular congestion through encouragement to utilise the Metrolink network. For this reason it is considered that the TPL scheme is compliant with national policy.

**‘Future of Transport – A network for 2030’, July 2004**

- 4.2.8 This White Paper, produced by DfT, provides guidance on the future policies in transport, with an emphasis on three central themes; sustained long-term investment, improvement in transport management and planning for the future. The document outlines the need for a transport network that can meet the challenges of a growing economy and the increasing demand for travel, but can also achieve environmental objectives.

- 4.2.9 The three central themes are;

- **sustained investment** – the spending review outlined the Government’s commitment to deliver sustained improvements to transport networks;
- **improvements in transport management** – reorganising the rail industry to improve performance, drive down costs and get better value from public spending; and
- **planning ahead** – national, regional and local governments will ensure that transport decisions are taken alongside decisions on liveability, sustainable communities and other policy areas.

- 4.2.10 TfGM’s predecessor (GMPTE) produced the Greater Manchester Integrated Transport Strategy (2005) (GMITS) in response to this White Paper. GMITS underpins all the subsequent public transport investment in Greater Manchester.

**4.3 Sub Regional Policy**

**Greater Manchester Combined Authority (GMCA), The Greater Manchester Strategy, 2013 - 2020**

- 4.3.1 The Greater Manchester Strategy sets out a number of key priorities across regeneration, housing and transport to deliver integrated solutions that will help the conurbation to reach its potential. Improved transport connectivity is seen as one such priority. Continued and sustained economic growth will be a function of the relative ease by which people are able to travel to work, education, retail or leisure. Economic growth will also be a function of the relative ease by which businesses will be able to access markets and distribute goods and services.

- 4.3.2 The Strategy identifies a number of future schemes in Greater Manchester, including the Northern Rail Hub, the A6 to Manchester Airport Relief Road and the Metrolink TPL.
- 4.3.3 One of the strategic objectives for transport is: *"To prioritise cost-effective major transport interventions that will create maximum economic benefit to the city-region, subject to positive social and environmental outcomes."*
- 4.3.4 Against this background, the Greater Manchester Authorities have prioritised a programme of major transport schemes for delivery by 2020 that will contribute most to economic growth, increased productivity and employment, whilst also contributing to positive social and environmental benefits overall. The agreed list of schemes comprises a £1.5 billion programme: the Greater Manchester Transport Fund (GMTF) which included the recent successful expansion of Metrolink to East Manchester, South Manchester, Oldham and Rochdale, East Didsbury and Manchester Airport. The Second City Crossing (also part of the programme) is currently under construction.
- 4.3.5 The UK Government announced the Greater Manchester City Deal in March 2012, which includes a 'Revolving Infrastructure Fund' that allows Greater Manchester to 'earn back' additional tax revenues resulting from local investment in infrastructure and has been identified as having potential to fund the TPL.

#### **Greater Manchester's Third Local Transport Plan, 2011/12 – 2015/16**

- 4.3.6 In 2011, TfGM and the Greater Manchester Combined Authority (GMCA) published the third Local Transport Plan (LTP3) covering the period from 2011/12 to 2015/16, setting out transportation policies and proposals for the five year period. The LTP3 also contains a long term strategy to 2026.
- 4.3.7 The key policies of the plan are the provision of safe, integrated, efficient and economic transport to, from and within the area. The policies contained within the plan build upon the previous Local Transport Plan 2. However, a key role of LTP3 is to support the delivery of the Greater Manchester Strategy and the emerging Core Strategies of the district councils. LTP3 aims to ensure that development in priority locations is supported by appropriate transport infrastructure and services. LTP3 also recognises the need to greatly increase the mode share of public transport in the regional centre, in order to keep the level of car traffic more or less constant as the economy grows.

4.3.8 The core objectives for LTP3 are;

- to ensure the transport network supports the Greater Manchester economy to improve the life chances of residents and business;
- to ensure that carbon emissions from transport are reduced in line with UK Government targets in order to minimise the impact of climate change;
- to ensure that the transport system facilitates active, healthy lifestyles and a reduction in the number of casualties, and that other adverse health impacts are minimised;
- to ensure that the design and maintenance of the transport network and provision of services supports sustainable neighbourhoods and public spaces, and provides equality of transport services; and
- to maximise value for money in the provision and maintenance of transport infrastructure and services.

4.3.9 Beyond the majority of committed schemes which have been completed and operational, the LTP3 includes other priority schemes, which are currently awaiting further funding.

## 4.4 Local Policy

### **Trafford Council's Local Area Implementation Plan (LAIP), March 2011**

- 4.4.1 The LAIP is Trafford Council's overall statement of Transport Strategy, which sets out Trafford's long term vision and objectives for transport and how these objectives support the Borough's Sustainable Community Strategy. The LAIP has been prepared in consultation with TfGM and the document annexes Greater Manchester's Local Transport Plan (LTP), which is discussed below. The LAIP supports the LTP by providing detailed local proposals in Trafford and identifies Trafford Council's long term vision for local transport.
- 4.4.2 The 'Vision' for transport in Trafford is for the Borough to have a transport network which is the rival of any across the north west of England. The local transport network should provide all the connections that local residents, businesses and visitors require, support economic growth and support the delivery of a sustainable, low-carbon economy.



4.4.3 In order to deliver this vision, a series of ‘Local Delivery Challenges’ need to be met. These are;

- tackle congestion on main roads and at key junctions;
- reduce the number of people killed & injured on Trafford’s roads;
- improve bus services and increase bus patronage;
- make it easier for people to get to key services;
- increase levels of walking and cycling;
- to maintain the highway network;
- improve local air quality by reducing harmful emissions from transport, and minimise wider adverse environmental impacts of the transport network; and
- work in partnership with Transport for Greater Manchester to increase the capacity and enhance the quality of Metrolink services, to deliver the new Altrincham Interchange and, subject to funding, improvements to Hale and Flixton rail stations.

4.4.4 It is anticipated that the TPL scheme would encourage the transfer of trips from private cars to trams, which could reduce congestion and contribute to local road safety improvements and the reduction of private vehicle emissions.

#### **Trafford Council’s Local Plan, January 2012**

4.4.5 The Trafford Core Strategy Local Plan (2012) provides the overarching planning policy framework for Trafford and sets the vision, spatial strategy and strategic policies for development in the Borough up to 2026. The Core Strategy was formally adopted in January 2012 and replaces in part a number of policies in the Revised Trafford UDP (2006). It forms Part One of the Local Plan. Emerging planning policy for TMBC includes Part 2 of the Local Plan, the Land Allocations Plan.

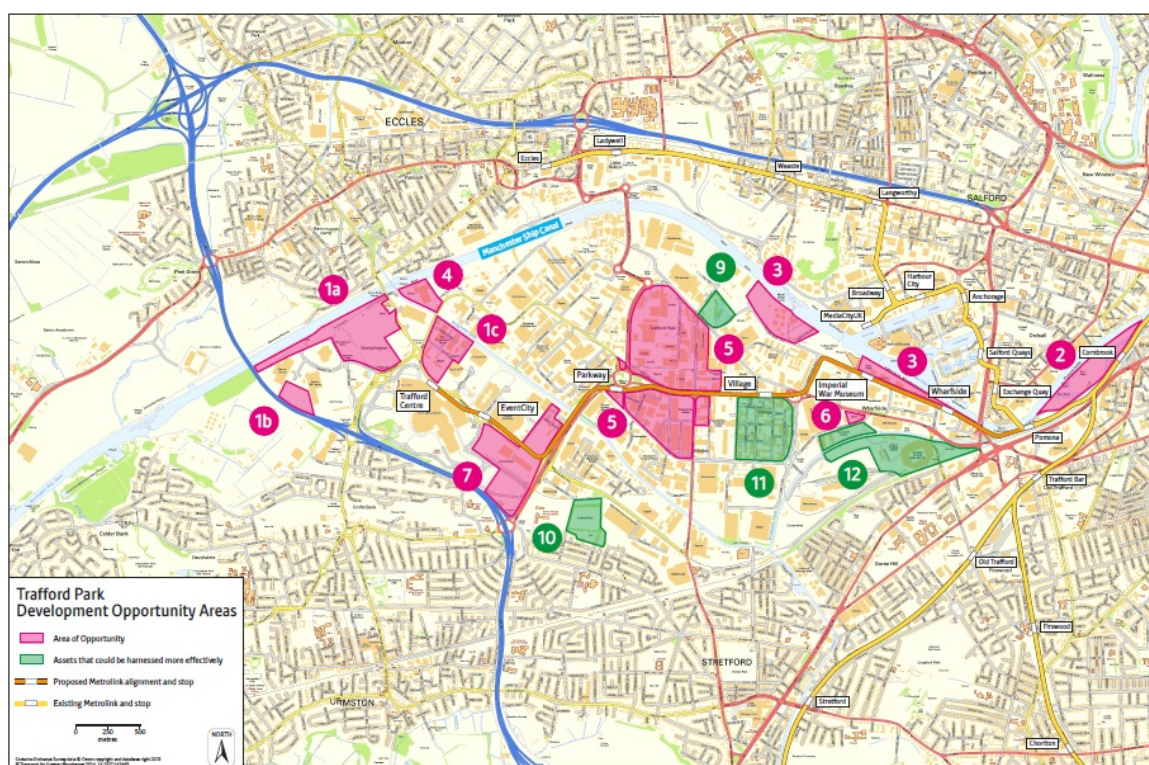
4.4.6 The Core Strategy provides the spatial expression of the Sustainable Community Strategy for Trafford. It outlines the Council’s vision and how this will be achieved. The Core Strategy provides the strategic framework against which decisions about the use of land can be planned. Transport provision is a key enabler of development, and the preparation of the Core Strategy has been undertaken in close alignment with the development of the Local Transport Plan and the Local Area Implementation Plan. Transport was a key consideration throughout the preparation of the document and the strong connection between transport and land use planning is critical to the success of Trafford’s vision for the future.

- 4.4.7 The Core Strategy vision for Trafford is to have vibrant, prosperous and well-designed communities which are served by an integrated transport network which offers a choice of travel modes. The economy of the Borough will be high performing and make a significant contribution to the North West and Greater Manchester City Region.
- 4.4.8 To achieve this vision, a number of objectives have been identified. Strategic Objective 6 (SO6) 'Reduce the need to travel' aims to promote development in the most sustainable locations and improve public transport accessibility in less sustainable locations. Furthermore, place objectives TPO3 and TPO14-16 each set out specific local transport objectives for Trafford Park.
- 4.4.9 Improving accessibility is recognised as being essential for the building of sustainable communities and creating a competitive and efficient labour market within the Borough. Accessibility to housing, employment, health, education, shopping, culture, sports and leisure and other essential facilities is influenced by the location of development and the quality and choice of transport links available to serve that development.
- 4.4.10 The TPL can be seen as complementary to and supporting the objectives and aims of the Core Strategy. The TPL will assist in improving choice of travel, enhancing the integrated public transport network and improving accessibility to / from the Trafford Park area by non-car modes of travel. TPL will also positively contribute to facilitating sustainable development in the Trafford Park area and across the City Region.

#### **Trafford Park Growth Strategy**

- 4.4.11 The Trafford Park Growth Strategy (the Growth Strategy), commissioned by the Trafford Park Business Neighbourhood Shadow Management Board (no longer in existence), quotes the Office for National Statistics 2010-2015 population projection estimates which forecast an estimated projected population growth in Trafford to be 15.9%, above the Greater Manchester (13.2%), North West (9.3%) and England (12.2%) averages.
- 4.4.12 Within the Growth Strategy, Trafford Park is identified as the principal location for employment development within Trafford Borough, where the dominant mode of transport is currently the private car. In 2008, The Highways Agency submitted a response to the TMBC Core Strategy consultation, in which they identified that 'The M60 and M602 currently suffer from peak hour congestion and increased development in this area may lead to further operational difficulties for the Agency.' On this basis, the Highways Agency stated in their consultation response that they *"would like to see measures developed and infrastructure put in place to facilitate... potential development sites, in order to reduce the need to travel by private car"*.

4.4.13 The Growth Strategy assessment for Trafford Park has identified a number of sites that are seen as ‘areas of opportunity’ or ‘assets that could be harnessed more effectively’. As shown in Figure 4.1, many of the routes lie in close proximity to the TPL route.



#### Key

1. Trafford Quays; 2. Pomona/Cornbrook; 3. Along Manchester Ship Cana; 4. Trafford Point; 5. Around Parkway Circle and along Ashburton Road; 6. Wharfside Point; 7. Container Base at Trafford Centre off Barton Dock Road/Park Way Junction and Land along Park Way; 8. Not mapped; 9. Ecology Park; 10. Lostock Park; 11. The Village; 12. Manchester United Football Stadium

**Figure 4.1 – Areas of Opportunity in Trafford Park**

## 4.5 Conclusions

- 4.5.1 The policies reviewed as part of this chapter demonstrate that there is strong support for the expansion of Metrolink within planning policy.
- 4.5.2 Both National and Sub Regional policies encourage sustainable transport choices and sustained investment in transport. The Local Transport Plan 3 details the benefits to Trafford Park from improved public transport access, reduced congestion and improved support of major and future businesses and freight areas.

- 4.5.3 The overriding theme of local planning policy is to support economic growth with an accessible, sustainable and reliable public transport facility, with an importance to ensure that public transport services are capable of responding to demand. The TPL scheme therefore both directly supports these policy aims and complements the aspiration to improve the public transport offering in Trafford Park and the surrounding areas.

## **5 Impact on Traffic**

5.1.1 TfGM has undertaken extensive traffic modelling work and detail assessment of the scheme proposals to identify what impact the proposed TPL will have on the highway and its users. This section details this work and its findings, which conclude that the proposed TPL could be introduced with limited impact on the overall highway network.

5.1.2 Following the implementation of the anticipated TPL traffic management measures, current traffic flow patterns will alter due to changes in the highway network. This section demonstrates that this will have limited overall impact as the traffic is redistributed over the wider highway network.

### **5.2 Modelling Methodology**

5.2.1 The effect of the TPL scheme has been determined using the Greater Manchester (GM) strategic highway model which was built using the industry standard modelling software, 'SATURN' (Simulation and Assignment of Traffic in Urban Road Networks).

5.2.2 The GM SATURN model is one component of a multi-modal variable demand forecasting system (GMVDM02) which includes representation of highway and public transport travel, as well as walking and cycling. This model system is consistent with the industry modelling standards for major scheme transport demand forecasting and appraisal, as laid out in the Department for Transport (DfT) Transport Analysis Guidance (TAG).

5.2.3 A SATURN model represents the highway network as a series of links and nodes with links representing the carriageway and nodes representing junctions. The modelled area is divided into zones that contain the locations where journeys start (origins) and end (destinations). The base year traffic patterns were established from traffic survey information and Census data, and a process of model calibration was undertaken to ensure an acceptable validation is achieved between modelled traffic flows and observed traffic counts. GMVDM02 contains representations of highway and public transport travel that have been validated for a base year of 2013, for a weekday morning peak hour of 8am – 9am, a weekday average inter-peak hour between 10am – 4pm, a weekday evening peak hour of 5pm – 6pm and an average Saturday hour between 1pm – 4pm.

- 5.2.4 For the TA, a 'Do Minimum' - 'without tram' scenario has been modelled for a forecast year of 2035, predicting the future situation without TPL, but including all known committed schemes and developments. The Do Minimum (DM) represents the base situation against which the 'Do Something' - 'with tram' scenario is compared. Details of the schemes included in the DM scenario are provided in Sections 5.9 and 5.10.
- 5.2.5 The second scenario, the 'Do Something' – 'with tram' or DS, has been created which is essentially the DM scenario but with the addition of the proposed TPL scheme. The differences in traffic flows and changes in traffic routing between the DM and DS models therefore form the basis of assessing the scheme's impact on traffic.
- 5.2.6 In addition to providing predicted traffic flows for the junctions through which the scheme passes (on-line junctions), the SATURN model has also been used to identify those junctions in the surrounding area (off-line junctions) where the scheme will result in material changes between the DM and DS scenarios.
- 5.2.7 The operation of these identified on-line and off-line junctions has been assessed using detailed traffic signal models and SATURN respectively. These assessments indicate the performance of each junction in both the DM and DS scenarios in the AM, PM and where relevant Saturday peak periods. Details of this modelling are provided in sections 5.13 and 5.14.

### **5.3 Strategic Level Traffic Modelling**

- 5.3.1 The GMVDM02 strategic transport modelling system of Greater Manchester links a variable demand model (developed by SYSTRA) with TfGM's highway (SATURN) and public transport (VOYAGER) assignment models in the way set out in Figure 5.1 below. Representations are included in the system of 4 time periods cumulatively covering 16 hours of a typical weekday, plus an additional time period representing travel for an average Saturday.
- 5.3.2 The demand model is an economic model that adjusts travel demand on the basis of changing travel times and costs. As travel time and/or cost for a particular transport option increase, demand falls; and as travel time and/or cost for a particular transport option decrease, demand rises. Three travel responses are included within the demand model representing;
- where to travel to (distribution);
  - which travel mode to use (car, public transport or walk/cycle); and
  - what time of day to travel (macro time period).

- 5.3.3 The highway and public transport assignment models are used to provide travel time and cost matrices for input to the demand model with forecast demands from the demand model being reassigned in the assignment models. The demand and supply models are run iteratively until a converged solution is reached.

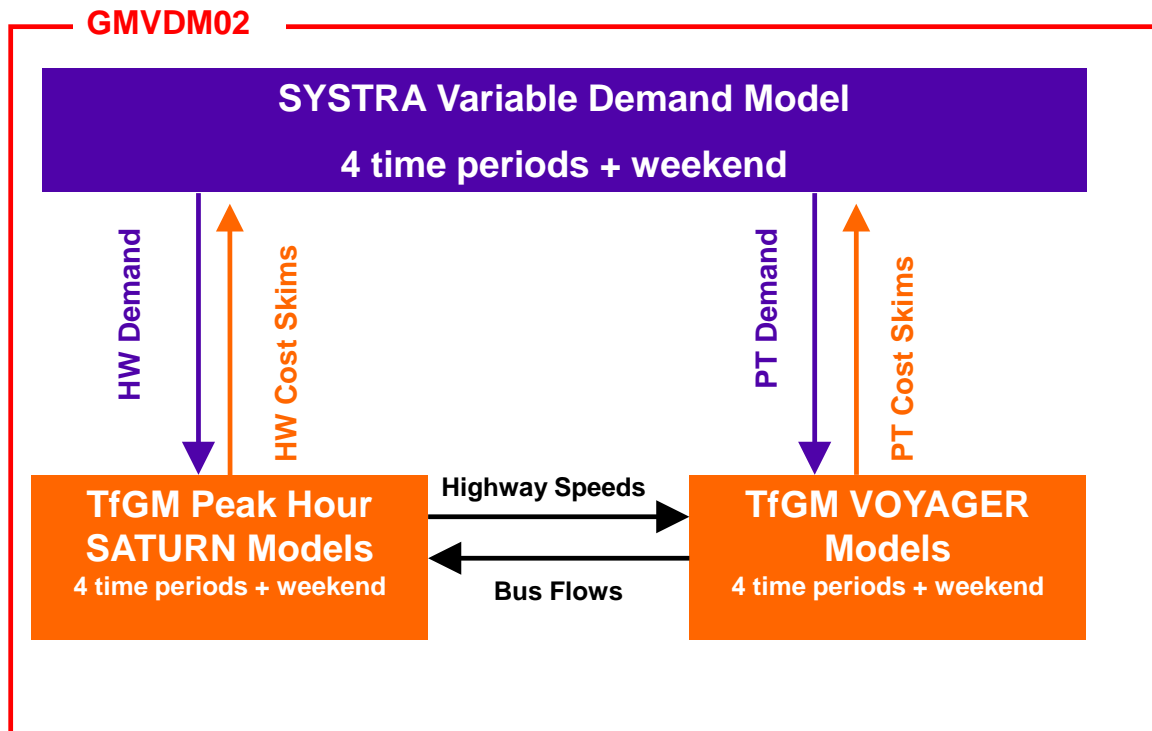


Figure 5.1 Greater Manchester Modelling System (GMVDM02)

## 5.4 Forecasting Approach

- 5.4.1 The forecasting approach adopted follows the guidance set out in DfT TAG Unit M4 'Forecasting and Uncertainty' (May 2014). An Uncertainty Log has been produced in line with this TAG unit which summarises all the known assumptions and uncertainties in the model, and provides a basis for developing alternative scenarios to test the validity of the model forecasts.
- 5.4.2 The approach to forecasting is presented in Figure 5.2 overleaf.

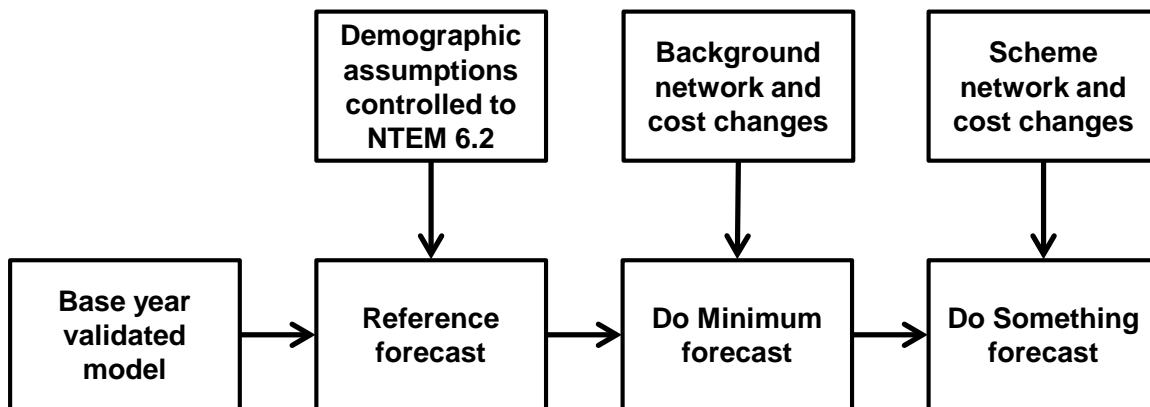


Figure 5.2 Approach to Forecasting using a transport model

## 5.5 Approach to Forecasting using a Transport Model

### 5.5.1 The key points to note about the methodology include;

- future year forecasts are produced by factoring a validated base year model;
- Reference forecasts include the impacts of local land-use developments but the overall demand for travel is controlled to national forecasts of travel demand (NTEM 6.2) as required by TAG;
- DM forecast takes the Reference forecast demand as an input to the variable demand model along with background assumptions that are independent of the scheme being tested; and
- DS forecast takes the DM forecast as input along with the definition of the scheme.

## 5.6 Reference Forecast

5.6.1 The Reference forecast is developed through a two-part process involving deriving trip matrices for specific developments identified as being in the planning process and controlling overall demand for travel to national forecasts. The number of development trips is calculated from trip rates applied to floorspace or the number of dwellings. The development trips are added to the base matrices then the background growth applied to the matrix in a way that ensures that the outturn growth matches the NTEM growth forecasts.

5.6.2 The developments included in the forecasts are those that lie within a reasonable walking distance of one of the proposed TPL stops. As required by TAG Unit M4, only those developments that have already entered the planning process and are identified as 'near certain' or 'more than likely' of progressing have been included in the DM Scenario.



- 5.6.3 Control to NTEM growth has been undertaken at local authority district level within Greater Manchester except that the districts of Manchester, Salford, and Trafford have been combined. This step was taken because the route of the TPL runs through or along the boundaries between those three districts.

## 5.7 Do Minimum Forecast (Committed Development without TPL)

- 5.7.1 The DM scenario represents the expected situation with regards to development proposals and traffic characteristics at the time of introducing TPL.

## 5.8 Do Something Forecast (Committed Development with TPL)

- 5.8.1 The DS scenario takes the DM scenario and incorporates the TPL proposals, enabling an assessment of the impacts of TPL to be made. The majority of network changes are along the scheme corridor are as described in Section 3.
- 5.8.2 As a result of consultation and stakeholder engagement there has been a modification to the proposed route of the TPL scheme along Trafford Wharf Road. The coding of the scheme within SATURN was based on earlier scheme proposals as presented at the outset of the public consultation process. The differences are described in Table 5.1 and illustrated in Figure I.1 in Appendix I.

**Table 5.1 Scheme included in SATURN model**

Original Consultation Scheme modelled in SATURN	Application Scheme	Scale of Impact
Tram route passes under Trafford Road bridges and joins Trafford Wharf Road in the vicinity of its junction with Sir Alex Ferguson Way, after the proposed Wharfside stop. The tram route runs segregated on southern side of Trafford Wharf Road then crosses the highway to the proposed Imperial War Museum stop on northern side of carriageway.	Tram route passes under Trafford Road bridges. After the proposed Wharfside stop, it continues to run off-highway, flanking the Manchester Ship Canal. The tram route joins Trafford Wharf Road after the proposed Imperial War Museum stop and re-joins alignment as represented in the SATURN modelling.	<p>Application scheme proposals have a lesser impact on traffic and the scale of impacts are expected to be local because:</p> <ul style="list-style-type: none"> <li>- The tram / traffic interface at the Trafford Wharf Road / Sir Alex Ferguson Way junction is removed;</li> <li>- Proposals involve only one signal controlled crossing in the vicinity of the proposed Imperial War Museum stop, instead of two;</li> <li>- The level of re-routing away from Trafford Wharf Road is expected to reduce.</li> </ul>

## **5.9 Committed Transport Schemes**

5.9.1 Representation has been included within both the DM and DS forecasts of a number of committed transport schemes across Greater Manchester, both for highway and public transport. The schemes of primary relevance to TPL are as follows:

- Western Gateway Infrastructure Scheme (WGIS)
- M60 Smarter Motorways
- Public transport and highway impacts of the Phase 3 Metrolink Extensions
- Cross City Bus including Leigh-Salford-Manchester busway
- Northern Hub rail service changes
- Trafford Park Road Safety Scheme
- Barton Dock Road Pedestrian Accessibility
- Trafford Centre Bus Station Access Improvements
- Bus lanes on Barton Dock Road
- New bus lane on A56 at Sir Matt Busby Way

5.9.2 In addition, the following three schemes on the route of the TPL have been included in the DM and DS forecasts. These are:

- Traffic signals at Parkway Circle – this junction operates as a roundabout at present. It is highly congested at peak times, and fast circulating speeds during off-peak periods present a safety risk, particularly to vulnerable road users such as pedestrians and cyclists. This junction ranks third across the Borough of Trafford in terms of poor safety. The Local Highway Authority has indicated that future background increases in traffic will necessitate reconfiguration and signalisation of this junction in the coming years.
- Traffic signals at the junction of Mercury Way/Barton Dock Road – this junction operates as a priority controlled junction at present. Significant committed development along Mercury Way is anticipated to lead to increased traffic at the junction of Mercury Way/Barton Dock Road necessitating reconfiguration and signalisation of this junction before the 2035 forecast year.

- New signalised pedestrian crossings on Barton Dock Road either side of Peel Circle. Continued expansion of Barton Square and EventCity will continue to increase pedestrian movements across Barton Dock Road. The Local Highway Authority has indicated that permanent signalised pedestrian crossings on Barton Dock Road will be required in the future to ensure pedestrian safety, due to the high demand from pedestrians crossing Barton Dock Road between the Trafford Centre car parks and Barton Square and EventCity developments.

## **5.10 Committed Developments**

5.10.1 Committed developments are those with current planning consent. The most significant developments explicitly represented in the DM forecast and impacting on traffic flows in Trafford Park are proposed office and residential developments at Trafford Quays on land adjoining Trafford Way and Trafford Boulevard, where outline planning consent has been granted.

5.10.2 Other recent or committed developments explicitly represented in the DM (but not in the 2013 base year model), contribute substantially less daily car trips to the road network than the Trafford Quays site, and include the;

- leisure expansion of Barton Square;
- Think Money office development on Mosley Road;
- redevelopment of office space at the Soapworks in Ordsall; and
- housing developments on Pomona Strand.

## **5.11 Predicted Traffic Flows**

5.11.1 The predicted traffic flows from the SATURN traffic model for both the DM and DS forecasts are presented in Appendix D.

5.11.2 Figures E.1 to E.3 in Appendix E, for the morning peak, evening peak and Saturday models respectively, show the flow differences between the DM and DS forecasts. Green represents increasing traffic flow and blue decreasing traffic flow, and the width of the band provides an indication of the volume of flow change (the wider the band the higher the change). This analysis does not show values for parts of the network where the link/node structure changes between the DM and DS such as at Parkway Circle. The model does however predict changes in flows in the Parkway Circle area and these are discussed below.

5.11.3 The model suggests some re-routing of traffic through Trafford Park will take place, away from the TPL corridor on to parallel routes, which can be summarised as follows:

- In the morning and evening peak models, inbound to Manchester city centre, the model indicates re-routing away from Trafford Wharf Road to routes through Village Circle and along Wharfside Way. These changes occur primarily due to changes in signal timings along Trafford Wharf Road associated with introducing dedicated signal stages for TPL. Removal of the right turn from Elevator Road on to Trafford Wharf Road leads to an increase in traffic reaching Trafford Wharf Road via Warren Bruce Road.
- The scheme necessitates a significant remodelling of the current road layout at Parkway Circle in order to accommodate TPL passing through this area and the development of a dedicated Park and Ride site. Direct traffic access from Westinghouse Road to the north of Parkway Circle is removed in the DS scenario, leading to re-routing of traffic passing north-south through Trafford Park from Park Road (Stretford) to Centenary Way (Eccles). This traffic re-routes to Mosley Road/Trafford Park Road from Westinghouse Road/Parkway Circle/Tenax Road. Consequently the model indicates that in the DS scenario the volume of traffic passing through the junction in the AM peak decreases slightly whilst the PM peak increases when comparing against the DM scenario. The increase in traffic in the PM peak is an indication of the additional capacity the revised junction arrangement provides.
- Flow differences are generally less pronounced across Trafford Park in the Saturday model compared with the peak hour weekday models reflecting the absence of commuter traffic in this time period. The area around the Trafford Centre is the notable exception where traffic flows are higher on a Saturday than on a weekday.
- The Saturday model shows an increase in traffic flow exiting the Trafford Centre to the east, accessing the M60 at junction 9 rather than junction 10. This effect occurs in the model because an additional 6 seconds of green time has been given to right turning traffic exiting the Trafford Centre car parks on to Parkway in the DS relative to the DM. The operation of the signals at the Trafford Centre exit is the subject of ongoing review and development, in consultation with GMUTC (Greater Manchester Urban Traffic Control)

5.11.4 TMBC and the Highways Agency will continue to be engaged as the next iteration of modelling work is progressed.

## 5.12 Detailed Junction Assessment: On Line Junctions

5.12.1 Detailed assessments have been undertaken of both the DM and DS scenarios on those junctions through which the scheme passes – or ‘online’ junctions. Using traffic data derived from the SATURN model the following junctions have been assessed using the LinSig and ARCADY software package:

- Trafford Wharf Road / Warren Bruce Road
- Village Circle (signal controlled roundabout)
- Village Way / Fifth Avenue
- Village Way / Mosley Road
- Parkway Circle
- Barton Dock Road / Mercury Way\*
- Barton Dock Road / Peel Circle\*

*\* Also assessed in the Saturday afternoon peak period as total junction flows during this time period are similar to or higher than predicted AM or PM peak flows.*

5.12.2 Assessment has been undertaken for an Opening Year (2020) and a Design Year (2035) of +15-years.

5.12.3 LinSig results refer to the Degree of Saturation (DoS) and Mean Maximum Queue (MMQ) predicted in each lane of the junction. A DoS of 100% indicates that the lane in question is operating at its absolute capacity (point of saturation), whilst a DoS of 90% or less indicates that the lane is operating within its practical capacity. The summary results tables present the Mean Maximum Queue in metres (m) where it has been assumed that a Passenger Car Unit (PCU) is equivalent to 5.75m.

5.12.4 The results tables also refer to the junction’s overall performance by indicating the Practical Reserve Capacity (PRC). The PRC is a measure of how much additional traffic could pass through a junction before practical capacity is achieved – i.e. how much reserve capacity is available. A positive PRC indicates that the junction has spare practical capacity remaining, whilst a negative PRC indicates that the junction is operating over its practical capacity.

5.12.5 Each measure is used to illustrate the potential effects of increased traffic flows upon congestion and delay at a given junction. Whilst in reality a junction will continue to operate when congestion is predicted, a congested junction would not be expected to clear demand as efficiently as an uncongested junction.

5.12.6 Summary results of the on-line assessment are presented in the following sub-sections. For each online junction the DM results are presented first, followed by the DS results for the forecast years of 2020 and 2035.

#### Junction of Trafford Wharf Road and Warren Bruce Road

##### Do Minimum Assessment

5.12.7 On site observations in 2013 suggest that there are no capacity issues at this junction, which operates as a 2 stage cycle – Trafford Wharf Road then Warren Bruce Road. The existing signal timings, as provided by GMUTC have been incorporated, with cycle times as follows:

- AM peak – 38 seconds
- PM peak – 44 seconds

5.12.8 The 2020 AM and PM peak DM results are summarised as follows:

**Table 5.2 Junction of Trafford Wharf Road / Warren Bruce Road 2020 DM Results**

Movement	AM Peak (38 sec cycle time)		PM Peak (44 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Trafford Wharf Road (West) Right Ahead	47.4%	21	14.4%	5
Warren Bruce Road Left Right	2.2%	1	5.1%	1
Trafford Wharf Road (East) Ahead Left	19.8%	7	30.5%	13
<b>PRC</b>	<b>90.0%</b>		<b>194.8%</b>	

Source: Mott MacDonald

5.12.9 The 2035 AM and PM peak DM results are summarised as follows:

**Table 5.3 Junction of Trafford Wharf Road / Warren Bruce Road 2035 DM Results**

Movement	AM Peak (38 sec cycle time)		PM Peak (44 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Trafford Wharf Road (West) Right Ahead	52.5%	24	22.0%	9
Warren Bruce Road Left Right	2.2%	1	5.1%	1
Trafford Wharf Road (East) Ahead Left	24.4%	9	33.9%	15
<b>PRC</b>	<b>71.5%</b>		<b>165.2%</b>	

Source: Mott MacDonald

##### Do Something Assessment

5.12.10 The TPL proposals at this junction would retain all traffic movements whilst introducing tram movements. Accordingly, as shown in Figure 5.3, two extra stages would be required to accommodate both the tram and pedestrian movements which would otherwise be in conflict with other traffic movements. The DS modelling for this junction has been based on a 60 second cycle time. The tables below show the results of the assessment.

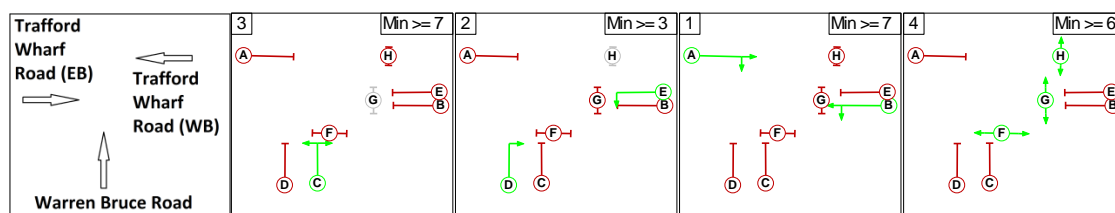


Figure 5.3 – DS Staging of Trafford Wharf Road / Warren Bruce Road junction

5.12.11 The AM and PM peak 2020 Do Something results are summarised as follows:

Table 5.4 Junction of Trafford Wharf Road / Warren Bruce Road 2020 DS Results

Movement	AM Peak (60 sec cycle time)		PM Peak (60 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Trafford Wharf Rd WB – Ahead Left (Lane 1)	37.3%	17	55.9%	30
Trafford Wharf Rd EB – Ahead (Lane 1)	47.3%	21	16.7%	8
Trafford Wharf Rd SB – Right (Lane 2)	4.4%	2	3.7%	1
Warren Bruce Rd – Left Right (Lane 1)	48.6%	17	39.3%	11
<b>PRC</b>	<b>85.3%</b>		<b>61.1%</b>	

Source: Mott MacDonald

5.12.12 The AM and PM peak 2035 Do Something results are summarised as follows:

Table 5.5 Junction of Trafford Wharf Road / Warren Bruce Road 2035 DS Results

Movement	AM Peak (60 sec cycle time)		PM Peak (60 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Trafford Wharf Rd WB – Ahead Left (Lane 1)	48.5%	23	59.5%	33
Trafford Wharf Rd EB – Ahead (Lane 1)	55.2%	26	22.5%	10
Trafford Wharf Rd SB – Right (Lane 2)	4.5%	1	5.6%	1
Warren Bruce Rd – Left Right (Lane 1)	56.3%	2	42.1%	12
<b>PRC</b>	<b>59.7%</b>		<b>51.3%</b>	

Source: Mott MacDonald

5.12.13 The results indicate that the junction will continue to operate with a significant level of spare capacity.

## Village Circle

### Do Minimum Assessment

5.12.14 Village Circle (a signalised gyratory operating as a series of 2 stage nodes) is comprised of five approaches onto a circulatory carriageway. On site observations in 2013 indicated that there are limited queues on the approaches to the gyratory, with the exception of the A5081 Village Way approach in the AM peak and the A5081 Wharfside Way approach in the PM peak. The queue on the Village Way approach tends to clear every cycle, but the A5081 Wharfside Way queue does not clear every cycle.

5.12.15 For the DM modelling the existing signal timings as provided by GMUTC were taken from traffic signal controller which indicate a 50 second cycle time is used in both the AM and PM peaks. The tables below show the results of the junction. The 2020 DM results and 2035 DM results are summarised in Tables 5.6 and 5.7 respectively.

**Table 5.6 Village Circle 2020 DM Results**

Movement	AM Peak		PM Peak	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
<b>Village Circle &amp; Europa Way Junction</b>				
Europa Way Approach Arm Ahead Left (Lane 1)	11.8%	3	21.1%	5
Europa Way Approach Arm Ahead (Lane 2)	11.5%	3	21.1%	5
Europa Way Circulatory Arm Left (Lane 1)	25.7%	10	42.4%	19
Europa Way Circulatory Arm Left (Lane 2)	25.7%	10	42.5%	19
<b>Village Circle &amp; Village Way Junction</b>				
Village Way Approach Arm Ahead (Lane 1)	53.7%	32	32.3%	16
Village Way Approach Arm Ahead (Lane 2)	53.7%	32	32.2%	16
Village Way Circulatory Arm Ahead Left (Lane 1)	39.2%	10	44.2%	11
Village Way Circulatory Arm Ahead (Lane 2)	9.2%	3	16.8%	1
<b>Village Circle &amp; Trafford Park Rd Junction</b>				
Trafford Park Rd Approach Ahead	68.4%	27	47.4%	18
Trafford Park Road Circulating Right Left	68.1%	27	50.7%	22
Trafford Park Road Circulating Right	58.5%	16	41.6%	13
Trafford Park Road Circulating Right	0.1%	0	0.0%	0
<b>Village Circle &amp; Warren Bruce Rd Junction</b>				
Warren Bruce Rd Approach Arm Ahead Left (Lane 1 & 2)	3.0%	1	10.0%	2
Warren Bruce Rd Approach Arm Ahead (Lane 3)	26.0%	6	29.9%	7
Warren Bruce Rd Circulatory Arm Ahead Left (Lane 1)	67.7%	21	44.7%	10
Warren Bruce Rd Circulatory Arm Ahead (Lane 2)	67.3%	21	46.0%	10
Warren Bruce Rd Circulatory Arm Right (Lane 3)	2.8%	2	3.0%	3
<b>Village Circle &amp; Wharfside Way Junction</b>				
Wharfside Way Approach Arm Ahead Left (Lane 1)	23.9%	11	41.3%	21
Wharfside Way Approach Arm Ahead (Lane 2)	23.9%	11	41.3%	21
Wharfside Way Circulatory Arm Ahead (Lane 1)	7.6%	2	14.0%	2
Wharfside Way Circulatory Arm Left (Lane 2)	16.7%	2	19.0%	2
Wharfside Way Circulatory Arm Left (Lane 3)	11.7%	1	13.2%	1
<b>PRC</b>	<b>31.5%</b>		<b>77.5%</b>	

Source: Mott MacDonald



**Table 5.7 Village Circle 2035 Do Minimum Results**

Movement	AM Peak		PM Peak	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
<b>Village Circle &amp; Europa Way Junction</b>				
Europa Way Approach Arm Ahead Left (Lane 1)	15.4%	6	21.4%	6
Europa Way Approach Arm Ahead (Lane 2)	15.4%	6	21.4%	6
Europa Way Circulatory Arm Left (Lane 1)	41.9%	28	53.4%	12
Europa Way Circulatory Arm Left (Lane 2)	41.9%	28	53.3%	12
<b>Village Circle &amp; Village Way Junction</b>				
Village Way Approach Arm Ahead (Lane 1)	64.3%	41	35.3%	18
Village Way Approach Arm Ahead (Lane 2)	64.3%	41	35.2%	18
Village Way Circulatory Arm Ahead Left (Lane 1)	40.0%	13	50.0%	18
Village Way Circulatory Arm Ahead (Lane 2)	12.5%	7	17.1%	1
<b>Village Circle &amp; Trafford Park Rd Junction</b>				
Trafford Park Rd Approach Ahead	80.8%	41	59.6%	28
Trafford Park Road Circulating Right Left	79.2%	32	60.2%	21
Trafford Park Road Circulating Right	64.4%	17	48.6%	20
Trafford Park Road Circulating Right	0.2%	0	0.0%	0
<b>Village Circle &amp; Warren Bruce Rd Junction</b>				
Warren Bruce Rd Approach Arm Ahead Left (Lane 1 & 2)	7.0%	2	2.4%	1
Warren Bruce Rd Approach Arm Ahead (Lane 3)	32.6%	9	54.4%	17
Warren Bruce Rd Circulatory Arm Ahead Left (Lane 1)	71.1%	22	53.7%	17
Warren Bruce Rd Circulatory Arm Ahead (Lane 2)	70.9%	22	54.8%	17
Warren Bruce Rd Circulatory Arm Right (Lane 3)	8.0%	8	3.9%	4
<b>Village Circle &amp; Wharfside Way Junction</b>				
Wharfside Way Approach Arm Ahead Left (Lane 1)	32.8%	16	53.1%	32
Wharfside Way Approach Arm Ahead (Lane 2)	32.9%	16	53.0%	32
Wharfside Way Circulatory Arm Ahead (Lane 1)	18.1%	3	4.6%	2
Wharfside Way Circulatory Arm Left (Lane 2)	29.5%	6	26.1%	11
Wharfside Way Circulatory Arm Left (Lane 3)	17.3%	5	22.8%	10
<b>PRC</b>	<b>11.4%</b>		<b>49.4%</b>	

Source: Mott MacDonald

### Do Something Assessment

- 5.12.16 The TPL proposals at this junction would retain all traffic movements and the tram route would pass through the centre of the gyratory which would require the Warren Bruce Road and Village Way arms to be remodelled. All other approaches to the junction would be unaffected. At Warren Bruce Road the initial arrangement of the tram route passing through the junction required three stages to accommodate tram movements. However on-going design work has since indicated that two-stage operation (Figure 5.4) could be retained which would mean the Warren Bruce Road approach and the tram route way would run together. At Village Way, as the tram route is currently proposed to run to the north of Village Way, three stage operation (Figure 5.5) at this node would be required to cater for the tram movements i.e. the circulating

carriageway, Village Way approach and tram movements would have to run in separate stages. The DS modelling for this junction has been based on a 60 second cycle time.

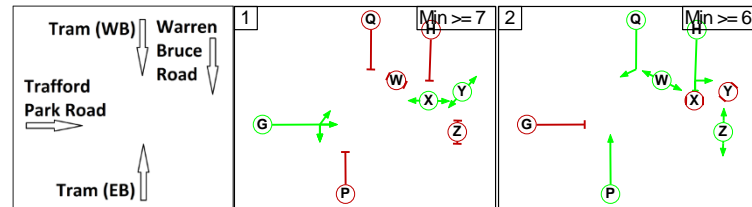


Figure 5.4 DS Staging for the Warren Bruce Road Node

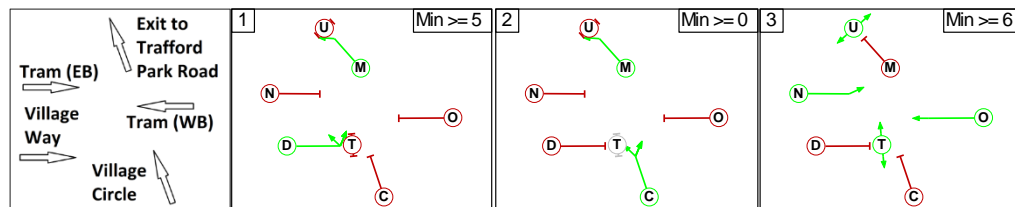


Figure 5.5 – DS Staging for the Village Way Node

5.12.17 The 2020 DM results and 2035 DM results are summarised in Tables 5.8 and 5.9 respectively.

**Table 5.8 Village Circle 2020 DS Results**

Movement	AM Peak		PM Peak	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
<b>Village Circle &amp; Europa Way Junction</b>				
Europa Way Approach Arm Ahead Left (Lane 1)	9.5%	3	16.2%	5
Europa Way Approach Arm Ahead (Lane 2)	9.1%	3	15.8%	5
Europa Way Circulatory Arm Left (Lane 1)	27.0%	5	44.0%	6
Europa Way Circulatory Arm Left Ahead (Lane 2)	26.8%	4	44.0%	6
<b>Village Circle &amp; Village Way Junction</b>				
Village Way Approach Arm Left Ahead (Lane 1)	64.4%	50	42.4%	28
Village Way Approach Arm Ahead (Lane 2)	64.4%	50	42.4%	28
Village Way Circulatory Arm Ahead Left (Lane 1)	52.3%	17	50.9%	17
Village Way Circulatory Arm Ahead (Lane 2)	8.1%	3	14.0%	5
<b>Village Circle &amp; Trafford Park Rd Junction</b>				
Trafford Park Rd Approach Ahead	81.1%	61	45.7%	20
Trafford Park Road Circulating Right Left	72.9%	23	44.5%	6
Trafford Park Road Circulating Right	83.7%	32	46.1%	8
Trafford Park Road Circulating Right	0.0%	0	0.0%	0
<b>Village Circle &amp; Warren Bruce Rd Junction</b>				
Warren Bruce Rd Approach Arm Ahead Left (Lane 1 & 2)	13.4%	4	22.9%	6
Warren Bruce Rd Circulatory Arm Ahead Left (Lane 1)	75.9%	37	49.5%	14
Warren Bruce Rd Circulatory Arm Ahead (Lane 2)	83.7%	43	51.0%	14
Warren Bruce Rd Circulatory Arm Right (Lane 3)	2.9%	3	1.3%	2
<b>Village Circle &amp; Wharfside Way Junction</b>				
Wharfside Way Approach Arm Ahead Left (Lane 1)	26.7%	15	43.7%	28
Wharfside Way Approach Arm Ahead (Lane 2)	26.7%	15	43.8%	28
Wharfside Way Circulatory Arm Left (Lane 1)	1.6%	0	1.7%	1
Wharfside Way Circulatory Arm Left Ahead (Lane 2)	9.2%	3	10.3%	2
Wharfside Way Circulatory Arm Ahead (Lane 3)	7.1%	2	8.9%	1
<b>PRC</b>	7.5%		76.6%	

**Source: Mott MacDonald**

**Table 5.9 Village Circle 2035 DS Results**

Movement	AM Peak		PM Peak	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
<b>Village Circle &amp; Europa Way Junction</b>				
Europa Way Approach Arm Ahead Left (Lane 1)	9.9%	3	14.6%	4
Europa Way Approach Arm Ahead (Lane 2)	9.9%	3	14.6%	4
Europa Way Circulatory Arm Left (Lane 1)	33.2%	5	54.2%	11
Europa Way Circulatory Arm Left Ahead (Lane 2)	33.3%	5	54.0%	11
<b>Village Circle &amp; Village Way Junction</b>				
Village Way Approach Arm Left Ahead (Lane 1)	68.5%	56	51.3%	35
Village Way Approach Arm Ahead (Lane 2)	68.5%	56	51.4%	36
Village Way Circulatory Arm Ahead Left (Lane 1)	61.8%	21	50.5%	17
Village Way Circulatory Arm Ahead (Lane 2)	8.8%	3	13.0%	5
<b>Village Circle &amp; Trafford Park Rd Junction</b>				
Trafford Park Rd Approach Ahead	90.0%	80	53.1%	26
Trafford Park Road Circulating Right Left	77.2%	25	56.3%	10
Trafford Park Road Circulating Right	89.1%	40	58.2%	13
Trafford Park Road Circulating Right	0.0%	0	0.0%	0
<b>Village Circle &amp; Warren Bruce Rd Junction</b>				
Warren Bruce Rd Approach Arm Ahead Left (Lane 1 & 2)	19.3%	5	29.2%	8
Warren Bruce Rd Circulatory Arm Ahead Left (Lane 1)	81.3%	41	58.1%	23
Warren Bruce Rd Circulatory Arm Ahead (Lane 2)	90.0%	52	59.8%	23
Warren Bruce Rd Circulatory Arm Right (Lane 3)	3.7%	4	5.5%	5
<b>Village Circle &amp; Wharfside Way Junction</b>				
Wharfside Way Approach Arm Ahead Left (Lane 1)	32.8%	19	51.5%	36
Wharfside Way Approach Arm Ahead (Lane 2)	32.9%	19	51.4%	36
Wharfside Way Circulatory Arm Left (Lane 1)	2.6%	2	1.4%	0
Wharfside Way Circulatory Arm Left Ahead (Lane 2)	12.1%	5	20.1%	6
Wharfside Way Circulatory Arm Ahead (Lane 3)	9.5%	4	18.4%	5
<b>PRC</b>	0.0%		50.4%	

**Source: Mott MacDonald**

- 5.12.18 The DoS PM results indicate that the junction will continue to operate with the same spare capacity as the Do Minimum results. However, while the Do Something AM results have slightly less spare capacity than the DM results all queues should clear every cycle.

## Junction of Village Way and Fifth Avenue

### Do Minimum Assessment

- 5.12.19 The existing junction operates on a 3 stage cycle with a cycle time of 67 seconds. On site observations in 2013 suggest that there are no capacity issues at this junction. Tables 5.10 and 5.11 below summarise the 2020 DM and 2035 DM results respectively.

**Table 5.10 Junction of Village Way / Fifth Avenue 2020 DM Results**

Movement	AM Peak		PM Peak	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Village Way (East) Left Ahead	34.8%	21	52.6%	40
Village Way (East) Ahead	32.6%	21	49.1%	39
5th Avenue Right Left	55.1%	16	50.6%	14
Village Way (West) Ahead	45.8%	31	25.3%	14
Village Way (West) Ahead Right	54.3%	32	28.9%	14
Village Way (East) Eastbound Stop Line Ahead	51.0%	20	30.6%	14
Village Way (East) Eastbound Stop Line Ahead	39.5%	3	21.9%	2
<b>PRC</b>	<b>63.5%</b>		<b>71.2%</b>	

Source: Mott MacDonald

**Table 5.11 Junction of Village Way / Fifth Avenue 2035 DM Results**

Movement	AM Peak		PM Peak	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Village Way (East) Left Ahead	46.0%	30	62.6%	53
Village Way (East) Ahead	42.8%	29	58.5%	50
5th Avenue Right Left	53.8%	16	61.0%	16
Village Way (West) Ahead	45.2%	31	26.9%	14
Village Way (West) Ahead Right	53.1%	32	31.2%	15
Village Way (East) Eastbound Stop Line Ahead	49.6%	19	33.4%	16
Village Way (East) Eastbound Stop Line Ahead	38.1%	2	24.3%	3
<b>PRC</b>	<b>67.4%</b>		<b>43.8%</b>	

Source: Mott MacDonald

### Do Something Assessment

- 5.12.20 The TPL proposals remodel Village Way to accommodate a segregated tram route on its northern side. The tram route will pass through a new access to the CHEP UK Ltd site which will form part of the Village Way / Fifth Avenue signalled controlled junction. The resulting junction layout means that the junction will operate with three stages as indicated in Figure 5.6 below.

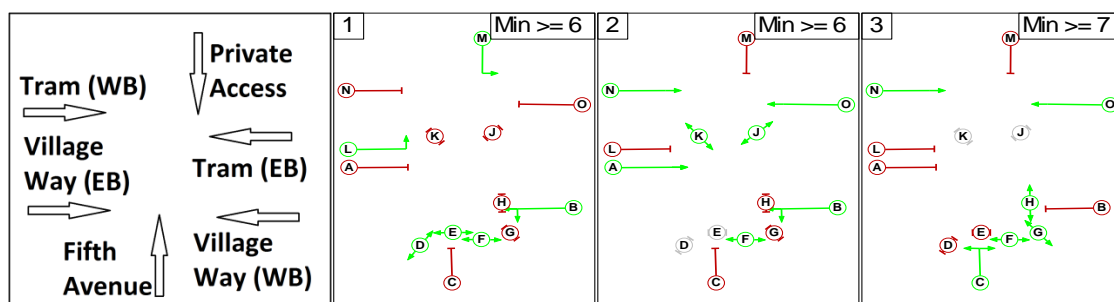


Figure 5.6 DS Staging of junction at Village Way / Fifth Avenue

5.12.21 The Do Something modelling for this junction has been based on a 60 second cycle time. The 2020 DM results and 2035 DM results are summarised in Tables 5.12 and 5.13 respectively.

Table 5.12 Junction of Village Way / Fifth Avenue 2020 DS Results

Movement	AM Peak (60 sec cycle time)		PM Peak (60 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Village Way (East) Left Ahead (Lane 1 & 2)	18.6%	12	34.4%	23
Village Way (East) Ahead (Lane 2)	17.7%	12	36.3%	23
Fifth Avenue Right Left (Lane 1 & 2)	27.1%	12	52.7%	17
Village Way (West) Left (Lane 1)	0.0%	0	0.0%	0
Village Way (West) Ahead (Lane 2 & 3)	87.6%	75	54.8%	29
Development Approach Left (Lane 1)	0.0%	0	0.0%	0
Village Way (East) Eastbound Stop Line Ahead (Lane 1)	47.9%	6	29.8%	6
Village Way (East) Eastbound Stop Line Ahead (Lane 2)	49.8%	12	35.1%	12
<b>Total Flow / PRC</b>	<b>2.7%</b>		<b>64.2%</b>	

Source: Mott MacDonald

Table 5.13 Junction of Village Way / Fifth Avenue 2035 DS Results

Movement	AM Peak (60 sec cycle time)		PM Peak (60 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Village Way (East) Left Ahead (Lane 1 & 2)	22.8%	10	42.6%	26
Village Way (East) Ahead (Lane 2)	22.6%	13	44.3%	30
Fifth Avenue Right Left (Lane 1 & 2)	28.7%	7	62.9%	18
Village Way (West) Left (Lane 1)	0.0%	0	0.0%	0
Village Way (West) Ahead (Lane 2 & 3)	92.0%	100	64.7%	33
Development Approach Left (Lane 1)	0.0%	0	0.0%	0
Village Way (East) Eastbound Stop Line Ahead (Lane 1)	50.3%	3	36.0%	2
Village Way (East) Eastbound Stop Line Ahead (Lane 2)	52.3%	7	41.3%	14
<b>Total Flow / PRC</b>	<b>-2.3%</b>		<b>39.0%</b>	

Source: Mott MacDonald

5.12.22 The DS PM results indicate that the junction will continue to operate with the same spare capacity as the DM results. The DS AM results indicate the junction performance of the junction will deteriorate towards 2035 Design Year. However the analysis includes the proposed development exit (CHEP UK Ltd) in every stage. It is highly probable this will be a demand dependant stage which will be called less often during the AM peak. Therefore this will present the opportunity to run the eastbound ahead movement (largest flow in the AM peak) for longer resulting in improved performance.

### Junction of Village Way and Mosley Road

#### Do Minimum Assessment

5.12.23 The junction mainly operates as a three stage junction, but a fourth stage is called if a demand is registered. This fourth stage allows a right turn from the westbound Village Way into the northern leg of Mosley Road. This stage operates as demand dependent due to the low demand for this movement.

5.12.24 The junction was observed in 2013 to be operating within its capacity and there are generally limited queues that clear during each traffic signal cycle. For the Do Minimum the existing signal timings as provided by GMUTC. The cycle times are as follows:

- AM peak – 71 seconds (all 4 stages) and 61 seconds (Stages 1, 2, and 4)
- PM peak – 71 seconds (all 4 stages) and 63 seconds (Stages 1, 2, and 4)

5.12.25 As the existing right turn demand (from Village Way East to Mosley Road North) is less than one every cycle the model has been run based on two cycles (AM = 132 seconds / PM = 134 seconds) to provide a proper representation of how the junction performs. The tables below show the results of the junction.

5.12.26 The AM and PM peak 2020 and 2035 DM results are summarised in tables 5.14 and 5.15 respectively.

**Table 5.14 Junction of Village Way / Mosley Road 2020 DM Results**

Movement	AM Peak		PM Peak	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Village Way (West) Ahead Left (Lane 1 & 2)	59.6%	50	20.2%	14
Village Way (West) Ahead (Lane 3 & 4)	66.5%	60	62.2%	28
Mosley Rd (North) Ahead Right Left (Lane 1)	11.2%	6	16.6%	6
Village Way (East) Ahead Left (Lane 1 & 2)	40.9%	27	61.2%	48
Village Way (East) Ahead Right (Lane 3 & 4)	44.0%	28	61.3%	48
Mosley Rd (South) Ahead Left (Lane 1 & 2)	0.0%	0	0.0%	0
Mosley Rd (South) Ahead Right (Lane 3)	65.2%	31	62.2%	24
<b>PRC</b>	<b>35.4%</b>		<b>44.7%</b>	

Source: Mott MacDonald

**Table 5.15 Junction of Village Way / Mosley Road 2035 DM Results**

Movement	AM Peak		PM Peak	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Village Way (West) Ahead Left (Lane 1 & 2)	56.7%	46	23.8%	17
Village Way (West) Ahead (Lane 3 & 4)	65.1%	56	74.7%	34
Mosley Rd (North) Ahead Right Left (Lane 1)	17.4%	7	35.2%	12
Village Way (East) Ahead Left (Lane 1 & 2)	52.8%	37	75.8%	71
Village Way (East) Ahead Right (Lane 3 & 4)	57.3%	39	75.2%	71
Mosley Rd (South) Ahead Left (Lane 1 & 2)	0.0%	0	0.0%	0
Mosley Rd (South) Ahead Right (Lane 3)	64.9%	30	74.6%	28
<b>PRC</b>	<b>38.2%</b>		<b>18.8%</b>	

Source: Mott MacDonald

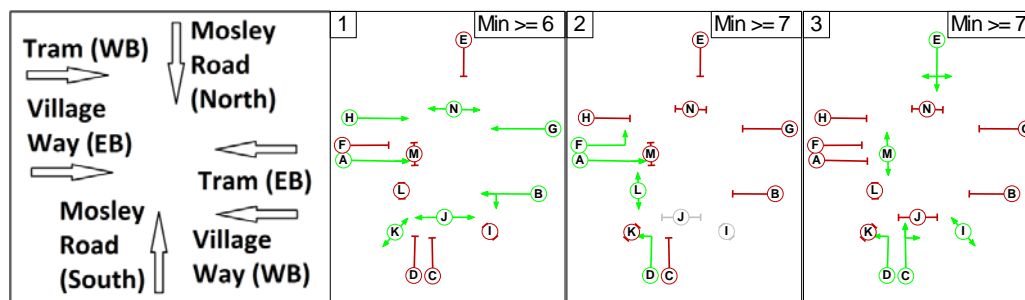
5.12.27 It can be seen that in both the AM and PM peaks the junction operates with significant spare capacity.

### Do Something Assessment

5.12.28 The TPL proposals remodel this junction to allow the tram route to cross the junction on its northern side, crossing Mosley Road (north). To allow the highway and tram movements to run in the same stage, and therefore reduce unnecessary lost time, it is proposed to:

- Separately signal the left turn from Village Way onto Mosley Road (north).
- Ban the right turns from Village Way into Mosley Road, both north and south arms.

5.12.29 Accordingly the new junction will operate a 3 stage cycle as indicated in Figure 5.7 below. The DS modelling for this junction has been based on a 90 second cycle time.



**Figure 5.7 DS Staging of junction at Village Way / Mosley Road**

5.12.30 The AM and PM peak 2020 and 2035 DS results are summarised in tables 5.16 and 5.17 respectively.



**Table 5.16 Junction of Village Way / Mosley Road 2020 DS Results**

Movement	AM Peak (90 sec cycle time)		PM Peak (90 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Village Way (West) Ahead Left (Lane 1 & 2)	72.5%	79	35.7%	33
Village Way (West) Ahead (Lane 3)	32.0%	29	15.1%	13
Mosley Rd (North) Ahead Right Left (Lane 1)	41.1%	18	44.7%	22
Village Way (East) Ahead Left (Lane 1 & 2)	40.8%	29	62.8%	64
Village Way (East) Ahead (Lane 3)	43.5%	33	64.2%	71
Mosley Rd (South) Ahead Left (Lane 1 & 2)	53.7%	48	34.7%	22
Mosley Rd (South) Ahead Right (Lane 3)	71.4%	52.33	62.3%	28.18
<b>PRC</b>	<b>24.2%</b>		<b>40.1%</b>	

Source: Mott MacDonald

**Table 5.17 Junction of Village Way / Mosley Road 2035 DS Results**

Movement	AM Peak (90 sec cycle time)		PM Peak (90 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Village Way (West) Ahead Left (Lane 1 & 2)	77.4%	87	43.2%	42
Village Way (West) Ahead (Lane 3)	34.4%	31	19.6%	17
Mosley Rd (North) Ahead Right Left (Lane 1)	67.3%	32	74.1%	41
Village Way (East) Ahead Left (Lane 1 & 2)	54.4%	39	80.8%	95
Village Way (East) Ahead (Lane 3)	57.0%	44	82.0%	103
Mosley Rd (South) Ahead Left (Lane 1 & 2)	53.4%	49	30.8%	18
Mosley Rd (South) Ahead Right (Lane 3)	75.4%	58	79.4%	41
<b>PRC</b>	<b>16.3%</b>		<b>9.7%</b>	

Source: Mott MacDonald

- 5.12.31 The 2020 results indicate the junction will operate with a similar level of spare capacity as the DM scenario while the 2035 results will have approximately 50% less spare capacity than the DM scenario.

### Parkway Circle/Junction

#### Do Minimum Assessment

- 5.12.32 Parkway Circle is large priority controlled roundabout forming a junction between five roads. During the periods of observation in 2013, working weekdays during the AM and PM peaks; two major traffic queues were observed. The first was on the Parkway approach during the AM peak and was a rolling queue that extended to the flyover for Barton Dock Road. The queue tended to roll continually at a speed of around 10mph. The second was during the PM peak on the Village Way and Westinghouse Road approaches where intermittent queues were observed. At times the queue on Village Way extended back to the Village Way / Mosley Road junction. The queues appeared to be a result of a dominant north to west traffic flow from Tenax Road. This dominant flow reduced the gap availability for traffic trying to enter the roundabout from Village Way. These queues had generally subsided by the end of the peak period being observed.

5.12.33 Due to the poor accident record at this junction, the DM proposal involves signalling the junction. Therefore the DM AM and PM peaks have been assessed using LinSig. Tables 5.18 and 5.19 detail the 2020 and 2035 assessment results respectively.

5.12.34 The 2020 Do Minimum results are summarised as follows:

**Table 5.18 Parkway Junction 2020 DM Results**

Movement	AM Peak		PM Peak	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Parkway Approach Arm Ahead Left (Lane 1)	65.6%	52	37.5%	22
Parkway Approach Arm Ahead (Lane 2)	65.6%	52	37.4%	22
Parkway Circulatory Arm Left (Lane 1)	57.6%	21	12.9%	4
Parkway Circulatory Arm Ahead (Lane 2)	56.8%	24	27.6%	12
Ashburton Rd Approach Arm Ahead Left(Lane 1)	93.9%	50	35.3%	16
Ashburton Rd Approach Arm Ahead (Lane 2)	93.9%	50	63.0%	33
Ashburton Rd Circulatory Arm Ahead Left (Lane 1)	64.8%	30	41.1%	30
Ashburton Rd Circulatory Arm Ahead (Lane 2)	59.5%	35	40.7%	6
Tenax Rd Approach Arm Ahead Left (Lane 1)	92.0%	45	111.0%	220
Tenax Rd Approach Arm Ahead (Lane 2)	91.6%	45	111.0%	220
Tenax Rd Circulatory Arm Left (Lane 1)	43.8%	18	20.9%	4
Tenax Rd Circulatory Arm Left (Lane 2)	77.0%	44	66.3%	31
Village Way Approach Arm Ahead Left (Lane 1)	66.5%	31	109.4%	259
Village Way Approach Arm Ahead (Lane 2 & 3)	67.0%	31.05	110.5%	323
Village Way Circulatory Arm Ahead Left (Lane 1)	57.9%	40.83	57.7%	45
Village Way Circulatory Arm Ahead (Lane 2)	24.2%	5.18	59.6%	46
Westinghouse Rd Approach Arm Ahead Left (Lane 1 & 2)	58.1%	27.6	50.5%	9
Westinghouse Rd Circulatory Arm Left (Lane 1)	34.5%	6.9	73.7%	25
Westinghouse Rd Circulatory Arm Left (Lane 2)	53.8%	24.73	86.1%	45
Westinghouse Rd Circulatory Arm Ahead (Lane 3)	14.1%	1	8.5%	0
Parkway SB Entry Arm (Lane 1)	29.9%	3	79.6%	45
Parkway SB Entry Arm (Lane 2)	45.2%	5	92.2%	77
<b>PRC</b>	<b>-4.4%</b>		<b>-23.3%</b>	

Source: Mott MacDonald

**Table 5.19 Parkway Junction 2035 DM Results**

Movement	AM Peak		PM Peak	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Parkway Approach Arm Ahead Left (Lane 1)	67.9%	56	101.3%	119
Parkway Approach Arm Ahead (Lane 2)	68.0%	56	101.3%	119
Parkway Circulatory Arm Left (Lane 1)	66.1%	26	11.9%	5
Parkway Circulatory Arm Ahead (Lane 2)	53.7%	25	7.3%	2
Ashburton Rd Approach Arm Ahead Left(Lane 1)	90.9%	47	41.3%	14
Ashburton Rd Approach Arm Ahead (Lane 2)	91.2%	47	115.4%	217
Ashburton Rd Circulatory Arm Ahead Left (Lane 1)	67.1%	35	33.5%	12
Ashburton Rd Circulatory Arm Ahead (Lane 2)	59.9%	11	37.5%	8
Tenax Rd Approach Arm Ahead Left (Lane 1)	98.3%	63	133.9%	443
Tenax Rd Approach Arm Ahead (Lane 2)	98.3%	63	133.7%	440
Tenax Rd Circulatory Arm Left (Lane 1)	42.6%	30	20.6%	7
Tenax Rd Circulatory Arm Left (Lane 2)	77.6%	45	66.7%	36
Village Way Approach Arm Ahead Left (Lane 1)	68.4%	37	109.7%	278
Village Way Approach Arm Ahead (Lane 2 & 3)	74.1%	39	111.4%	354
Village Way Circulatory Arm Ahead Left (Lane 1)	64.3%	45	54.5%	32
Village Way Circulatory Arm Ahead (Lane 2)	29.1%	1	55.8%	129
Westinghouse Rd Approach Arm Ahead Left (Lane 1 & 2)	74.1%	39	64.2%	369
Westinghouse Rd Circulatory Arm Left (Lane 1)	43.7%	13	74.2%	37
Westinghouse Rd Circulatory Arm Left (Lane 2)	61.5%	35	84.1%	49
Westinghouse Rd Circulatory Arm Ahead (Lane 3)	19.1%	1	8.5%	0
Parkway SB Entry Arm (Lane 1)	40.4%	7	84.3%	48
Parkway SB Entry Arm (Lane 2)	54.9%	8	94.4%	93
<b>PRC</b>	<b>-9.2%</b>		<b>-48.8%</b>	

**Source: Mott MacDonald**

5.12.35 The results indicate that at 2020 the junction will continue to operate over capacity as it does today albeit traffic movements will be slower and safer and there will be better provision for vulnerable road users. As a result of continuing traffic growth by 2035 the junction will be operating significantly over capacity meaning that a further intervention is likely to be required.

### Do Something Assessment

5.12.36 In developing the TPL proposals a significant number of options to accommodate the tram route have been considered that would signalise and remodel the junction whilst retaining the existing roundabout configuration. However, none performed well in capacity terms. Proposals to reconfigure the roundabout as a series of signalised junction have therefore been developed. The junctions include:

- Realigned Ashburton Road West / Tenax Road junction operating on a two stage cycle.
- Village Way / Park Way / Tenax Road (Parkway) junction operating on a three stage cycle as shown in Figure 5.8.
- Realigned Westinghouse Road / Park Way junction operating on a two stage cycle.

5.12.37 The proposed layout retains all movements with the exception of:

- Right turn from Westinghouse Road. This movement would be available from Mosley Road, Fifth Avenue or Europa Way
- U-turning traffic. Such movements would be possible using other roads in the Trafford Park area noting that Village Way, Westinghouse Road and Europa Way form a circular network around the central portion of the Trafford Park area and Tenax Road, Trafford Park Road and Village Way form a circular network to the north.

5.12.38 The tram route would cross Village Way to the east of the Village Way / Park Way / Tenax Road junction to run around the southern side of the junction to connect to the proposed Parkway stop and Park & Ride site before crossing Park Way at the new Realigned Westinghouse Road / Park Way junction to run along the western side of Park Way.

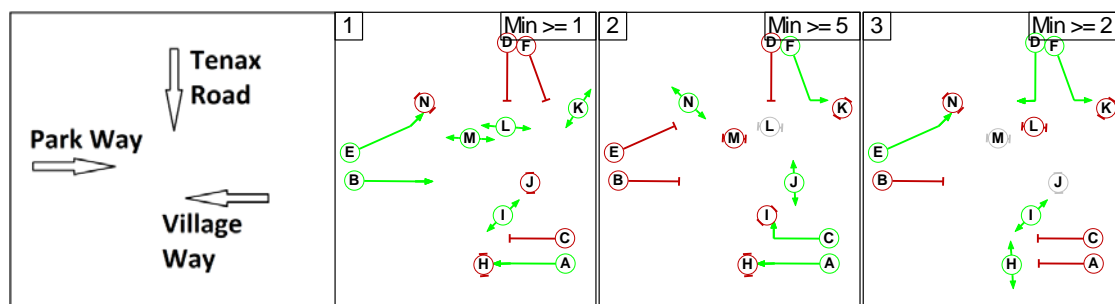


Figure 5.8 DS Staging of Parkway Junction

5.12.39 The DS modelling for these junctions, which has been assessed within one LinSig model, has been based on a 60 second cycle time for the AM scenarios and a 75 second cycle time for the PM scenarios. The 2020 and 2035 DM results are detailed within Table 5.20 and 5.21 respectively.

**Table 5.20 Parkway Junction 2020 DS Results**

Movement	AM Peak (60 sec cycle time)		PM Peak (75 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
<b>Junction of Park Way, Village Way and Tenax Road (Parkway Junction)</b>				
Parkway Ahead (Lane 1)	40.9%	14	20.7%	9
Parkway Ahead (Lane 2)	55.4%	21	38.1%	18
Parkway Ahead (Lane 3)	53.5%	19	30.5%	14
Village Way Ahead (Lane 1 & 2)	11.1%	6	47.6%	30
Village Way Ahead (Lane 3)	19.6%	11	74.7%	66
Village Way Right (Lane 4 & 5)	59.3%	22	31.5%	15
Tenax Rd Right Left (Lane 1 & 2)	59.6%	18	79.7%	55
Tenax Rd Right (Lane 3)	32.0%	11	74.6%	36
Tenax Rd Right (Lane 4)	24.2%	10	54.5%	53
<b>Junction of Park Way and re-aligned Westinghouse Road</b>				
Parkway EB Ahead (Lane 1)	59.9%	45	29.9%	22
Parkway EB Ahead (Lane 2)	37.6%	23	18.0%	12
Parkway EB Right (Lane 3 & 4)	52.0%	28	30.0%	11
Parkway WB Left Ahead (Lane 1 & 2)	24.2%	9	53.6%	15
Parkway WB Ahead (Lane 3)	30.3%	17	63.4%	71
Parkway WB Ahead (Lane 4)	34.1%	18	74.5%	79
Westinghouse Rd Left (Lane 1)	60.2%	33	74.4%	34
<b>Junction of Eastern Tram Crossing</b>				
Village Way WB Ahead (Lane 1)	8.1%	2	33.6%	11
Village Way WB Ahead (Lane 2)	19.2%	5	41.3%	17
Village Way EB Ahead (Lane 1)	28.4%	2	18.2%	3
Village Way EB Ahead (Lane 2)	17.9%	1	12.2%	1
<b>Junction of Tenax Road and the re-aligned Ashburton Road West</b>				
Tenax Rd NB Ahead Left (Lane 1)	52.0%	26	31.9%	17
Tenax Rd NB Ahead (Lane 2)	46.3%	14	34.9%	21
Tenax Rd SB Ahead (Lane 1)	31.5%	15	66.0%	49
Tenax Rd SB Ahead (Lane 2)	50.9%	26	79.9%	71
Ash Burton Road West Right Left (Lane 1)	58.3%	43	79.5%	88
<b>PRC</b>	<b>55.7%</b>		<b>12.6%</b>	

Source: Mott MacDonald

**Table 5.21 Parkway Junction 2035 DS Results**

Movement	AM Peak (60 sec cycle time)		PM Peak (75 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
<b>Junction of Park Way, Village Way and Tenax Road (Parkway Junction)</b>				
Parkway Ahead (Lane 1)	35.8%	11	34.3%	13
Parkway Ahead (Lane 2)	56.7%	21	49.3%	19
Parkway Ahead (Lane 3)	55.7%	20	44.4%	17
Village Way Ahead (Lane 1 & 2)	19.0%	11	61.3%	41
Village Way Ahead (Lane 3)	16.6%	9	85.1%	85
Village Way Right (Lane 4 & 5)	72.4%	36	56.1%	28
Tenax Rd Right Left (Lane 1 & 2)	62.0%	32	84.0%	56
Tenax Rd Right (Lane 3)	54.5%	17	82.0%	46
Tenax Rd Right (Lane 4)	45.5%	15	65.6%	52
<b>Junction of Park Way and re-aligned Westinghouse Road</b>				
Parkway EB Ahead (Lane 1)	74.2%	63	27.7%	19
Parkway EB Ahead (Lane 2)	38.8%	25	19.7%	13
Parkway EB Right (Lane 3 & 4)	50.9%	27	38.5%	13
Parkway WB Left Ahead (Lane 1 & 2)	19.1%	14	59.4%	47
Parkway WB Ahead (Lane 3)	37.8%	30	68.0%	86
Parkway WB Ahead (Lane 4)	44.4%	31	83.5%	91
Westinghouse Rd Left (Lane 1)	73.4%	45	81.5%	36
<b>Junction of Eastern Tram Crossing</b>				
Village Way WB Ahead (Lane 1)	11.5%	3	41.4%	15
Village Way WB Ahead (Lane 2)	26.5%	6	53.0%	25
Village Way EB Ahead (Lane 1)	30.2%	2	23.8%	2
Village Way EB Ahead (Lane 2)	18.5%	1	13.8%	1
<b>Junction of Tenax Road and the re-aligned Ashburton Road West</b>				
Tenax Rd NB Ahead Left (Lane 1)	64.6%	39	42.5%	32
Tenax Rd NB Ahead (Lane 2)	50.3%	25	41.5%	25
Tenax Rd SB Ahead (Lane 1)	23.7%	11	63.8%	47
Tenax Rd SB Ahead (Lane 2)	67.1%	42	92.2%	101
Ash Burton Road West Right Left (Lane 1)	72.1%	59	94.2%	141
<b>PRC</b>	<b>28.2%</b>		<b>-4.7%</b>	

**Source: Mott MacDonald**

5.12.40 The results indicate the new junctions will operate well in both peak periods in the 2020 assessment year, representing an improvement over the Do Minimum operation. Operational levels will deteriorate in the 2035 assessment year, but this is as a result of increases in background traffic, rather than an impact of the scheme.

## Junction of Barton Dock Road and Mercury Way

### Do Minimum Assessment

5.12.41 The existing junction is priority controlled, with Mercury Way as the minor (side road). Site observations in 2013 indicate the junction operates adequately at the present time. The DM scenario, has not been modelled as this has been undertaken by others as part of assessment work in support of a proposed commercial development on the brownfield site that is bounded by Barton Dock Road, Mercury Way and Park Way (known as the Kratos Development) which provided the site observations. This assessment has recommended that this junction would need to be signalised to accommodate the traffic generated by the development proposals.

### Do Something Assessment

5.12.42 The TPL proposals at this junction would retain all existing traffic movements, whilst introducing tram movements that would cross Mercury Way. It is considered necessary, for the safe and efficient operation of the junction, to introduce segregated left and right turn facilities from Barton Dock Road onto Mercury Way. This segregation will not only provide drivers making different movements with the correct indication and hence reduced driver confusion but also allow tram and (certain) traffic movements to be run safely the same time. Accordingly the new junction will operate a four stage cycle as indicated in Figure 5.9 below. The DS modelling for this junction has been based on a 63 second cycle time for both the AM & PM peak periods while the Saturday peak period is based on a 60 second cycle time albeit a greater level of demand dependant staging is expected due to the lower flows from Mercury Way.

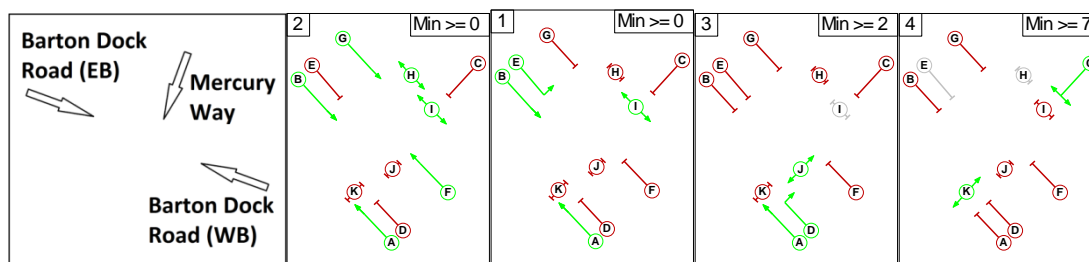


Figure 5.9 DS Staging of Barton Dock Road / Mercury Way junction

5.12.43 The 2020 and 2035 DS AM and PM results are detailed within Table 5.22 and 5.23 respectively.

**Table 5.22 Junction of Barton Dock Road / Mercury Way 2020 DS Results**

Movement	AM Peak (63 sec cycle time)		PM Peak (63 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Barton Dock Rd WB – Ahead (Lane 1)	26.8%	16	44.3%	32
Barton Dock Rd WB – Ahead Right (Lane 2 & 3)	40.8%	17	44.0%	32
Barton Dock Rd EB – Left Ahead(Lane 1 & 2)	21.9%	13	59.8%	43
Barton Dock Rd EB – Ahead (Lane 3)	20.2%	13	55.9%	42
Mercury Way – Left Right (Lane 1 & 2)	15.5%	4	59.3%	19
<b>PRC</b>	<b>120.6%</b>		<b>50.4%</b>	

Source: Mott MacDonald

**Table 5.23 Junction of Barton Dock Road / Mercury Way 2035 DS Results**

Movement	AM Peak (63 sec cycle time)		PM Peak (63 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Barton Dock Rd WB – Ahead (Lane 1)	39.2%	26	48.3%	36
Barton Dock Rd WB – Ahead Right (Lane 2 & 3)	46.4%	27	48.0%	36
Barton Dock Rd EB – Left Ahead(Lane 1 & 2)	28.7%	17	71.6%	57
Barton Dock Rd EB – Ahead (Lane 3)	26.0%	17	67.0%	55
Mercury Way – Left Right (Lane 1 & 2)	20.1%	5	65.9%	21
<b>PRC</b>	<b>94.1%</b>		<b>25.6%</b>	

Source: Mott MacDonald

5.12.44 The 2020 and 2035 Saturday DS results are detailed within Table 5.24

**Table 5.24 Junction of Barton Dock Road / Mercury Way Saturday DS Results**

Movement	Saturday Peak (2020) (60 sec cycle time)		Saturday Peak (2035) (60 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Barton Dock Rd WB – Ahead (Lane 1)	44.1%	30	47.5%	33
Barton Dock Rd WB – Ahead Right (Lane 2 & 3)	43.7%	30	47.2%	33
Barton Dock Rd EB – Left Ahead(Lane 1 & 2)	48.2%	33	50.8%	36
Barton Dock Rd EB – Ahead (Lane 3)	45.1%	32	47.5%	35
Mercury Way – Left Right (Lane 1 & 2)	230.0%	12	46.0%	24
<b>PRC</b>	<b>86.6%</b>		<b>77.2%</b>	

Source: Mott MacDonald

5.12.45 The results indicate that the junction will operate with a significant level of spare capacity with low levels of queuing.



## Peel Circle/Junction

### Do Minimum Assessment

- 5.12.46 Peel Circle is a 5 arm priority controlled roundabout located on Barton Dock Road that provides access to the Trafford Centre, Barton Square and EventCity developments. The roundabout includes pedestrian and cycle facilities by way of uncontrolled crossing points on all of the entry and exit arms. Given the level of traffic and vehicle speeds, outside congested periods, it is not considered that these facilities adequately provide for pedestrians and cyclists, particularly the large volumes crossing Barton Dock Road (East) between the surface car parks and EventCity development, and (west) between the bus stops and Barton Square.
- 5.12.47 During the peak period site observations in 2013 limited congestion was noted, although it is understood queues in both directions can occur as a result of downstream conditions on the highway network. The 2020 peak period for this junction is at the weekend during the busiest shopping hours and events at the EventCity development which attract high volumes of traffic over short timescales. Tables 5.25, 5.26 and 5.27 detail the results of the assessment of this junction for 2020 AM and PM peak, 2035 AM and PM peak and 2020 and 2035 Saturday peak respectively.
- 5.12.48 The existing layout has been assessed using ARCADY. A Ratio of Flow to Capacity (RFC) of less than 0.85 indicates an approach is operating with spare capacity. An RFC of between 0.85 and 1.00 indicates the approach is at capacity and an RFC in excess of 1.00 indicates an approach is over capacity:

**Table 5.25 Peel Circle 2020 Do Minimum Results**

Movement	AM Peak		PM Peak	
	RFC	Queue (m)	RFC	Queue (m)
Barton Dock Road (West)	0.244	2	0.419	5
Phoenix Way	0.024	0	0.394	3
Barton Dock Road (East)	0.373	3	0.655	11
Festival Way	0.001	0	0.009	0
Peel Avenue	0.027	0	0.171	1

**Source: Mott MacDonald**

**Table 5.26 Peel Circle 2035 Do Minimum Results**

Movement	AM Peak		PM Peak	
	RFC	Queue (m)	RFC	Queue (m)
Barton Dock Road (West)	0.290	2	0.631	10
Phoenix Way	0.029	0	0.503	6
Barton Dock Road (East)	0.588	8	0.800	22
Festival Village	0.001	0	0.025	0
Peel Avenue	0.033	0	0.189	1

**Source: Mott MacDonald**

**Table 5.27 Peel Circle Saturday Do Minimum Results**

Movement	Saturday Peak (2020)		Saturday Peak (2035)	
	RFC	Queue (m)	RFC	Queue (m)
Barton Dock Road (West)	0.435	5	0.460	5
Phoenix Way	0.470	6	0.511	6
Barton Dock Road (East)	0.640	11	0.665	12
Festival Village	0.004	0	0.003	0
Peel Avenue	0.280	3	0.319	3

**Source: Mott MacDonald**

- 5.12.49 In line with the observations the junction performs adequately during all time periods. However the results for the Saturday peak are not considered truly representative of network conditions when high volumes of traffic over short timescales try to pass through the roundabout.

### Do Something Assessment

- 5.12.50 The TPL proposals result in the tram route crossing Phoenix Way to a new stop in front of Barton Square before continuing to cross Barton Dock Road to the west of the roundabout prior to the Trafford Centre stop. To provide effective and efficient control of the tram and traffic interface it is proposed to convert the roundabout into a signal controlled junction. All movements at the junction will be retained with the exception of the left turn from Barton Dock Road into Phoenix Way to allow tram and traffic movements to run at the same time. This movement will be re-provided by way of a new access road that will run to the west of Barton Square along a route formerly reserved for the Metrolink extension. The Trafford Centre car park access will also be revised.
- 5.12.51 The new junction will operate a four stage cycle as indicated in Figure 5.10 below and the DS modelling for this junction has been based on a 90 second cycle time for all time periods considered.

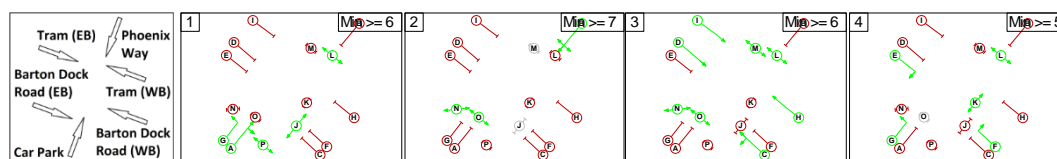


Figure 5.10 DS Staging of Peel Junction

Tables 5.28, 5.29 and 5.30 detail the results of the assessment of this junction for 2020 AM and PM peak, 2035 AM and PM peak and 2020 and 2035 Saturday peak respectively.

Table 5.28 Peel Junction 2020 Do Something Results

Movement	AM Peak (90 sec cycle time)		PM Peak (90 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Festival Village – Left Ahead Right (Lane 1 & 2))	0.5%	0	44.9%	15
Festival Village – Right (Lane 3)	1.0%	1	45.2%	15
Barton Dock Rd North – Ahead (Lane 1)	23.7%	18	48.1%	40
Barton Dock Rd West – Ahead (Lane 2)	18.1%	13	42.4%	33
Barton Dock Rd West – Right (Lane 3 & 4)	8.9%	3	10.4%	3
Phoenix Way – Ahead Left Right (Lane 1 & 2)	9.1%	3	76.1%	37
Barton Dock Rd East – Ahead Left (Lane 1)	38.1%	32	75.5%	76
Barton Dock Rd East – Ahead Right (Lane 2 & 3)	39.2%	32	75.3%	76
<b>PRC</b>	<b>129.3%</b>		<b>18.2%</b>	

Source: Mott MacDonald

Table 5.29 Peel Junction 2035 Do Something Results

Movement	AM Peak (90 sec cycle time)		PM Peak (90 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Festival Village – Left Ahead Right (Lane 1 & 2))	9.1%	3	36.4%	12
Festival Village – Right (Lane 3)	9.1%	3	36.6%	12
Barton Dock Rd North – Ahead (Lane 1)	31.3%	25	67.5%	65
Barton Dock Rd West – Ahead (Lane 2)	26.0%	19	56.9%	49
Barton Dock Rd West – Right (Lane 3 & 4)	10.9%	4	19.6%	6
Phoenix Way – Ahead Left Right (Lane 1 & 2)	10.6%	3	80.3%	38
Barton Dock Rd East – Ahead Left (Lane 1)	55.3%	52	85.2%	96
Barton Dock Rd East – Ahead Right (Lane 2 & 3)	55.3%	52	84.0%	95
<b>PRC</b>	<b>62.7%</b>		<b>5.7%</b>	

Source: Mott MacDonald

**Table 5.30 Peel Junction Saturday Do Something Results**

Movement	Saturday 2020 Peak (90 sec cycle time)		Saturday 2035 Peak (90 sec cycle time)	
	DoS (%)	Queue (m)	DoS (%)	Queue (m)
Festival Village – Left Ahead Right (Lane 1 & 2))	77.3%	40	83.3%	44
Festival Village – Right (Lane 3)	77.4%	40	84.2%	45
Barton Dock Rd North – Ahead (Lane 1)	60.5%	48	66.2%	55
Barton Dock Rd West – Ahead (Lane 2)	57.0%	44	57.5%	44
Barton Dock Rd West – Right (Lane 3 & 4)	5.0%	2	13.4%	5
Phoenix Way – Ahead Left Right (Lane 1 & 2)	79.9%	44	80.9%	46
Barton Dock Rd East – Ahead Left (Lane 1)	80.6%	73	85.3%	84
Barton Dock Rd East – Ahead Right (Lane 2 & 3)	80.6%	73	85.0%	84
<b>PRC</b>	<b>11.7%</b>		<b>5.5%</b>	

**Source: Mott MacDonald**

- 5.12.52 The results indicate that the junction will continue to operate with spare capacity during all time periods and should allow for better control of traffic during times of peak demand than the roundabout arrangement does today.
- 5.12.53 Overall, the junction capacity modelling presented above represents a worst case scenario. Junctions would operate on a SCOOT / MOVA system which adjust signal timings against prevailing traffic conditions to improve junction operation. Junction designs will continue to be developed whilst working closely alongside GMUTC, to ensure delivery of an optimal solution.

### **5.13 Identification of Off-Line Impact**

- 5.13.1 The previous sections report on the operation of the on-line junctions with the TPL scheme in place. However, an assessment has been undertaken to identify those junctions not on the alignment – or off-line junctions – which may be directly affected by the introduction of the scheme. Where considered appropriate, measures to mitigate against any adverse impacts will be developed as part of the on-going scheme design development. Any such mitigation measures will be developed directly in conjunction with TMBC and GMUTC as the key highway stakeholders.

## Methodology

- 5.13.2 An area of highway influence (AOI) of the TPL was derived using the SATURN model in order to determine the geographical area that might be affected by the schemes introduction. This was done by comparing flow differences from the DM and DS model runs. The AOI was defined as containing those links where the difference in traffic flow between the DM and DS exceeded a GEH<sup>1</sup> Statistic of 5.0. This analysis was undertaken for both the AM and PM peak forecasts at 2035. The AOI was defined as those links exceeding 5.0 on this measure in either time period. It can be seen from (Figure 5.11) that the AOI is bordered by the Manchester Ship Canal, Manchester-Liverpool railway and the M60 motorway which represent significant barriers to movement. For completeness, and further to engaging with the Highways Agency, junctions 9 and 10 of the M60 motorway were also included within the AOI.

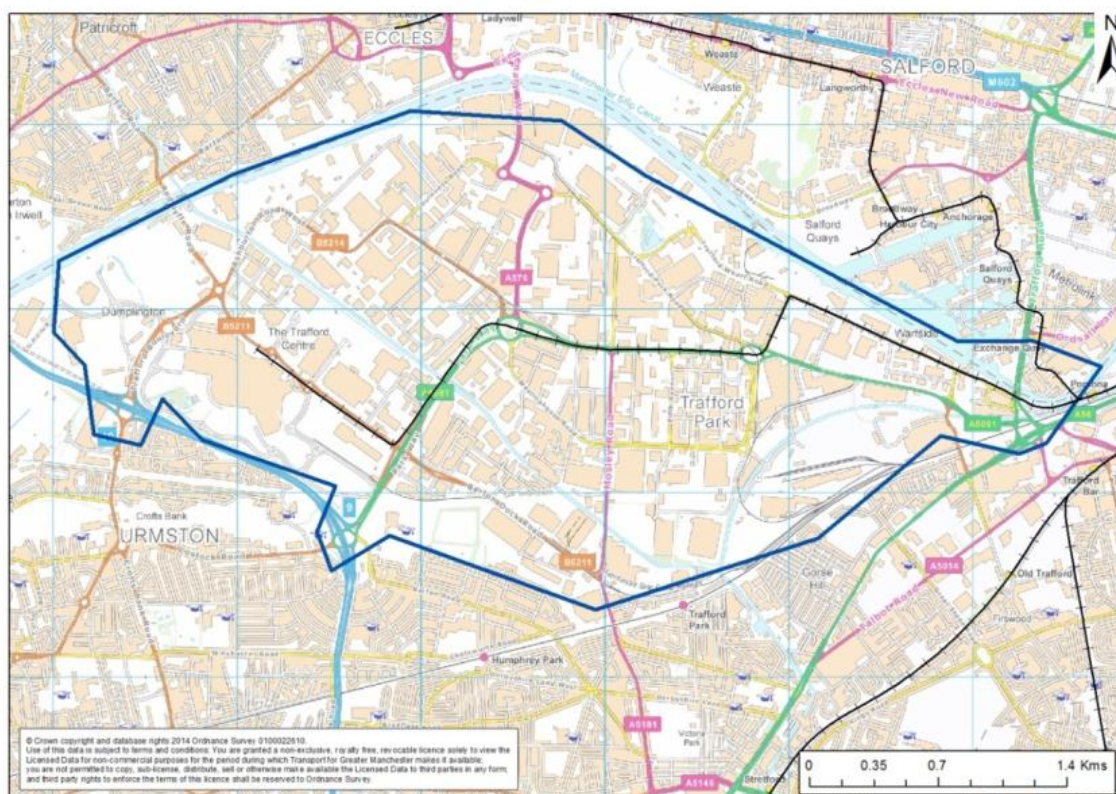


Figure 5.11 Area of Highway Influence

- 5.13.3 In order to determine which junctions within the AOI required further detailed consideration, individual turning movements were analysed based on the Volume/Capacity (V/C) ratio. This ratio provides an indication of whether any

<sup>1</sup> The GEH Statistic is a formula used in traffic engineering, traffic forecasting, and traffic modelling to compare two sets of traffic volumes.



junction is operating close to, at, or above capacity. Any junction which has a V/C that meets the following criteria was flagged for further review.

5.13.4 By comparing the DM and DS scenarios, the change in performance of individual junctions resulting from the introduction of the TPL was identified. Junctions were categorised using the following thresholds:

- 0-84% Junction performing within capacity;
- 85-100% Junction performing over capacity; and
- >100% Junction performing over practical & theoretical capacity.

5.13.5 Figures 5.12 to 5.17 show the results of this analysis in the AM peak, PM peak and Saturday time periods respectively for each of the DM and DS scenarios. On these figures the following colour coding has been used to represent the thresholds set out above:

- 0-84% Green
- 85-100% Amber
- >100% Red

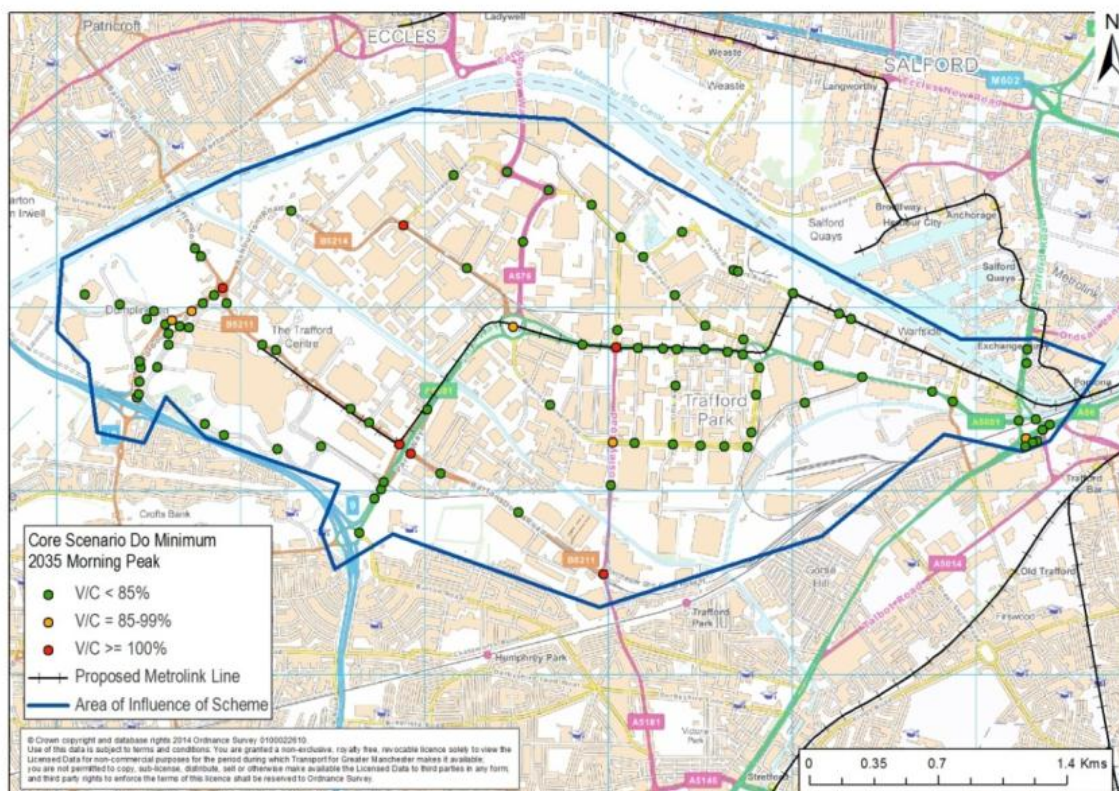


Figure 5.12 Morning Peak Do Minimum



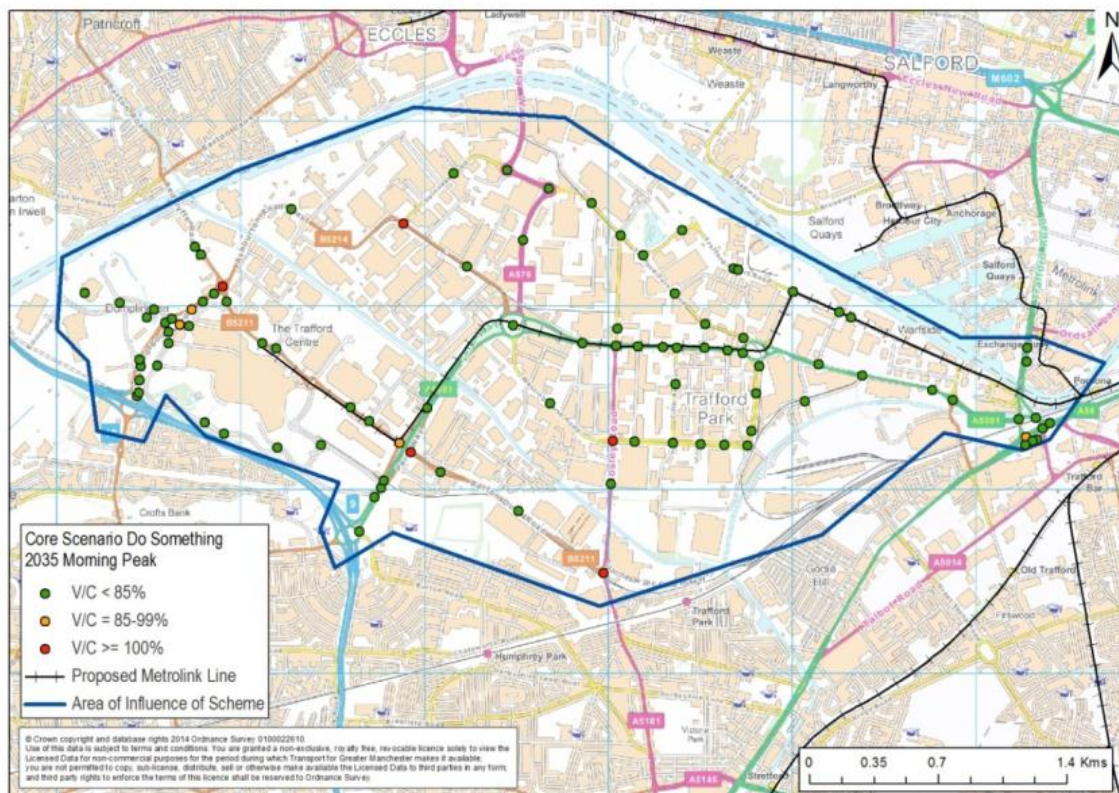


Figure 5.13 Morning Peak Do Something

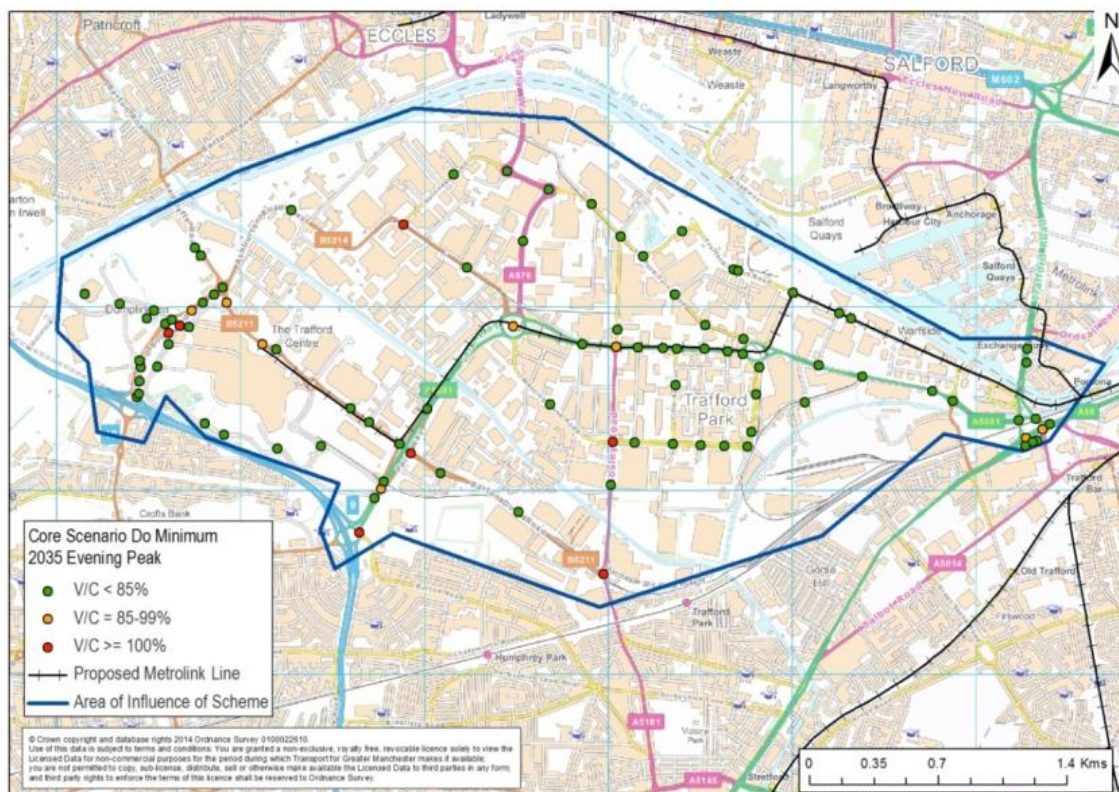


Figure 5.14 Evening Peak Do Minimum



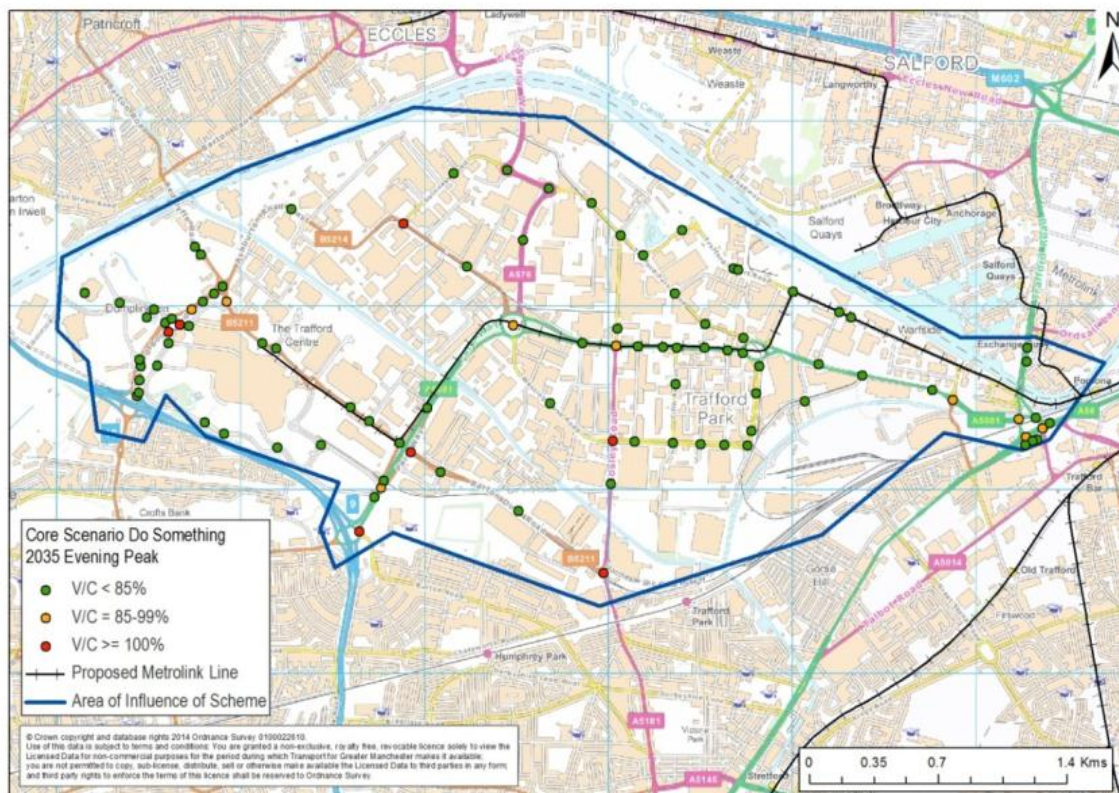


Figure 5.15 Evening Peak Do Something

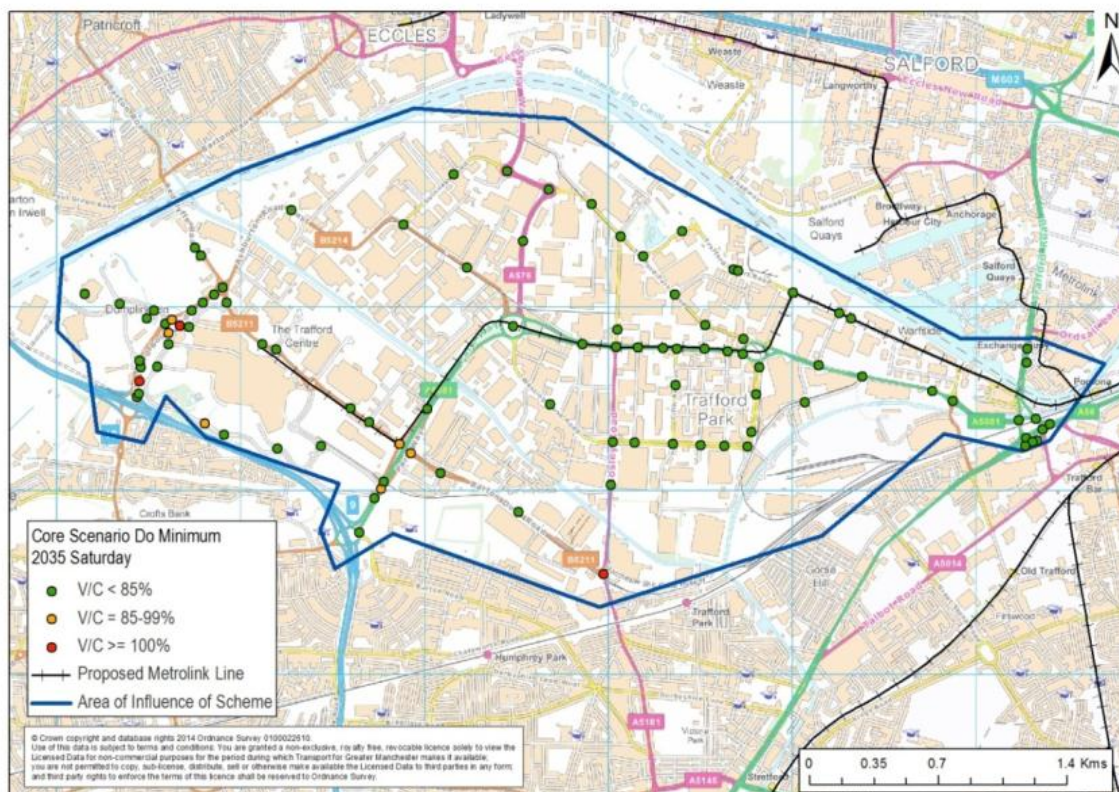


Figure 5.16 Saturday Do Minimum



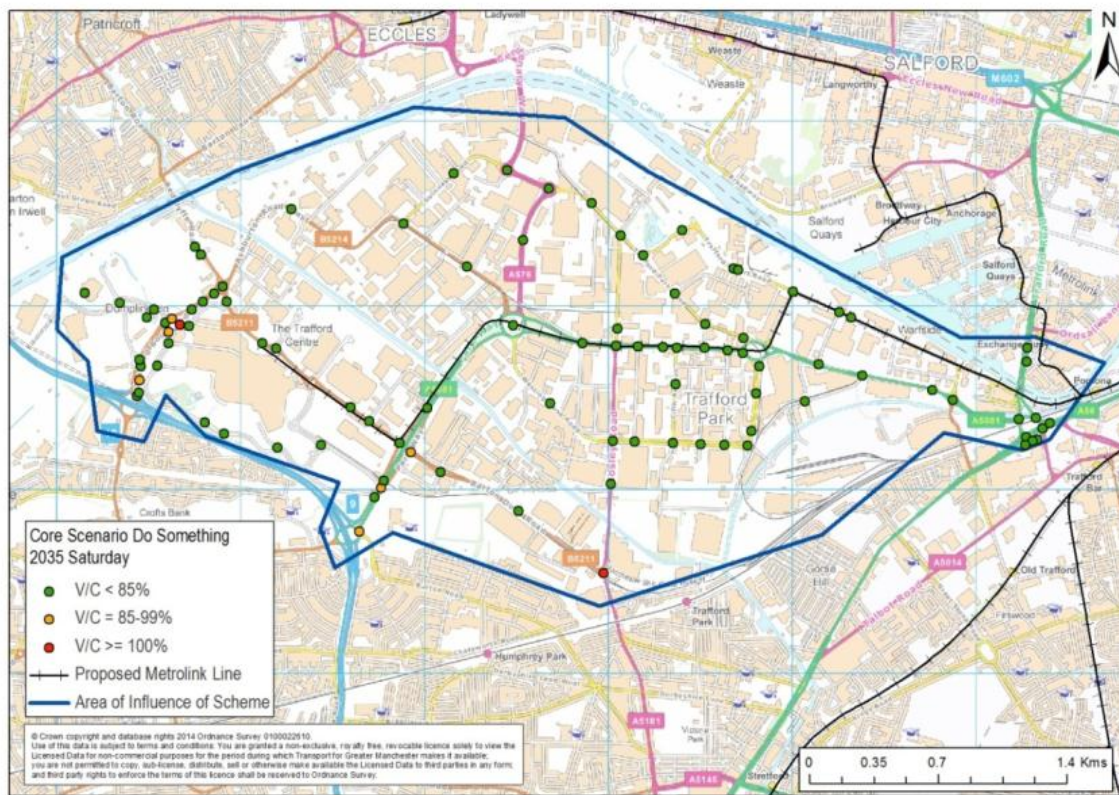


Figure 5.17 Saturday Do Something

5.13.6 Figures 5.12 to 5.17 above show that a number of junctions across Trafford Park are highly congested in both the DM and DS (coloured Amber or Red). Using the thresholds presented above, the change in predicted operation going from the DM to the DS scenario was further reviewed and three Figures 5.18 to 5.20 created to illustrate the ‘deterioration’ between the DM and DS scenarios attributable to the TPL scheme introduction for each time period. These changes are colour coded as follows:

- **Green** = No change in V/C; or V/C decreases DM to DS.
- **Amber** = V/C increases by 1 category either from green to amber or from amber to red.
- **Red** = V/C increases by 2 categories from green to red.

5.13.7 Junctions that are coloured Amber represent a moderate ‘deterioration’ in performance resulting from TPL whilst those coloured Red represent a marked ‘deterioration’. Although there are some junctions for which the V/C ratio increases between the DM and DS by at least one V/C category as set out above – from green to amber or amber to red. There are no instances of junctions changing by two V/C categories – from green to red.



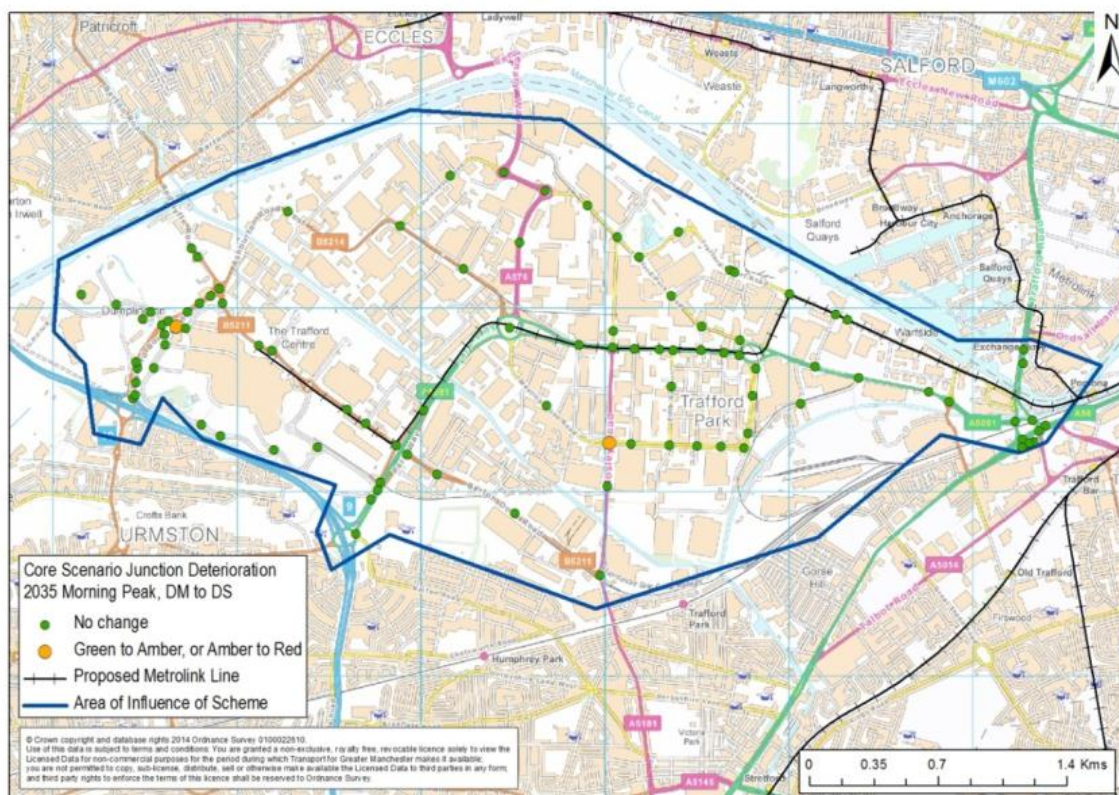


Figure 5.18 Morning Peak Junction 'Deterioration' DM to DS

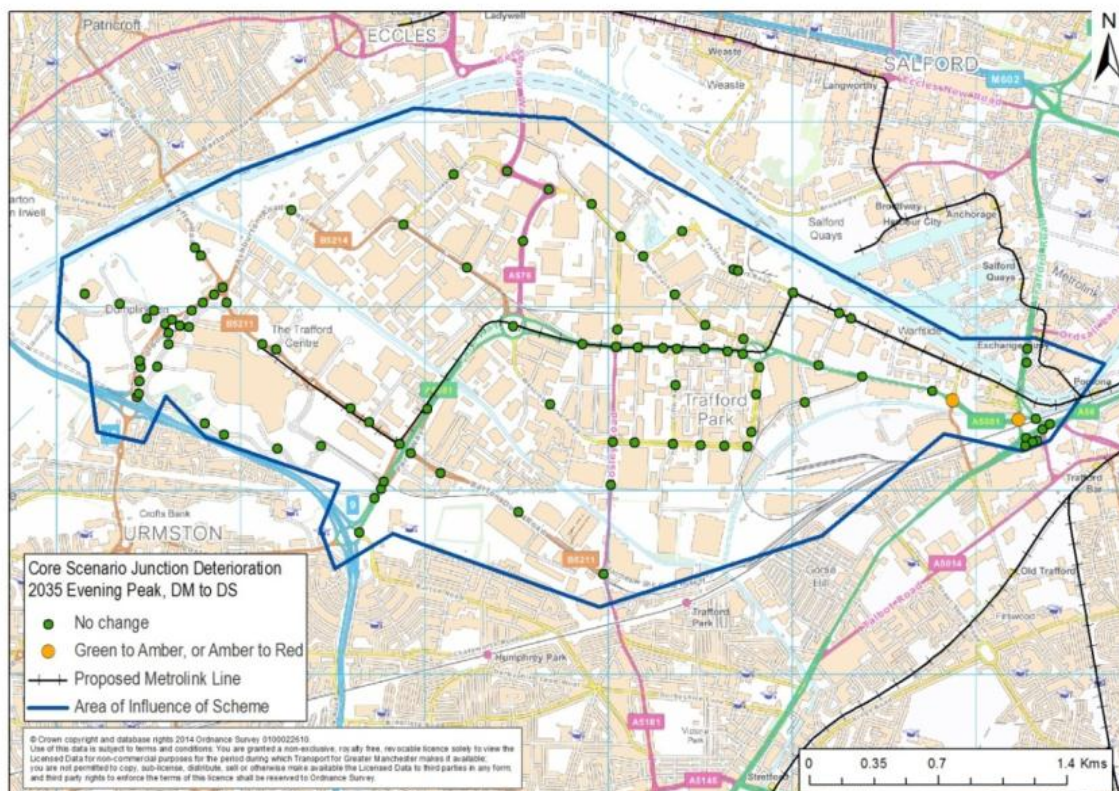


Figure 5.19 Evening Peak Junction 'Deterioration' DM to DS



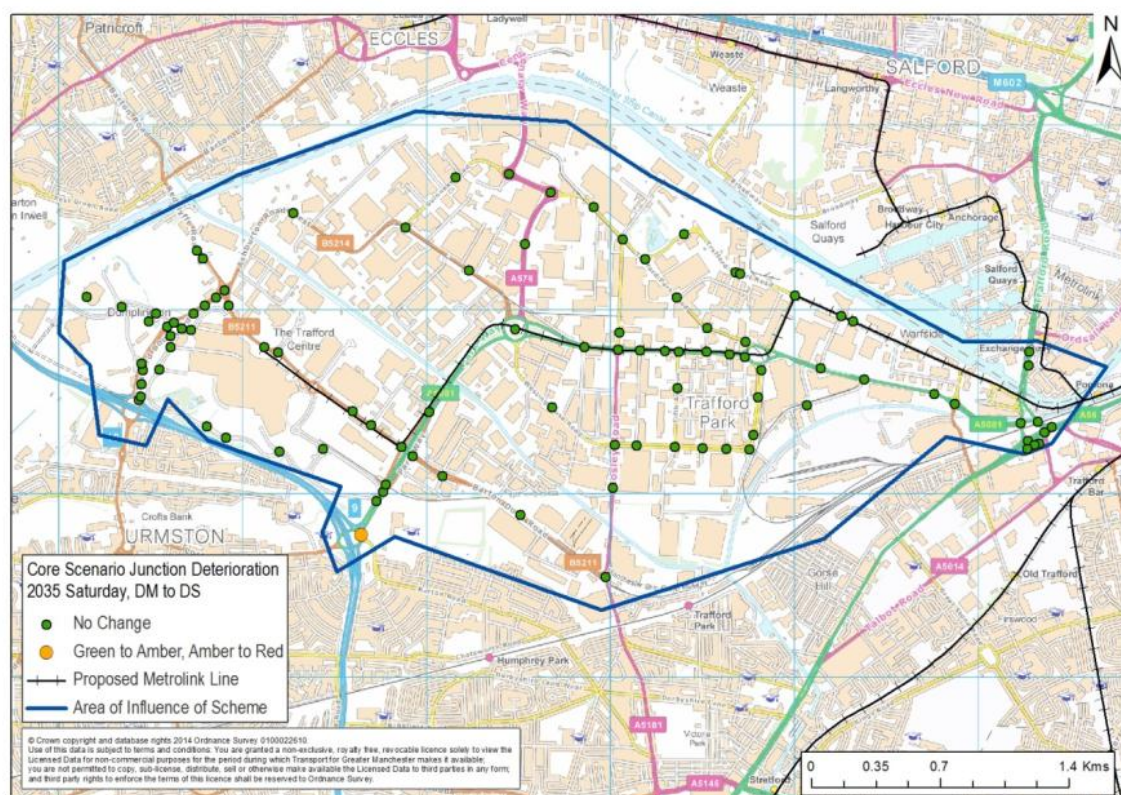


Figure 5.20 Saturday Junction 'Deterioration' DM to DS

5.13.8 As demonstrated in the Figures 5.18 to 5.20 above, only five junctions have been identified as 'deteriorating' between the DM and DS across the morning peak, evening peak or Saturday time periods. Table 5.31 sets out these locations, the junction type and the V/C ratios for these junctions in the DM and DS.

Table 5.31 Junctions Identified as Having Deteriorating V/C

Time Period	Junction	Junction Type	Do Minimum V/C	Do something V/C
Morning Peak	A5181 Mosley Road/Westinghouse Road	Signal Controlled	97	101
Morning Peak	Bridgewater Circle	Signal Controlled	84	86
Evening Peak	A5081 Wharfside Way/A5063 Trafford Road	Signal Controlled	84	87
Evening Peak	A5081 Wharfside Way/Sir Matt Busby Way	Signal Controlled	70	92
Saturday	M60 Junction 9 approach from A5081 Parkway	Signal Controlled	80	92

Source: Systra

- 5.13.9 A5181 Mosley Road/Westinghouse Road – Alterations to the junction layout at Parkway Circle and along Village Way to accommodate the scheme, results in an increase in traffic passing through the Mosley Road/Westinghouse Road junction. Potential traffic mitigation measures to improve this off-line junction will be developed in conjunction with TMBC and GMUTC as part of the ongoing scheme development and are likely to involve the provision of dedicated right turning lanes on Westinghouse Road. These improvements could be accommodated with the existing highway.
- 5.13.10 For the four other junctions, small adjustments to the signal timings assumed in the SATURN model for these junctions would address the increases in V/C ratio observed between the DM and DS forecasts.

## **5.14 Conclusions**

- 5.14.1 TfGM has undertaken extensive traffic modelling work and detailed assessment of the scheme proposals to identify what impact the proposed TPL will have on the highway and its users.
- 5.14.2 The effect of the TPL scheme has been determined using the Greater Manchester strategic highway model which was built using the industry standard modelling software, SATURN. Individual junction capacity assessments were then undertaken using the industry standard LinSig and Arcady software packages. The DM scenario represents the expected situation with regards to development proposals and traffic characteristics at the time of introducing TPL and the DS scenario takes the DM scenario and incorporates the TPL proposals.
- 5.14.3 The online junctions were assessed and it was identified that the vast majority of junctions would be expected to continue to operate within capacity after the implementation of TPL. The remodelling of the Parkway Junction will result in improvement over the Do Minimum in 2020. The deterioration expected in 2035 at the Parkway junction was considered to be a result of background traffic growth rather than an impact of the TPL scheme.
- 5.14.4 An assessment was also undertaken to identify those off-line junctions not on the TPL alignment which may be directly affected by the introduction of the scheme. In total, five junctions across the whole of Trafford Park were identified as having a deteriorating volume to capacity ratio. However, only one of these junctions is likely to require a physical intervention the details of which will be developed in conjunction with TMBC and GMUTC as part of the ongoing scheme development.
- 5.14.5 It can be concluded from the modelling presented in section 5.12 and 5.13 that the TPL can be introduced into the DM scenario with limited overall impact on the highway network.

## **6 Impact on Bus Services**

### **6.1 Introduction**

- 6.1.1 Buses form an important element of the existing public transport infrastructure offering access to both the Trafford Park area and Trafford Centre Rectangle developments. As the operation of bus services is de-regulated in Greater Manchester, bus routings are generally determined by bus operating companies. A primary role of TfGM is to coordinate public transport and sponsor subsidised services where ‘gaps’ in the commercial bus network are identified. Across Greater Manchester, approximately 80% of all services are operated commercially whilst the remaining 20% are supported by TfGM to varying degrees. Both commercial and subsidised bus services operate in Trafford Park. The existing bus network is presented in Figure F.1 included in Appendix F.
- 6.1.2 This section details the existing bus provision and where necessary suggests a viable set of alternative bus routings that could be introduced after the implementation of TPL. These proposals will go through further refinement as the TPL scheme is progressed at detailed design stage, and following further detailed discussions with bus operators and TMBC.
- 6.1.3 Table 6.1 details the existing frequent and less frequent bus services which run parallel to or cross the TPL alignment. However, it is understood that the existing bus network may be subject change due to a review of the Trafford Park bus network, which will encompass both commercial and subsidised services. TPL will present an opportunity for TfGM to work with bus operators to develop the most effective network provision in Trafford Park.
- 6.1.4 The following sections detail the potential impacts of the TPL on existing bus routings and bus stop provision. The impacts of potential changes to existing bus services are reviewed by section as defined in Figure 3.1. The majority of Section 1 of the proposed TPL route has a limited interface with existing bus service provision. For ease the proposed alterations at the eastern end of Trafford Wharf Road have been assessed with those proposed further along Trafford Wharf Road in Section 2 of the proposed TPL route.

Table 6.1 – Existing Bus Services

No	Route	First Bus	Last Bus	Frequency					Operator	Supported by TfGM
				AM	IP	PM	SAT	SUN		
Frequent Bus Services										
18	The Trafford Centre - Stretford - Sale – W’shawe - Manchester Airport - Hale - Altrincham	06:29	23:47	30 mins	30 mins	30 mins	30 mins	60 mins	Arriva North West / Manchester Community Transport	Both commercial and subsidised
245	Exchange Quay - Trafford Park - Urmston - Stretford - Broadheath - Altrincham	06:30	23:24	30 mins	30 mins	30 mins	30 mins	60 mins	Arriva North West	Both commercial and subsidised
250	The Trafford Centre - Trafford Park - MediaCityUK - Salford Quays - Old Trafford - Hulme - Manchester	05:56	00:42	15 mins	15 mins	15 mins	15 mins	15 mins	Stagecoach Manchester	Commercial Service
291	Trafford Park - Old Trafford - Hulme - Manchester	05:28	21:36	15 mins	30 mins	30 mins	No Service	No Service	Stagecoach Manchester / Go Goodwins	Subsidised service
293	Little Hulton - Winton - Peel Green - Eccles - The Trafford Centre - Trafford Park	06:22	18:43	30 mins	No Service	30 mins	No Service	No Service	Arriva North West	Subsidised service
ML1	Stretford Metrolink - Trafford Centre	08:30	18:30	20 mins	20 mins	20 mins	20 mins	20 mins	Arriva North West	Subsidised service
X50	The Trafford Centre - Trafford Park - Salford Quays - Manchester	06:11	22:14	15 mins	15 mins	15 mins	15 mins	15 mins	Stagecoach Manchester	Commercial Service
X58	Flixton - Lostock - Stretford - Old Trafford - Hulme – Manchester	05:04	23:55	10 mins	10 mins	20 mins	10 mins	30 mins	Stagecoach Manchester	Both commercial and subsidised

No	Route	First Bus	Last Bus	Frequency					Operator	Supported by TfGM	
				AM	IP	PM	SAT	SUN			
Less Frequent Bus Services											
19	Clifton Junction - Swinton - Eccles - Patricroft - Trafford Park	06:55	07:36	One morning service to Trafford Park only, weekdays only.					Go Goodwins	Subsidised service	
54	Cheetham - Moss Side - Hulme - Trafford Park - Trafford Centre	05:44	07:08	Two morning services only between Trafford Bar and Trafford Centre. Weekdays only.					J P Travel / Go Goodwins	Both commercial and subsidised	
270	Baguley - Wythenshawe - Benchill - West Didsbury - Trafford Park - The Trafford Centre	06:40	09:00	Two services and one service between Wythenshawe and Parkway Circle only, weekdays only.					Manchester Community Transport / Go Goodwins	Both commercial and subsidised	
272	Woodhouse Park - Northenden - Sale - Stretford - Trafford Park	06:30	19:02	Three morning and three evening services, weekdays only.					Arriva North West / Go Goodwins	Subsidised service	
294	Langley - Middleton - Moston - Crumpsall - Cheetham Hill - The Trafford Centre	06:10	07:48	Two morning services, weekdays only.					J P Travel	Subsidised service	
297	Levenshulme - Chorlton - Stretford - The Trafford Centre - Trafford Park	07:00	07:57	One morning service, weekdays only.					Manchester Community Transport	Subsidised service	

Source: Transport for Greater Manchester

## 6.2 Sections 1 and 2 – Wharfside Stop to Warren Bruce Road

### Bus Services

- 6.2.1 The existing bus services are shown in Figure F.2 in Appendix F and summarised in Table 6.1 above. Six bus services operate along Trafford Wharf Road and 6 bus services operate along Warren Bruce Road, providing a minimum service frequency of 10bph (per direction).

- 6.2.2 The bus services that currently access Trafford Wharf Road at its eastern end via its junction with Trafford Road (A5063) will be unaffected, albeit they will be required to re-route via Victoria Place and Sir Alex Ferguson Way as opposed to simply following Trafford Wharf Road round. This is not considered detrimental as the route lengths are similar and there are no bus stops on the section of the route affected.
- 6.2.3 Those bus services that currently access Trafford Wharf Road at its eastern end via Sir Alex Ferguson Way from Wharfside Way (A5081), which includes the X50 service, will need to re-route to the route outlined above, and as shown in Figure F.3. This is not considered detrimental as the route lengths are similar and the bus stops on Wharfside Way between its junction with White Circle gyratory and Sir Alex Ferguson Way are not currently served by the X50.
- 6.2.4 Access to Warren Bruce Road from either Trafford Wharf Road or Village Circle is unaffected.

#### **Bus Stops**

- 6.2.5 On Sir Alex Ferguson Way bus stops, by way of a flag pole are provided on both sides of the carriageway either side of the junction with Waterside. These bus stops are retained in the Technical Drawing scheme proposals.
- 6.2.6 On Trafford Wharf Road bus stops are provided in the vicinity of its junction with Trafford Road (A5063). These are retained in the illustrative scheme proposals. Further along on Trafford Wharf Road between its junctions with Sir Alex Ferguson Way and Warren Bruce Road eastbound bus stops, comprising of flagpole, information sign and shelter, are provided to the west of the junction with Sir Alex Ferguson Way, along the Quay West office frontage and along the Imperial War Museum frontage. In the westbound direction, bus stops comprise of flag poles only.
- 6.2.7 As part of the highway modifications necessary to accommodate the tramway, the illustrative design proposes to retain three pairs of stops which would be re-spaced to accommodate the tram and highway modifications. The arrangement avoids siting stops alongside the centrally segregated section of tramway opposite Rank Hovis where they would obstruct other road traffic and potentially lead to conflicts between traffic and trams. Resultant distances between the adjacent bus stops would be around 200 metres apart.
- 6.2.8 On Warren Bruce Road bus stops are provided on either side of the carriageway, by way of a flagpole only, in the vicinity of the access to Warren Bruce Court. These bus stops are retained but relocated slightly in the scheme proposals to allow for vehicles overtaking a stationary bus.



### **6.3 Section 3 – Village Way (including Village Circle)**

#### **Bus Services**

- 6.3.1 Village Circle is a signalised gyratory junction formed between Village Way, Trafford Park Road, Wharfside Way, Warren Bruce Road and Europa Way. Village Way extends westward from Village Circle towards the Parkway Circle. As shown in Figure F.4 in Appendix F and summarised in Table 6.1, a number of bus services operate through Village Circle and along Village Way to provide public transport access to the western and southern areas of Trafford Park. Those that cross Village Way do so at Mosely Road.
- 6.3.2 The TPL scheme will not impact on the routing of bus services that either pass through Village Circle or pass along Village Way with the exception of bus service 19, an infrequent subsidised service which operates just one service in the eastbound direction only, in the morning peak. It routes through the Trafford Park and Village area from Ashburton Road West using Village Way, Mosley Road, Westinghouse Road, terminating on Second Avenue.
- 6.3.3 Bus service 19 currently turns right from Village Way to Mosley Road (south). This movement will no longer be available and the service would need to be re-routed, as shown in Figure F.5, to use the new Park Way / Westinghouse Road junction to pick up the existing route at the junction of Westinghouse Road / Mosley Road.

#### **Bus Stops**

- 6.3.4 There are three pairs of bus stops located on Village Way, each comprising of a flagpole only, except for the eastbound bus stop adjacent to Third Avenue, which consists of a flagpole, information sign and shelter. These bus stops are retained in the scheme proposals.

### **6.4 Section 4 – Parkway Circle and Park Way**

#### **Bus Services**

- 6.4.1 Parkway Circle is a large roundabout formed at the junction between Tenax Road, Village Way, Westinghouse Road, Park Way and Ashburton Road West. As shown in Figure F.6 in Appendix F and summarised in Table 6.1, a number of bus services operate through Parkway Circle and along Park Way providing public transport access to the Trafford Park area, however it should be noted that some of these services operate infrequently and some services operate in one direction only.

6.4.2 The TPL proposals reconfigure the roundabout as a series of signalised junctions as follows:

- Realigned Ashburton Road West / Tenax Road junction.
- Village Way / Park Way / Tenax Road junction.
- Realigned Westinghouse Road / Park Way junction.

6.4.3 The proposed layout retains all movements with the exception of:

- the right turn to Village Way from Westinghouse Road. This movement would be available from Mosley Road, Fifth Avenue or Europa Way; and
- u-turning traffic. Such movements would be available using other roads in the Trafford Park area noting that Village Way, Westinghouse Road and Europa Way form a circular network around the central portion of the Trafford Park area and Tenax Road, Trafford Park Road and Village Way form a circular network to the north.

6.4.4 The removal of the ability to u-turn does not impact on bus services. However the proposals to convert Parkway Circle into the three junctions detailed above will impact on bus services 19, 54, 245, 270, 272, 291 294 and 297 services which currently utilise Westinghouse Road. The portion of the existing routes affected and potential re-routing options are detailed in Table 6.2 below and Figure F.7 in Appendix F.

**Table 6.2 – Possible Re-Routing of Existing Bus Services at Parkway Junction**

Bus Service	Direction	Existing Route	Proposed Route
19	Eastbound	From Ashburton Road West onto Village Way, right turn onto Mosley Road, left turn onto Westinghouse Road	from Ashburton Road West right turn onto Tenax Road, right turn onto Park Way, left turn onto Westinghouse Road
	Westbound	No service	No service
54	Southbound	From Ashburton Road West to Westinghouse Road, right turn onto Mosley Road (south)	As existing but routing through re-modelled Parkway junction.
	Northbound	No service	No service
245	Eastbound	From Ashburton Road West onto Village Way	As existing but routing through re-modelled Parkway junction.
	Westbound	From Village Way onto Ashburton Road West	As existing but routing through re-modelled Parkway junction.
270	Southbound	From Ashburton Road West onto Westinghouse Road	As existing but routing through re-modelled Parkway junction.
	Northbound	No service	No service

Bus Service	Direction	Existing Route	Proposed Route
272	Eastbound	From Ashburton Road West to Westinghouse Road	As existing but routing through re-modelled Parkway junction.
	Westbound	From Westinghouse Road to Ashburton Road West	From Westinghouse Road right turn onto Mosley Road and left turn onto Village Way, right turn onto Tenax Road and left turn onto Ashburton Road West
291	Westbound (all but 21:05 service)	From Village Way, left turn onto Mosley Road, right turn onto Westinghouse Road, ahead to Ashburton Road West	At Mosley Road continue along Village Way and routing through re-modelled Parkway junction to access Ashburton Road West
	Eastbound (21:05 service only)	From Ashburton Road West to Westinghouse Road, right turn onto Mosley Road (south)	As existing but routing through re-modelled Parkway junction.
293	Anticlockwise Loop	From Park Way to Westinghouse Road, left turn onto Second Avenue, Left turn onto Village Way and onto Ashburton Road West.	As existing but direct turn onto Westinghouse Road. Eastbound element of the route to navigate through the re-modelled Parkway junction
294	Northbound	No service	No service
	Southbound	From Ashburton Road West to Westinghouse Road, right turn onto Mosley Road (south)	As existing but routing through re-modelled Parkway junction.
297	Westbound	No service	No Service
	Eastbound	From Ashburton Road West to Westinghouse Road	As existing but routing through re-modelled Parkway junction.

6.4.5 It is noted that bus service 293 is unaffected by the proposals. Bus services 54, 245, 270, 293, 294 and 297 are largely unaffected and only re-require minor re-routing as a consequence of the Parkway Circle re-modelling. The main impact is on those services that use Westinghouse Road in a westbound direction. This includes bus services 272 and 291. Alternative routes for these services exist but their re-routing will reduce bus penetration within the central area of the Park at the north-west end of Westinghouse Road in the westbound direction. However, this only affects one regular service (291) which indicates there is limited demand in this area. The means to mitigate this impact will continue to be considered as part of on-going design development.

### Bus Stops

6.4.6 On Westinghouse Road between Park Way and Mosley Road, the eastbound bus stops will be retained. It is proposed to relocate the two westbound bus stops onto Mosley Road to align with the service re-routing proposals. Users of these bus stops would have to divert to the new bus stop locations which would increase walking distances by up to 350 metres.

- 6.4.7 Bus stops are currently provided on the Ashburton Road West approach and exit from Parkway Circle. It is proposed to relocate the bus stops slightly on Ashburton Road West to ensure all existing bus services currently using the existing stops are catered for. A bus stop is provided on the main northbound carriageway adjacent to the on-slip from Barton Dock Road which is accessed via a set of stairs. This bus stop is unaffected by the scheme proposals.

## **6.5 Section 5 – Barton Dock Road (Park Way to Trafford Centre stop)**

### **Bus Services**

- 6.5.1 As shown in Figure F.8 in Appendix F and summarised in Table 6.1, a significant number of bus services operate along Barton Dock Road with many having the Trafford Centre Bus Station as a destination. It is noted that a Better Bus Area Funded scheme is currently being constructed to the west of the terminus of the proposed Metrolink TPL scheme. The BBAF scheme will provide bus lanes on either side of Barton Dock Road avoiding traffic queuing on the approach to Ellesmere Circle. The bus measures scheme has been developed in conjunction with the Metrolink proposals. In addition the Metrolink proposals have been planned so as not to prejudice the extension of the bus lane measures further eastwards post TPL implementation as funding and other opportunities permit.
- 6.5.2 Existing bus services will continue to be able to utilise Barton Dock Road, with their routing unaffected as shown in Figure F.9. It is proposed that the Peel Circle roundabout will be upgraded to a signalised junction and all movements will still be available to bus services using the junction. The proposed Metrolink scheme is complementary to the Greater Manchester Better Bus Area Fund scheme currently under construction which is providing bus priority measures on Barton Dock Road, through Ellesmere Circle and along Trafford Boulevard.

### **Bus Stops**

- 6.5.3 Between the junction with Park Way and just to the west of Bright Circle, there are four sets of bus stops on Barton Dock Road. Those to the east of Peel Circle stops consist of flagpoles only and those to the west of Peel Circle comprise of flagpoles, information signs and shelters.
- 6.5.4 The TPL proposals rationalise the bus stop provision to three sets of bus stops along this length. The stop that is close to the Bright Circle roundabout (and thus in close proximity to the intu Trafford Centre Selfridges and mall access) is retained. Those that are located under the intu Trafford Centre overbridge to the west of Peel Circle, which provide access to Barton Square and EventCity, are to be removed owing to the spatial constraints presented by the existing built environment. To the east of the new junction the existing bus stops are proposed to be retained, where they will afford good access to the Barton

Square and EventCity developments. Safety will be enhanced through the provision of controlled pedestrian crossing facilities at the new junction to the aforementioned developments. The bus stops in close proximity to the junction with Park Way are also retained.

## 6.6 Summary

6.6.1 Currently, buses form the primary component of public transport in Trafford Park. With the implementation of the TPL:

- The routing of bus services 54, 245, 270, 291 and 294 will need to divert to the new route via Victoria Place and Sir Alex Ferguson Way due to the closure of Trafford Wharf Road in the area of Wharfside stop to vehicular traffic. This not considered detrimental as route lengths are similar and bus stop coverage is unaffected.
- The routing of bus service 19 around Trafford Park Village will need be modified to account for the highway changes that are proposed along Village Way. The re-routing of this limited service would add additional coverage of the north-west end of Westinghouse Road in the eastbound direction and users of the stop at the southern end of Mosley Road would only increase walking distances by around 340 metres.
- The routing of bus services 54, 245, 270, 294 and 297 around the Parkway area will need be modified slightly to account for the highway changes that are proposed. This will mean that in the eastbound direction between Mosley Road and Ashburton Road West these services will operate on a modified route.
- The re-routing of the 272 and 291 will mean that the two westbound bus stops on the north-west section of Westinghouse Road will no longer be in use and it is proposed they will be re-provided on Mosley Road to align with the proposed service re-routing. The fact that only one regular service (291) serves this movement would indicate there is limited demand in this area. However, users of the stop will have to divert to the new bus stop locations which will increase walking distances by around 350 metres. The means to mitigate this impact will continue to be considered as part of on-going design development.

6.6.2 It is noted that the operation of bus services is de-regulated in Greater Manchester with approximately 80% of all services across Greater Manchester operating commercially and the remaining 20% supported by TfGM to varying degrees. Bus routings for commercial services are determined by bus operating companies, in liaison with TfGM, and may change over time.

- 6.6.3 Both groups of services are reviewed by the operators and TfGM, and will evolve to serve the changing developments and commercial environment following the introduction of Metrolink. It is not expected that the proposed highway modifications consequent on the introduction of Metrolink will of themselves lead to the withdrawal of any bus services.

## **7 Impact on Light Rail**

### **7.1 Policy Fit**

7.1.1 Section 4 (Policy Review) of this report sets out national, sub-regional and local policy of most relevance to the proposed Metrolink TPL. In addition to this, it is important to establish how the proposed scheme fits with policy, which is demonstrated below.

7.1.2 The Greater Manchester Integrated Transport Strategy and the Local Transport Plan 3 (LTP3), published in 2011, set out future aspiration for the expansion of Metrolink, which includes the proposed TPL alignment.

7.1.3 The aspirations of LTP3 have been incorporated in TMBC's Local Area Implementation Plan (LAIP) for Trafford (2011), which identifies a key priority to expand Metrolink to Trafford Park and into Trafford Centre.

7.1.4 The LAIP sets out the Council's overarching Transport Strategy, which identifies their long term vision and objectives for transport and how these objectives support the Borough's Sustainable Community Strategy. In order to deliver this vision, a series of 'Local Delivery Challenges' need to be met. These are:

- Tackle congestion on main roads and at key junctions;
- Reduce the number of people killed & injured on Trafford's roads;
- Improve bus services and increase bus patronage;
- Make it easier for people to get to key services;
- Increase levels of walking and cycling;
- To maintain the highway network;
- Improve local air quality by reducing harmful emissions from transport, and minimise wider adverse environmental impacts of the transport network; and
- Work in partnership with Transport for Greater Manchester to increase the capacity and enhance the quality of Metrolink services.

7.1.5 Trafford Park, located just to the west of the Regional Centre of Greater Manchester, is a significant employment and leisure site and one of the largest and most successful industrial parks in the UK, hosting 1,330 businesses employing over 35,000 people. Trafford Park has a very low residential population which means that those who are employed in Trafford Park need to be able to travel there by either private car or public transport or use active modes.

- 7.1.6 In the Trafford Park area there are significant proposals to bring forward further development through the Trafford Park Masterplan. However, congestion and a lack of public transport choice is constraining future sustainable development within Trafford Park and the Trafford Centre Rectangle (TCR), both of which are currently major generators of car trips.
- 7.1.7 Extending the existing Metrolink network through Trafford Park would provide a quality, efficient and reliable public transport alternative to private cars. The TPL would improve public accessibility to the existing employment, leisure and tourism market within Trafford Park and could be a catalyst for future development in the local area.
- 7.1.8 The main objectives of the TPL are thus;
- improve public transport provision and encourage inward investment in the Trafford Park area;
  - improve public transport connections to employment sites in Trafford Park to increase access to employment; and
  - enhance the capacity of the public transport network to support sustainable growth of leisure and retail activity.
- 7.1.9 Extending the Metrolink network with the proposed scheme will increase public transport access from Greater Manchester to the existing employment, leisure and tourism market within Trafford Park. This in turn has the potential to attract more businesses and leisure activities to locate within Trafford Park. Coupled with anticipated commercial and residential development opportunities over the next 15 years the expansion of the Metrolink network through Trafford Park has the potential to assist development.
- 7.1.10 The TPL scheme can therefore be considered as a priority for both TfGM and TMBC in line with published policy.



## 7.2 Existing Metrolink Operations

7.2.1 The Metrolink network operates with both single-tram units and double-tram units. As of July 2014, the established Metrolink peak hour service pattern was:

- Altrincham to Piccadilly 5 trams per hour (single)
- Bury to Altrincham 5 trams per hour (doubles)
- Bury to Abraham Moss 5 trams per hour (singles)
- East Didsbury to Rochdale Town Centre 5 trams per hour (mixture of doubles and singles)
- Eccles to Ashton-Under-Lyne 5 trams per hour (singles)
- MediaCityUK to Piccadilly 5 trams per hour (singles)

7.2.2 Currently the network carries almost 30 million passengers per year and forms a core part of the public transport offering in Greater Manchester offering a fast, frequent and reliable service. The existing service will be supplemented with a 5 tram per hour service from Cornbrook to Manchester Airport in November 2014.

## 7.3 Proposed Metrolink Operations

7.3.1 TfGM forecast passenger numbers will grow. This will be achieved partly through service enhancements. A separately funded project is already in place to purchase further rolling stock to enable the existing service frequency and number of double unit trams used to be enhanced to provide the potential for the following peak hour service pattern (subject to demand and operational requirements):

- Altrincham to Piccadilly 5 trams per hour (singles)
- Bury to Altrincham 5 trams per hour (doubles)
- Bury to Ashton-Under-Lyne 5 trams per hour (singles)
- East Didsbury to Shaw and Crompton 5 trams per hour (mixture of singles and doubles)
- East Didsbury to Rochdale Town Centre 5 trams per hour (singles)
- Eccles to Ashton-Under-Lyne 5 trams per hour (singles)
- MediaCityUK to Piccadilly 5 trams per hour (singles)
- Victoria to Manchester Airport 5 trams per hour (singles)

- 7.3.2 This will result in a total of 35 trams per hour operating on the core section of the network between Cornbrook and St. Peter's Square. Service patterns are subject to change and dependant on future operations and demand.

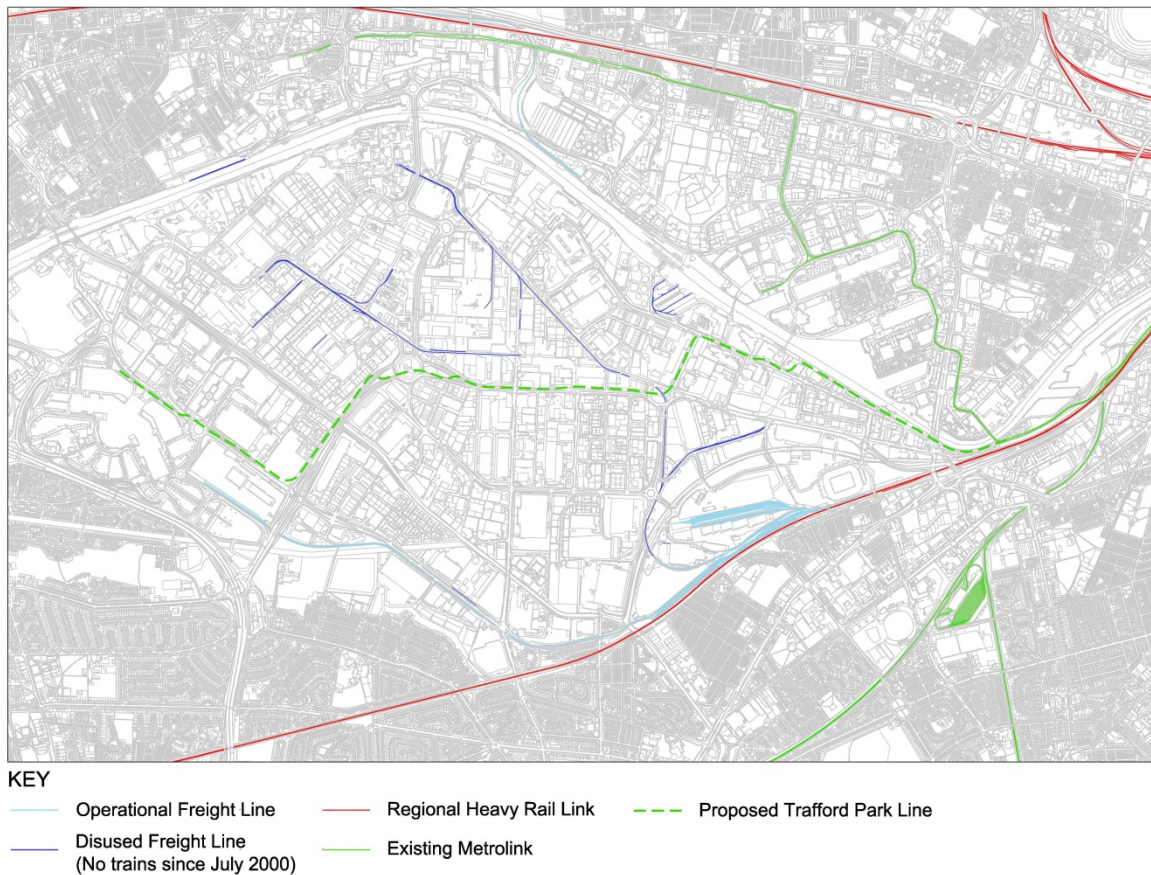
#### **7.4 Conclusions**

- 7.4.1 The assumed service frequency currently proposed for the TPL is five trams per hour in each direction to serve the Trafford Park area and the Trafford Centre, offering as a minimum an additional hourly capacity for 1,000 passengers per direction. The services are assumed to operate northwards to Crumpsall on the Bury Line. This will increase the total number of trams operating on the core section of the network to 40 trams per hour.
- 7.4.2 The operational modelling undertaken in support of the 2CC scheme indicated that 45 trams per hour operating on this section of the network is within the capacity of the existing infrastructure once 2CC is completed. Consequently the introduction of the TPL scheme can be accommodated within the wider operation of the Metrolink network.
- 7.4.3 Higher service frequencies could be employed on the TPL at times of high demand e.g. during events at Old Trafford Football Stadium/EventCity.
- 7.4.4 Construction impacts on existing Metrolink operations will be limited to the construction of the interface between the new scheme and existing infrastructure. It is noted that the Cornbrook viaduct was designed to be extended over Pomona Strand which should limit the impact on the existing operation when these works are undertaken.

## **8 Impact on Heavy Rail**

### **8.1 Existing Baseline**

- 8.1.1 Trafford Park is served by passenger heavy rail services, with Trafford Park Rail Station located on the southern boundary of the Trafford Park area. A half hourly service calls at the station with destinations including Liverpool Lime Street, Liverpool South Parkway, Warrington Central, Birchwood, Manchester Oxford Road and Manchester Piccadilly. However, lying approximately 1.8km south of the centre of the Trafford Park area this heavy rail provision does not offer a realistic public transport provision for many working in this area.
- 8.1.2 Manchester Victoria and Manchester Piccadilly (the principal railway station in Manchester) are located approximately 4km northeast and 4km east of the Trafford Park area respectively. Collectively these stations provide services to cities including Liverpool, Leeds, Newcastle and York, London, Birmingham, Bristol, south Wales, Edinburgh, Glasgow, Sheffield and Newcastle. Other rail stations in or close to Manchester city centre include Manchester Oxford Road, Deansgate and Salford Central.
- 8.1.3 The Metrolink network already connects with Manchester Piccadilly, Victoria and Deansgate and lies within a 5 minute walk of Manchester Oxford Road thereby offering good interchange between heavy and light rail services.
- 8.1.4 The Euroterminal Rail Freight Terminal is also located in Trafford Park lying to the east of Old Trafford Football Stadium and a rail connection still exists for the Shipping Container Base located to the south of Barton Dock Road although it is understood this has not been used for some time.
- 8.1.5 Additionally, the Trafford Park area was formerly served by an extensive internal freight railway. It is understood that no trains have been in service on these lines since July 2000 and the infrastructure has now fallen into a state of disrepair and multiple ownerships. The TPL scheme would cross this railway at Village Circle. However the Transport and Works Act Order for TPL includes protective provisions should this railway to be reinstated.
- 8.1.6 The rail network within the Trafford Park area is summarised in Figure 8.1 overleaf.



**Figure 8.1 – Existing Heavy Rail Network within Trafford Park and existing and proposed Metrolink network.**

## 8.2 Future Schemes

- 8.2.1 There are no committed rail enhancement schemes within the Trafford Park area although Network Rail are progressing a number of enhancement schemes throughout the North West region.
- 8.2.2 Network Rail is working closely with TfGM to deliver an enhanced train/tram interchange at Victoria Rail Station. The enhanced facilities are planned to cater for the future Metrolink service patterns and passenger footfalls as a result of the recent Metrolink network expansion which includes the 2CC connection.
- 8.2.3 Deansgate-Castlefield Metrolink stop is also subject to an improvement scheme in anticipation of its enhanced role as an interchange with heavy rail and also development growth in the Southern Gateway Quarter in Manchester city centre.

### **8.3 Conclusions**

- 8.3.1 Whilst the TPL scheme will not interface with the existing local heavy rail lines or rail stations within Trafford Park, owing to the significant existing connections between Metrolink and the heavy rail network elsewhere it will improve linkages between the Trafford Park area and the mainline railway network. This will offer a high quality and reliable public transport alternative to the private car to access areas of employment from areas of Greater Manchester with higher population, higher deprivation and lower car ownership. The TPL scheme will expand access to the existing employment, leisure and tourism market within the Trafford Park area to the wider conurbation. This in turn will add to the attractiveness for businesses and leisure activities to locate within Trafford Park.
- 8.3.2 No construction impacts in relation to the application scheme are anticipated to affect heavy rail services.

## **9 Impacts on Active Modes**

### **9.1 Introduction**

- 9.1.1 The third Greater Manchester Local Transport Plan (LTP3) places smarter choices and active travel strategies at the core of its approach to delivering its objectives alongside the delivery of the programme of large public transport infrastructure projects. The TPL complements the ambitious programme of active travel, sustainable travel promotion and local accessibility measures.
- 9.1.2 Walking underpins all elements of a transport system, with all journeys involving walking to some extent for able-bodied persons. When considering pedestrians, it is important to consider those with restricted mobility, including the disabled, the elderly, and also those with small children. Integrating walking with public transport is essential, and pedestrian access to public transport needs to be considered as an integral part of the journey experience.
- 9.1.3 The Equality Act 2010 requires that all new developments are fully accessible to all, including those with limited mobility, audio or visual disability. Both the existing Metrolink system and the TPL scheme will be fully accessible. The proposed stops will be carefully integrated with the surrounding urban fabric. Stop platforms will have ramped access, with maximum gradients of 1 in 20 (5%) and level access onto all trams from the stops to facilitate access by all users.
- 9.1.4 The aim of Trafford Council's Cycle Strategy is to bring about infrastructure improvements which will increase the number of people who feel able to cycle in the Borough. For shorter distance commuting directly by cycle, the Greater Manchester Commuter Cycle Project aims to increase the number of people cycling to work. This will be delivered through a series of interventions such as cycle hubs providing cycle parking, lockers and showers. Cycle hubs have recently been opened in Manchester city centre, Ashton-under-Lyne, Bury, and Rochdale and are already proving popular with users. For longer distance trips Metrolink and National Rail will provide many more opportunities through cycle park and ride to open up cycling as a genuine option for commuters.
- 9.1.5 The Metrolink Phase 3 expansion programme included the provision of at least 5 cycle stands at the vast majority of new stops. The programme translated into an additional 300 cycle stands. In addition to these stands a significant number of Metrolink stops are also equipped with secure cycle lockers which accommodate over 200 cycles. It is currently proposed to provide similar provision on the TPL. These figures are subject to review with the local authorities and may be increased where it is deemed that demand for cycle parking is particularly strong.

## **9.2 Connectivity**

- 9.2.1 The proposed TPL will provide a total of six stops.
- 9.2.2 The proposed scheme alignment and the proposed location of tram stops provide catchment which encompasses the majority of leisure and employment sites within Trafford Park.
- 9.2.3 The proposed Wharfside and Imperial War Museum tram stops have been located to provide access to sites which include Old Trafford Football Stadium, Clippers Quay, the Imperial War Museum, The Lowry and MediaCityUK.
- 9.2.4 The tram alignment along Village Way runs centrally through Trafford Park and provides convenient access to the Metrolink network from both the north and south of Trafford Park. The proposed location of the Village and Parkway tram stops allows for the majority of employment sites within central Trafford Park to fall within their catchment.
- 9.2.5 The proposed Trafford Centre and EventCity tram stops have been located to provide convenient access to the leisure and employment sites to the west of Trafford Park, including the intu Trafford Centre, Barton Square and EventCity sites.
- 9.2.6 It is considered that the proposed scheme alignment and location of stops allows for the majority of Trafford Park sites to be comfortably accessed via tram.

## **9.3 Impact on Pedestrian and Cycling Facilities**

- 9.3.1 Pedestrians are well served by the existing footway network, as detailed in Appendix B. The section below details the proposed modifications as a result of the scheme.
- 9.3.2 In keeping with the provision along the existing Metrolink network, where a pedestrian crossing is to be provided over a tram-only section of the TPL, the crossing will be clearly marked out, but will not be controlled. Pedestrian crossings of the tram alignment will only be signal controlled where the alignment is shared with general traffic e.g. at junctions. All signalised junctions implemented as part of the scheme will include signal-controlled crossings for pedestrians. Where appropriate the signalised junctions shall accommodate for cyclists, generally with TOUCAN crossings. Each stop will be compliant with the Equality Act 2010 allowing full pedestrian access.

#### **9.4 Section 1 – Pomona Stop to Wharfside Stop**

- 9.4.1 The existing infrastructure comprises a canal path which runs along the southern bank of the Manchester Ship Canal. Connections are provided between the canal path and Pomona Strand which links in with the footbridge over the Bridgewater Canal.
- 9.4.2 The canal path continues beneath the Trafford Road bridges and follows the bank of the canal, adjacent to Wharf End and Trafford Wharf Road. To the west of the Trafford Road bridges the canal path has been subject to an urban realm improvement scheme and provides a good pedestrian and cycling environment, ultimately providing access to the Lowry and MediaCityUK developments via the fully accessible footbridges across the Manchester Ship Canal. In the area around the proposed Wharfside stop the canal path is at a lower level to the adjacent local highway. Currently a pedestrian stair tower provides access between the canal path and Trafford Road.
- 9.4.3 The TPL illustrative scheme design retains the existing canal path, providing a width of 3m between the Pomona Strand and Trafford Road Bridge. This will be suitable for a shared pedestrian / cycle facility. The connections between Pomona Strand and the canal side is retained albeit modified. Appropriate pedestrian linkages will be provided around the Wharfside stop to retain access to the local highway and pedestrian network and an improved public realm between the Wharfside stop and canal is proposed. Where possible footway widths will be increased and it is proposed to include shared pedestrian / cycle facility to the south of the stop to retain the existing cycle route.
- 9.4.4 The illustrative scheme proposals include a pedestrian management facility in the area of Trafford Wharf Road between Victoria Place and Wharf End (which is proposed to be pedestrianised as part of the scheme). This will allow for safe management of pedestrians accessing the tram stop after events, such as those at Old Trafford Football Stadium. The initial design work for this facility indicates a likely peak queuing capacity requirement of around 3000 people.
- 9.4.5 In addition, Salford City Council are promoting the construction of a new pedestrian / cycle footbridge (known as Clippers Quay bridge) to the west of the Trafford Road bridges, between the southern bank of the Manchester Ship Canal and Clippers Quay to the north of the canal. TfGM are continuing to work with Salford City Council and TMBC to ensure integration of the two schemes. Should the bridge be realised it would be complementary to the TPL.



## 9.5 Section 2 – Wharfside Stop to Warren Bruce Road

- 9.5.1 The existing pedestrian / cycle facilities which flank Trafford Wharf Road are of a good standard and form part of the National Cycle Network (Route 55). Uncontrolled crossing points with dropped kerbs are provided across each minor road and uncontrolled crossing points with dropped kerbs and refuge islands are provided across the main carriageway. However, signalised pedestrian facilities are not included within the signal controlled junctions of Trafford Wharf Road/Sir Alex Ferguson Way. The canal quayside also provides well for pedestrians and cyclists alike.
- 9.5.2 After implementation of the TPL scheme the canal quayside is proposed to be remodelled and good pedestrian and cycle provision retained. The footway and cycleways along Sir Alex Ferguson Way are proposed to be enhanced and connected with formal signal controlled crossings at either end. The improvements will tie into the existing National Route 55 of the National Cycle Network.
- 9.5.3 The existing footway / cycleway provisions on Trafford Wharf Road up to the proposed Imperial War Museum stop at the Quay West development are proposed to be retained. At the Metrolink stop, signal controlled crossings are proposed to be provided across the road and the footways / cycleways are proposed to tie into the existing paths that connect Trafford Wharf Road to the Manchester Ship Canal quayside to maximise the connectivity with the Lowry and MediaCityUK developments and general amenity of the quayside.
- 9.5.4 A modified signal-controlled junction with crossing facilities is proposed at the junction between Warren Bruce Road and Trafford Wharf Road which tie in with modifications and improvements on Warren Bruce Road.
- 9.5.5 The tram is anticipated to run segregated along the western side of Warren Bruce Road. A new western footway will be provided alongside the narrowed carriageway as the existing footway and cycleway are under the alignment of the proposed tram route. The eastern footway will be retained and widened to provide a shared footway/cycleway. This is in line with wider proposals to improve active modes being promoted by TfGM under the Local Sustainable Transport Fund. Relocating the cycleway from the west to the east side of Warren Bruce Road is consistent with TfGM's proposed Stretford to MediaCityUK strategic cycle route scheme.

## 9.6 Section 3 – Village Way (including Village Circle)

- 9.6.1 A footway / cycleway is currently provided around Village Circle. Footways are provided along both sides of Village Way between Village Circle and Parkway Circle with cyclists currently having to cycle within the carriageway except for the eastbound section between Parkway Circle and Mosley Road where an off-carriageway cycleway is provided. Signal controlled crossing points are provided across each arm of Village Circle and at the junction of Village Way / Fifth Avenue. At the Village Way / Mosley Road junction uncontrolled pedestrian crossings are provided across the southern and western arms only. There are no pedestrian crossing facilities at the junctions with minor roads, Second Avenue, Third Avenue and Praed Road.
- 9.6.2 At Village Circle the existing provisions are currently proposed to be retained / re-provided. However, where the tram route crosses the circulatory carriageway and the central island the inclusion of pedestrian / cycle facilities will be considered later at the detailed design stage. Subject to detailed consideration of the associated safety issues and benefits this may afford pedestrians and cyclists with a more direct route across this roundabout.
- 9.6.3 The track alignment is anticipated to run to the north of the Village Way and proposals between Village Circle and Mosley Road currently comprise:
- The existing southern footway provision (an approximately 2.5m wide footway not incorporating cycle facilities) is proposed to be retained, albeit reconstructed to align with the modification to the alignment of Village Way.
  - A new shared footway/cycleway is proposed to be provided on the northern side between the carriageway and tram route. This will connect the existing facilities at the western end of Village Way through to the facilities at the Village Circle.
  - Signalised crossings are proposed to be incorporated into the remodelled junctions of Village Way / Fifth Avenue and Village Way / Mosley Road.
  - Uncontrolled crossing facilities, incorporating dropped kerbs, are proposed to be provided across the junctions with the other minor roads, namely Second Avenue and Praed Road.
- 9.6.4 Between Mosley Road and the new Parkway junction the existing footway provision on the southern side of the carriageway is anticipated to be retained.

## **9.7 Section 4 – Parkway Circle and Park Way**

- 9.7.1 Pedestrians and cyclists are currently poorly provided for at Parkway Circle and along Park Way. At Parkway Circle, there are footways and cycleways all the way around the intersection. However these paths connect uncontrolled crossing points with dropped kerbs across each arm of the roundabout. Given the traffic volumes and speeds of traffic exiting the roundabout the crossings are difficult to use safely. Alongside Park Way as far south as the Bridgewater Canal there is only a discrete narrow path approximately 1m wide running along its eastern side. South of the canal the path becomes a more recognised standard width kerbside footway. There is no particular accommodation for cyclists. The existing urban environment therefore acts as a barrier to pedestrian and cycle movement.
- 9.7.2 The TPL scheme proposes to convert the existing roundabout into three signal controlled junctions. Within each junction, controlled pedestrian / cycle crossings are anticipated to be provided, enabling significantly safer access for all from the Parkway stop to the wider Trafford Park area.
- 9.7.3 Along Park Way, the track alignment is proposed to run to the west of the existing carriageway and as a result, the existing footway to the east of the carriageway would be unaffected. However, the illustrative scheme design includes proposals for a new shared footway and cycleway flanking the tram route. This new facility would connect the Parkway area with Barton Dock Road, thereby removing the existing severance effect of the highway layout within this location.

## **9.8 Section 5 – Park Way / Barton Dock Road Junction and Barton Dock Road**

- 9.8.1 Footways and off carriageway segregated cycleways are currently provided on both sides of the carriageway of Barton Dock Road. Uncontrolled crossing points with dropped kerbs are provided across each minor road and all arms of the Peel Circle and Bright Circle roundabouts. Signal controlled crossings are provided within the junction of Barton Dock Road / Park Way slip roads and to the west of Bright Circle. The existing pedestrian crossing facilities at Peel Circle do not currently provide adequately for pedestrians who alight from buses on the south side of the road and wish to cross to visit Barton Square. In addition large volumes of pedestrians cross both Barton Dock Road and Phoenix Avenue during events at EventCity requiring temporary signal crossing apparatus to be deployed at the busiest times. TMBC, in conjunction with the site operator, is considering the installation of permanent pedestrian crossing facilities to cater for these movements.

- 9.8.2 Between Park Way and Barton Square the track alignment is anticipated to run on land immediately to the north of Barton Dock Road. The existing footways and off-carriageway cycleways are proposed to be retained / re-aligned. The junction with Mercury Way is anticipated to be signalised and signal controlled crossing points are therefore proposed to be provided across the northern and eastern arms.
- 9.8.3 As part of the proposals, Peel Circle will be remodelled into a signal controlled junction in order to accommodate the EventCity Metrolink stop and it is proposed that signal controlled crossings will be provided across all approaches to the junction, enabling safer access for all, particularly those accessing Barton Square and EventCity from the adjacent relocated bus stops and surrounding car parking. These improvements provide complimentary benefits to Metrolink users and to pedestrians accessing neighbouring locations.
- 9.8.4 It is proposed, subject to obtaining the land owner's consent, to include a cycle lane along the new vehicular access along the western side of the Barton Square development and then enable this to connect to the path flanking the Bridgewater Canal, which has recently been upgraded, further enhancing connectivity within and through the Trafford Park area.
- 9.8.5 Between Barton Square and the proposed terminus at the Trafford Centre stop, the track alignment is proposed to cross from the north verge to run to the south of the existing street. The existing footways and off carriageway cycleways are proposed to be retained / re-aligned. At the Trafford Centre Metrolink stop an undercover footpath connection is proposed to be provided to the main mall entrance by removing approximately twelve spaces at the edge of the decked car park. Pedestrian access to the Trafford Centre bus interchange is provided via external linkages which are also proposed to be improved to maximise connectivity.

## **9.9 Summary**

- 9.9.1 The proposed TPL scheme will result in some changes to existing footways and cycleways. Overall it will result in benefits for active modes.
- 9.9.2 The proposed scheme will both enhance the existing infrastructure provision for active modes and provide a step change in public transport provision within the Trafford Park area. It will enable many more journeys, within the Greater Manchester area to be undertaken in a more sustainable manner, including incorporating the use of active modes.

## **10 Impacts on Parking**

### **10.1 On-street Parking**

#### **Informal**

- 10.1.1 Informal on-street parking exists within the Trafford Park area. Within the study area this is predominantly on Waterside, Elevator Road, Warren Bruce Road, Third Avenue to the north of Village Way and in the streets to the south of Village Way, in the commercial area known as the Village.
- 10.1.2 A well-developed strategy for parking control exists within the Trafford Park area. The principal roads through the area and major distributor roads carry significant proportions of large and heavy goods vehicles. Consequently most of these roads have continuous no-waiting or clearway restrictions to maintain unobstructed access for traffic.
- 10.1.3 Along the proposed TPL corridor the scheme will only affect the informal parking provision at Wharf End and Warren Bruce Road.
- 10.1.4 At Wharf End, a layby provides parking for approximately 7 vehicles. The TPL proposals will close Wharf End to vehicular traffic. It is currently proposed to relocate this informal parking provision to the remodelled junction of Trafford Wharf Road and Victoria Place.
- 10.1.5 At Warren Bruce Road the tram route is proposed to run in a segregated alignment on its western side. To accommodate the proposed tram route infrastructure the overall carriageway width is proposed to be reduced and a continuous no waiting and no loading restriction applied to both sides of the carriageway, with the exception of bus stop clearways, displacing the informal car parking use (approximately 50 spaces).
- 10.1.6 Most businesses have their own on-site parking and much of the on-street parking observed in this area could be attributed to users seeking to avoid parking charges at MediaCityUK and other sites including the IWM and The Lowry. Given the local availability of both formal and informal parking provision, such as that observed throughout the day on streets such as Waterside, this parking loss in the context of a major public transport scheme is not considered to be significant and hence mitigation is not proposed.

### **Pay and Display Parking**

- 10.1.7 There are no Pay and Display parking bays within the study area or in proximity to the proposed alignment of the TPL. Therefore the TPL scheme will have no impact upon pay and display parking, or the Match-Day Parking permit Scheme as there is no interface with streets covered by that scheme.

### **10.2 Proposed Parkway Circle ‘Park and Ride’ Site**

- 10.2.1 A circa 200 capacity park and ride car park is proposed to the southeast of the proposed Parkway Stop. As part of the proposals, the Parkway Circle roundabout will be remodelled to form a number of signal controlled junctions, which will aim to resolve peak period capacity issues at this junction and release highway land for redevelopment as the car park. It is proposed that vehicular access from Park Way will be provided from the new junction between Park Way and a realigned Westinghouse Road.
- 10.2.2 The design of the site is proposed to follow a similar standard to that adopted by TfGM for the design of other recent park and ride sites constructed to support the Metrolink Phase 3 Extensions. This would include the provision of cycle facilities with the aim of maximising travel choices for those opting to use active modes of travel for part of their journey.

### **10.3 intu Trafford Centre Parking**

- 10.3.1 The intu Trafford Centre currently provides free parking for customers across approximately 11,500 parking spaces. There are six at-grade car parks and two decked multi-storey car parks that front onto Barton Dock Road
- 10.3.2 Along the proposed TPL route, access to the intu Trafford Centre is currently provided via Peel Circle, which in addition to providing access to the centre’s internal roads network provides direct access to the eastern decked car park; and
- 10.3.3 The proposed TPL scheme changes Peel Circle roundabout into a signalised junction to enable the effective control of tram and traffic movements and release land for the provision of the tram stop. As part of this proposed highway change the access to the eastern decked car park will need to be remodelled.

10.3.4 Dedicated accesses from the east and to the west have been proposed from and to Barton Dock Road. It is proposed that all other movements will be provided from a new internal car park access road. This proposal will require the existing surface car park (adjacent to the decked car park) to be remodelled. The spaces lost as a result of providing the new access road are proposed to be re-provided to the north of the existing surface car park in land released by remodelling the Peel Circle junction. The illustrative scheme design indicates there is no net loss or gain in parking provision. The final design will be subject to on-going stakeholder discussions.

#### 10.4 Other Private Parking

10.4.1 The TPL scheme will affect private development parking as discussed below. It should be noted that where a property is to be acquired for the scheme the impact on parking at this development has not been discussed below:

- **Quay West** – The proposed tram alignment and infrastructure around the Imperial War Museum stop will require land from the Quay West development which is currently used for landscaping and car parking. The need to re-provide some parking spaces is the subject of on-going stakeholder discussion.
- **Pisces Industrial Estate**– The proposed scheme requires land from the development to accommodate the segregated alignment along Village Way and the remodelled junction with Mosley Road. This will affect approximately 4 spaces. It is understood that the site is not continually used and this loss would not present a detrimental impact. The need to re-provide these parking spaces is the subject of on-going stakeholder discussion.
- **Illingworth Ingham** – The proposed access to the Illingworth Ingham site from Ashbridge, as described in Section 12.5, will affect the existing on-site parking area which provides for around 50 cars. The need to re-provide these parking spaces is the subject of ongoing stakeholder discussions.
- **Speedy Hire, Ashbridge** – The proposed scheme requires a small amount of land to provide the new Parkway junction. The land affected is within the yard to the building which observations suggest is used for parking. It is not anticipated that the magnitude of land required will significantly affect the operation of the business.

- **Chemtura UK, Tenax Way** – To provide the proposed re-aligned Ashburton Road West and new junction with Tenax Road, land that currently used for parking is required from this development, which will affect circa 50 spaces. It is proposed, in conjunction with changes to the site access, to remodel the site parking by removing internal landscaping to as far as practicable retain the same number of parking spaces that exist today.
- **Roadways Container Logistics site** – The frontage parking to the site will be affected by the proposed widening of Barton Dock Road to accommodate the new signal controlled junction with Mercury Way. This will affect approximately 100 spaces. It is proposed that the parking will be re-provided within the existing site. This is the subject of on-going stakeholder discussions.

## 10.5 Event Parking

- 10.5.1 In the Trafford Wharf Road area the majority of private off-street car parks (POSCPs) operate as controlled (charged) match time car parking. The land flanking the eastern boundary of Warren Bruce Road is also used as controlled (charged) match time parking. The use of these sites for this purpose creates significant congestion during events, such as those at the Old Trafford Football Stadium, and is a key reason why the TPL scheme proposals segregate the tram route from the highway to provide operational resilience and reliability.
- 10.5.2 The proposed TPL scheme will utilise the space occupied by the POSCPs that is formed on the triangular strip of land to the east of Sam Platts and reduce the area of parking available on the land flanking the eastern boundary of Warren Bruce Road. In the context of the provision of a public transport scheme, which in itself will provide a more sustainable form of travel to events, such as those at Old Trafford Football Stadium, these impacts are not considered material.

## 10.6 Conclusions

- 10.6.1 A number of informal parking spaces will be displaced on Wharf End and Warren Bruce Road by the proposed TPL; however alternative parking locations have been identified in close proximity, and the TPL scheme proposes stops in this vicinity at Imperial War Museum and Village.
- 10.6.2 The proposed scheme results in small impacts on the car parking associated with private developments. These impacts are not considered to have a detrimental impact on these developments, the need for mitigation or replacement provision will be made in agreement/discussion with the individual stakeholders.



- 10.6.3 The provision of a circa 200 capacity park and ride car park will offer a new sustainable travel option for people travelling through Trafford Park, resulting in a moderate positive impact.

## 11 Impact on Taxis

### 11.1 Introduction

11.1.1 Taxi is a generalised term used to describe all forms of licensed hire vehicles. There are two types of taxi; hackney carriages and Private Hire Vehicles (PHVs). Licensed hackney carriages are the traditional “Black” Cab whilst PHVs are private motor vehicles used for hire. Licensed PHVs are only distinguished from private motor vehicles by a small plate fixed to the rear of the vehicle and/or a sticker on the front/rear window.

11.1.2 Taxis offer an alternative mode of transport to both the car and other forms of public transport (i.e. bus, heavy rail and light rail) and are an important element of the public transport system. Taxis fill a role in the public transport network providing for business, leisure and social trips.

### 11.2 Existing Provision

11.2.1 A taxi rank is a place where hackney carriages can wait for passengers. However they may pick up passengers at any point on the highway networks so long as it is safe to do so. Whereas PHVs can only set down or pick up passengers by prior arrangement. Users of PHVs must currently make a prior arrangement for their services.

11.2.2 There are a small number of taxi ranks located close to the route of the TPL. Table 11.1 details the location and operation of taxi ranks in the general area of the proposed TPL scheme.

**Table 11.1: Existing Taxi Ranks**

Location	Number of Spaces	Operating Times
Sir Alex Ferguson Way	Not defined	Match days
Sir Matt Busby Way North, Stretford	Not Defined	24 Hour
Sir Matt Busby Way South, Stretford	Not Defined	24 Hour
Barton Dock Road, Trafford Park, Near Asda car park	7	24 Hour

11.2.3 The taxi ranks on Sir Matt Busby Way and Barton Dock Road are unaffected by the scheme.

11.2.4 The part time taxi rank on Sir Alex Ferguson Way operates during events at the Old Trafford Football Stadium only and will be affected by the highway modifications in the area. It is proposed to relocate the rank to the informal parking being provided at the remodelled junction of Trafford Wharf Road / Victoria Place where waiting will be prohibited during events but taxis will be permitted to load.

### **11.3 Summary**

- 11.3.1 The existing taxi rank provision will be maintained albeit the temporary taxi rank on Sir Alex Ferguson Way will be relocated to Victoria Place. Consequently there will be no net loss in provision. However, taxis will be affected by the changes to the highway network consequent on the introduction of the Metrolink alignment, which are discussed in more detail in Section 3. This assessment has concluded that the highway network changes are not significant and therefore it is concluded there will be no material impact upon taxi services.

## **12 Impact on Access and Servicing**

### **12.1 Introduction**

12.1.1 This section considers the effect of the TPL scheme and the associated highway modifications on access within the Trafford Park area and the servicing of properties along the route. The impact of the TPL is considered against the existing provision which is understood to represent the Do Minimum scenario (as detailed in Section 5) which includes the committed schemes that will be in place by the time TPL is implemented.

12.1.2 There are no on-street loading bays within the study area. New kerbside loading restrictions are proposed as part of the scheme but these are in areas where the adjoining properties have access to off-street loading areas. The new restrictions are therefore only intended to maximise the surety that traffic flows will not be impeded and are not expected to have a material effect on any property. The assessment therefore considers alterations to access routes around Trafford Park as a result of the proposed highway modifications at a strategic level before considering the impact to accesses to off-street areas at an individual property level. The proposed highway changes are described on drawings MMD-327551-100-061 to 064 included in Appendix C.

12.1.3 As described in the sections below, this assessment has required the collection of data to confirm existing conditions, the review and understanding of existing servicing and access arrangements, and the development of future servicing provision, once TPL is in place.

### **12.2 Data Collection**

12.2.1 In June 2014 information detailing the current servicing and access arrangements for the premises along and adjacent to the scheme corridor was collected through a combination of Business Consultation Surveys (a total of 148 businesses were contacted) and on-site observations. The information collected included:

- The name and type of company occupying the premises;
- How premises are currently serviced, for example via which building entrance and from which road;
- When and how often premises are serviced, for example the day of the week and the time of day; and
- The approximate size of vehicle which undertakes the servicing.

- 12.2.2 The information gathered represents the current servicing patterns. It has provided a good level of understanding as to the existing servicing and access arrangements. This has enabled robust proposals to be developed for the future servicing provision within the TPL scheme to provide effective operation at both an individual premises and wider zonal level. The proposed future provision has already been discussed with stakeholders through the stakeholder engagement processes employed by TfGM and the changes to highway access illustrated within the consultation material.

### **12.3 Section 1 – Pomona Stop to Wharfside Stop**

#### **Strategic Impacts**

- 12.3.1 The proposed scheme is elevated as it crosses Pomona Strand and then passes beneath the Trafford Road bridges. Over this stretch the scheme will not result in any permanent changes to the existing access arrangements
- 12.3.2 The proposed location of the Wharfside stop will require some land acquisition and the closure of Trafford Wharf Road between its junctions with Victoria Place and Sir Alex Ferguson Way to vehicular traffic. Similarly Wharf End is proposed to be closed to vehicular traffic. However both roads will remain open to pedestrians and cyclists.
- 12.3.3 To mitigate the closure of this section of Trafford Wharf Road and Wharf End it is proposed to re-open the junction of Victoria Place and Sir Alex Ferguson Way for east – west movements. On highway safety grounds, the proposed scheme closes Sir Alex Ferguson Way at its junction with Wharfside Way for all movements with the exception of the left turn from Wharfside Way onto Sir Alex Ferguson Way. However, cyclists will continue to be able to pass between Sir Matt Busby Way and Sir Alex Ferguson Way.
- 12.3.4 It is proposed that access to and egress from Trafford Wharf Road at its eastern end will therefore be via its junction with Trafford Road (A5063) with traffic routing via Victoria Place and Sir Alex Ferguson Way. This is not considered to be a detrimental impact. Under these proposals access from the west is not affected. Egress to the west is proposed to be provided by either Warren Bruce Road (as now) or potentially via a proposed new egress junction of Waterside / Wharfside Way.

### **Specific Property Impacts**

- 12.3.5 The short section of Trafford Wharf Road that will be closed to vehicular traffic will require the existing access to the Hilti site and the proposed Manchester United Football Supporter's Car Park proposed to be constructed on land between Hilti and the Premier Inn (Golden Tulip Hotel) to be relocated. It is proposed that these accesses are relocated to Victoria Place on the southern boundary of the developments. The Sam Platts property is proposed to be acquired as part of the scheme. The existing accesses to the site are not proposed to be reinstated.

## **12.4 Section 2 – Wharfside Stop to Warren Bruce Road**

### **Strategic Impacts**

- 12.4.1 A number of modifications to Trafford Wharf Road are proposed as follows:
- The junction of Trafford Wharf Road / Elevator Road will be restricted to left-in, left-out movements. Given the layout of the highway network movements in all directions from the properties along Elevator Road will remain available.
  - Between Elevator Road and Warren Bruce Road the tramway will run segregated in the centre of the carriageway. Accordingly, right turn movements, except for those by emergency vehicles, across the tramway are proposed to be prohibited to the properties either side. This will mean access and egress to all properties along this section will become left-in and left-out.
- 12.4.2 These restrictions will require traffic to re-route and will entail, in some instances, a degree of additional travel. However they are not considered to pose a detrimental impact. The introduction of the proposed junction of Waterside / Wharfside Way helps to mitigate the impact on westward movements from properties on the north side of Trafford Wharf Road where egress restrictions are proposed to be imposed.
- 12.4.3 Access to Warren Bruce Road from either Trafford Wharf Road or Village Circle is unaffected by the scheme proposals.

### **Specific Property Impacts**

- 12.4.4 To accommodate the proposed Imperial War Museum stop the access to the Quay West development will need to be modified. It is proposed to relocate this access to the western end of the site. All movements would be retained via a proposed signal controlled junction, in place of the existing priority junction. Signalisation here is required to control tram and traffic conflicts as trams cross the highway from the tram stop to the central segregated tramway.
- 12.4.5 To accommodate the proposed tramway and highway realignment the service access to the Imperial War Museum North (IWMN) is proposed to be remodelled slightly. It is proposed that access to the IWMN site would also be modified to be left-in / left-out utilising existing access points. All traffic will therefore need to approach from the west. Given the availability of alternative routes that can be clearly signed this is not considered to present a material impact. Egress to the east remains largely unaffected. Egress to the west would need to be routed (and signed) by way of Waterside and the new junction proposed with Wharfside Way. Emergency vehicles would be able to access from all direction as they would be permitted to turn right over the tramway.
- 12.4.6 As with IWMN turning movements into and out of the Rank Hovis Trafford Mills site are proposed to be left-in left-out only. It is understood that the eastern access is used for grain deliveries (which undergo testing at plant located on the Trafford Wharf Road frontage) and refuse collection vehicles. It is therefore proposed to retain this access for left-in movements. This is understood not to present a material impact as vehicles are able to approach from the site via Trafford Wharf Road from the east or Elevator Road from the west albeit some re-routing will be required for some movements. The western access, which is used by all other vehicles, is proposed to be restricted to left-in left-out movements. This will mean access to and from the site will operate on an anticlockwise basis using Wharfside Way, Elevator Road, Trafford Wharf Road and Warren Bruce Road. The site should therefore be able to function as it does today albeit some re-routing will be required for some movements.
- 12.4.7 The ITV studios primary access to the west of the site will be unaffected by the proposed TPL scheme. ITV studio's secondary access (understood to be used as an emergency access only) will also be unaffected as emergency vehicles will be permitted to cross the tramway.

- 12.4.8 Access to the premises off Warren Bruce Road will be unaffected by the proposed TPL scheme as they are proposed to be retained as they exist today, albeit modified to tie-in with the new highway layout. Properties on the western side of Warren Bruce Road have no requirement for access across the proposed Metrolink alignment.

## **12.5 Section 3 – Village Way (including Village Circle)**

### **Strategic Impacts**

- 12.5.1 Village Circle is proposed to be retained with all movements permitted as they do today.
- 12.5.2 Along Village Way the tram alignment is proposed to run to the northern side of the vehicular carriageway. In order to protect the tram priority through signalised junctions, the right-turn movements at Fifth Avenue and Mosley Road are proposed to be prohibited. Access to properties to the south of Village Way, when approaching from the north and west will be via the new junction between Park Way and the realigned Westinghouse Road. Access to properties on the southern part of Mosley Road, when approaching from the north and west are proposed to be via the new junction between Park Way and the realigned Westinghouse Road. Access to the properties on the northern part of Mosley Road is proposed to be via Trafford Park Road and Mosley Road where it is proposed to make the existing one-way section at its northern end two-way and permit left turn movements at the junction with Trafford Park Road.
- 12.5.3 These diversions are not considered to represent a material impact.

### **Specific Property Impacts**

- 12.5.4 The proposed tram route alignment will cross the existing access and egress into the CHEP UK Ltd site which currently provides for left-in and left-out movements only. The review of alternative access arrangements is subject to on-going stakeholder discussions.
- 12.5.5 The proposed realignment of Village Way will affect the access and frontage service area to Stocks which lies to the east of Praed Road. To mitigate the impact of a reduced service area it is proposed to provide the site with a separate entrance and exit to enable rigid vehicles (the most commonly used vehicle) to continue to reverse onto one of the two service bays so they can be rear end loaded as it is understood they do now. Articulated vehicles would have to stop in the middle of the service yard and be side loaded as they do today. Side loading remains a possibility for rigid vehicles.



- 12.5.6 The proposed tram route alignment will cross the existing left-in left-out access into the Illingworth Ingham site which would need to be closed on safety grounds. It is proposed to re-provide this access via a slip road between Village Way and Ashbridge. This would facilitate access to the site from the west (as now) but via the existing (and unused) site access from Ashbridge which is proposed to be upgraded. Egress would be via this upgraded access along Ashbridge Road to join Tenax Road where routes to the east, west and south would be available at the new Parkway junction. Routes to the north would remain as they do now i.e. along Village Way and left onto Mosley Road to access Trafford Park Road and the wider highway network. Access from the east would need to re-route away from the current route of Village Circle – Village Way westbound – u-turn at Parkway Circle – Village Way eastbound to say Village Circle – Trafford Park Road – Tenax Road – Ashbridge.

## **12.6 Section 4 – Parkway Circle and Park Way**

### **Strategic Impacts**

- 12.6.1 The TPL scheme proposed to reconfigure the Parkway Circle roundabout as a series of signalised junctions as follows:
- Realigned Ashburton Road West / Tenax Road junction.
  - Village Way / Park Way / Tenax Road junction.
  - Realigned Westinghouse Road / Park Way junction.
- 12.6.2 The proposed layout retains all movements with the exception of:
- The right turn from Westinghouse Road to head either east or north. This movement is provided for by re-routing to Village Way via Mosley Road, Fifth Avenue or Europa Way.
  - U-turning traffic. Such movements would be available using other roads in the Trafford Park area noting that Village Way, Westinghouse Road and Europa Way form a circular network around the central portion of the Trafford Park Village area and Tenax Road, Trafford Park Road and Village Way form a circular network to the north.
- 12.6.3 The proposed changes to the highway network are not considered to present a material impact on general access within the wider Trafford Park area.

### **Specific Property Impacts**

- 12.6.4 Vehicular access to HSS Hire located between Tenax Road and Ashburton Road West is currently taken from Tenax Road. The access is proposed to be remodelled and provided from the realigned Ashburton Road West providing the same movements as today. There would therefore be negligible impact upon access to HSS Hire.
- 12.6.5 The access to the Chemtura UK site is currently from Tenax Road in approximately the same location the realigned Ashburton Road West junction will be formed with Tenax Road. It is proposed to re-provide a similar left-in, left-out access to the car park but further north on Tenax Road in combination with remodelling the car parking layout as discussed further in Section 10.4. Therefore access and egress movements would remain similar to current arrangements.
- 12.6.6 The access to the Monde Trading Estate (off Westinghouse Road) is proposed to be remodelled to accommodate the realignment of Westinghouse Road but all movements are proposed to be retained. Access to the wider highway network would require a degree of re-routing as described above for movements to the east and north.
- 12.6.7 The area of land between Westinghouse Road and Park Way, known as Westinghouse Point, is proposed to in part be used to provide the realignment of Westinghouse Road and the new junction with Park Way. The area of land remaining will form a development opportunity and accesses to the land will need to be considered in light of any development proposals that are brought forward in agreement with TMBC as the local highway authority.

## **12.7 Section 5 – Barton Dock Road (Park Way to Trafford Centre stop)**

### **Strategic Impacts**

- 12.7.1 The proposed TPL alignment runs to the north of Barton Dock Road carriageway between Park Way and Peel Circle. Between Peel Circle and the terminus at the Trafford Centre stop the proposed alignment will cross from the northern side to run to the south of Barton Dock Road.
- 12.7.2 As part of the proposals, Peel Circle is remodelled as a signal controlled junction which provides for all vehicle movements except the eastbound left turn into Phoenix Avenue. This movement is proposed to be catered for by a new left turn in-only access to Barton Square off Barton Dock Road west of the proposed tram route crossing.

### **Specific Property Impacts**

- 12.7.3 All existing vehicle movements at the junction of Mercury Way and Barton Dock Road will be retained by the proposed TPL scheme. There will be a slight beneficial impact upon vehicular access to the premises which are accessed via Mercury Way as a consequence of the proposed signalling of the junction with Barton Dock Road, which will facilitate easier access to and egress from Mercury Way at busy times.
- 12.7.4 The access to the Roadways Container Logistics site is proposed to be retained and remodelled to accord with the revised highway layout. All movements are proposed to be retained.
- 12.7.5 The access to the intu Trafford Centre decked car park from Peel Circle is proposed to be remodelled as described in Section 10.3. The existing emergency access road that runs to the south of Barton Dock Road and links the accesses to the east and west decked car parks is proposed to be converted into the tram route and remain usable by emergency vehicles only.
- 12.7.6 The primary parking for Barton Square and EventCity developments is located on their north side and is currently accessed via Phoenix Way. The TPL proposals do not affect the parking for these developments. The proposed remodelling of the Peel Circle roundabout into a signalled junction will retain all movements with the exception of the left turn into Phoenix Way to allow tram and ahead traffic movements on Barton Dock Road to run simultaneously. This movement will be provided for via a new access route to the west of the Barton Square development within the existing Limits of Deviation for the TPL.

### **12.8 Conclusions**

- 12.8.1 The implementation of the proposed TPL scheme will alter some existing access routes requiring vehicles to re-route. However, the proposed diversions are not considered to present a material impact on general access within the wider Trafford Park area.
- 12.8.2 Where the proposed TPL scheme has an impact upon existing access arrangements to individual properties it has been demonstrated that in relatively few cases where existing accesses cannot be retained, alternative access arrangements can be provided. Therefore it is considered that there would be no significant impact from the TPL scheme upon property servicing and access.

## 13 Impact on Road Safety

### 13.1 Accident History Summary

- 13.1.1 The assessment considers the formal accident records for the five year period up to the 31st March 2014 along the proposed route of the TPL scheme. The data is summarised in Table 13.1 the accidents and the full dataset is included within Appendix F.

**Table 13.1: Reported Road Injury Accidents**

Type	Apr-Dec 2009	2010	2011	2012	2013	Jan-Mar 2014	Total
Fatal	0	0	0	0	0	0	0
Serious	1	2	1	3	0	0	7
Slight	18	16	23	12	2	3	74
Total	23	19	29	15	8	3	81

Source: Transport for Greater Manchester

- 13.1.2 In total, there were 81 collisions over the five year period. Whilst there were no fatalities during this period, seven of the accidents were serious collisions.

### 13.2 Section 1 – Pomona Stop to Wharfside Stop

#### Accident History

- 13.2.1 The police records indicate there were few recorded collisions. Of those recorded two collisions occurred at the junction between Trafford Road and Trafford Wharf Road, of which one involved a cyclist. Both collisions were the result of poor observation. A third collision occurred at the junction of Trafford Road and Wharfside Way, when a vehicle failed to stop at the traffic signal. Each collision resulted in a single slight injury.

#### Impact on Road Safety

- 13.2.2 The implementation of the TPL scheme is not expected to detrimentally impact highway safety. The TPL scheme is completely segregated from other highway traffic over this section.

- 13.2.3 The closure of the short section of Trafford Wharf Road to traffic between its junctions at Victoria Place, Sir Alex Ferguson Way and Wharf End along with the prohibition of movements at the junction of Wharfside Way / Sir Alex Ferguson Way / Sir Matt Busby Way will result in the re-routing of traffic to the Trafford Road / Trafford Road junction. However, the strategic traffic modelling indicates that the magnitude of change in traffic flow at this junction is small and therefore an increase in collisions is not predicted.

### **13.3 Section 2 – Wharfside Stop to Warren Bruce Road**

#### **Accident History**

- 13.3.1 Two collisions were recorded along Trafford Wharf Road. One collision involved a vehicle being shunted during dark and wet road conditions and the second accident involved a pedestrian stepping into the path of an oncoming vehicle. Each collision resulted in a single slight injury.

#### **Impact on Road Safety**

- 13.3.2 The implementation of the TPL is not expected to detrimentally impact highway safety on Trafford Wharf Road and Warren Bruce Road. The police records indicate there were few recorded collisions. The majority of the alignment will be segregated from the vehicular carriageway and crossing points will be signal controlled to provide the safe movement of all users. Pedestrian and cycling facilities will also be improved as described in Section 9.

### **13.4 Section 3 – Village Way (including Village Circle)**

#### **Accident History**

- 13.4.1 The police records indicate a total of seventeen collisions occurred at Village Circle. Of these nine occurred at the Warren Bruce Road node which resulted in a total of fourteen slight injuries and one serious injury. Of these nine, eight of the collisions occurred due to drivers failing to stop at the traffic signal and one accident was caused by poor/worn road markings. From the details available five drivers disobeyed the signals on the Warren Bruce Road approach whilst two drivers disobeyed the signals on the circulating carriageway. Five collisions occurred at the Europa Way Node, of which;

- one was serious and occurred during dark and wet road conditions where a car left the carriageway and collided with the central reserve;
- three of the collisions were shunts caused by driver error; and
- one collision occurred when an overloaded HGV overturned.

These five collisions resulted in seven slight injuries and one serious injury.

- 13.4.2 A further two collisions occurred at the Village Way node and a final collision occurred at the Trafford Park Road node. Each resulted in a single slight injury and was the result of driver error or inclement weather.
- 13.4.3 In addition to the collisions at Village Circle, a further four collisions occurred along Village Way, three of which were slight and one was serious. The serious collision, caused by driver error, occurred at the junction with Fifth Avenue and resulted in one slight pedestrian injury and one serious pedestrian injury. A second collision occurred at the junction with Fifth Avenue, when a vehicle was shunted as the result of a poor braking manoeuvre and resulted in a slight injury. The third collision occurred near Second Avenue when a vehicle lost control due to ice and the final collision occurred at the Mosley Road junction and occurred due to a poor turning manoeuvre.
- 13.4.4 No significant correlations have been identified to suggest that highway condition, layout or design were significant contributory factors in the recorded along Village Way.

#### **Impact on Road Safety**

- 13.4.5 The implementation of the TPL is not expected to detrimentally impact highway safety at Village Circle or on Village Way. The alignment would be segregated from the vehicular carriageway and crossing points will be signal controlled to provide the safe movement of all users including pedestrians and cyclists. The scheme presents an opportunity to improve the positioning of signals at Village Circle to maximise driver compliance. Additional design measures should also be considered at detailed design stage such as the installation of traffic light enforcement cameras as a means of improving compliance and the accident record at this junction. Trams movements are not in conflict with traffic movements from Warren Bruce Road which reduces the likelihood of tram / traffic collisions when considering the poor driver traffic signal compliance record on this approach. The strategic traffic modelling indicates that traffic flows, in general, remain as they do today. The modifications to the highway will retain the majority of the dual carriageway layout and at the Mosley Road junction conflicting movements will be reduced through the proposed prohibitions of the right turns. The renewal of worn road markings will improve drivers' understanding of the highway layout.

## **13.5 Section 4 – Parkway Circle and Park Way**

### **Accident History**

- 13.5.1 The police records indicate that there were 29 collisions recorded at Parkway Circle. These collisions resulted in 35 slight injuries and two serious injuries.
- 13.5.2 One collision occurred on Ashburton Road West and resulted in a serious injury where during dark and wet road conditions a car collided with a pedestrian.
- 13.5.3 At the junction of Ashburton Road West and Parkway Circle, a total of five collisions resulted in six slight injuries. Three of the collisions were shunts and two were collisions mid-junction. Each was caused by poor observation or poor vehicle manoeuvres.
- 13.5.4 The second serious injury occurred on Tenax Road when a car disobeyed a give way line and collided with a cyclist.
- 13.5.5 A further seven collisions occurred at the junction of Tenax Road and Parkway Circle. Six collisions were shunts and the seventh occurred mid-junction. Each collision resulted from poor driver observations.
- 13.5.6 Six collisions were recorded at the junction of Village Way and Parkway Circle, resulting in seven slight injuries. One collision involved a cyclist and two involved motorcyclists. Three collisions were shunts caused by wet weather or aggressive driving. Three collisions also occurred mid-junction, as a result of poor observations of drivers swerving into the road.
- 13.5.7 A collision occurred on Westinghouse Road which resulted in one slight injury and was due to poor driver observation. A further five collisions were recorded at the junction of Westinghouse Road and Parkway Circle, resulting in six slight injuries. There were two shunts and three mid-junction collisions, each occurring due to poor observations or poor driver manoeuvres.
- 13.5.8 Two accidents occurred at the junction of Parkway Circle with Park Way, resulting in two slight injuries. The first, involving a cyclist, was due to poor driver observation and the second, which involved a motorcyclist, was due to a driver disobeying the giveaway markings.
- 13.5.9 Two collisions occurred on Park Way. One involved a motorcyclist who fell from their motorcycle after slipping on debris on the road, resulting in a slight injury. The second collision occurred when a car was shunted from behind and was a result of poor driver observation.

- 13.5.10 A total of 29 collisions were recorded, with three collisions involving cyclists and five collisions involving motorcyclists. This number of collision is not insignificant. Furthermore, it is noted that there is a trend for shunting collisions at the junction of Parkway Circle and Tenax Road.

#### **Impact on Road Safety**

- 13.5.11 The existing Parkway Circle roundabout is a priority junction and high speeds through the junction have been observed. It provides a poor environment for pedestrians and cyclists where there are no controlled crossing points. It is proposed to be replaced with three different signalised junctions. This should improve safety for road users, particularly for pedestrians, cyclists and motorcyclists who are insufficiently provided for by the existing junction design. The implementation of traffic signals should also reduce the number of shunt collisions that occur, particularly on the Tenax Road approach as drivers will be provided with a clear indication rather than trying to assess road conditions in front of them and on the circulatory carriageway at the same time.
- 13.5.12 At Parkway Circle and Park Way, the alignment will be segregated from the vehicular carriageway and crossing points will be signal controlled to provide the safe movement of all users. The conversion of Parkway Circle to signal controlled junctions is expected to improve highway safety. No detrimental impact on highway safety is expected along Park Way.

### **13.6 Section 5 – Barton Dock Road (Park Way to Trafford Centre stop)**

#### **Accident History**

- 13.6.1 The police records indicate that 31 collisions occurred along Barton Dock Road between Park Way and Traders Avenue. These collisions resulted in 43 slight injuries and two serious injuries.
- 13.6.2 Four collisions were recorded along Barton Dock Road which did not occur at a main highway junction. Three collisions were shunts and the fourth occurred at the entrance to the Carcraft car showroom. Each collision was caused by poor driver observation. The four collisions resulted in five slight injuries, including three drivers, one passenger and a motorcyclist.



- 13.6.3 A total of 13 accidents were recorded at the junction of Park Way and Barton Dock Road, resulting in 20 slight injuries. One collision involved a cyclist who rode into the side of a HGV. The remaining collisions involved only drivers and passengers. One driver collided with a lamppost due to tiredness, one collision was caused by swerving, one collision was due to dark and wet road conditions, there were two collisions caused by vehicles making illegal moves, two collisions were due to speeding, two collisions were due to poor observations and four collisions were caused by vehicles failing to stop at lights.
- 13.6.4 There were no collisions recorded at the junction between Barton Dock Road and Mercury Way.
- 13.6.5 At Peel Circle, six collisions were recorded and resulted in 10 slight injuries. Each collision involved only drivers and passengers. Four of the accidents were due to poor driver observations, one collision was caused by aggressive driving and one collision was the result of dark and wet road conditions.
- 13.6.6 A further collision was recorded on Phoenix Way and resulted in one slight injury. The collision occurred when a car attempted a U-turn and collided with an oncoming vehicle.
- 13.6.7 At the junction between Traders Avenue and Barton Dock Road (Bright Circle) five collisions were recorded, resulting in two serious injuries and five slight injuries. The first serious injury occurred when a motorcyclist fell from their vehicle due to debris on the road. The second serious injury occurred when a passenger carrying vehicle collided with a car and flipped it onto its roof. A cyclist suffered a slight injury when they fell off their bicycle due to wet weather conditions. A pedestrian also suffered a slight injury when they fell into the road due to illness. The remaining collisions involved drivers and passengers and were a result of poor driver observation. Despite two serious accidents being recorded at the junction, no significant correlations have been identified to suggest that highway condition, layout or design were significant contributory factors in any of the collisions.
- 13.6.8 A further collision was recorded on Traders Avenue and resulted in one slight injury. The shunt collision was due to poor driver observation.
- 13.6.9 No significant correlations have been identified to suggest that highway condition, layout or design were significant contributory factors in any of the collisions in the study area. However, it is noted that 30% of the collisions resulted in multiple injuries. It is thought that the proximity of the Trafford Centre which attracts more groups of travellers in comparison to the predominant commuter travelling elsewhere in the study area could be a contributory factor.

### **Impact on Road Safety**

- 13.6.10 The implementation of the TPL is not expected to detrimentally impact highway safety along Barton Dock Road. The scheme does not alter the existing junctions of Park Way / Barton Dock Road, Bright Circle or Ellesmere Circle and the strategic traffic modelling indicates that traffic flows, in general, remain as they do today. The alignment will be segregated from the vehicular carriageway and crossing points will be signal controlled to provide the safe movement of all users.
- 13.6.11 The realignment of Barton Dock Road to provide 2 full lanes in each direction between Parkway and Bright Circle and the conversion of the Barton Dock Road / Mercury Way junction and Peel Circle to signal controlled junction is expected to improve highway safety, particularly for pedestrians and cyclists which will be provided with controlled crossings. The modification of the intu Trafford Centre car park access would;
- rationalise the number of conflicting movements which will be subject to signal control thereby reducing driver frustration when dominant movements prevent passage through the junction; and
  - reduce the total volume of traffic passing through the junction.

### **13.7 Summary**

- 13.7.1 The recent collision history has been analysed and the proposed junction modifications have been considered in light of this analysis. As the scheme design is advanced it will be further informed by formal TfGM safety processes and the independent Road Safety Audit process. Comments and issues identified through these processes will be systemically addressed.
- 13.7.2 Whilst the implementation of a tram may introduce potential for collisions with tram vehicles or vehicles disobeying prohibited turns, the TPL scheme has been designed to minimise these conflicts. It is envisioned that the junction layouts and improvements could reduce vehicle collisions along the corridor. Given the objectives of the TPL scheme, the scheme should result in a decrease in congestion and would encourage tram travel, reducing existing pressures on highway safety.
- 13.7.3 In summary, the TPL scheme should result in a positive impact upon highway safety along the scheme corridor.

## **14 Impact on Events**

### **14.1 Introduction**

- 14.1.1 Old Trafford Football Stadium hosts all of Manchester United's home matches during the football season, EventCity is a large exhibition space which accommodates numerous public events and trade shows throughout the year attracting many visitors and the intu Trafford Centre is a major retail centre attracting many shoppers particularly during peak periods such as Christmas. These three venues are considered to be both regional and national tourist and leisure attractions.
- 14.1.2 In addition, the routes of the Great Manchester Cycle, Great Manchester Run and Manchester Marathon all currently use highways within Trafford Park.

### **14.2 Events at Old Trafford Football Stadium**

- 14.2.1 The existing Metrolink network already serves the Old Trafford Football Stadium from the Old Trafford and Trafford Bar stops on the Altrincham Line and Exchange Quay on the Eccles Line. TfGM data regarding ticket checking figures for pre- and post-event passengers for a typical event in 2013 indicate that in general passengers who use Metrolink to access the stadium also use Metrolink for the return journey.
- 14.2.2 The conclusion was based on figures taken at a football match which started at 15:00. It is assumed that people began exiting the stadium just before 17:00. It was recorded that queues were cleared at 18:15. This indicates that, after deducting approximately 15 minutes for the walk time, Metrolink passengers are prepared to queue for up to around an hour after an event.
- 14.2.3 Observations of the operation of the streets in and around the area for a typical event in 2013 are detailed in Appendix H. In summary there are significant pedestrian movements to and from the stadium from both the east and west along Trafford Wharf Road and Wharf End to the Stadium. Traffic conditions, particularly post-match, cause significant congestion on the surrounding highway network which is the key reason why the tram route has been segregated from other road traffic along this section. To help control congestion there are specific traffic management procedures put in place during some events which are centred on the Wharfside Way / Sir Alex Ferguson Way / Sir Matt Busby Way junction.

- 14.2.4 With the introduction of the Wharfside stop it can be expected that a significant number of passengers will transfer to using this stop. Given that the Stadium capacity is around 76,000 and potential demand for public transport to the venue far exceeds the current supply it is anticipated that the number of passengers using Metrolink to access the Stadium on event days would increase. Formal passenger crowd management facilities are therefore proposed in the area around Trafford Wharf Road. As described in Section 3, a section of Trafford Wharf Road and the full length of Wharf End are proposed to be closed to vehicular traffic which will help facilitate safe movements of both general pedestrians and passengers accessing Metrolink services. Access routes around the crowd management facilities are proposed to remain available for general public use to allow access to the stadium as at present. Signing and directing of movements will be considered as the measures are developed.
- 14.2.5 For passengers arriving before an event at the Stadium it is not currently anticipated that queue control measures will be necessary. However, revenue protection for arriving passengers is proposed to be strategically positioned to avoid revenue checks giving rise to crowding on the platforms. It is proposed that corralling and ticket checking facilities will be located off the stop and could be used both pre and post event to control arriving and departing flows respectively.
- 14.2.6 With available data sources and modelling tools it is not possible to accurately predict how current travel behaviours may change with the presence of the Wharfside stop and TPL. The directional split of passengers is unknown; however, anecdotal evidence suggests that, in addition to those travelling east towards the city centre, a proportion of people will travel west towards the Trafford Centre as this offers convenient parking and post-match leisure and retail activity. As noted above the Stadium capacity far exceeds the current capacity provided by the existing Metrolink services. Typically all seats are sold for football fixtures and other events held at the Stadium. The initial work to consider the stop capacity and queue lengths has been considered against the service capacity that may be employed and the likely maximum wait time that passengers would endure before changing their travel behaviour / mode. This has been assumed to be approximately an hour from the point of joining the queue and is based on the evidence from 2013 and general advice offered by TfGM's Passenger Services team. An hour also corresponds with the approximate walk times to either the Trafford Centre or the city centre and Manchester Piccadilly railway station (which are both around 5km from the stadium).

- 14.2.7 The Inbound direction tram services are expected to be busiest. It is therefore likely that additional trams would run in between the scheduled service (nominally 5 trams per hour in each direction) for a period following an event at Old Trafford Football Stadium. It is assumed these would be introduced into service from the proposed siding at Warren Bruce Road or the trailing crossover proposed to the west of the Wharfside tram stop, subject to operational and demand assessments.
- 14.2.8 The analysis has indicated that the longest queue heading in either direction would be around 1,500 persons (3,000 in total). Using the assumed service frequency the Wharfside stop would carry around 6,750 passengers over a 2 hour period which represents just under 10% of the stadium's current capacity. These figures will need to be further benchmarked to support the detailed design of the passenger management system and plan.
- 14.2.9 TfGM will work with TMBC and Greater Manchester Police to devise new congestion control and traffic management plans in light of the proposed highway changes.

### **14.3 Events at EventCity and the intu Trafford Centre**

- 14.3.1 The presence of Metrolink will provide a viable public transport alternative to the private motor car for accessing these venues. TfGM will work with the operators with the aim of providing enhanced service capacity at the busiest times to ensure Metrolink offers the travelling public a realistic choice. Demand for events at these venues is generally spread across the day and it is envisioned that a standard tram frequency can sustain the demand. The urban realm will require careful design to accommodate large numbers of queuing passengers.

### **14.4 Special Events**

- 14.4.1 Trafford Park hosts a variety of special events throughout the year. This includes a number of special sports events within Trafford Park which include;
- Great Manchester Cycle;
  - Great Manchester Run; and
  - Manchester Marathon

### **Great Manchester Cycle**

- 14.4.2 The Greater Manchester Cycle is an annual closed-road cycle sports event held each summer. The route runs through Manchester, Salford and Trafford, although the specific route varies each year. The most recent event was held in June 2014. The 13 mile loop began at the Etihad Stadium in the east of Manchester and travelled through the city centre. In Trafford Park, the route followed Wharfedale Way, turned north along Elevator Road and turned east onto Trafford Wharf Road. Given the proposed changes to the highway network the event may have to be re-routed. TfGM will work with the event organiser to consider suitable alternatives.

### **Great Manchester Run**

- 14.4.3 The Great Manchester Run is an annual 10km run and is the largest of its type in Europe. It was most recently held in May 2014. The race begins in the city centre and heads west along Bridgewater Way. The route enters Trafford Park along Wharfedale Way. The route then follows Village Circle, Warren Bruce Road, Trafford Wharf Road and Sir Alex Ferguson Way before heading back towards the city centre. Given the proposed changes to the highway network the event may have to be re-routed. TfGM will work with the event organiser to consider how the event could be run alongside the Metrolink operations.

### **Greater Manchester Marathon**

- 14.4.4 The Greater Manchester Marathon is an annual long distance run which was most recently held in April 2014. The route begins on the Chester Road A56 before heading onto Bridgewater Road and entering Trafford Park along Trafford Wharf Road. After the junction with Warren Bruce Road the route doubles back along Trafford Wharf Road, turns south along Sir Alex Ferguson Way and then continues through Stretford, Sale, Altrincham and Urmston, before finishing on Sir Matt Busby Way. Given the proposed changes to the highway network the event may have to be re-routed. TfGM will work with the event organiser to consider how the event could be run alongside the Metrolink operations.

## **14.5 Impact of Events on the TPL**

- 14.5.1 The TPL scheme has specifically been developed so that it can be, as far as is practicable, insulated from the impact of events and the prevailing highway conditions. The scheme, apart from highway crossings, will be segregated from other road traffic thereby providing resilience and reliability of tram operations during times of highway congestion that can arise from events within the area, such as those frequently held at Old Trafford Football Stadium, EventCity and the Trafford Centre retail and leisure complex. The scheme includes a number of crossovers to allow trams to be turned around prior to reaching the terminus. They will allow a degraded level of operation to be maintained should the highway be blocked for whatever reason.
- 14.5.2 The TPL is being designed to support regular events that occur at the Old Trafford Football Stadium, EventCity and the intu Trafford Centre. It is likely that in support of these events additional tram vehicles would be deployed to provide additional passenger capacity.
- 14.5.3 It is not expected that special events will have a significant impact upon the operation of the TPL. Sports events which are routed around the tram alignment will be carefully discussed and coordinated with Greater Manchester Police and TMBC.

## **14.6 Impact of TPL on Special Events**

- 14.6.1 It is envisioned that the proposed TPL would not have a negative impact upon the annual special events. The organisers of each event are required to liaise and agree proposals with Greater Manchester Police and TMBC on an annual basis. Route details have been modified and refined each year, which provides an opportunity for management plans to be developed with each event organiser. TfGM will liaise with the authorities to ensure that the effects on public transport are kept to manageable levels.
- 14.6.2 The TPL will see the implementation of a new tram line and improvements to the existing cycle network which will also provide additional sustainable travel opportunities for people staffing and attending events.

## **14.7 Conclusion**

- 14.7.1 The TPL is expected to enhance Trafford Park's capability to host events, public exhibitions and trade shows and will form an important element of the public transport provision serving them.

## **15 Impact of Construction**

### **15.1 Construction Methodology**

- 15.1.1 The construction of the proposed TPL within Trafford Park will have a temporary impact on the existing highway and its users. It is anticipated that the proposed scheme would be constructed by dividing the route into a number of construction zones; possibly slightly more disaggregated than those established for this Transport Assessment. Construction works could then be sequenced by zone(s), with the aim of maintaining (where practicable) movements through Trafford Park and access to individual properties throughout the works.

### **15.2 Code of Construction Practice (CoCP)**

- 15.2.1 Underpinning the management of construction impacts is a draft Code of Construction Practice (CoCP) that has been developed by TfGM for the construction of the TPL. The CoCP will address the contractor's general obligations with respect to minimising the impact of construction activities on businesses, the general public, the environment and the surroundings in the vicinity of the works. The CoCP applies to the construction phase of the TPL scheme, and will be in addition to statutory regulations. The contractor will be required to comply with the terms of the CoCP. The draft CoCP is submitted as a supporting document to the TWAO application and deals with issues such as the control of noise generated by construction activities, permitted hours of working, maintenance of access routes and the protection of the public from site working areas. The Environmental Statement also makes reference to the CoCP, with regard to assessing the temporary impacts arising from construction and mitigation measures.

### **15.3 The Construction Management Plan (CMP)**

- 15.3.1 The Trafford Park area operates continually serving businesses (some of which operate 24 hours a day 7 days a week) and visitors. Continual access to certain sites and along particular streets may be required at all times during the construction of the TPL. Construction of the TPL will, in general affect the movement of traffic; as construction proceeds. However, it will also have an effect on pedestrians and cyclists at key points such along Trafford Wharf Road, particularly during events at Old Trafford Football Stadium, and at the Trafford Centre developments. The Construction Management Plan (CMP) will need to provide appropriate arrangements to facilitate vehicular movements and manage pedestrian and cyclist access to allow the commercial life of the Trafford Park area to continue.



#### **15.4 Development of the Construction Management Plan**

- 15.4.1 Planning and liaison will be required between the Contractor, TfGM, TMBC and affected stakeholders. It will be necessary to develop and update plans throughout the construction of the works. TfGM will continue to liaise with stakeholders throughout the construction phase to manage and mitigate any potential disruption. In developing the CMP the following issues will need to be addressed.

#### **15.5 Traffic**

##### **General Traffic**

- 15.5.1 The construction of the TPL will have temporary effects on traffic movements. A number of temporary road closures and diversions will be required. In developing the construction methodology consideration will need to be given to aligning the sequencing of the works to the permanent traffic management measures to minimise the number of changes to the traffic management and impacts to road users and frontagers. Access to the Trafford Park area will be required at all times during the construction of the TPL and it is possible that other third party developments may be under construction. The traffic arrangements will need to:

- Take due consideration of other highway works such as highway maintenance and minor improvements so that traffic management proposals are compatible and co-ordinated to minimise abortive highway works.
- Take due consideration of the traffic management requirements of other development schemes.
- Take into account major events in the area such as Great Manchester Cycle, Great Manchester Run and Manchester Marathon that all currently pass through Trafford Park.
- Retain suitable access to the Trafford Centre leisure and retail areas during the commercially sensitive Christmas and New Year periods.

##### **Access Traffic**

- 15.5.2 It will be necessary to maintain essential access to frontages. However, it is anticipated that certain elements of construction will require the temporary closure of some sections of the highway. In such circumstances it may be necessary to establish temporary measures to allow frontagers to continue operating.

### **Emergency Services Access**

- 15.5.3 Access for emergency services will need to be maintained at all times and consultation and agreements with the relevant bodies will need to be made as to how this can be best achieved. It will also be necessary to consider evacuation routes and assembly points for adjacent buildings affected by the works.

### **Construction Traffic**

- 15.5.4 The Code of Construction Practice provides details on how construction will be managed, including consideration of construction traffic. Whilst construction traffic will be relatively low in volume it will need to access areas adjacent to high traffic movements and will therefore require suitable control to avoid conflict. Delivery traffic to compounds will need to be managed so as not to cause congestion. Access routes to the individual work sites will have to be agreed between the contractor and TMBC as local highway authority. These will need careful planning giving consideration to the plant and materials that will need to be conveyed.

## **15.6 Public Transport Services**

- 15.6.1 The construction of the TPL will have an impact on public transport provision, including bus services but also the existing light rail services, which are discussed below. The impact on other modes of public transport i.e. taxis and coach services will be limited to that from the general traffic management measures.

### **Light Rail**

- 15.6.2 The construction of the scheme will have a short term temporary effect on the operation of the existing Metrolink Eccles and MediaCityUK services where the scheme connects to the existing network. The Pomona Viaduct and track alignment was designed to be extended westwards over Pomona Strand. This passive provision will allow for the TPL to connect to the existing network with minimal disruption to the operation of the existing network.
- 15.6.3 Other than this the construction of the system will have little impact on the existing scheme as the works are off-line.

### **Heavy Rail**

- 15.6.4 The construction of the application scheme does not have any direct or indirect interfaces with the heavy rail system. Therefore the construction of the TPL will not have any effect on the operation of the heavy rail network.

## **Buses**

- 15.6.5 The nature of the proposed scheme means that alterations, both temporary and permanent, to the bus network will occur during construction largely in response to the highway junction works and track crossings associated with the scheme. The contractor, in conjunction with TMBC, TfGM and bus operators, will need to carefully consider and appropriately advertise changes to any bus services necessary such as the re-routing required as a result of the changes to Parkway Circle. TfGM will work with the contractor to consider the construction methodology for this area to identify a solution that minimises any impact on the delivery of passenger services whilst expediting the works.

## **15.7 Pedestrians**

- 15.7.1 The works will need to be carried out with due consideration of the large volumes of pedestrian movements that can occur in locations such as Trafford Wharf Road, particularly during events at the Old Trafford Football Stadium, or around the Trafford Centre rectangle, such as during events at Event City and the Trafford Centre. Any diversions will need to be well signed and suitable for use by people with disabilities or restricted mobility. Temporary crossing facilities will be considered to maintain existing standards of crossing facilities, especially where there would be a high volume of pedestrian movements, such as in the area around the new Wharfside stop.
- 15.7.2 During the works pedestrian access will be maintained to all frontages along the route. However, it is likely that certain elements of construction will require the temporary closure of access for short periods of time. Where this is necessary ongoing liaison between the property owners/tenants, TfGM and the contractor will establish the exact requirements for access and suitable mitigation.

## **15.8 Cyclists**

- 15.8.1 Within the geographical boundary of the TA study there are currently signed cycle routes along Trafford Wharf Road, Warren Bruce Road, around Village Circle and along Barton Dock Road. The Manchester Ship Canal and Bridgewater Canal are also used by cyclists. Due to the fact that these routes run parallel to or cross the alignment it is likely that during construction, they may either require temporary suspension or diversion.
- 15.8.2 During the works, any roads which are open to motor vehicles may be used by cyclists. In locations where the full width of a road is closed then cyclists will either have to follow an alternative route or dismount and push their cycles along the pedestrian footway.

## **15.9 Conclusions**

- 15.9.1 Continual access to the Trafford Park area will be required at all times during the construction of the TPL. Temporarily the construction of the TPL is likely to affect the movement of traffic and as construction proceeds it may have an effect on property access. Appropriate arrangements will be required to facilitate vehicular and pedestrian access to allow the general life of the Trafford Park area to operate. It will ultimately be the responsibility of the contractor to prepare a Construction Management Plan to demonstrate to TfGM how the construction impacts will be minimised. Such challenges have been successfully tackled during the implementation of other recent Metrolink extensions. The contractor appointed to construct the scheme would bring knowledge and expertise in their management.
- 15.9.2 Underpinning the management of impacts is a draft Code of Construction Practice (CoCP), developed by TfGM for the construction of the TPL, which addresses the contractor's general obligations with respect to minimising the impact of construction activities on businesses, the general public and the surroundings in the vicinity of the works. The CoCP applies to the construction phase of the TPL scheme, and will be in addition to statutory regulations. The contractor will be required to comply with the terms of the CoCP, and to incorporate it in any contract or sub-contract relating to any aspect of the scheme.
- 15.9.3 The scale of the project will require extensive detailed planning in conjunction with the highway authority and organisations such as the emergency services, public transport operators, cyclists, people with disabilities and local business will be necessary.
- 15.9.4 Extensive planning and liaison will be required between the contractor, TfGM and TMBC. It will be necessary to continue the planning exercise and revise plans throughout the construction of the works. TfGM will continue to liaise with stakeholders throughout the construction phase to minimise disruption.

## **16 Summary and Conclusions**

- 16.1.1 The Manchester Metrolink Light Rapid Transit System commenced operation in 1992 with the opening of the Altrincham and Bury Lines, including a short section of on-street running through the city centre and a link to Piccadilly Station. In 2000 the Eccles extension was fully opened. The Phase 3 extensions recently completed to Ashton-under-Lyne, East Didsbury, Oldham and Rochdale and Manchester Airport (due to open November 2014) have significantly extended the reach of the network which now carries approximately 20 million passengers per year. The Second City Crossing (2CC) is under construction and is due to be open by 2017.
- 16.1.2 With the current network expansion nearing completion, future network improvements have been identified. Trafford Park, located to the west of the Regional Centre of Greater Manchester, is a significant employment and leisure site and one of the largest and most successful industrial parks in the UK, employing over 35,000 people. Trafford Park has virtually no residential population which means that those who are employed in Trafford Park need to be able to travel there by either private car or public transport or use active modes. However, it is documented in the Trafford MBC Core Strategy (2012) that congestion and a lack of public transport choice is constraining future sustainable development within Trafford Park and the Trafford Centre Rectangle (TCR), both of which are currently major generators of car trips.
- 16.1.3 Within the Trafford MBC Core Strategy, Trafford Park is acknowledged to have a very significant role to play in the economy of the region and more specifically in terms of achieving a significant improvement in the performance of the sub-regional economy. The Greater Manchester Strategy (GMS) (2009) sets out an agreed strategy for delivery by the Greater Manchester Combined Authority and the Local Enterprise Partnership. The refreshed GMS 2013-2020 identifies the TPL as a long standing investment priority, a key transport priority and Trafford Park as a key employment area. The GMS also identifies an Earn Back model as providing scope to extend Greater Manchester Transport Fund (GMTF) spending power by up to a further £500 million by 2020, enabling the delivery of further key transport priorities including the Metrolink extension to Trafford Park.
- 16.1.4 The proposed TPL consists of an approximately 5.5 km twin track extension to the Metrolink network, along with six new stops, providing a link between Manchester City Centre and the employment and regeneration areas of Trafford Park and the Trafford Centre retail and leisure complex.

16.1.5 This Transport Assessment (TA) provides an examination and understanding of the implications of the scheme on transportation issues. It is intended to complement the information provided in the Environmental Statement (ES) concerning transportation issues and accompanies the Transport and Works Act Order (TWAO) application for the scheme, to be submitted to the Secretary of State to acquire the Powers necessary to construct and operate the extension.

16.1.6 The TA has considered the impacts of the TPL on all modes of travel including but not limited to walking, cycling and public transport and set out the proposed mitigation measures to reduce or eliminate the identified impacts. Considering each area in turn it can be concluded that:

## 16.2 Policy Fit

16.2.1 The TPL scheme is embedded in planning policy to support economic growth with an accessible, sustainable, reliable public transport facility. The Greater Manchester Strategy (GMS) (2009) sets out an agreed strategy for delivery by the Greater Manchester Combined Authority and the Local Enterprise Partnership. The refreshed GMS 2013-2020 identifies the TPL as a long standing investment priority, a key transport priority and Trafford Park as a key employment area.

16.2.2 In addition to the TPL, the current Local Transport Plan (LTP3) identifies a further extension of Metrolink beyond the Trafford Centre to the City of Salford Stadium and Port Salford. LTP3 goes on to state that the extension will provide greatly improved public transport to the largest concentration of employment outside the Regional Centre. Regional planning policy echoes the guidance of national policy, encouraging sustainable transport choices and sustained investment in transport. National planning policies further support the enhancement of the Metrolink network.

## 16.3 Traffic

16.3.1 TfGM has undertaken extensive traffic modelling work and detailed assessment of the scheme proposals to identify what impact the proposed TPL will have on the highway and its users.

16.3.2 The online junctions have been assessed and it was identified that the majority of junctions would be expected to continue to operate within capacity after the implementation of TPL. The remodelling of the Parkway Junction will result in improvement over the Do Minimum situation in both 2020 and 2035. The deterioration in performance expected by 2035 at the Parkway junction is considered to be a result of background traffic growth rather than an impact of the TPL scheme and it is noted that the Do Minimum modelling indicates a significant intervention will be required by this time in any event.

- 16.3.3 An assessment was also undertaken to identify those off-line junctions not on the TPL alignment which may be directly affected by the introduction of the scheme. In total, five junctions across the whole of Trafford Park were identified as having a deteriorating volume to capacity ratio. However, only one of these junctions is likely to require a physical intervention the details of which will be developed in conjunction with TMBC and GMUTC as part of the ongoing scheme development.
- 16.3.4 It can be concluded from the modelling that the TPL can be introduced into the DM scenario with limited overall impact on the highway network.

#### **16.4 Light Rail**

- 16.4.1 The assumed service frequency currently proposed for the TPL is five trams per hour in each direction to serve the Trafford Park area and the Trafford Centre, offering as a minimum an additional hourly capacity for around 1,000 passengers per direction. The services are anticipated to operate to Crumpsall on the Bury Line. This will increase the total number of trams operating on the core section of the network to 40 trams per hour.
- 16.4.2 The operational modelling undertaken in support of the 2CC scheme indicated that 45 trams per hour operating on this section of the network is within the capacity of the existing infrastructure. Consequently the introduction of the TPL scheme will have a limited effect on the wider operation of the Metrolink network.

#### **16.5 Heavy Rail**

- 16.5.1 Whilst the TPL scheme will not interface with the existing local heavy rail lines or rail station within Trafford Park, owing to the significant existing connections between Metrolink and the heavy rail network elsewhere it will improve linkages between the Trafford Park area and the mainline railway network. This will offer a high quality and reliable public transport alternative to the private car to access areas of employment from areas of Greater Manchester with higher population, higher deprivation and lower car ownership. The TPL scheme will expand access to the existing employment, leisure and tourism market within the Trafford Park area to the wider conurbation. This in turn will add to the attractiveness for businesses and leisure activities to locate within Trafford Park.

## **16.6 Buses**

- 16.6.1 Currently, buses form the primary component of public transport in Trafford Park. As a result of the TPL scheme, the routing of some bus services will be diverted to accommodate the proposed highway modifications. Mitigation measures have been proposed that demonstrate each diverted bus service can still operate after the implementation of the TPL. The re-routing will limit the penetration of bus services at the north-west end of Westinghouse Road in the westbound direction. The fact that only one regular service (291 operating Trafford Park, Old Trafford, Hulme and Manchester) serves this movement would indicate there is limited bus demand in this area.
- 16.6.2 It is noted that the operation of bus services is de-regulated in Greater Manchester with approximately 80% of all services across Greater Manchester operating commercially and the remaining 20% supported through TfGM to varying degrees. Bus routings for commercial services are determined by bus operating companies, in liaison with TfGM, and may change over time.
- 16.6.3 Both commercial and supported services are reviewed by the operators and TfGM, and will evolve to serve the changing developments and commercial environment following the introduction of Metrolink. It is not expected that the proposed highway modifications consequent on the introduction of Metrolink will of themselves lead to the withdrawal of any bus services.

## **16.7 Active Modes**

- 16.7.1 The scheme design involves no physical segregation or other design features that might impact on or constrain open and free movements by pedestrians. The TPL scheme will in general pose no greater direct impact upon pedestrians or cyclists than exists today. The illustrative design generally retains or re-provides the cycle lanes that exist today. Additionally, new cycle facilities have been included as part of the TPL scheme, including a new shared footway / cycleway adjacent to the north-eastbound Park Way carriageway which would significantly reduce the severance effect of the existing highway network.
- 16.7.2 Whilst the scheme will result in changes to footways, it is considered that the benefits that would result from the introduction of TPL in terms of new controlled crossing facilities and removal of traffic from some areas, which will be of significant benefit to pedestrians and cyclists.



## **16.8 Parking**

- 16.8.1 A number of informal on-street parking spaces will be displaced on Wharf End and Warren Bruce Road. However alternative parking locations have been identified in close proximity. The scheme results in small impacts on the car parking associated with private developments. These impacts are not considered to have a detrimental impact on these developments. The need for mitigation or replacement provision will be made in agreement/discussion with the individual stakeholders.
- 16.8.2 The provision of a circa 200 capacity park and ride car park will offer a new sustainable travel option for people travelling through Trafford Park, resulting in a moderate positive impact.

## **16.9 Taxis**

- 16.9.1 The existing taxis rank provision will be maintained albeit the temporary taxi rank on Sir Alex Ferguson Way will be relocated to Victoria Place. However, taxis will be affected by the changes to the highway network consequent on the introduction of the Metrolink alignment. This assessment has concluded that the highway network changes are not significant and therefore it is concluded there will be no material impact upon taxi services.

## **16.10 Servicing and Access**

- 16.10.1 The implementation of the proposed TPL scheme will alter some existing access routes requiring vehicles to re-route. However, the proposed diversions are not considered to present a material impact on general access within the wider Trafford Park area.
- 16.10.2 Where the proposed TPL scheme has an impact upon existing access arrangements to individual properties it has been demonstrated that in relatively few cases where existing accesses cannot be retained, alternative access arrangements can be provided. Therefore it is anticipated that there would be no detrimental impact from the TPL scheme upon servicing and access.

## **16.11 Construction and Phasing**

16.11.1 Trafford Park is an employment centre with different businesses operating for 24 hours a day and 7 days a week. Continual access to Trafford Park will be required at all times during the construction of the TPL. Temporarily the construction of the TPL will affect the movement of traffic. Appropriate arrangements will be required to facilitate vehicular and pedestrian access to allow Trafford Park to continue to function and it will ultimately be the responsibility of the contractor to prepare a Construction Management Plan to demonstrate how the construction impacts will be minimised. The contractor appointed to construct the scheme will also bring knowledge and expertise and be able to address the changing nature of Trafford Park taking into account the needs of other developments.

16.11.2 Underpinning the management of impacts is the draft Code of Construction Practice (CoCP), developed by TfGM for the construction of the TPL, which addresses the contractor's general obligations with respect to minimising the impact of construction activities on businesses, the general public and the surroundings in the vicinity of the works. The CoCP applies to the construction phase of the TPL scheme, and will be in addition to statutory regulations. The contractor, his servants, agents and employees will be required to comply in full with the terms of the CoCP, and to incorporate it in any contract or sub-contract relating to any aspect of the scheme.

16.11.3 Extensive planning and liaison will be required between the contractor, TfGM and TMBC. It will be necessary to continue the planning exercise and revise plans throughout the construction of the works. TfGM will continue to liaise with stakeholders through-out the construction phase to minimise disruption.

## **16.12 Highway Safety**

16.12.1 It is anticipated that the TPL scheme would result in a positive impact upon highway safety along the scheme corridor. The recent collision history has been analysed and any correlations have been identified. The proposed junction modifications have been prepared in light of this analysis and it is envisioned that junction layout improvements could reduce vehicle collisions along the corridor. Given the objectives of the TPL scheme, the scheme would result in a decrease in congestion and would encourage tram travel, reducing existing pressures on highway safety. It is concluded that the TPL scheme will be beneficial to highway safety.

### **16.13 Special Events**

- 16.13.1 The TPL will provide additional public transport capacity for visitors to the Trafford Park area and in particular those attending events at the Old Trafford Football Stadium, EventCity and the intu Trafford Centre and associated leisure activities. In this way the TPL would further enhance Trafford Park's capability to host sports events, public exhibitions and trade shows.
- 16.13.2 The TPL is being designed to enable support to regular events that occur at the Old Trafford Football Stadium and EventCity. In support of these events additional tram vehicles could be deployed to provide additional passenger capacity. These services will likely be provided by modifying the overall service pattern thereby remaining within the 45 trams per hour operating on the core section of the network.
- 16.13.3 The TPL scheme has specifically been developed so that it can be, as far as is practicable, insulated from the impact of events and the prevailing highway conditions. The scheme, apart from highway crossings will be segregated from other road traffic thereby providing resilience and reliability of tram operations during times of highway congestion that can arise from events within the area, such as those frequently held at Old Trafford Football Stadium, Event City and the Trafford Centre retail and leisure complex. The scheme includes a number of crossovers to allow trams to be turned around prior to reaching the terminus. They will allow a degraded level of operation to be maintained should the highway be blocked for whatever reason.
- 16.13.4 A wide variety of special events are staged in Trafford Park. They vary in character from large static events, such those hosted at Event City, to sporting events over large sections of highway. The routes of sports events such as the marathons and cycle rides will be discussed and agreed with event organisers, Greater Manchester Police and Trafford Metropolitan Borough Council, in order to minimise mutual impacts on the events and TPL services.

### **16.14 Overall Conclusion**

- 16.14.1 Based on the summaries provided above it can be concluded the TPL scheme can be introduced without causing significant detriment to the existing highway, the wider public transport system and its users. Generally the scheme will result in positive benefits for the users of Trafford Park and the proposals and mitigation measures to offset impacts are wholly aligned with the vision of TMBC, the transport policy and other complementary schemes.

## **APPENDIX A      Technical Development Plans**

## **APPENDIX B      Existing Route Description**

### **B.1      Introduction**

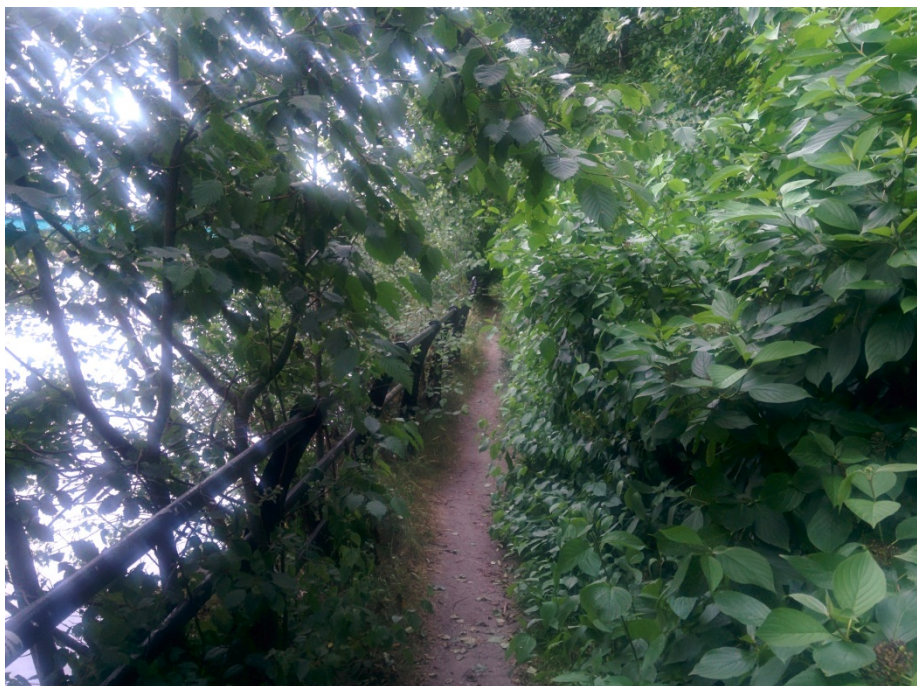
This Appendix details the prevailing conditions along the proposed TPL scheme corridor, running east to west along the scheme route from Pomona, to Trafford Wharf Road along Village Way, then Barton Dock Road to the terminus of the scheme at the Trafford Centre.

### **B.2      Pomona Strand**

Pomona strand is a private single carriageway road that provides access from Trafford Road and the White Circle gyratory to the Pomona Island area. The footways are discontinuous along its length although they do offer pedestrian and cyclist access to the canal paths flanking Bridgewater and Manchester Ship Canals. The Pomona Island area, a former dockland, is currently un-developed. There is only one office block (Adamson House) which lies adjacent to the Metrolink Pomona stop. Consequently traffic volumes are very low.

### **B.3      South bank of the Manchester Ship Canal**

A canal towpath runs adjacent to the south bank of the canal. The towpath varies in width throughout its course. From Pomona to Trafford Road the towpath is bordered by dense vegetation. The towpath runs underneath the Trafford Road bridge structures and a staircase provides pedestrian access from the towpath up to Trafford Road. Westward of Trafford Road the towpath continues alongside the canal at a lower grade to the adjacent Trafford Wharf Road Carriageway. It is paved and bordered planting and public art as shown in Figures B.1 and B.2 below.



**Figure B.1 – Manchester Ship Canal – Overgrown Canalside Path to the East of Trafford Road**



**Figure B.2 – Manchester Ship Canal –Canalside Environment to the West of Trafford Road**

#### **B.4 Wharf End**

Wharf End is a single carriageway road that links Trafford Wharf Road to Trafford Road and is one-way in this direction. It is flanked by footways on both side and forms part of the existing cycle route that connects the cycle facilities on Trafford Wharf Road with those on the northern bank of the Manchester Ship Canal, although there are no formal cycle facilities provided.

#### **B.5 Sir Alex Ferguson Way**

Sir Alex Ferguson Way (formerly Waters Reach) is a wide single carriageway providing 2 lanes in each direction. It connects Wharfside Way with Trafford Wharf Road. Both junctions are signal controlled junctions. At its mid-point it forms a priority controlled junction with Waterside. It also provides access to the Premier Inn Hotel located on the corner of Sir Alex Ferguson Way and Trafford Wharf Road. Bus stops, by way of a flagpole are provided on both sides of the carriageway near the junction with Waterside.

It is subject to a 30mph speed limit and no waiting at any time restrictions along both sides, although there is a short length on the eastern side that operates as a taxi rank on Match Days at the Old Trafford Football Stadium.

#### **B.6 Victoria Place**

Victoria Place is single carriageway cul-de-sac running on an east-west axis that provides access to the properties on its southern side. Access to its eastern end is controlled by bollards. This area is where the food & drink concessions / vending stalls are located during events at the Old Trafford Football Stadium.

#### **B.7 Trafford Wharf Road (Trafford Road to Warren Bruce Road)**

Between Trafford Road and Sir Alex Ferguson Way, Trafford Wharf Road turns through two 90 degree bends which are located at its junctions with Victoria Place and Wharf End. It is a single carriageway which has been widened on the bends and includes right turning pockets. Footways flank both side of the carriageway.

Between Sir Alex Ferguson Way and Warren Bruce Road its alignment is generally straight running on an east-west axis and is bounded by a mixture of light industrial uses, commercial office use and tourist attractions. As shown in Figure B.3, it is a wide single carriageway with a 30mph speed limit and has one lane in each direction separated by central hatching that includes ghost island forming right turning pockets with pedestrian refuge islands (see Figure B.4). It is subject to no waiting at any time restrictions along both sides.





**Figure B.3 – Trafford Wharf Road Typical Cross Section**



**Figure B.4 – Pedestrian and cyclists crossing point on Trafford Wharf Road**

Traffic flows on Trafford Wharf Road are relatively low. There are a number of HGV movements along this link. In particular the main goods in and out access to the Rank Hovis grain storage facility leads off Trafford Wharf Road opposite to the IWMN site. Pedestrian movements are also fairly light but there are a



number of cyclist movements, mainly on carriageway with cyclists choosing to avoid using the off-carriageway cycle lanes that cross numerous accesses. The road is a bus route and there are a number of bus stops along its length.

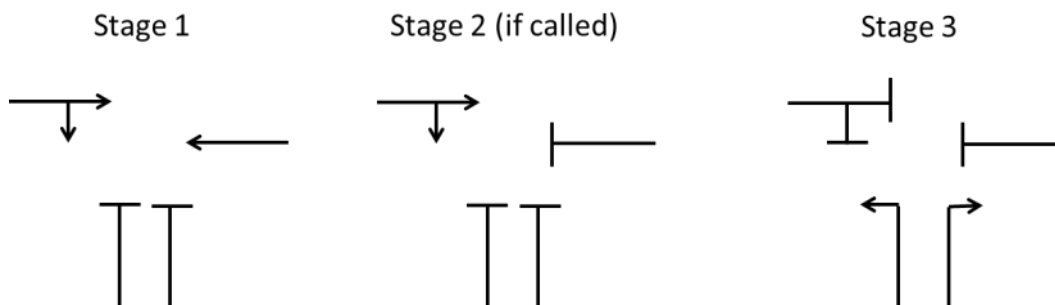
Trafford Wharf Road forms signalised junctions with Sir Alex Ferguson Way at its eastern end and Warren Bruce Road to the west as shown in Figure B.5. Between these two junctions, a number of priority-controlled junctions are present, most notably with Waterside and Elevator Road and 18 further private means of access (PMAs). At each priority controlled junction, a ghost island right turn lane is provided to facilitate access into the side roads.

The junction with Sir Alex Ferguson Way is a three arm 'T' junction controlled by traffic signals. Traffic flows are fairly light at all times and the traffic signals revert to the main road, Trafford Wharf Road, until a vehicle approaches on the side road. There is a demand dependent right turn facility for eastbound traffic on Trafford Wharf Road turning into Sir Alex Ferguson Way which is only called when required. There are no pedestrian facilities included within the traffic signals. This staging is illustrated in Figure B.6 below.

The westbound approach of Trafford Wharf Road has two lanes, one dedicated to turn right into the Sam Platts car park immediately before the signals. The eastbound approach of Trafford Wharf Road also has two lanes with a dedicated right turn lane into Sir Alex Ferguson Way. The Sir Alex Ferguson Way approach has two lanes, one for left turning traffic and one for right turning traffic. Except for events at the Old Trafford Football Stadium there are currently no significant traffic delays at this junction.



**Figure B.5 – Eastbound approach to Trafford Wharf Road / Sir Alex Ferguson Way junction**



**Figure B.6 – Existing staging of Trafford Wharf Road / Sir Alex Ferguson Way junction**

The junction with Waterside is a three arm priority-controlled junction with uncontrolled pedestrian and cycle crossing facilities across the minor arm. The junction provides access for local office and light industrial uses. On the northern side of the junction is a PMA.

The Elevator Road junction is a three-arm priority-controlled junction with uncontrolled pedestrian crossing facilities, including a refuge island, across the eastern arm. The junction provides access for local light industrial uses.

The Warren Bruce Road junction is currently a three arm 'T' junction controlled by traffic signals. Traffic flows are fairly light and the traffic signals revert to the main road, Trafford Wharf Road, until a vehicle approaches on the side road. There is a single lane for westbound traffic on Trafford Wharf Road and two lanes for eastbound traffic, one dedicated for right turning traffic. There are

two lanes on the Warren Bruce Road approach, segregated at the stop line by an island. There are also marked pedestrian and cyclist crossing locations on the Warren Bruce Road approach (uncontrolled), but there are no facilities within the traffic signals themselves as shown in Figure B.7.



**Figure B.7 – Pedestrian and cyclist facilities across Warren Bruce Road**

Footways comprising dropped kerbs and street lighting are provided along both sides of the carriageway. Uncontrolled pedestrian crossing facilities with refuge islands are located to the east of the junction with Waterside, east of the Elevator Road junction and at the eastern side of the Imperial War Museum North frontage. There are a number of footpaths between the street and the Manchester Ship Canal (MSC) Wharfside promenade including two in the vicinity of the Imperial War Museum North that provide access to the pedestrian bridges across the MSC to The Lowry and MediaCityUK developments.

In the eastbound direction an off-carriageway cycleway begins at the western perimeter of the Imperial War Museum that re-joins the main carriageway at the Trafford Wharf Road exit from the signalised junction with Sir Alex Ferguson Way. In the westbound direction an off-carriageway cycleway begins at the Trafford Wharf Road approach to the signalised junction with Sir Alex Ferguson Way and re-joins the main carriageway opposite the Quay West office building. These cycleways form part of the National Cycle Network (Route 55) and a reasonable level of cycling along this route has been observed during site visits.

Eastbound bus stops, comprising of flagpole, information sign and shelter, are provided to the west of the junction with Sir Alex Ferguson Way, along the Quay West office frontage and along the Imperial War Museum frontage. Figure B.8 illustrates the Quay West eastbound bus stop. In the westbound direction, bus stops comprise of flag pole only.

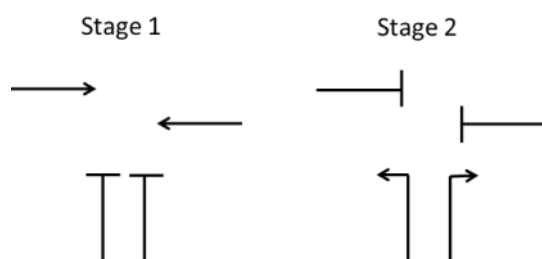


**Figure B.8 – Trafford Wharf Road eastbound bus stop**

## **B.8 Warren Bruce Road**

Warren Bruce Road runs along a north-south axis and is bordered by light industrial uses. It is a wide, straight road. No accesses are present on the western side of this link. It is single carriageway and it forms signalised junctions with Trafford Wharf Road to the north and Village Circle to the south. Between these two junctions, Warren Bruce Road forms priority-controlled junctions with two separate site access roads.

The junction between Warren Bruce Road and Trafford Wharf Road is a three arm 'T' junction controlled by traffic signals and operates as described in Section B.9.



**Figure B.9 – Existing staging of Trafford Wharf Road / Warren Bruce Road junction**

A two-way off-street cycleway is provided alongside the western footway and runs the entire length of Warren Bruce Road. Pedestrian footways with street lighting and dropped kerbs are also provided on both sides of the carriageway. A pair of bus stops are provided, in the vicinity of Warren Bruce Court, comprising of flagpole only.

Warren Bruce Road is subject to a speed limit of 30mph and is not subject to parking restrictions, apart from the approaches to the junctions with Trafford Wharf Road and Wharfside Way where no waiting at any time restrictions apply. Consequently it is heavily parked throughout the day (which is considered to be parking associated with the MediaCityUK development) Figures B.10 and B.11 illustrate the on-street parking along both sides of the carriageway.



**Figure B.10 – Warren Bruce Road looking south**





Figure B.11 – Warren Bruce Road looking north

## B.9 Wharfside Way

Wharfside Way runs along an east-west axis running parallel to (but to the south off) Trafford Wharf Road. It is bordered by car parks and light industrial uses. To the east, it forms a signalised junction with Sir Alex Ferguson Way and Sir Matt Busby Way and to the west it forms part of the signalised gyratory known as Village Circle. Between these two signalised junctions, a signalised junction is formed with John Gilbert Way and priority-controlled junctions are formed with Elevator Road, Circle Street and approximately 10 PMAs.

Between the junctions with Sir Alex Ferguson Way and Elevator Road, Wharfside Way comprises a single carriageway with two lanes of travel in each direction and an additional right turn lanes at its junction with John Gilbert Way. Between Elevator Road and Village Circle, Wharfside Way comprises a dual carriageway.

The junction with Sir Matt Busby Way and Sir Alex Ferguson Way is a four-arm signalised junction and provides controlled pedestrian crossings across each arm of the junction. Each approach provides two lanes of travel with an additional left turn lane. The Wharfside Way approaches also provide a additional right turn lanes.

To the west of the junction with Sir Matt Busby Way and Sir Alex Ferguson Way, a controlled pedestrian crossing is provided across Wharfside Way which provides pedestrian and cycle access to a footbridge travelling towards the Old Trafford Football Stadium.

The junction with John Gilbert Way is a three-arm signalised junction which provides uncontrolled pedestrian crossing facilities across the southern arm only. The eastern arm provides a left turn lane and two ahead lanes, the southern arm provides a left turn flare and a right turn lane and the western arm provides two ahead lanes and a right turn lane.

A two-way off-street cycleway is provided alongside the southern footway and runs the entire length of Wharfside Way. Pedestrian footways with street lighting and dropped kerbs are also provided on both sides of the carriageway.

Pairs of bus stops are located adjacent to John Gilbert Way and east of the Village Circle gyratory. Each bus stop comprises of a flagpole, information sign and shelter except for the westbound stop adjacent to John Gilbert Way which comprises a flagpole only. There is an eastbound bus stop adjacent to Sir Alex Ferguson Way, each comprising a flagpole and information sign.

Wharfside Way is subject to a speed limit of 40mph and is a designated urban clearway with stopping on the carriageway prohibited at all times.

## **B.10 Village Circle**

As shown in Figure B.12 the signalised gyratory (Village Circle) is comprised of five approaches onto a circulatory carriageway comprising three lanes in a clockwise direction of travel. The surrounding frontages are predominantly light-industrial. A railway line which forms part of the once extensive internal freight railway that served Trafford Park, but is now defunct, passes through the central island from Trafford Park Road to Europa Way. The former alignment of Ashburton Road also passes through the island and has been observed being used both as an informal pedestrian route and informal parking area during events at the Old Trafford Football Stadium. The five approaches are as follows;

- Warren Bruce Road – single carriageway, speed limit 30mph;
- A5081 Wharfside Way – dual carriageway, speed limit 40mph;
- Europa Way – dual carriageway, speed limit 30mph;
- A5081 Village Way – dual carriageway, speed limit 40mph; and
- Trafford Park Road – single carriageway, speed limit 30mph.

Village Circle itself is subject to a speed limit of 30mph.



**Source: Envirocheck Report 47970408\_1\_1**

**Figure B.12 – Village Circle**

There are limited queues on the approaches to the gyratory, with the exception of the A5081 Village Way approach in the AM peak and the A5081 Wharfside Way approach in the PM peak. The queue on the Village Way approach tends to clear every traffic signal cycle, but the A5081 Wharfside Way queue does not clear every cycle.

There are cycle and pedestrian facilities around the outside of the circulatory carriageway which are provided with controlled crossing points where they cross the carriageway. The controlled crossing points are incorporated into the traffic signals. The gyratory operates as a series of two stage traffic signal controlled junctions (nodes) and the traffic signal timings provide a green wave for vehicles travelling east – west and west – east on the A5081.



### **B.11 Europa Way**

Europa Way runs along a north-south axis and is bordered by light industrial uses. It comprises a dual carriageway with two lanes in each direction of travel. It forms signalised junctions with Village Circle to the north and Eight Street to the south.

Between the junctions with Village Circle and Eight Street, a left-in left-out priority-controlled junction is formed with a PMA.

Eight Street junction is a three-arm signalised junction which provides pedestrian and cycle crossing facilities across the southern and western arms. The Europa Way (north) approach provides two ahead-only lanes and one right turn lane, the Europa Way (south) approach provides one left turn/ahead lane and one ahead-only lane, and the Eighth Street approach provides one left turn lane and one right turn lane.

Europa Way continues south and forms a left-in left-out priority-controlled junction with John Gilbert Way. Europa Way terminates at a roundabout junction with Europa Gate, Fraser Place and Westinghouse Road.

A two-way off-street cycleway is provided alongside the southbound carriageway and runs the entire length of Europa Way. Pedestrian footways with street lighting and dropped kerbs are also provided on both sides of the carriageway. There are no bus stop facilities provided.

Europa Way is subject to a speed limit of 30mph and is a designated urban clearway with stopping on the carriageway prohibited at all times.

### **B.12 Village Way**

Village Way is a dual carriageway with two lanes in either direction separated by a central reserve as shown in Figures B.13 and B.14. It runs on an east-west axis and is bordered predominantly by light industrial uses. It is formed in the east at a junction with the Village Circle gyratory and terminates in the west at a junction with the Parkway Circle roundabout. Frontage development is industrial and there are limited access points. Village Way is subject to a speed limit of 40mph and is a designated urban clearway with stopping on the carriageway prohibited at all times.

West of Village Way Circle, a priority-controlled left-in left-out junction is formed with Second Avenue on its southern side. Second Avenue provides access into the local trading estate. There are no pedestrian crossing facilities provided at this junction.

A second priority-controlled left-in left-out junction is formed with Third Avenue on its northern side, which provides access to the local industrial units. There are no pedestrian crossing facilities provided at this junction.



**Figure B.13 – A5081 Village Way looking west**



**Figure B.14 – A5081 Village Way looking east**

A three-arm signalised junction is formed with Fifth Avenue. As shown in Figure B.15 Village Way East provides a left turn flare and two ahead lanes. Fifth Avenue provides a left turn flare and right turn lane and Village Way West provides two ahead-only lanes and a right turn lane. Pelican crossings are provided across the eastern and southern arms of the junction.

The arrangement of the current junction requires 3 stages to cater for all movements as indicated in Figure B.16 below.



Source: Envirocheck Report 47970408\_1\_1

Figure B.15 – Village Way / Fifth Avenue junction

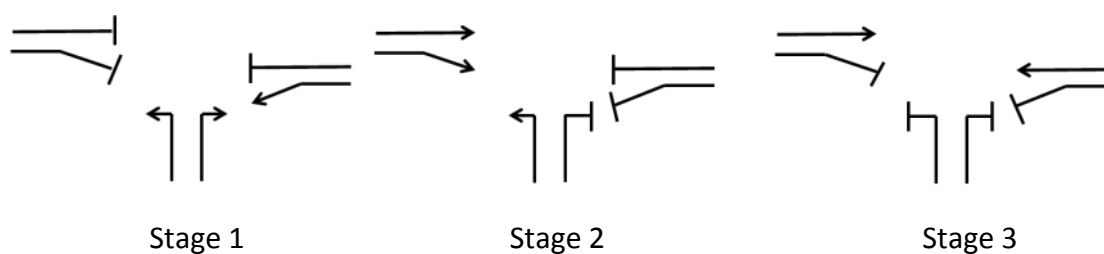
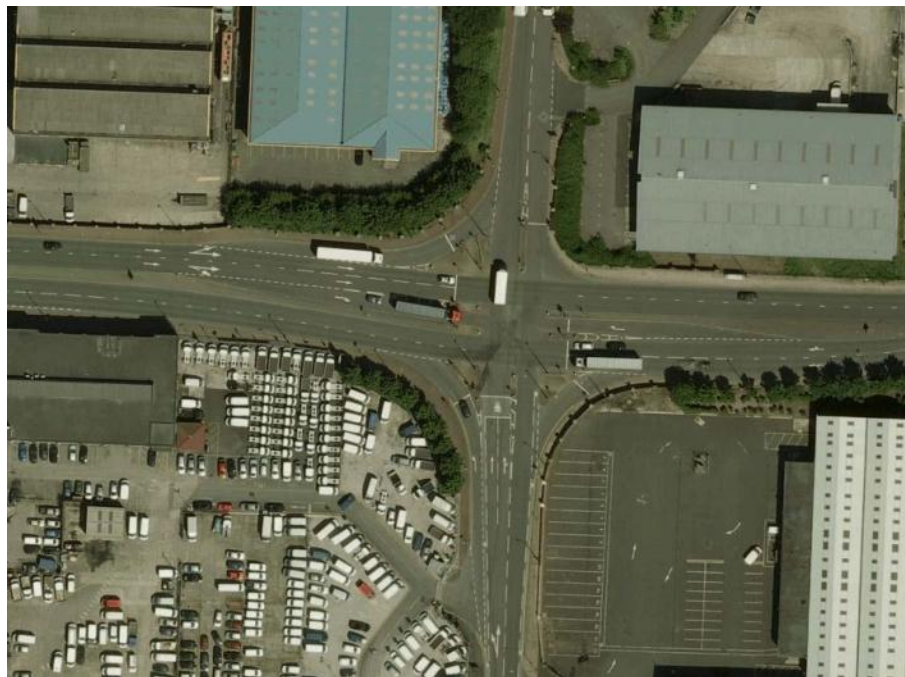


Figure B.16 – Current staging of Village Way / Fifth Avenue junction

Immediately west of the junction with Fifth Avenue, on the northern side is the main site access (for both cars and HGVs) to CHEP UK Ltd, a pallet, container and crate pooling service company. An egress is provided from the site further to the west but only for cars. HGVs currently exit the site onto Mosley Road.

On the southern side, to the west of Fifth Avenue there are two PMAs, one for Subway and one for Stocks. Immediately to the west of these PMAs there is a third priority-controlled junction with Praed Road, which provides access into the local industrial units. There are no pedestrian crossing facilities provided at this junction.

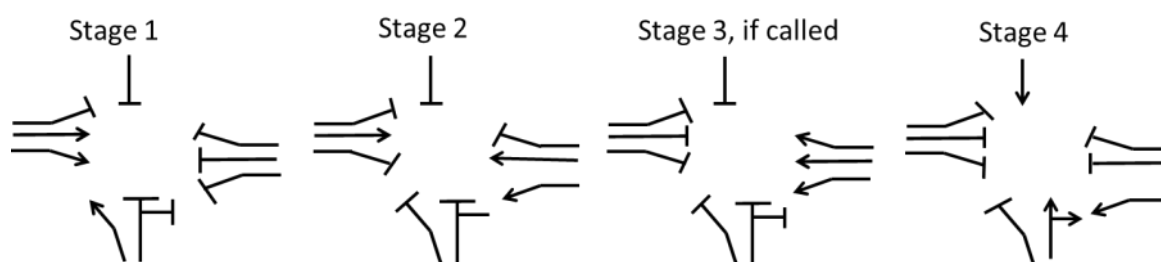
As shown in Figure B.17 a four-arm signalised junction is formed with Mosley Road. Village Way (east) provides a left turn flare, two ahead-only lanes and a right turn lane. Mosley Road (south) provides a left turn flare, a single ahead-only lane and an ahead/right turn lane all located behind an Advanced Cycle Stop Line (ACSL). Village Way (west) provides a left turn flare, two ahead-only lanes and a right turn lane. Mosley Road (north) provides a single general lane on approach to the junction. Uncontrolled pedestrian crossings are provided across the southern and western arms only.



Source: Envirocheck Report 47970408\_1\_1

**Figure B.17 – Village Way / Mosley Road junction**

As shown in Figure B.18 the junction mainly operates as a three stage junction, but a fourth stage is called if a demand is registered. This fourth stage allows a right turn from the westbound Village Way into the northern leg of Mosley Road and its demand dependency is an indication that there is a low demand for vehicles making this movement. The junction was observed to be operating within its capacity and there are generally limited queues that clear during each traffic signal cycle.



**Figure B.18 – Current staging of Village Way / Mosley Road junction**

West of the signalised junction, on the southern side a left-in left-out priority-controlled junction is formed with a private street providing access to an industrial area. There are no pedestrian crossing facilities provided at this junction. On the northern side there is a left-in left-out access to Illingworth Ingham, a timber merchant. Continuing westward, Village Way terminates at Village Circle.

Between the junction of Mosley Road and Parkway Circle, two-way off-street cycle facilities are provided on the northern side of Village Way, as shown in Figure B.19. Elsewhere, Village Way does not provide cycle facilities. Pedestrian footways with dropped kerbs and street lighting are provided along both sides of the carriageway. Three pairs of bus stops are located on Village Way, each comprising of a flagpole only, except for the eastbound bus stop adjacent to Third Avenue, which consists of a flagpole, information sign and shelter.





**Figure B.19 –Village Way eastbound carriageway and off-street cycleway**

### **B.13 Parkway Circle**

As shown in Figure B.20, Parkway Circle is a large priority controlled roundabout forming a junction between five roads, namely Village Way, Westinghouse Road, Park Way, Ashburton Road and Tenax Road. The roundabout comprises a single carriageway which in general provides two lanes on the circulatory carriageway except between the Village Way and Park Way arms where it is widened to 3 lanes. Parkway Circle is subject to a speed limit of 30mph.

Village Way provides three entry lanes onto the roundabout and two exit lanes. Westinghouse Road provides two entry lanes and one exit lane. Park Way provides two entry lane and two exit lanes. Ashburton Road provides two entry lanes and a single exit lane. Tenax Road provides two entry lanes and two exit lanes.



Source: Envirocheck Report 47970408\_1\_1

**Figure B.20 –Parkway Circle**

As shown in Figure B.21 a two-way off-street cycleway circumnavigates Parkway Circle. Uncontrolled pedestrian crossing facilities are provided across each arm of the roundabout. There are no bus stop facilities provided.

During the periods of observation, working weekdays during the AM and PM peaks, the junction operated over capacity. Two major traffic queues were observed. The first was on the Parkway approach during the AM peak and was a rolling queue that extended to the flyover for Barton Dock Road. The queue tended to roll continually at a speed of around 10mph. The second was during the PM peak on the Village Way approach where intermittent queues were observed. At times these queues extended back to the Village Way / Mosley Road junction and appeared to be a result of a dominant north to west traffic flow from Tenax Road. This dominant flow reduced the gap availability for traffic trying to enter the roundabout from Village Way.



**Figure B.21 –Typical pedestrian and cyclist facilities at Parkway Circle**

During the site visits high circulatory traffic speeds were observed and these are likely to be a contributory factor in the junction's poor safety record. During the last 5 years a total of 29 accidents have been recorded at the junction. Two of these were serious accidents and involved a pedestrian and cyclist respectively. The remaining 27 accidents were classified as slight accidents and generally involved vehicle to vehicle collisions. They were generally either on the approaches to the roundabout (rear end shunts) or on the circulatory carriageway where vehicles joining the roundabout failed to give way to vehicles already on the roundabout. The accidents were generally between a range of vehicle classes (i.e. private cars, light goods vehicles and heavy goods vehicles) without a bias towards one class. No causal trends in relation to the highway environment were evident from the accident data.

It is noted that TMBC have indicated that future background increases in traffic will necessitate reconfiguration and signalisation of this junction before the 2035 forecast year. This signalisation scheme is considered to be a committed development for the purposes of a comparison between the Do Minimum and Do Something Scenarios considered in Section 5 of this TA.

#### **B.14 Park Way**

Park Way comprises a dual carriageway, providing two lanes in each direction of travel. It is formed at the roundabout junction with Village Way, Westinghouse Road, Ashburton Road and Tenax Road and heads on a north-south axis towards Junction 9 of the M60 motorway.



Park Way crosses over the Bridgewater Canal via a bridge and then forms a grade-separated junction with Barton Dock Road. On and off slip roads from Park Way form two individual signalised junctions with Barton Dock Road, with the eastern junction being subject to yellow box junction markings. Pelican crossings are provided across each arm of the two junctions. The main Park Way carriageway remains free flow.

A pedestrian footpath (dirt track) flanks the eastbound side. A cycle lane is provided along the northbound on-slip from Barton Dock Road along with a cycle crossing from the main carriageway across the slip road. A bus stop is provided on the main northbound carriageway adjacent to the on-slip from Barton Dock Road which is access via a set of stairs.

Park Way is subject to a speed limit of 40mph and is a designated urban clearway with stopping on the carriageway prohibited at all times.

#### **B.15 Barton Dock Road**

Barton Dock Road runs along an east-west axis and is bordered by industrial land-uses, large mixed retail developments and car parking. It comprises a single carriageway with one lane in each direction of travel as shown in Figure B.22. Over the section under consideration, to the east, it forms a grade separated signalised junction with Park Way, as described above. A priority-controlled junction is formed with Mercury Way and two roundabout junctions are formed, the first with Phoenix Way, Festival Way and Peel Avenue known as Peel Circle and the second with Traders Avenue, known as Bright Circle. Barton Dock Road is subject to a speed limit of 40mph and is a designated urban clearway with stopping on the carriageway prohibited at all times.

Mercury Way provides access to local retail and light industrial units. The junction is subject to yellow box junction markings. No pedestrian crossing facilities are provided. It is noted that development proposals on the land bounded by Park Way, Barton Dock Road, Mercury Way and Cobalt Avenue would require this junction to be signalised. This signalisation scheme is considered to be a committed development for the purposes of a comparison between the Do Minimum and Do Something Scenarios considered in Section 5 of this TA.

Opposite this junction, there is a priority-controlled PMA into the industrial development which fronts onto the westbound lane.



**Figure B.22 –Barton Dock Road looking east**

As shown in Figure B.23, Peel Circle forms a five-arm roundabout junction providing access to the intu Trafford Centre, Barton Square and EventCity developments. Uncontrolled pedestrian crossing facilities are provided across each arm of the roundabout. To the west of the roundabout, a left-in only junction is provided, which provides access to the service yard on the western side of the Barton Square development.



Source: Envirocheck Report 47970408\_1\_1

**Figure B.23 –Peel Circle**

During the site observations, working weekdays during the AM and PM peaks, there was limited congestion although it is understood queues in a westbound direction can occur as a result of wider highway network events. In addition the peak period for this junction are at weekends during the busiest shopping hours or during events at the EventCity development which attract high volumes of traffic over short timescales. Events at EventCity also generate high volumes of pedestrian movements from the car parking which is provided on the former shipping container base site on the corner of Barton Dock Road and Festival Way.

TMBC has indicated that pedestrian crossings on Barton Dock Road will be required in the future to ensure pedestrian safety, due to the high demand noted above. This scheme is considered to be a committed development for the purposes of a comparison between the Do Minimum and Do Something scenarios considered in Section 5 of this TA.

Traders Avenue forms a three-arm roundabout with Barton Dock Road. Traders Avenue provides two entry lanes onto the roundabout and two exit lanes. Both the western and eastern arms of Barton Dock Road provide two entry lanes and two exit lanes from the roundabout. Uncontrolled pedestrian crossing points are provided across the western and northern arms of the roundabout. During the site observations no congestion occurred. However as with Peel Circle queues regularly occur during the peak period for this junction i.e. at a weekend during the busiest shopping hours. The roundabout has pedestrian and cyclist facilities around its outside, which included uncontrolled crossing points over Traders Avenue. There is also a well-used pedestrian crossing facility on Barton Dock Road immediately to the west of the junction. When this crossing is in use the westbound traffic queue extends onto the circulatory carriageway.

Footways, street lighting and two-way off carriageway cycleways are provided along both sides of Barton Dock Road.

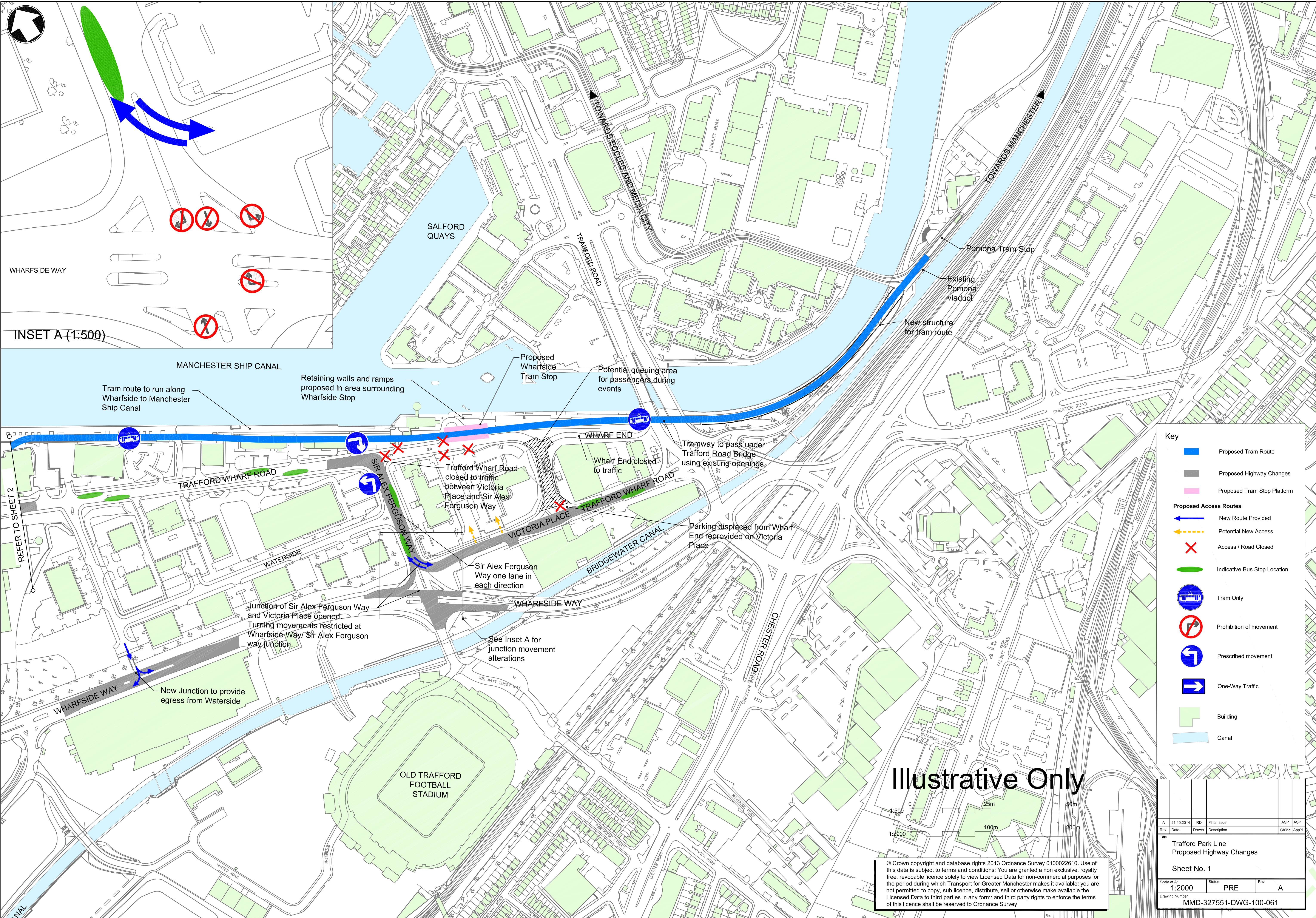
A pair of bus stops are located to the east of Mercury Way. The eastbound bus stop comprises of a flagpole, information sign, shelter and bus lay-by and the westbound bus stop comprises a flagpole only. A second pair of bus stops is located to the west of Mercury Way. Each bus stop comprises a flagpole only. A pair of bus stops is located beneath the Trafford Centre pedestrian bridge, as shown in Figure B.24, comprising flagpole, information sign, shelter and bus lay-by.



**Figure B.24 –Barton Dock Road footway, cycleway and bus stop to the west of Peel Circle**

## **APPENDIX C      Proposed Highway Changes**





**Key**

- Proposed Tram Route
- Proposed Highway Changes
- Proposed Tram Stop Platform

**Proposed Access Routes**

- New Route Provided
- Potential New Access
- Access / Road Closed
- Indicative Bus Stop Location

- Tram Only
- Prohibition of movement
- Prescribed movement
- One-Way Traffic

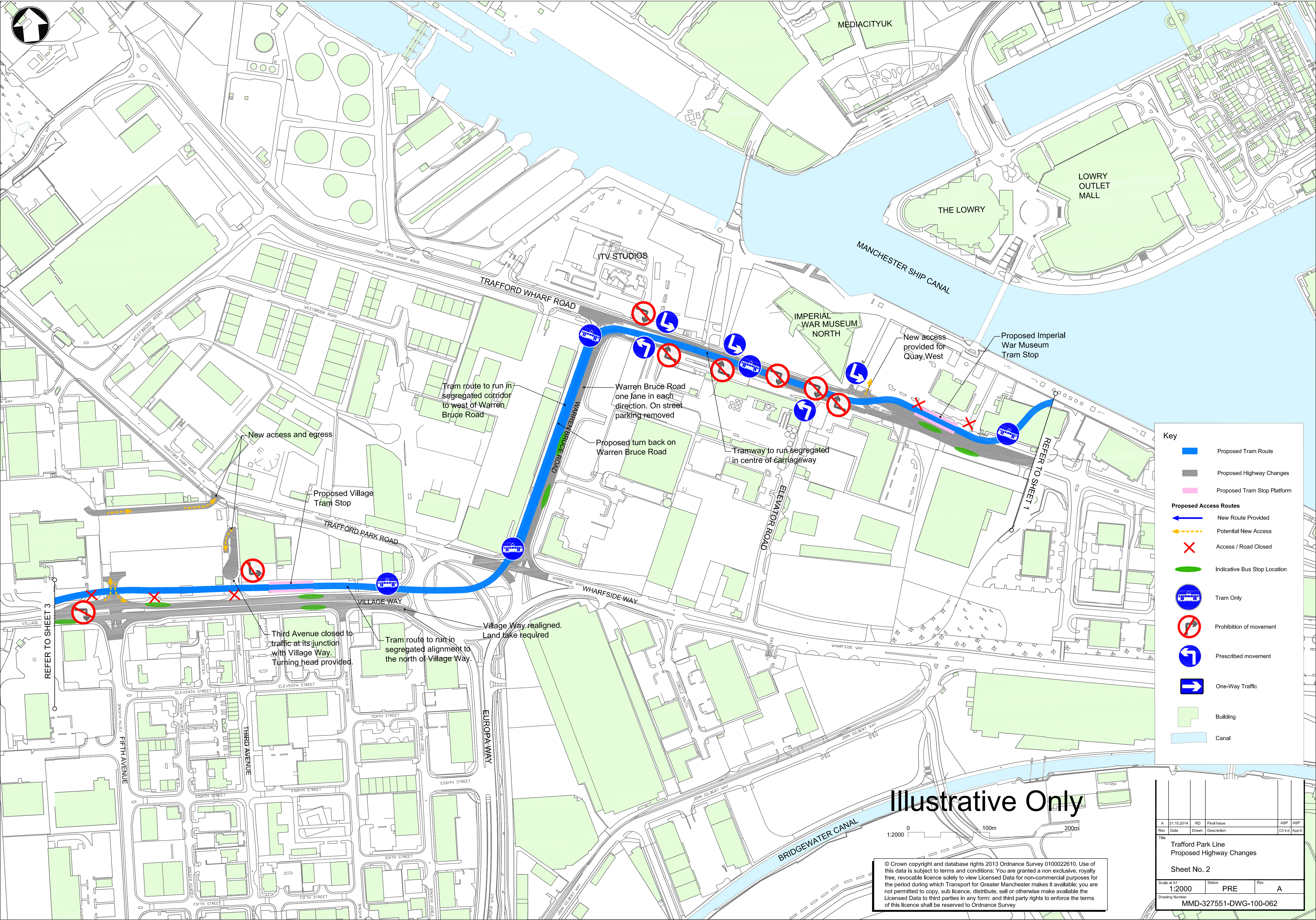
- Building
- Canal

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A	21.10.2014	RD	Final Issue	ASP	ASP	
Rev	Date	Drawn	Description	Chk'd	App'd	
Title						
Trafford Park Line Proposed Highway Changes						
Sheet No. 1						
Scale at A1 1:2000		Status PRE		Rev A		
Drawing Number MMD-327551-DWG-100-061						





**Key**

- Proposed Tram Route
- Proposed Highway Changes
- Proposed Tram Stop Platform

**Proposed Access Routes**

- New Route Provided
- Potential New Access
- Access / Road Closed
- Indicative Bus Stop Location

**Tram Only**

- Prohibition of movement
- Prescribed movement
- One-Way Traffic

**Building**

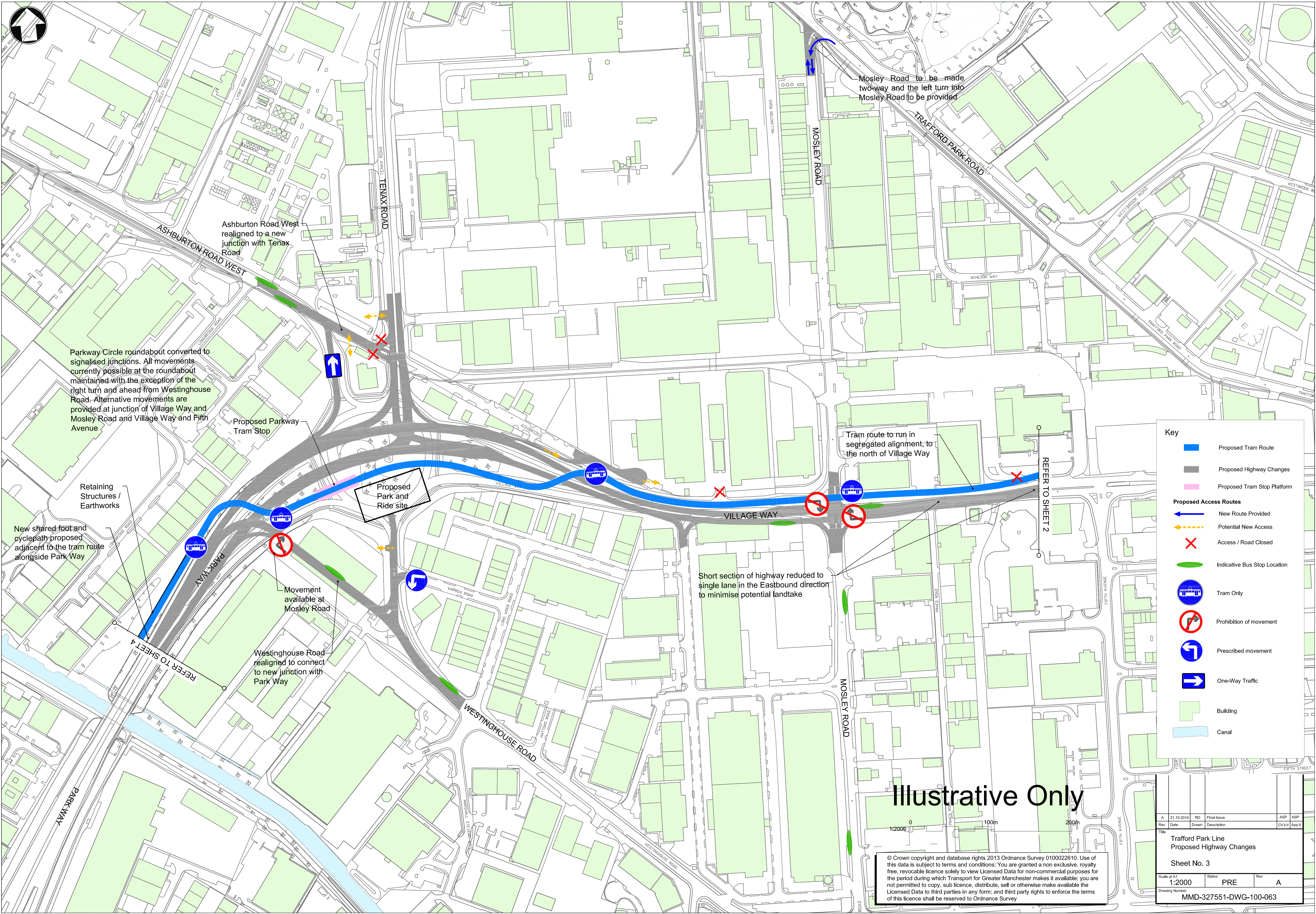
**Canal**

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Trafford Park Line Proposed Highway Changes					
Sheet No. 2					
Scale at A1	1:2000	Status	PRE	Rev	A
Drawing Number	MMD-327551-DWG-100-062				





Parkway Circle roundabout converted to signalised junctions. All movements currently possible at the roundabout maintained with the exception of the right turn and ahead from Westinghouse Road. Alternative movements are provided at junction of Village Way and Mosley Road and Village Way and Fifth Avenue

Ashburton Road West realigned to a new junction with Tenax Road

Proposed Parkway Tram Stop

Proposed Park and Ride site

New shared foot and cyclepath proposed adjacent to the tram route alongside Park Way

Retaining Structures / Earthworks

Movement available at Mosley Road

Westinghouse Road realigned to connect to new junction with Park Way

Mosley Road to be made two-way and the left turn into Mosley Road to be provided

Tram route to run in segregated alignment, to the north of Village Way

Short section of highway reduced to single lane in the Eastbound direction to minimise potential landtake

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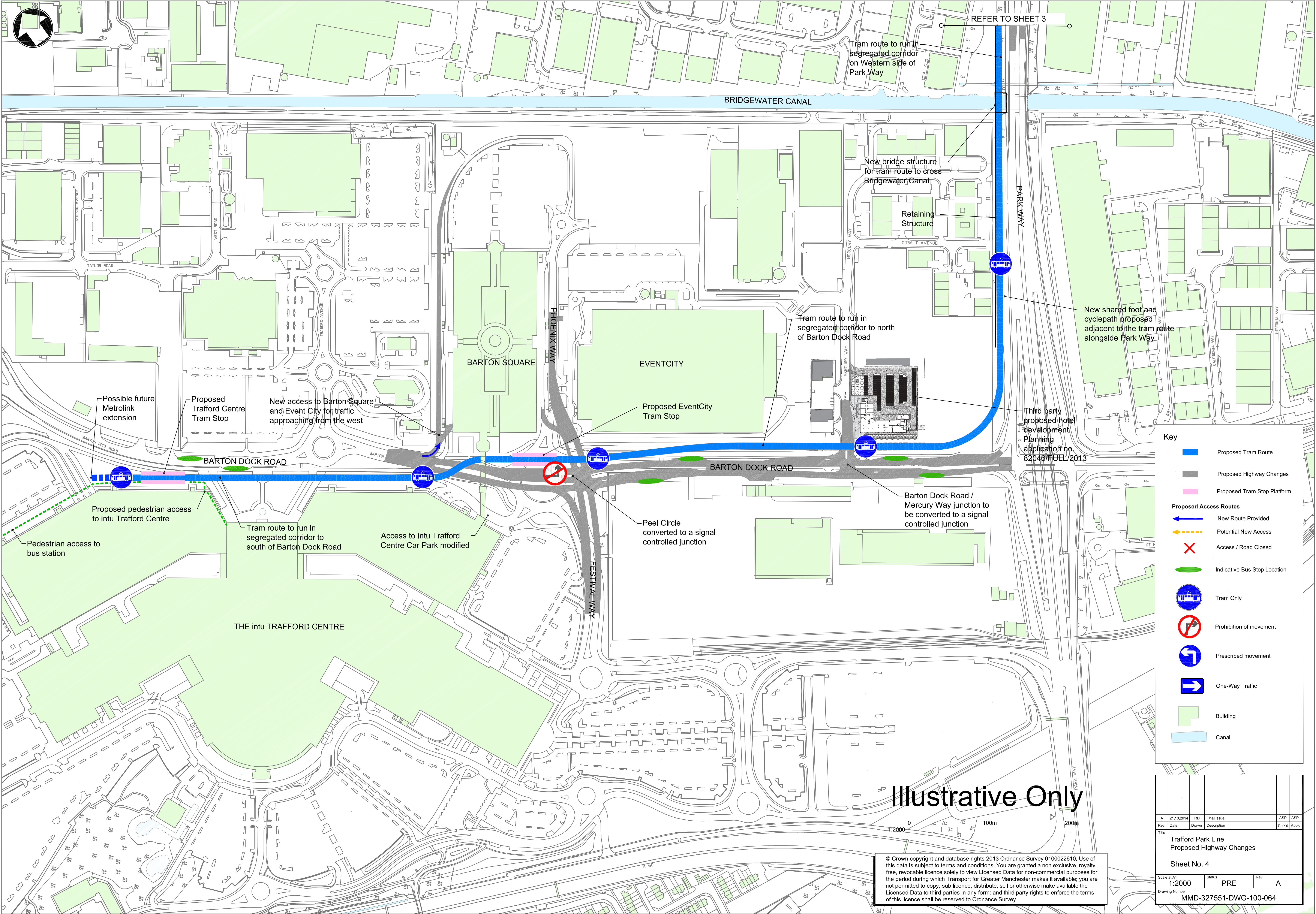
**Key**

- Proposed Tram Route
- Proposed Highway Changes
- Proposed Tram Stop Platform
- Proposed Access Routes**
- New Route Provided
- Potential New Access
- Access / Road Closed
- Indicative Bus Stop Location
- Tram Only
- Prohibition of movement
- Prescribed movement
- One-Way Traffic
- Building
- Canal

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Drawing Number	MMD-327551-DWG-100-063				





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Key

- Proposed Tram Route
- Proposed Highway Changes
- Proposed Tram Stop Platform

Proposed Access Routes

- New Route Provided
- Potential New Access
- Access / Road Closed
- Indicative Bus Stop Location
- Tram Only
- Prohibition of movement
- Prescribed movement
- One-Way Traffic
- Building
- Canal

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Rev	Date	Drawn	Description	Ch'kd	App'd
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Trafford Park Line Proposed Highway Changes					
Sheet No. 4					
Scale at A1 1:2000		Status PRE		Rev A	
Drawing Number MMD-327551-DWG-100-064					



## **APPENDIX D      Forecast Traffic Flows**

Project T1GM Metrolink Trafford Park Extension  
Scenario 2020 Do Minimum AM

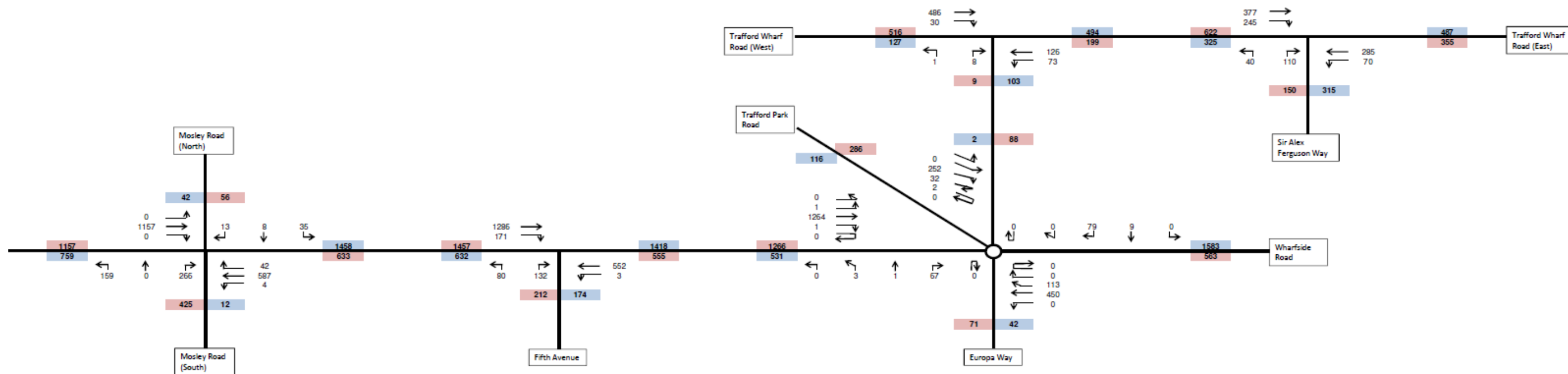


Figure D.1 2020 Do Minimum AM (Part 1)

**Project** TIGM Metrolink Trafford Park Extension  
**Scenario** 2020 Do Minimum AM

PCUs movement from junction

Entry  
Exits

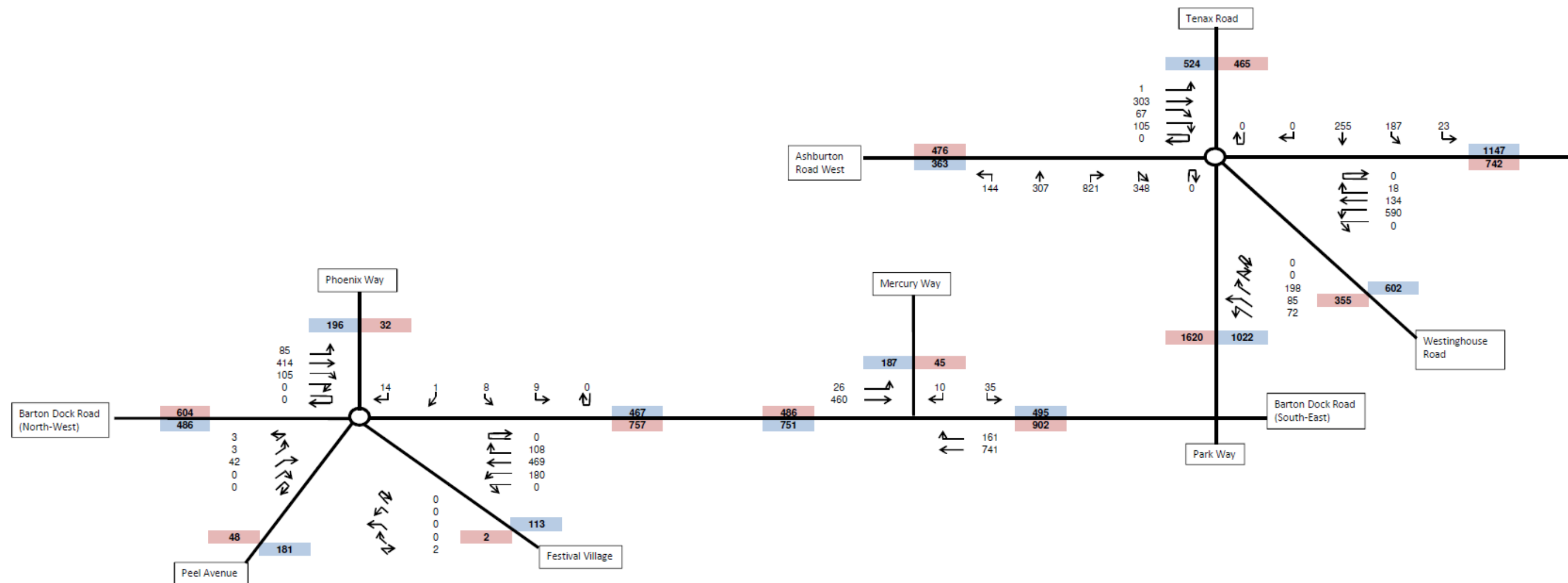


Figure D.2 2020 Do Minimum AM (Part 2)

Project TIGM Metrolink Trafford Park Extension  
Scenario 2020 Do Minimum PM

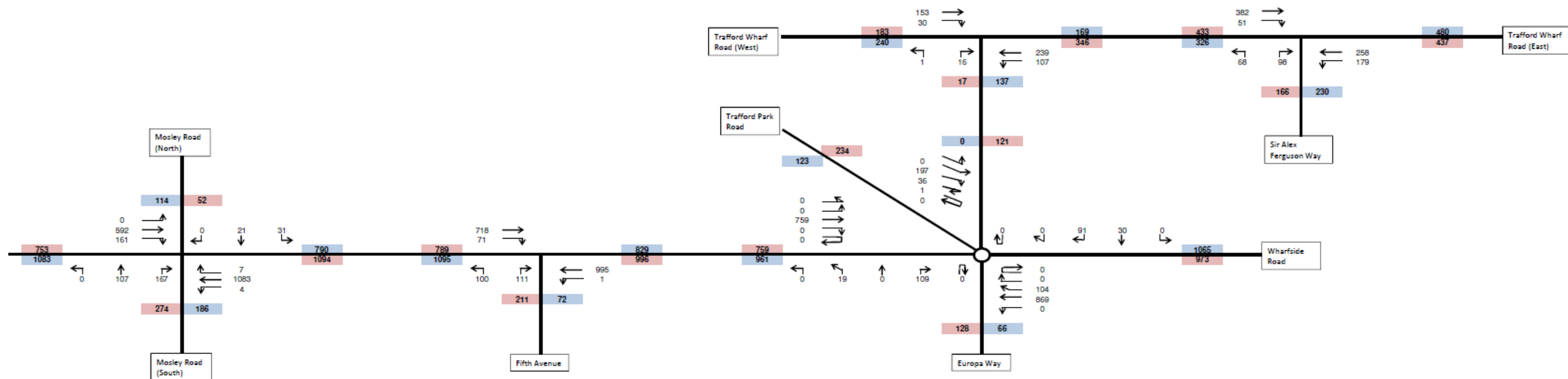


Figure D.3 2020 Do Minimum PM (Part 1)





Project TFGM Metrolink Trafford Park Extension  
Scenario 2035 Do Minimum AM

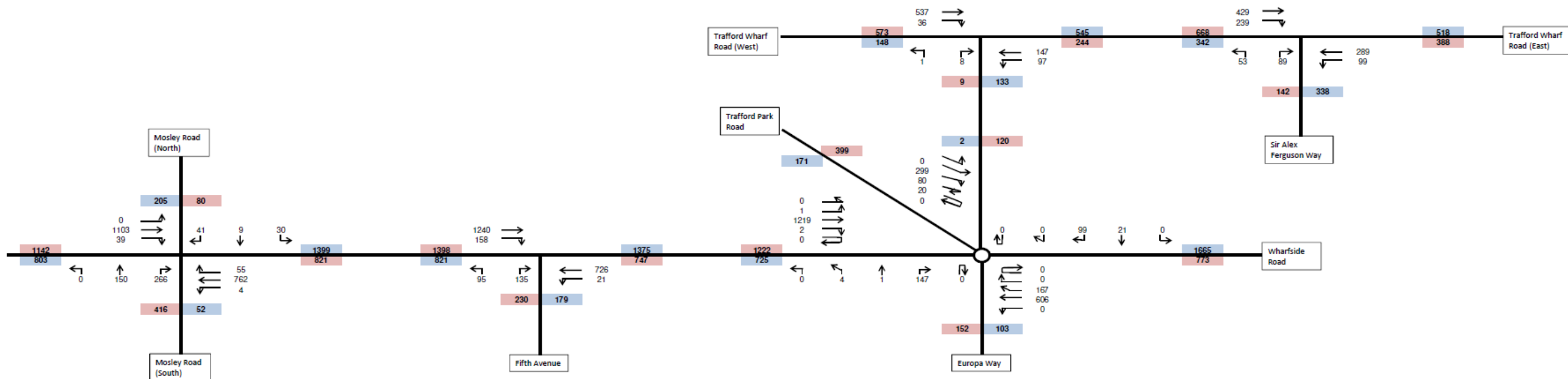


Figure D.5 2035 Do Minimum AM (Part 1)





**Project** TfGM Metrolink Trafford Park Extension  
**Scenario** 2035 Do Minimum PM

**PCUs movement from junction**

Entry  
Exits

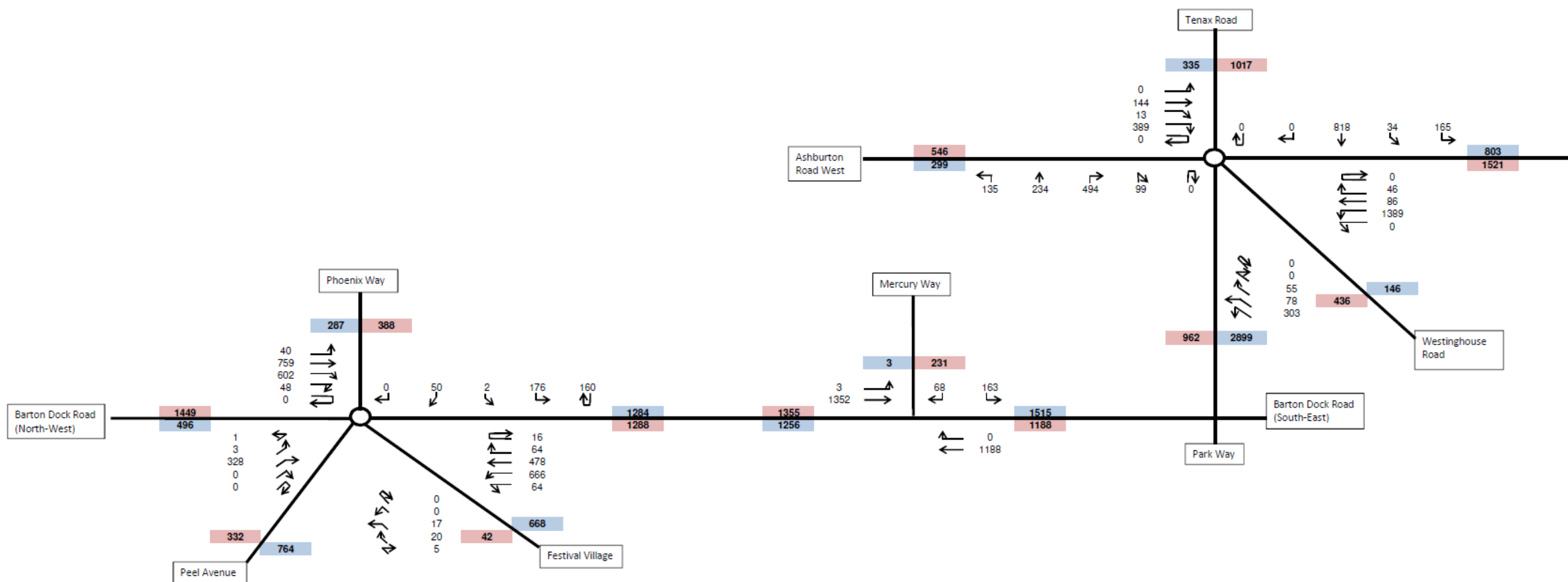


Figure D.8 2035 Do Minimum PM (Part 2)

Project TIGM Metrolink Trafford Park Extension  
Scenario 2020 Do Something AM

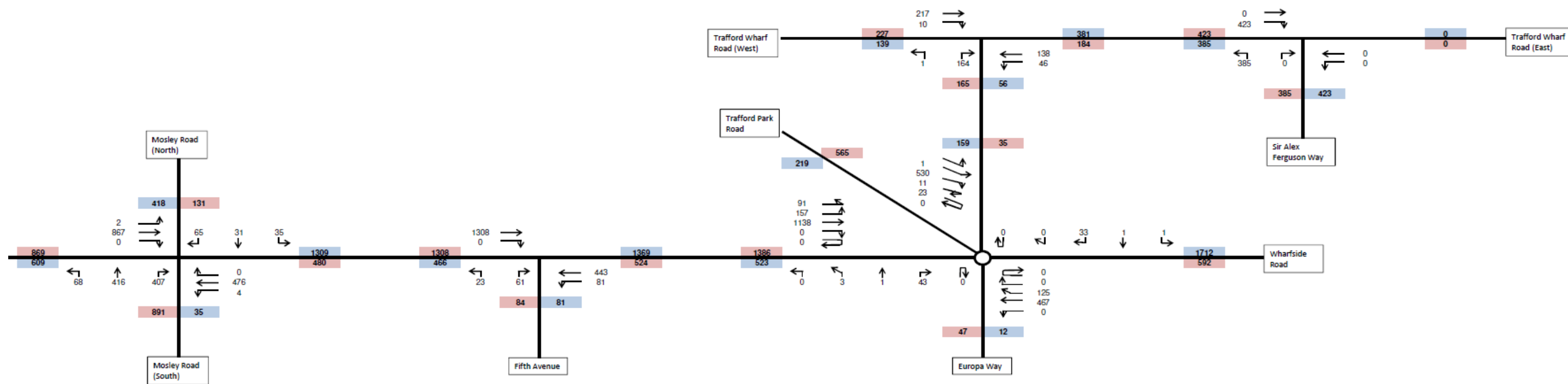


Figure D.9 2020 Do Something AM (Part 1)

**Project** TfGM Metrolink Trafford Park Extension  
**Scenario** 2020 Do Something AM

**PCUs movement from junction**

Entry ■  
Exits ■

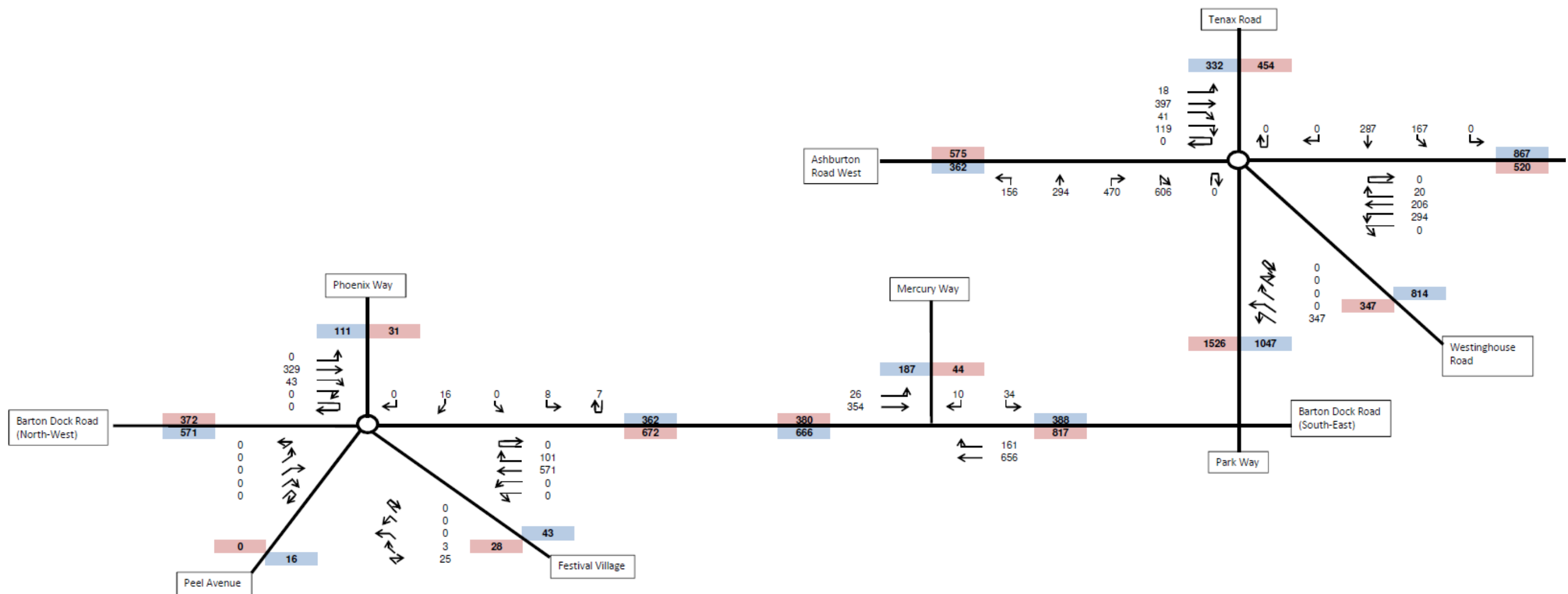


Figure D.10 2020 Do Something AM (Part 2)



Project TIGM Metrolink Trafford Park Extension  
Scenario 2020 DO Something PM

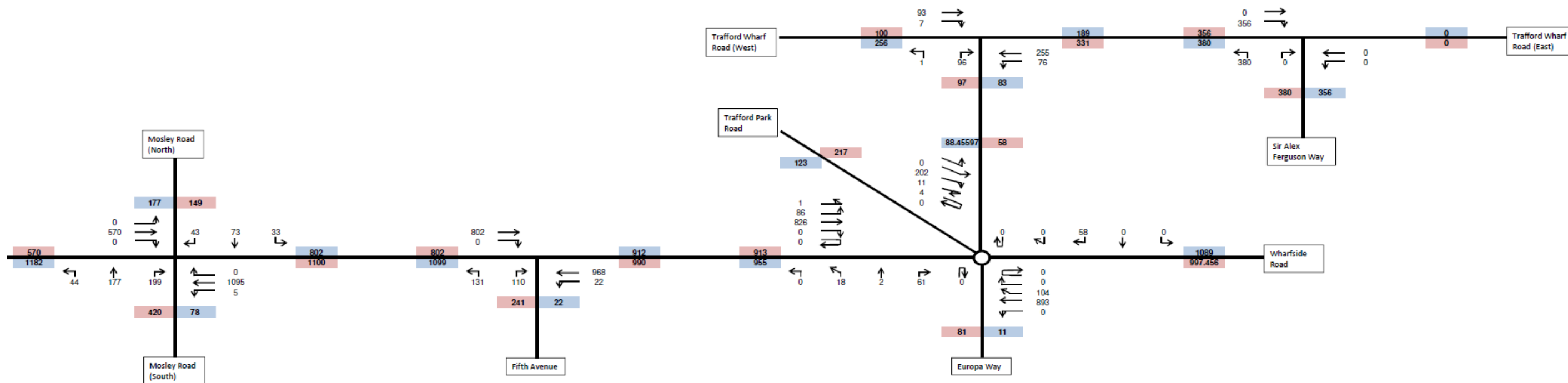


Figure D.11 2020 Do Something PM (Part 1)

**Project** T1GM Metrolink Trafford Park Extension  
**Scenario** 2020 DO Something PM

**PCUs movement from junction**

Entry  
Exits

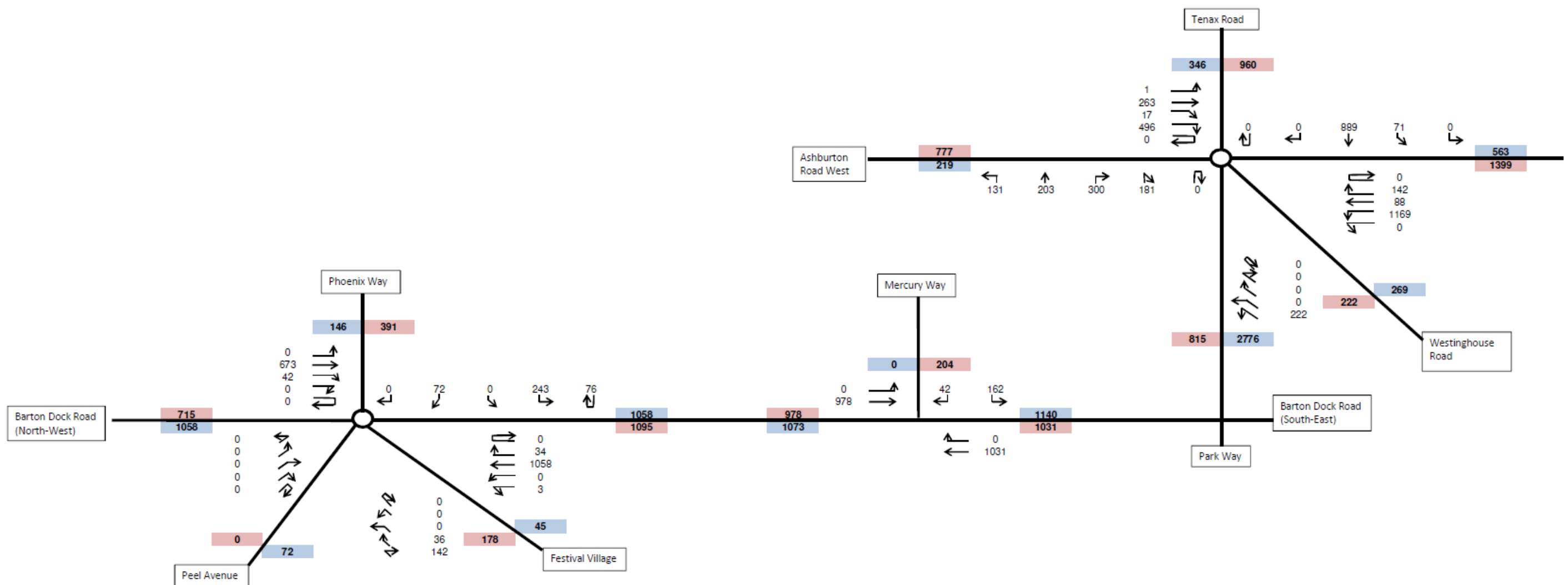


Figure D.12 2020 Do Something PM (Part 2)

Project TIGM Metrolink Trafford Park Extension  
Scenario 2035 Do Something AM

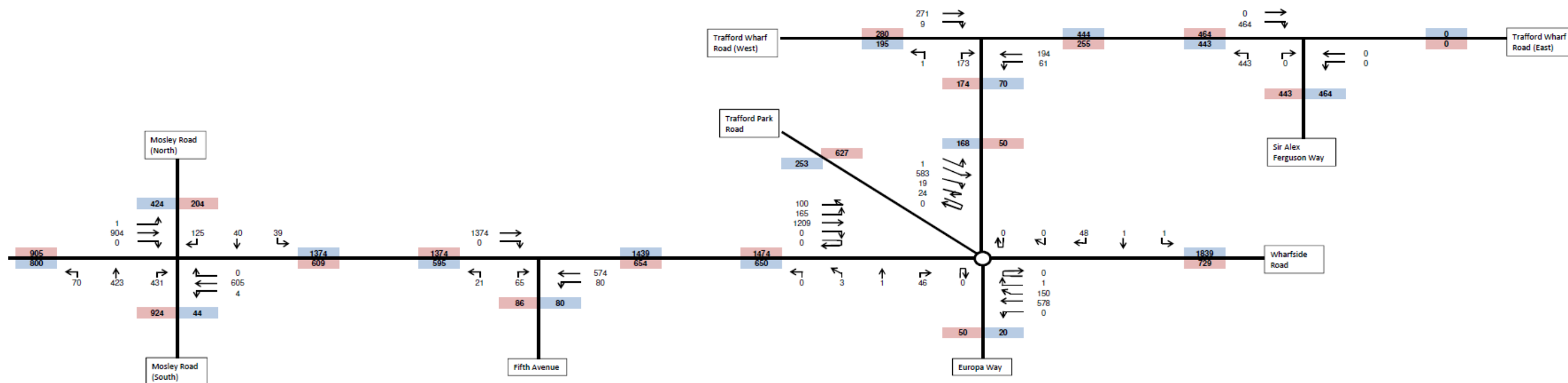


Figure D.13 2035 Do Something AM (Part 1)

**Project** TfGM Metrolink Trafford Park Extension  
**Scenario** 2035 Do Something AM

**PCUs movement from junction**

Entry ■  
Exits ■

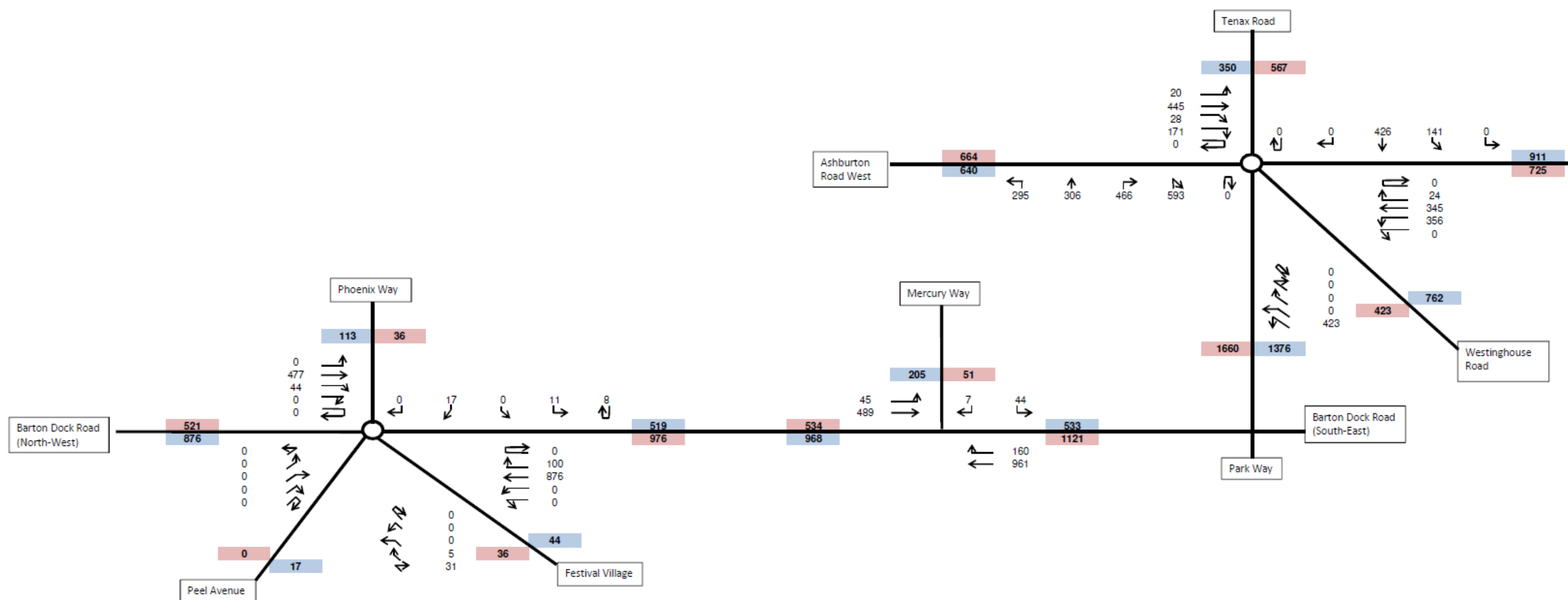


Figure D.14 Do Something AM (Part 2)

Project TGM Metrolink Trafford Park Extension  
Scenario 2035 Do Something PM

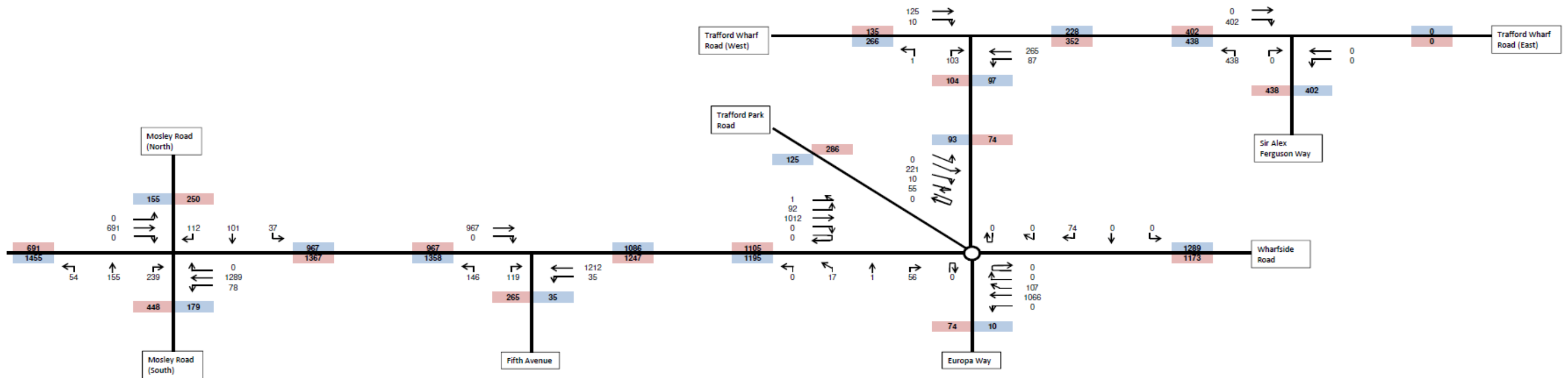


Figure D.15 2035 Do Something PM (Part 1)





## APPENDIX E Traffic Flow Differences (DS vs DM Scenarios)

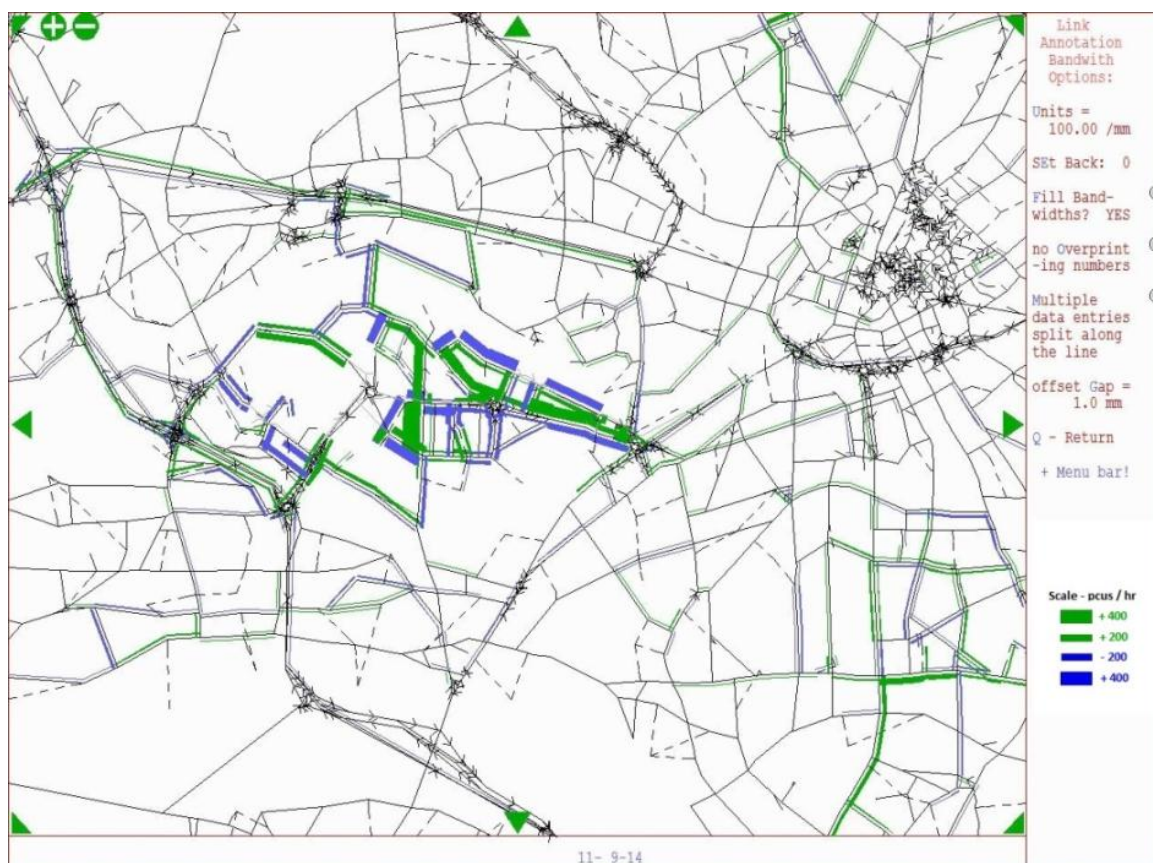
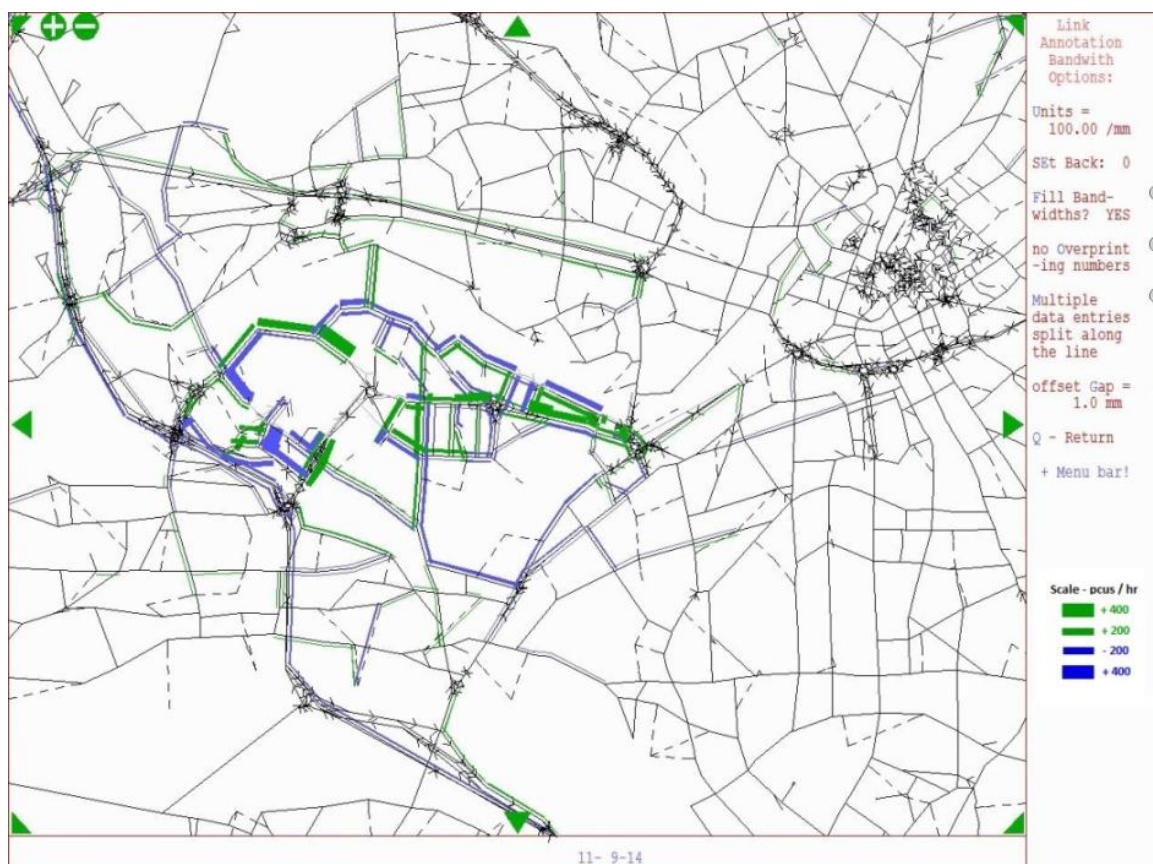


Figure E.1 Morning Peak DM to DS Traffic Flow Differences



**Figure E.2 Evening Peak DM to DS Traffic Flow Differences**

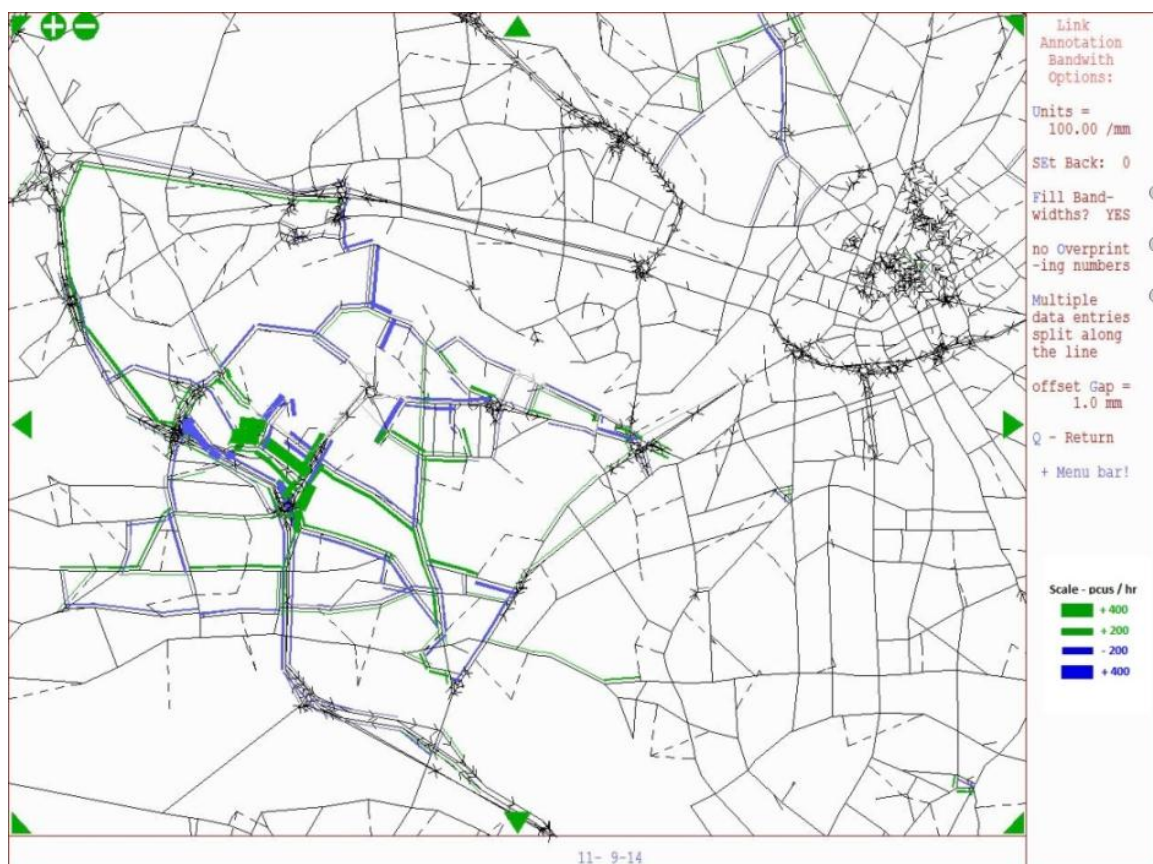
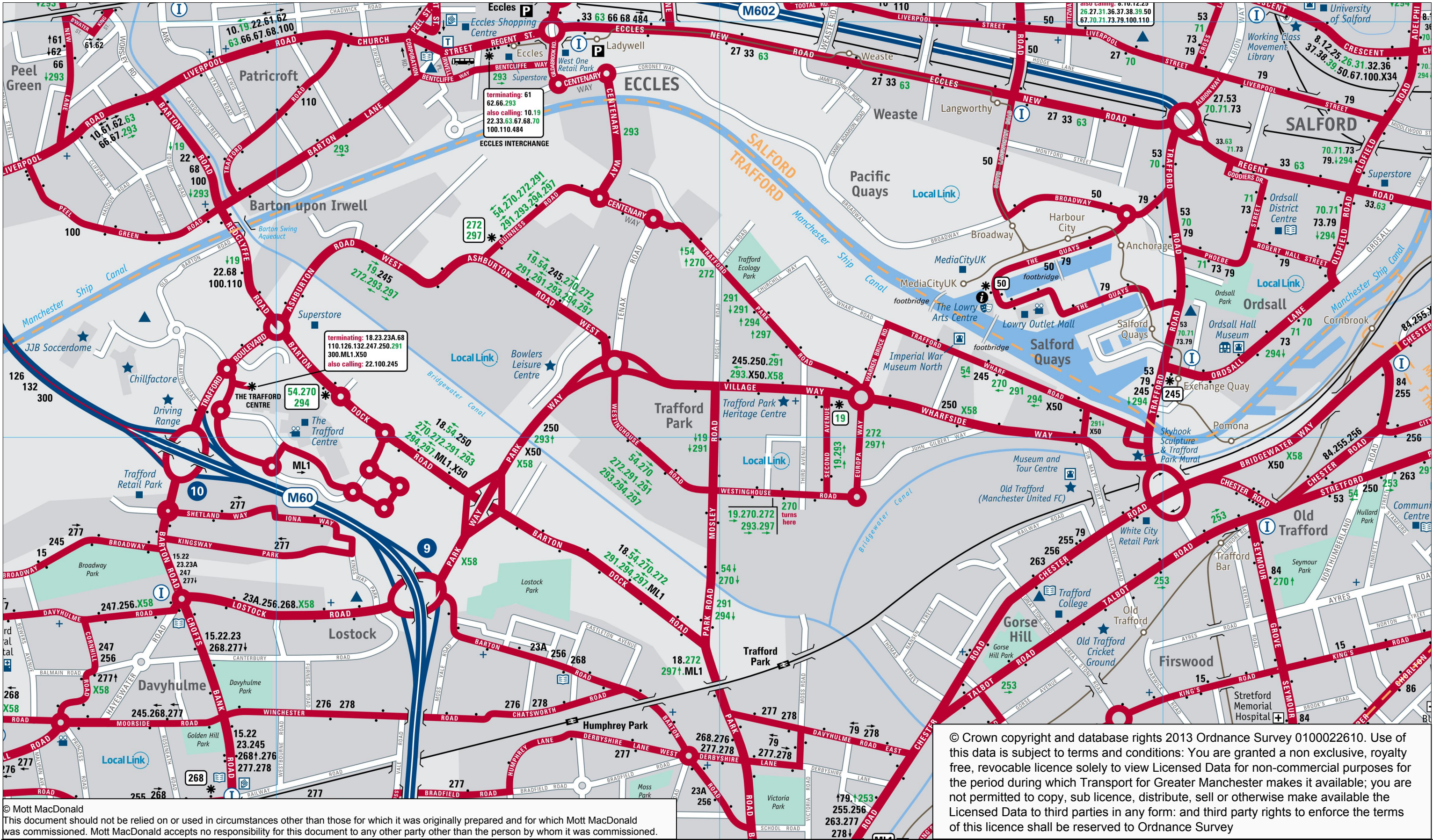


Figure E.3 Saturday DM to DS Traffic Flow Differences



**APPENDIX F      Bus Route Maps**





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<div><p>Spring Bank House 33 Stamford Street Altrincham, WA14 1ES United Kingdom</p><p><b>T</b> +44 (0)161 926 4000 <b>F</b> +44 (0)161 926 4100 <b>W</b> www.mottmac.com</p></div>	<div><p>Transport for Greater Manchester</p><p>2 Piccadilly Place   Telephone 0161-244 1000 Manchester   Facsimile 0161-244 1316</p></div>	Rev	Date	Drawn	Description	Ch'k'd	App'd	Title TfGM Metrolink Trafford Park Line Transport Assessment  Existing Bus Routes  Drawing Number  Figure F.1	Drawn		
										Checked	
										Approved	
										Scale at A3 NTS	
										Rev	Status



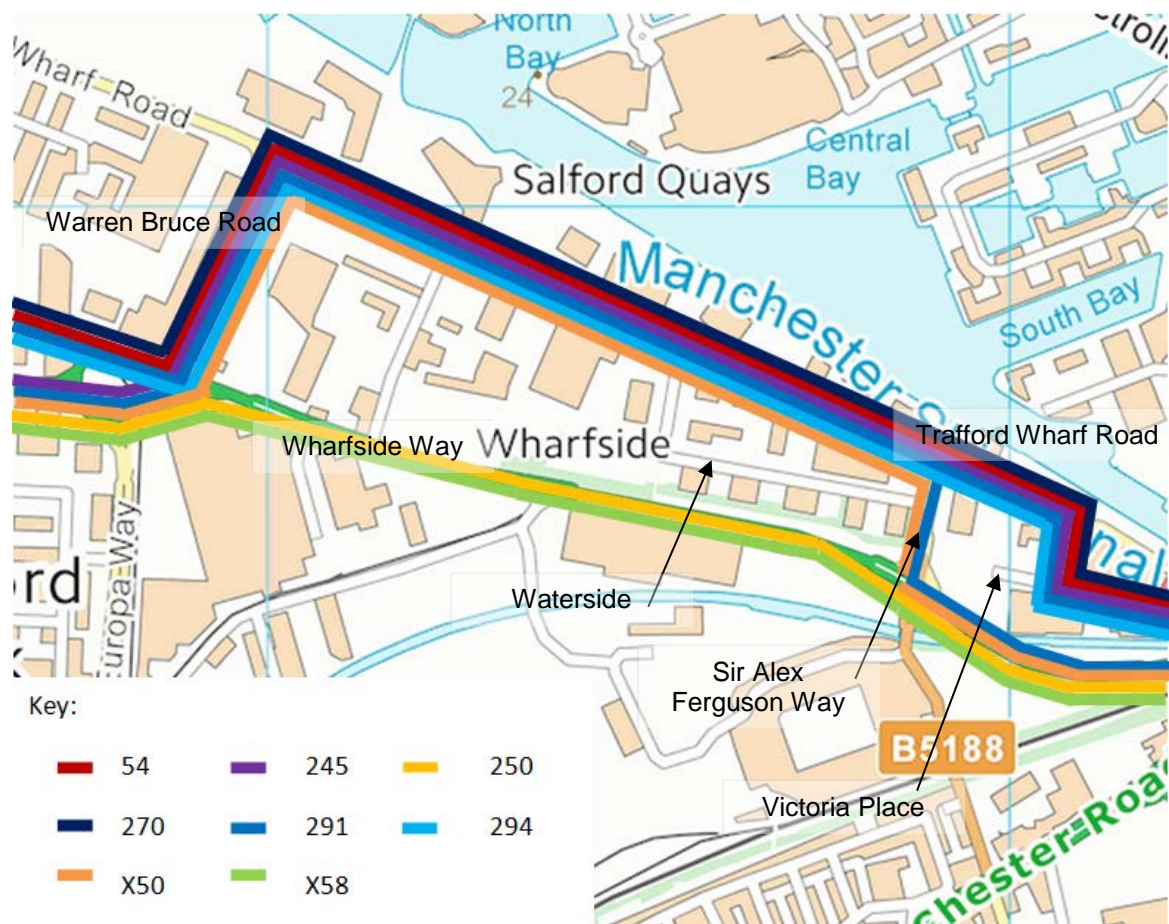


Figure F.2 Trafford Wharf Road and Warren Bruce Road - Existing Services



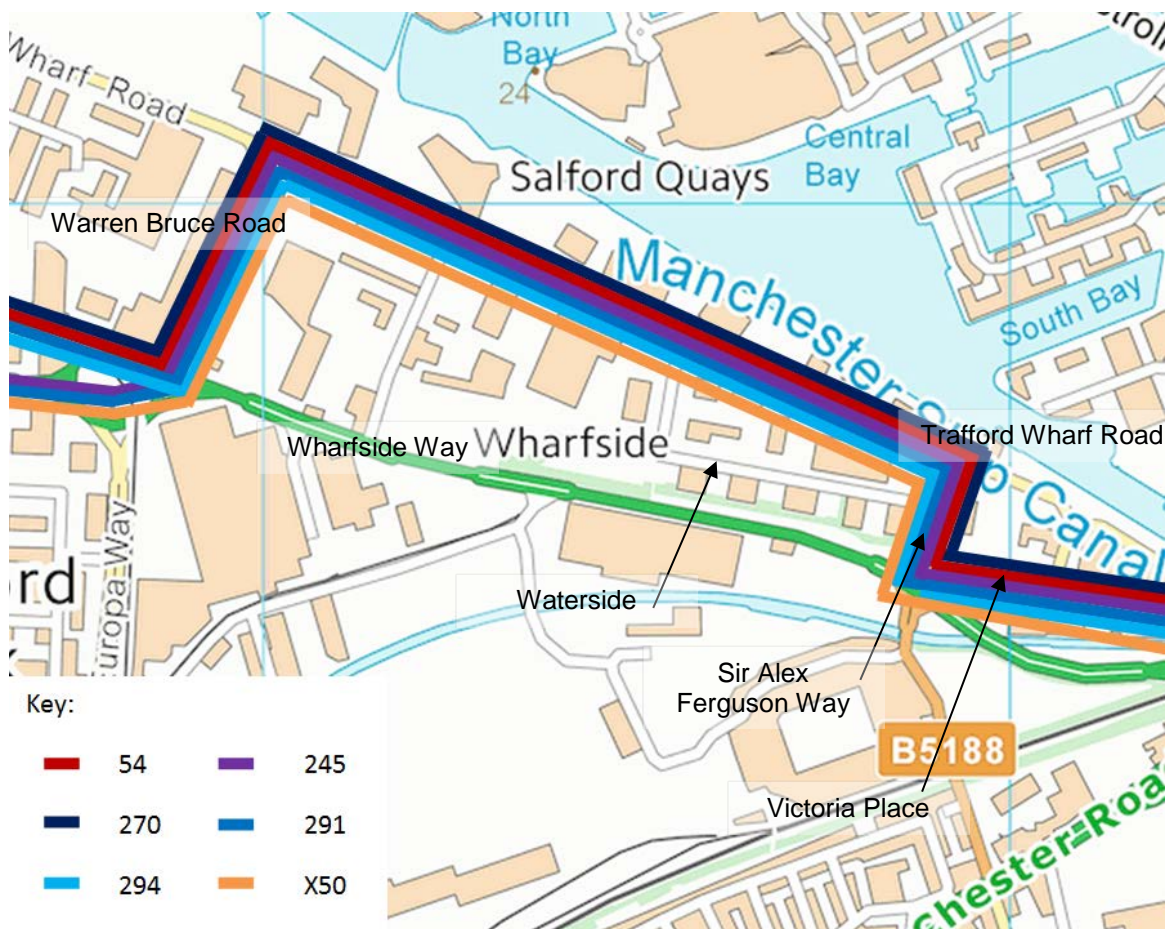
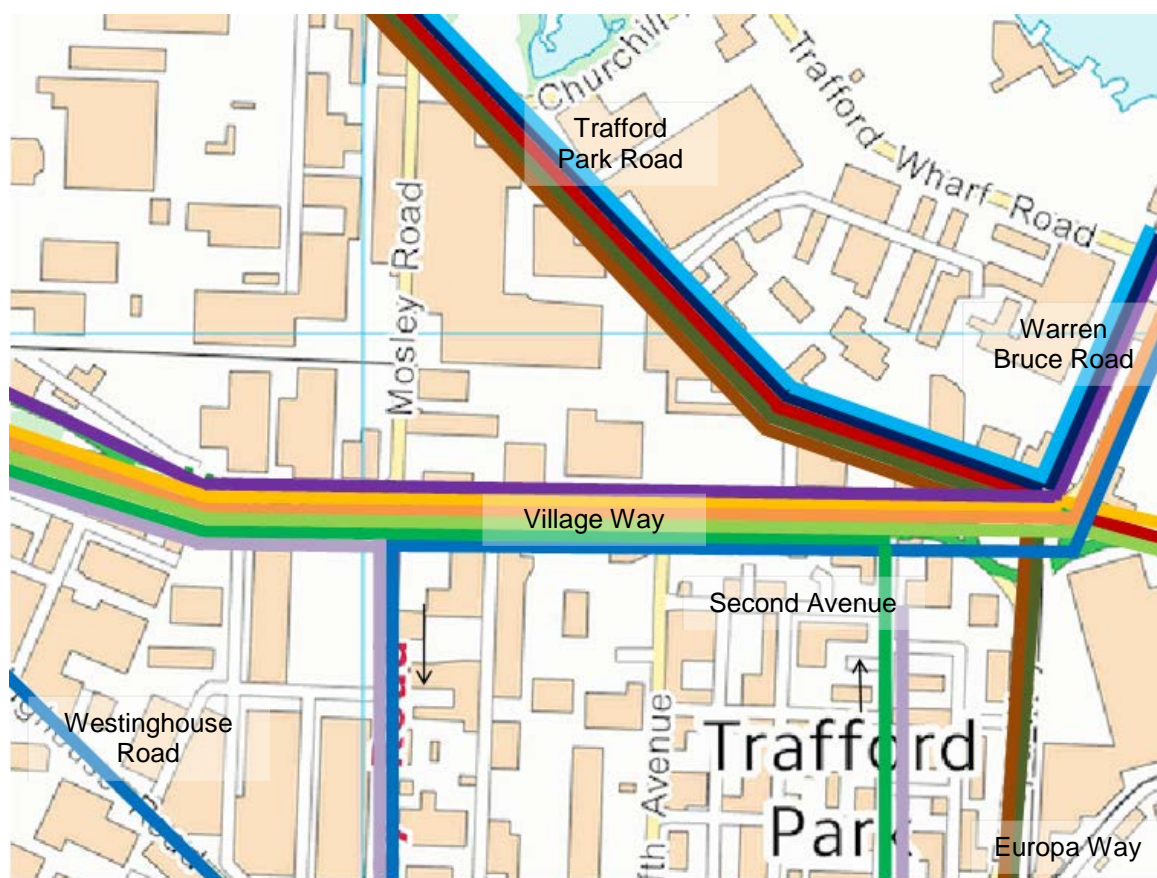


Figure F.3 Trafford Wharf Road and Warren Bruce Road - Altered Services



Key:













	245		250		291		293
	X50		X58		19		54
	270		272		294		297

Figure F.4 Village Way (including Village Circle) - Existing Services

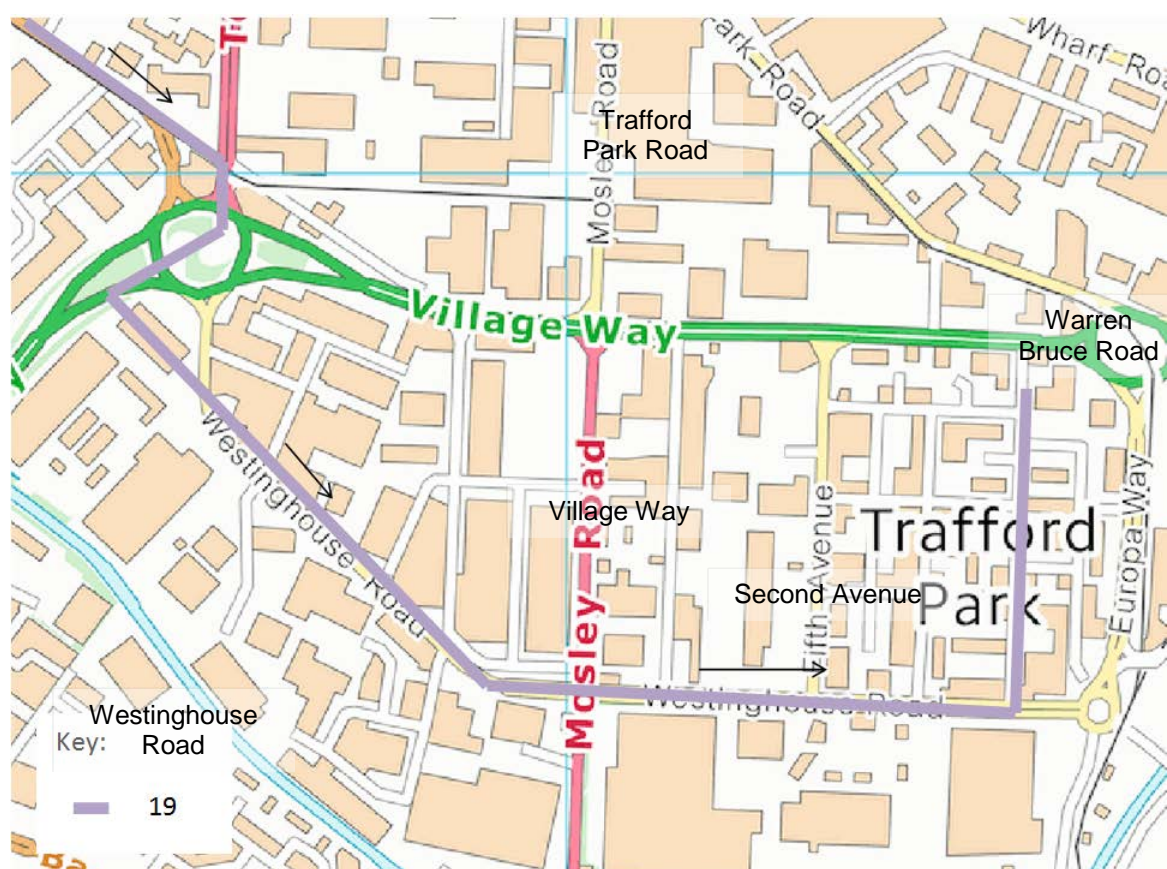
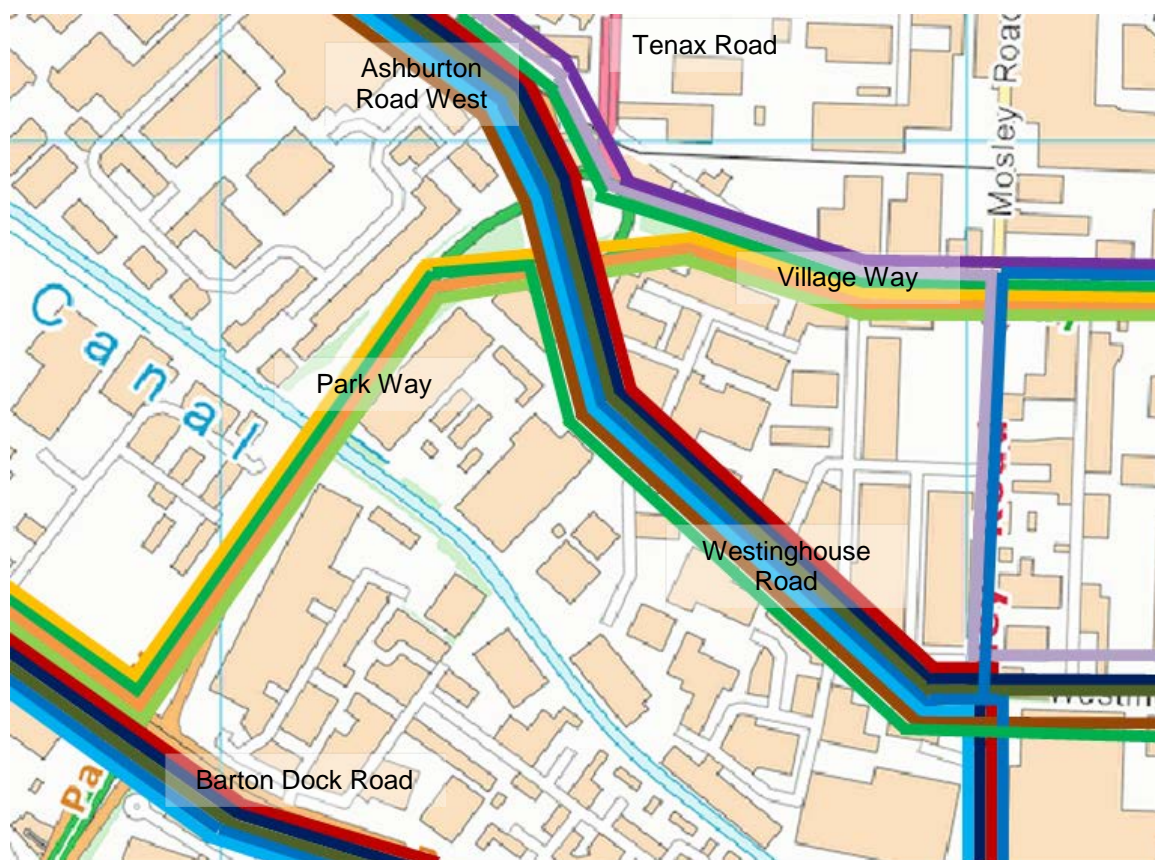


Figure F.5 Village Way (including Village Circle) - Altered Services





Key:













	250		293		X50		X53
	19		54		245		270
	272		291		294		297

Figure F.6 Parkway Circle and Park Way - Existing Services

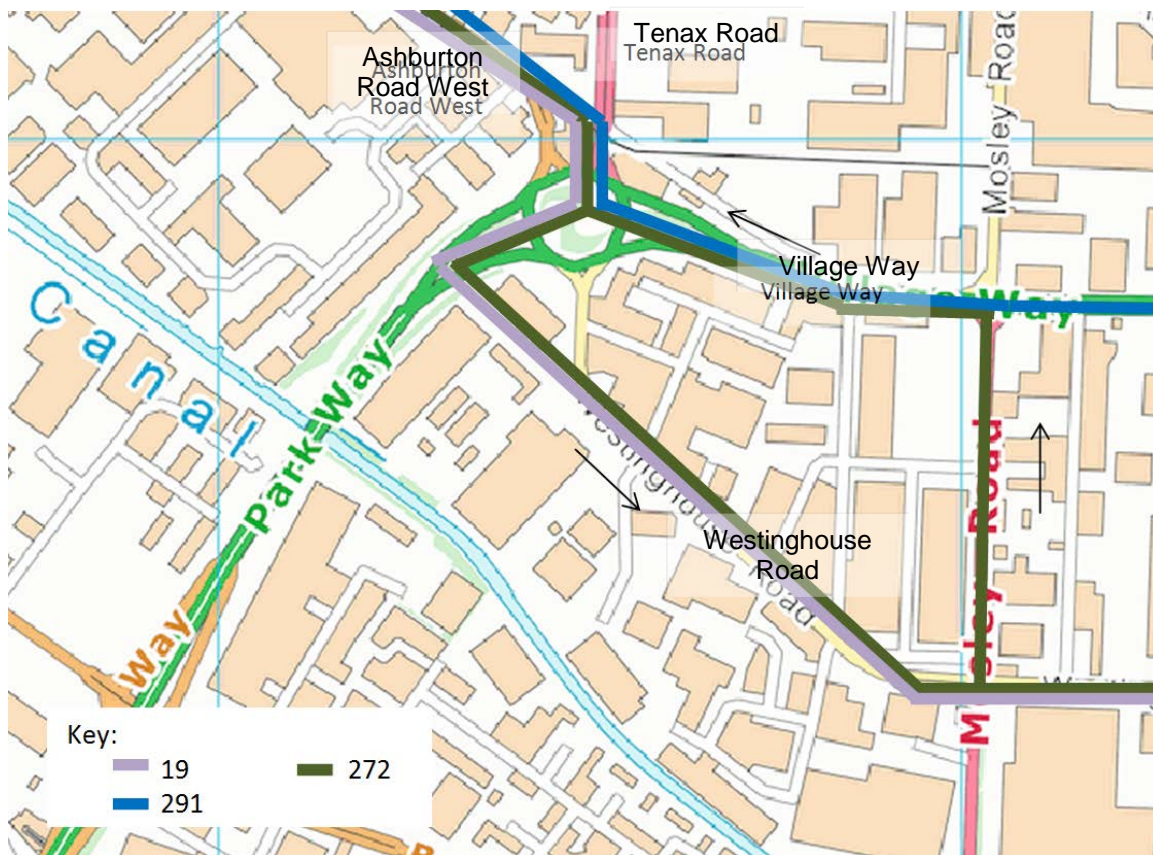


Figure F.7 Parkway Circle and Park Way - Altered Services



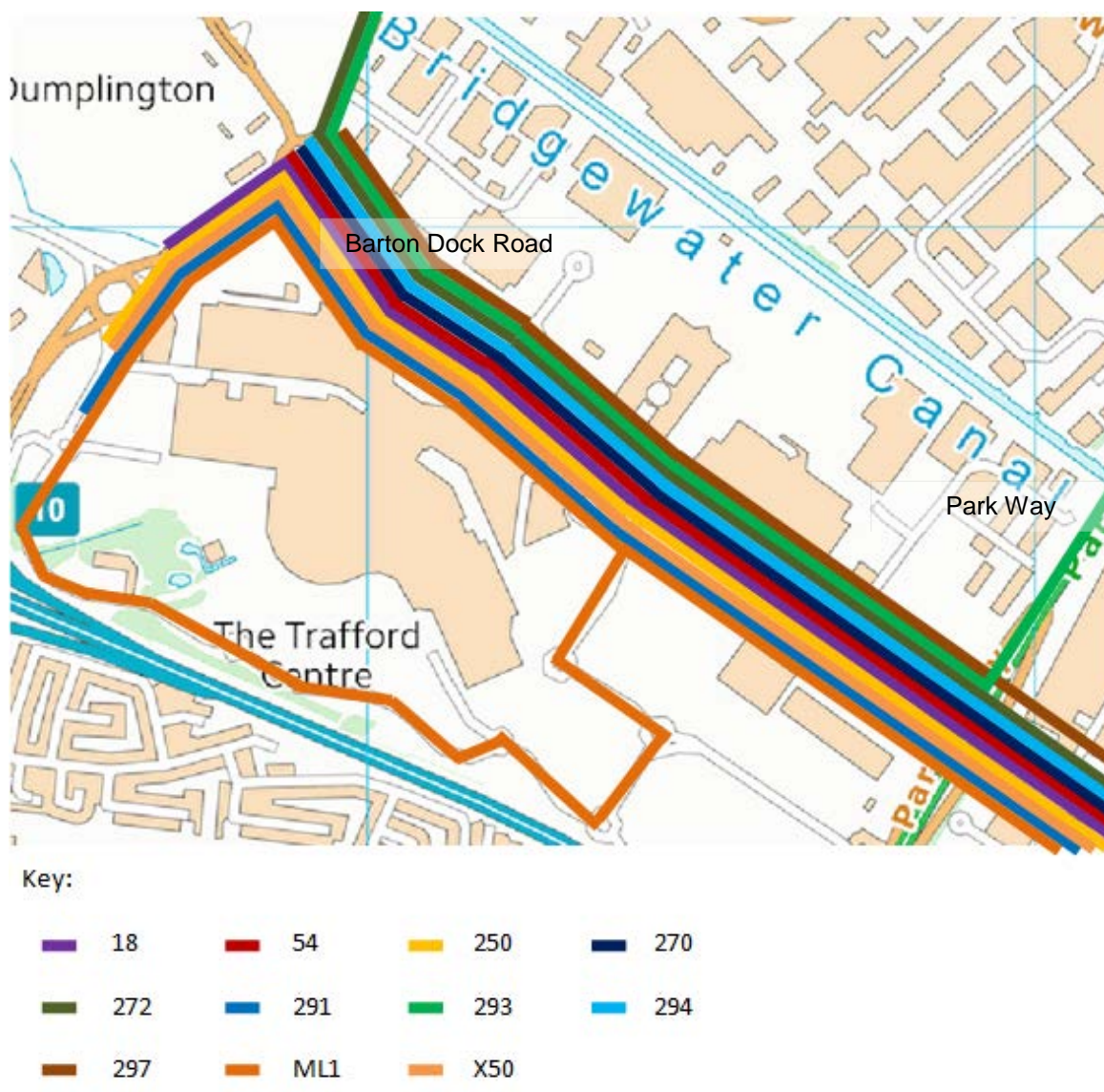


Figure F.8 Barton Dock Road - Existing Services



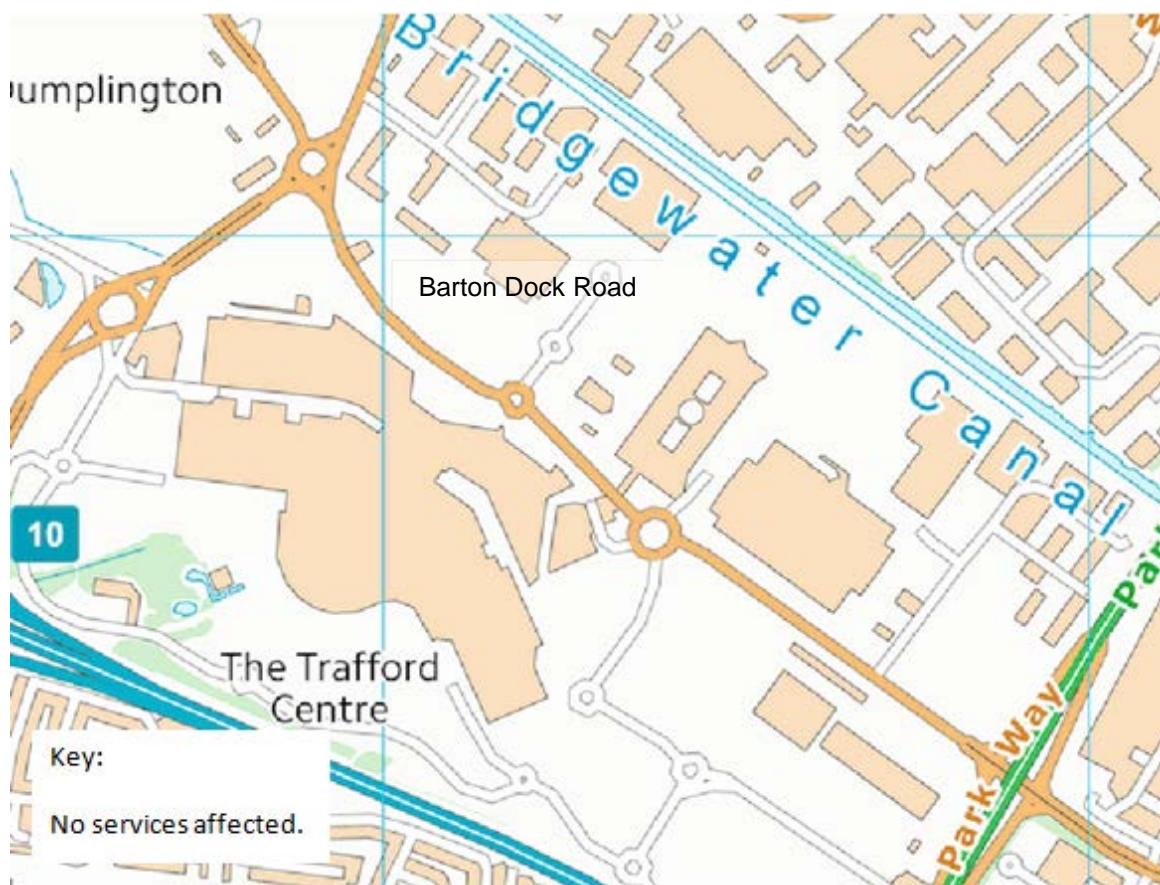
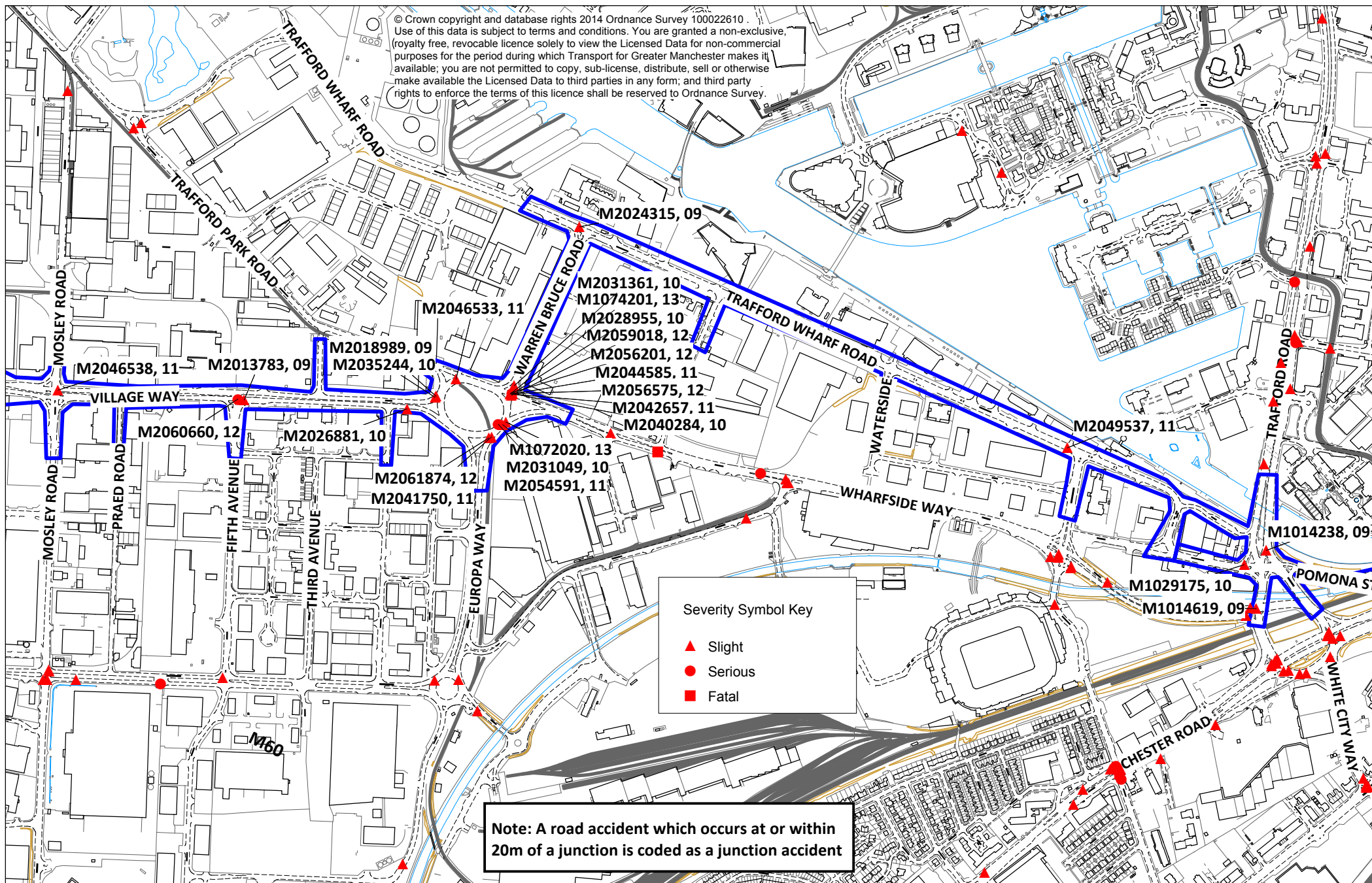


Figure F.9 Barton Dock Road - Altered Services

**APPENDIX G      Accident Records**

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2 Piccadilly Place,  
 Manchester,  
 M1 3BG

## Reported Road Injury Accidents for the Specified Area Along Parkway Circle To Pomona Strand, Trafford, from 01/04/2009 to 31/03/2014

Drawn By : chiud

Enclosed all reported injury accidents  
 bounded by the above polygon shown

Date : 28/07/2014

# TRANSPORT FOR GREATER MANCHESTER



---

**Location: Specified Area of  
A5081 Parkway Circle To Pomona Strand,  
Trafford  
from 01/04/2009 to 31/03/2014**

<b>Injury Accidents</b>	<b>Apr-Dec 2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Jan-Mar 2014</b>	<b>Total</b>
Fatal	0	0	0	0	0	0	0
Serious	0	1	1	1	0	0	3
Slight	5	6	6	4	2	0	23
<b>Total</b>	5	7	7	5	2	0	26

# Standard Totals Report : Reported Road Injury Accidents for the Specified Area Along Parkway Circle To Pomona Strand, Trafford, from 01/04/2009 to 31/03/2014

## Accidents

Serious	3
Slight	23
<b>Total Accidents</b>	<b>26</b>

## Casualties Broken Down By Type

Car (Driver)	0-15	16+	Total
Serious	0	2	2
Slight	0	20	20
<b>Total</b>	<b>0</b>	<b>22</b>	<b>22</b>
Car (Passenger)	0-15	16+	Total
Slight	2	7	9
<b>Total</b>	<b>2</b>	<b>7</b>	<b>9</b>
Pedestrian	0-15	16+	Total
Serious	0	1	1
Slight	1	1	2
<b>Total</b>	<b>1</b>	<b>2</b>	<b>3</b>
Cyclist (Rider)	0-15	16+	Total
Slight	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>
Other (Driver)	0-15	16+	Total
Slight	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>Total</b>	<b>3</b>	<b>33</b>	<b>36</b>

## Casualties By Age and Sex

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious					
Male	0	2	0	0	2
Female	0	1	0	0	1
<b>Total</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
Slight					
Male	1	14	0	0	15
Female	2	15	0	1	18
<b>Total</b>	<b>3</b>	<b>29</b>	<b>0</b>	<b>1</b>	<b>33</b>
<b>Total Casualties</b>	<b>3</b>	<b>32</b>	<b>0</b>	<b>1</b>	<b>36</b>

## Casualties By Age and Class

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious					
Driver or rider	0	2	0	0	2
Pedestrian	0	1	0	0	1
<b>Total</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
Slight					
Driver or rider	0	21	0	1	22
Veh or pillion pas	2	7	0	0	9
Pedestrian	1	1	0	0	2
<b>Total</b>	<b>3</b>	<b>29</b>	<b>0</b>	<b>1</b>	<b>33</b>
<b>Total Casualties</b>	<b>3</b>	<b>32</b>	<b>0</b>	<b>1</b>	<b>36</b>

## Cyclist (Rider and Pillion) and Pedestrian Casualties By Age

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious	0	1	0	0	1
Slight	1	2	0	0	3
<b>Total Casualties</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>4</b>

# Standard Report - Reported Road Injury Accidents for the Specified Area Along Parkway Circle To Pomona Strand, Trafford, from 01/04/2009 to 31/03/2014

This printout has been generated from the Transport for Greater Manchester's database of road traffic accident records using the query system, GMAXI.

The road traffic accident database contains STATS19 data supplied by Greater Manchester Police and further validated by the Highways Forecasting and Analytical Services (HFAS) section of Transport for Greater Manchester. It is maintained by HFAS on behalf of the ten District Councils in Greater Manchester.

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<b>Accident Reference Number:</b> M2046538				<b>Day:</b> Sunday		<b>Contributory Factors</b>			<b>Date:</b> 15/05/2011		<b>Time</b> 12:15			
<b>Place Reported:</b> Scene				<b>District:</b> Trafford										
<b>Location:</b> Mosley Road at junction with Village Way														
<b>Description:</b> V1 Trav Nth Mosley Rd And T/r East Into Path Of V2 Trav Sth Along Mosley Rd														
<b>Locational Details</b>				<b>Conditions</b>		<b>Accident Details</b>								
Road:	A5181/A5081	Junction Details:	Xrds	Road Surface:	Wet	Severity:	Slight							
OSGR:	379044 396785	Junction Control:	TS	Light Conditions:	Light	No. of Vehicles:	2							
Speed Limit:	40	Ped Crossing:	Ref	Weather Conditions:	Rain	No. of Casualties:	1							

<b>Accident Reference Number:</b> M2060660				<b>Day:</b> Sunday		<b>Contributory Factors</b>			<b>Date:</b> 27/05/2012		<b>Time</b> 18:00			
<b>Place Reported:</b> Scene				<b>District:</b> Trafford										
<b>Location:</b> Village Way (Ashburton Road East) at junction with Fifth Avenue														
<b>Description:</b> V1 Turns Right Into Path Of V2 V1 Spins & Colides With 2 Pedestrians														
<b>Locational Details</b>				<b>Conditions</b>		<b>Accident Details</b>								
Road:	A5081/C	Junction Details:	Tjun	Road Surface:	Dry	Severity:	Serious							
OSGR:	379372 396769	Junction Control:	TS	Light Conditions:	Light	No. of Vehicles:	2							
Speed Limit:	40	Ped Crossing:	TSX	Weather Conditions:	Fine	No. of Casualties:	2							



Accident Reference Number: M2013783				Day: Thursday		Contributory Factors			Date: 09/04/2009					Time 14:15				
Place Reported: Scene				District: Trafford														
Location: Village Way at junction with Fifth Avenue						Factor Conf Ref			Vehicle Details					Casualty Details				
Description: Veh2 Trav W In L2 O/takes Veh1 Trav L1 Veh2 Moves Into L1 App Ats And Stops Veh1 Fails To React And Colls With Veh2						DBrake Poss V2			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
						DSign Poss V2			HGV	Ahea	E	W						
						DJudg Poss V1			Car	chInL	E	W		1 Drv	F	20	Slight	
						DCare Poss V1												
Locational Details				Conditions		Accident Details												
Road:	A5081/C		Junction Details: Tjun		Road Surface:	Dry		Severity:	Slight									
OSGR:	379383	396767	Junction Control: TS		Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Fine		No. of Casualties:	1									

Accident Reference Number: M2026881				Day: Friday		Contributory Factors			Date: 15/01/2010					Time 05:00				
Place Reported: Scene				District: Trafford														
Location: Village Way 30 metres E of Second Ave						Factor Conf Ref			Vehicle Details					Casualty Details				
Description: V1 Travs Onto Village Way Comes Into Contact With Ice On Road Lost Control And Colls Lampost On Village Way						Slip VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
									Car	Lbend	E	W	Skid	1 Pas	F	28	Slight	
Locational Details				Conditions		Accident Details												
Road:	A5081		Junction Details:		Road Surface:	Ice		Severity:	Slight									
OSGR:	379680	396751	Junction Control: n/a		Light Conditions:	Dark		No. of Vehicles:	1									
Speed Limit:	40		Ped Crossing: PelX		Weather Conditions:	Othr		No. of Casualties:	1									

Accident Reference Number: M2035244				Day: Saturday		Contributory Factors			Date: 14/08/2010					Time 09:24				
Place Reported: Scene				District: Trafford														
Location: Village Way at junction with Europa Way						Factor Conf Ref			Vehicle Details					Casualty Details				
Description: V2 Staty At Red Ats V1 Fails To Stop In Time Colls Rear V2						Slip Poss V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
						DJnOv VLike V1			Car	Waitg	W	E		2 Pas	F	47	Slight	
									Car	Waitg	W	E		1 Drv	M	35	Slight	
Locational Details				Conditions		Accident Details												
Road:	A5081/A5081		Junction Details: Rdbt		Road Surface:	Wet		Severity:	Slight									
OSGR:	379731	396772	Junction Control: TS		Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing: TSX		Weather Conditions:	Fine		No. of Casualties:	2									

Accident Reference Number: M2018989				Day: Tuesday		Contributory Factors			Date: 28/07/2009					Time 15:10				
Place Reported: Scene				District: Trafford														
Location: Village Way at junction with Trafford Park Way						Factor Conf Ref			Vehicle Details					Casualty Details				
Description: V1 Travs East On A5081 Behind V2 Both Vehs Stop At Ats With Village Circle V2 Proceeds When Ats Show Green Light But Stalls Engibe V1 Then Colls Rv2						DFLoo Poss V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
						DLoss Poss V2			Car	Ahea	W	E		1 Drv	F	22	Slight	
									LGV	Ahea	W	E						
Locational Details				Conditions		Accident Details												
Road:	A5081/A5081		Junction Details: Rdbt		Road Surface:	Dry		Severity:	Slight									
OSGR:	379733	396774	Junction Control: TS		Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing: TSX		Weather Conditions:	Fine		No. of Casualties:	1									

Accident Reference Number: M2046533				Day: Tuesday		Contributory Factors			Date: 24/05/2011					Time 07:25				
Place Reported: Scene				District: Trafford														
Location: Village Circle at junction with Trafford Park Rd						Factor Conf Ref			Vehicle Details					Casualty Details				
Description: V2 Trav E Village Circle Stops At Red Ats Jct Trafford Park Rd V1 Trav E Village Circle Behind V2 Drives Into Rear V2						DFLoo VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
									LGV	Ahea	W	E						
									Car	Waitg	W	E		1 Drv	F	40	Slight	
Locational Details				Conditions		Accident Details												
Road:	A5081/C		Junction Details:	Rdbt	Road Surface:	Dry	Severity:	Slight										
OSGR:	379769	396805	Junction Control:	TS	Light Conditions:	Light	No. of Vehicles:	2										
Speed Limit:	30		Ped Crossing:	TSX	Weather Conditions:	Fine	No. of Casualties:	1										
Accident Reference Number: M2061874				Day: Thursday		Contributory Factors			Date: 28/06/2012					Time 08:59				
Place Reported: Scene				District: Trafford														
Location: Europa Way at junction with Wharfside Way						Factor Conf Ref			Vehicle Details					Casualty Details				
Description: V1 Trvl South On R/bout Exiting To Trvl South And OvertURNS						VLoad Poss V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
									HGV	Rben	N	S	O/tn	1 Drv	M	57	Slight	
Locational Details				Conditions		Accident Details												
Road:	C/A5081		Junction Details:	Rdbt	Road Surface:	Dry	Severity:	Slight										
OSGR:	379829	396698	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:	1										
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:	1										
Accident Reference Number: M2041750				Day: Friday		Contributory Factors			Date: 07/01/2011					Time 17:40				
Place Reported: Scene				District: Trafford														
Location: Village Way at junction with Europa Way						Factor Conf Ref			Vehicle Details					Casualty Details				
Description: V1 Trav Behind V2 As They Both Exit Roundabout Onto Europa Way V2 Brakes To Stop For Red Traffic Light V1 Brakes To Late Colls Rear V2						DLearn Poss V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
									Car	Ahea	N	S						
									Car	Ahea	N	S		1 Drv	M	40	Slight	
Locational Details				Conditions		Accident Details												
Road:	A5081/C		Junction Details:	Rdbt	Road Surface:	Wet	Severity:	Slight										
OSGR:	379834	396700	Junction Control:	GW	Light Conditions:	Dark	No. of Vehicles:	2										
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Rain	No. of Casualties:	1										
Accident Reference Number: M2054591				Day: Thursday		Contributory Factors			Date: 15/12/2011					Time 01:45				
Place Reported: Scene				District: Trafford														
Location: Wharfside Way at junction with Europa Way						Factor Conf Ref			Vehicle Details					Casualty Details				
Description: V1 Trav W Wharfside Way To Traffic Island V1 Fails To Neg Traf Island Collides Central Reserve						DLoss VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
									Car	Ahea	E	W	S&O	1 Drv	M	30	Serious	
Locational Details				Conditions		Accident Details												
Road:	A5081/A5081		Junction Details:	Rdbt	Road Surface:	Wet	Severity:	Serious										
OSGR:	379846	396723	Junction Control:	TS	Light Conditions:	Dark	No. of Vehicles:	1										
Speed Limit:	30		Ped Crossing:	TSX	Weather Conditions:	Rain	No. of Casualties:	1										

Accident Reference Number: M2031049				Day: Thursday		Contributory Factors			Date: 29/04/2010					Time 04:35					
Place Reported: Else				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Trafford Park Road at junction with Wharfside Way										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 In Left Hand Lane V2 In Right Hand Lane Set Off Ffrom Traffic Lights When V2 Enterers Left Hand Lane Coll Occurs V2 Fts										Car	Start	NE	SW		1	Drv	M	30	Slight
										MGV	chInL	NE	SW						
Locational Details				Conditions		Accident Details													
Road:	A5081/A5081		Junction Details:	Rdbt		Road Surface:	Wet		Severity:	Slight									
OSGR:	379854	396722	Junction Control:	TS		Light Conditions:	Dark		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:	TSX		Weather Conditions:	Rain		No. of Casualties:	1									

Accident Reference Number: M1072020				Day: Wednesday		Contributory Factors			Date: 03/04/2013					Time 13:15					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Wharfside Way at junction with Europa Way										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Whilst Trav Too Close To V2 Coll Rear Of V2 After It Brakes To Manoeuvre							DTgate VLike V1												
							DBrake Poss V2			Car	Rben	NE	SW						
										Car	Rben	NE	SW		1	Drv	F	55	Slight
															2	Pas	F	25	Slight
															3	Pas	F	7	Slight
Locational Details				Conditions		Accident Details													
Road:	A5081/A5081		Junction Details:	Rdbt		Road Surface:	Dry		Severity:	Slight									
OSGR:	379860	396727	Junction Control:	TS		Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:	TSX		Weather Conditions:	Fine		No. of Casualties:	3									

Accident Reference Number: M2042657				Day: Sunday		Contributory Factors			Date: 13/02/2011					Time 12:29					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Warren Bruce Road at junction with Wharfside Way										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Proceeding Round R/bout Heading Onto Wharfside Way V2 Warren Bruce Rd Onto Wharfside Way V1 Through Red Ats Coll Occurs							DATS VLike V1												
							Slip Poss V2			Car	Ahea	NW	SE		1	Pas	F	19	Slight
															2	Pas	F	1	Slight
															3	Pas	M	19	Slight
Locational Details				Conditions		Accident Details													
Road:	C/A5081		Junction Details:	Xrds		Road Surface:	Wet		Severity:	Slight									
OSGR:	379868	396778	Junction Control:	TS		Light Conditions:	Light		No. of Vehicles:	2		Car	Ahea	NE	SW				
Speed Limit:	30		Ped Crossing:	TSX		Weather Conditions:	Rain		No. of Casualties:	3									

Accident Reference Number: M1074201				Day: Monday		Contributory Factors			Date: 03/06/2013					Time 15:18					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Wharfside Way at junction with Warren Bruce Road										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Trav N Warren Bruce Rd, V2 Trav E Wharfside Way, V1 Fails To Conform To Red Ats And Coll Occurs							DATS VLike V1												
										Car	Ahea	S	N		1	Drv	F	21	Slight
															3	Pas	M	55	Slight
										Car	Ahea	E	W		2	Drv	F	46	Slight
Locational Details				Conditions		Accident Details													
Road:	A5081/C		Junction Details:	Xrds		Road Surface:	Dry		Severity:	Slight									
OSGR:	379868	396778	Junction Control:	TS		Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:	TSX		Weather Conditions:	Fine		No. of Casualties:	3									

Accident Reference Number: M2056201				Day: Monday		Contributory Factors			Date: 09/01/2012				Time 13:31		
Place Reported: Scene				District: Trafford											
Location: Wharfside Way at junction with Warren Bruce Road						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V2 Trav Warren Bruce Road Ats On Green V1 Also States Light On Green On Wharfside And Collides						DATS Poss V1			Type Move From To Skid				Type Sex Age Sev Pupil		
						DATS Poss V2			Car Ahea NW SE Car Ahea NE SW				1 Drv F 45 Slight		
Locational Details				Conditions		Accident Details									
Road: A5081/C		Junction Details: Xrds		Road Surface: Wet		Severity: Slight									
OSGR: 379869 396780		Junction Control: TS		Light Conditions: Light		No. of Vehicles: 2									
Speed Limit: 30		Ped Crossing:		Weather Conditions: Fine		No. of Casualties: 1									
Accident Reference Number: M2059018				Day: Friday		Contributory Factors			Date: 30/03/2012				Time 10:05		
Place Reported: Scene				District: Trafford											
Location: Wharfside Way at junction with Warren Bruce Road						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Trvls Through Red Ats Causing Collision With V2 Which Was Trvl Through Green Ats						DATS VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil		
									Car Ahea NW SE Car Start NE SW				1 Drv F 29 Slight		
Locational Details				Conditions		Accident Details									
Road: A5081/C		Junction Details: Xrds		Road Surface: Dry		Severity: Slight									
OSGR: 379870 396776		Junction Control: TS		Light Conditions: Light		No. of Vehicles: 2									
Speed Limit: 30		Ped Crossing: TSX		Weather Conditions: Fine		No. of Casualties: 1									
Accident Reference Number: M2040284				Day: Tuesday		Contributory Factors			Date: 14/12/2010				Time 19:19		
Place Reported: Scene				District: Trafford											
Location: Warren Bruce Road at junction with Wharfside Way						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Trav East On Wharfside Way V2 Trav Sth On Warren Bruce Rd V1 Fts At Red Traffic Signal And Colls V2						DATS VLike V1 DFLoo VLike V1 Other VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil		
									Car Ahea NW SE Car Ahea NE S				1 Drv F 22 Serious 2 Drv M 36 Slight		
Locational Details				Conditions		Accident Details									
Road: C/A5081		Junction Details: Rdbt		Road Surface: Dry		Severity: Serious									
OSGR: 379871 396779		Junction Control: TS		Light Conditions: Dark		No. of Vehicles: 2									
Speed Limit: 30		Ped Crossing: TSX		Weather Conditions: Fine		No. of Casualties: 2									
Accident Reference Number: M2044585				Day: Sunday		Contributory Factors			Date: 03/04/2011				Time 13:30		
Place Reported: Scene				District: Trafford											
Location: Wharfside Way at junction with Warren Bruce Rd						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Trav E/b Wharfside Way Enters Jct Again Red Ats And Colls V2 Trav S/b Warren Bruce Rd Mid Jct						DATS VLike V1 DFLoo VLike V1 DCare VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil		
									Car Ahea NW SE Car Ahea NE SW				1 Drv F 28 Slight		
Locational Details				Conditions		Accident Details									
Road: A5081/C		Junction Details: Rdbt		Road Surface: Dry		Severity: Slight									
OSGR: 379872 396778		Junction Control: TS		Light Conditions: Light		No. of Vehicles: 2									
Speed Limit: 30		Ped Crossing: TSX		Weather Conditions: Fine		No. of Casualties: 1									

Accident Reference Number: M2028955				Day: Friday		Contributory Factors			Date: 05/03/2010					Time 13:10					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Wharfside Way at junction with Warren Bruce Road										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Trav East Wharfside Way V2 Trav Sth Warren Bruce Rd Ats Turn Green For V2 V2 Starts To Move Off V1 Continues Through Red Ats Coll Occurs										Car	Ahea	NW	SE		1 Drv	F	77	Slight	
										Car	Ahea	NE	SW						
Locational Details				Conditions		Accident Details													
Road:	A5081/C		Junction Details:	Rdbt		Road Surface:	Dry		Severity:	Slight									
OSGR:	379872	396779	Junction Control:	TS		Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:	TSX		Weather Conditions:	Fine		No. of Casualties:	1									

Accident Reference Number: M2056575				Day: Thursday		Contributory Factors			Date: 19/01/2012					Time 19:00					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Wharfside Way at junction with Warren Bruce Road							Mark VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 App Jct Wharfside Way/Warren Br Rd Thru Ats V2 Trav Warren Br Rd Twds Wharfside Thru Ats V1 Coll V2										Car	Ahea	NW	SE		1 Drv	M	45	Slight	
										Car	Ahea	NE	SW		2 Pas	M	21	Slight	
Locational Details				Conditions		Accident Details													
Road:	A5081/C		Junction Details:	Rdbt		Road Surface:	Wet		Severity:	Slight									
OSGR:	379872	396779	Junction Control:	TS		Light Conditions:	Dark		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Rain		No. of Casualties:	2									

Accident Reference Number: M2031361				Day: Friday		Contributory Factors			Date: 30/04/2010					Time 18:30					
Place Reported: Else				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Trafford Park Road at junction with Warren Bruce Road										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Stops At Traffic L;ights When Hit In Rear By V2										Car	Waitg	NW	SE		1 Drv	M	30	Slight	
										Car	Ahea	NW	SE						
Locational Details				Conditions		Accident Details													
Road:	A5081/C		Junction Details:	Xrds		Road Surface:	Dry		Severity:	Slight									
OSGR:	379875	396793	Junction Control:	TS		Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:	TSX		Weather Conditions:	Fine		No. of Casualties:	1									

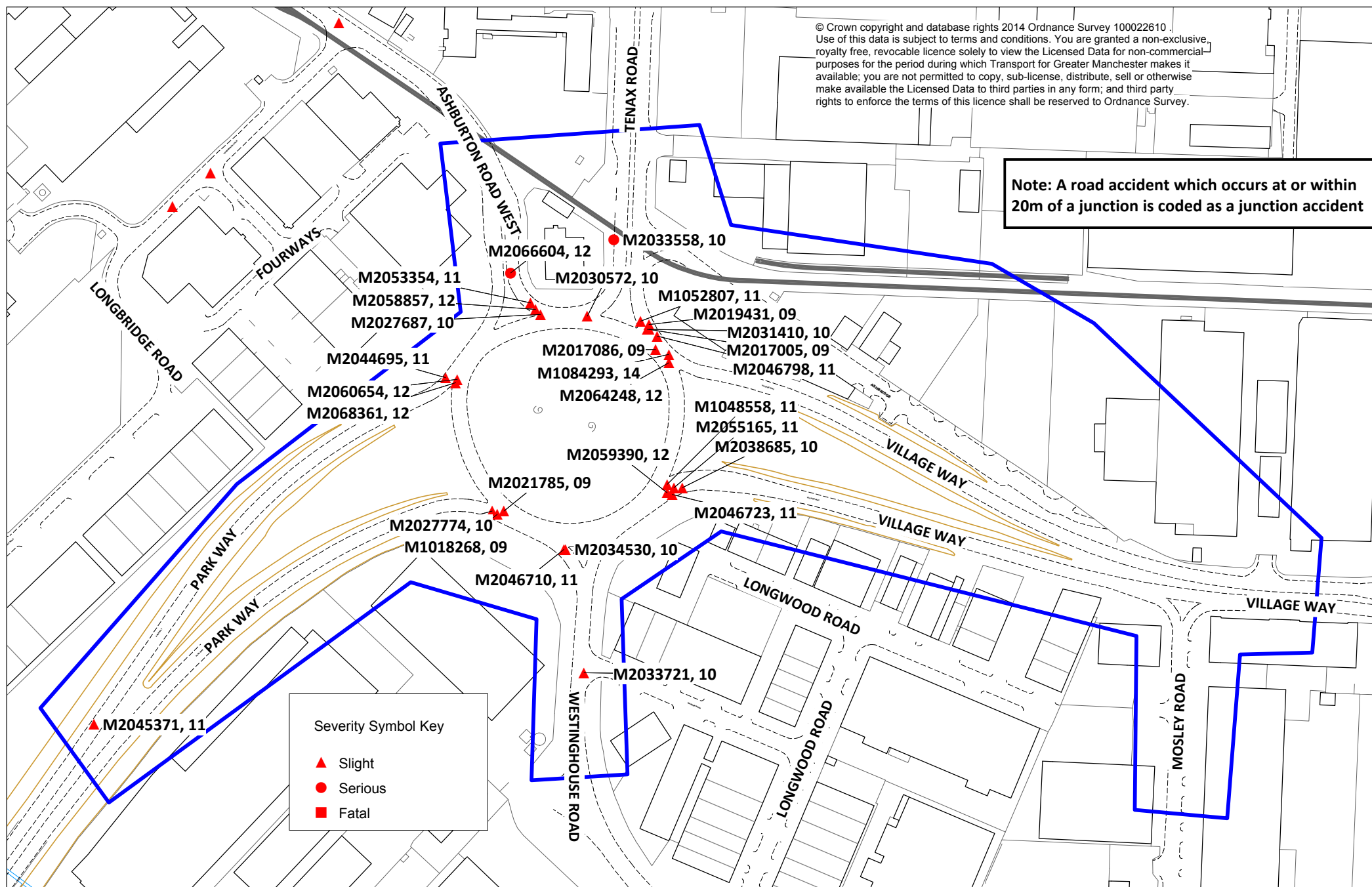
Accident Reference Number: M2024315				Day: Thursday		Contributory Factors			Date: 12/11/2009					Time 16:25					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Tgrafford Wharf Road 5 metres E of Warren Bruce Rd										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V2 Trav Trafford Wharf Road Driver Applies Brakes The Veh Wheels Lock Stops At Traffic Lights V1 Trav To Rear V2 Due To Wet Leaves Colls Trailer Of V2										Car	Stopg	NW	SE	Skid					
										Car	Stopg	NW	SE		1 Drv	M	34	Slight	
Locational Details				Conditions		Accident Details													
Road:	C/C		Junction Details:	Tjun		Road Surface:	Wet		Severity:	Slight									
OSGR:	379994	397083	Junction Control:	TS		Light Conditions:	Dark		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:	TSX		Weather Conditions:	Rain		No. of Casualties:	1									

<b>Accident Reference Number:</b> M2049537			<b>Day:</b> Friday		<b>Contributory Factors</b>			<b>Date:</b> 05/08/2011			<b>Time</b> 19:10		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford		<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Trafford Wharf Road 20 metres NW of Waters Reach					<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>	<b>Type Sex Age Sev Pupil</b>				
<b>Description:</b> V1 Inline Of Vehicles Heading Nw Group Ped Crossing Adults Stop Child Continues Colls Wing Mirror Of V1					PFLoo	Poss	C1						
V1 Runs Over Ped Foot					PJudg	Poss	C1	Car	Ahea	SE	NW	1 Ped	M 12 Slight
					Other	VLike	V1						
<b>Locational Details</b>			<b>Conditions</b>		<b>Accident Details</b>								
Road:	C/C	Junction Details:	Tjun	Road Surface:	Dry	Severity:	Slight						
OSGR:	380883 396680	Junction Control:	TS	Light Conditions:	Light	No. of Vehicles:	1						
Speed Limit:	30	Ped Crossing:	Ref	Weather Conditions:	Fine	No. of Casualties:	1						
<b>Accident Reference Number:</b> M1029175			<b>Day:</b> Tuesday		<b>Contributory Factors</b>			<b>Date:</b> 16/03/2010			<b>Time</b> 15:05		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford		<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Trafford Park Rd at junction with White City Way					<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>	<b>Type Sex Age Sev Pupil</b>				
<b>Description:</b> V2 Slows To A Stop For Red Ats On Trafford Park Rd Jct White City Way V1 Attempts To Stop But Colls Rear V2					DCare	VLike	V1						
					DSpee	Poss	V1	MGV	Ahea	W	E		
								Taxi	Stopg	W	E	1 Drv	F 29 Slight
<b>Locational Details</b>			<b>Conditions</b>		<b>Accident Details</b>								
Road:	A5081/A5081	Junction Details:	Xrds	Road Surface:	Dry	Severity:	Slight						
OSGR:	381205 396467	Junction Control:	TS	Light Conditions:	Light	No. of Vehicles:	2						
Speed Limit:	40	Ped Crossing:	TSX	Weather Conditions:	Fine	No. of Casualties:	1						
<b>Accident Reference Number:</b> M1014619			<b>Day:</b> Monday		<b>Contributory Factors</b>			<b>Date:</b> 04/05/2009			<b>Time</b> 11:04		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford		<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Trafford Rd at junction with Wharfside Way					<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>	<b>Type Sex Age Sev Pupil</b>				
<b>Description:</b> V1 Trav North On Trafford Rd V2 Trav East On Wharfside Way Both Vehs Enter Automatic Traffic Lkight Controlled Jct And Colls Mid Jct					DATS	VLike	V1						
								Car	Ahea	S	N		
								Car	Ahea	W	E	1 Drv	F 40 Slight
<b>Locational Details</b>			<b>Conditions</b>		<b>Accident Details</b>								
Road:	A5063/A5081	Junction Details:	Rdbt	Road Surface:	Dry	Severity:	Slight						
OSGR:	381227 396387	Junction Control:	TS	Light Conditions:	Light	No. of Vehicles:	2						
Speed Limit:	30	Ped Crossing:	TSX	Weather Conditions:	Fine	No. of Casualties:	1						
<b>Accident Reference Number:</b> M1014238			<b>Day:</b> Monday		<b>Contributory Factors</b>			<b>Date:</b> 20/04/2009			<b>Time</b> 08:30		
<b>Place Reported:</b> Else			<b>District:</b> Trafford		<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Trafford Raod at junction with Trafford Park Rd					<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>	<b>Type Sex Age Sev Pupil</b>				
<b>Description:</b> V2 Sets Off From Traffic Lights With Intention Of T/r V1 Pases V2 And Moves To Left Colls V2													
								Car	Ahea	NW	SE		
								p/c	TurnR	NW	NE	1 Rid	M 25 Slight
<b>Locational Details</b>			<b>Conditions</b>		<b>Accident Details</b>								
Road:	A5063/A5063	Junction Details:	Othr	Road Surface:	Dry	Severity:	Slight						
OSGR:	381245 396493	Junction Control:	TS	Light Conditions:	Light	No. of Vehicles:	2						
Speed Limit:	30	Ped Crossing:	TSX	Weather Conditions:	Fine	No. of Casualties:	1						



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**Note: A road accident which occurs at or within 20m of a junction is coded as a junction accident**



# TRANSPORT FOR GREATER MANCHESTER



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**Location: Specified Area of  
Parkway Circle Roundabout,  
Trafford  
from 01/04/2009 to 31/03/2014**

<b>Injury Accidents</b>	<b>Apr-Dec 2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Jan-Mar 2014</b>	<b>Total</b>
Fatal	0	0	0	0	0	0	0
Serious	0	1	0	1	0	0	2
Slight	5	7	9	5	0	1	27
<b>Total</b>	5	8	9	6	0	1	29

# Standard Totals Report : Reported Road Injury Accidents for the Specified Area Around the Parkway Circle Roundabout, from 01/04/2009 to 31/03/2014

## Accidents

Serious	2
Slight	27
<b>Total Accidents</b>	<b>29</b>

## Casualties By Age and Sex

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious					
Male	0	1	0	0	1
Female	0	1	0	0	1
<b>Total</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
Slight					
Male	0	25	1	0	26
Female	1	8	0	0	9
<b>Total</b>	<b>1</b>	<b>33</b>	<b>1</b>	<b>0</b>	<b>35</b>
<b>Total Casualties</b>	<b>1</b>	<b>35</b>	<b>1</b>	<b>0</b>	<b>37</b>

## Casualties By Age and Class

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious					
Driver or rider	0	1	0	0	1
Pedestrian	0	1	0	0	1
<b>Total</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
Slight					
Driver or rider	0	25	1	0	26
Veh or pillion pas	1	8	0	0	9
<b>Total</b>	<b>1</b>	<b>33</b>	<b>1</b>	<b>0</b>	<b>35</b>
<b>Total Casualties</b>	<b>1</b>	<b>35</b>	<b>1</b>	<b>0</b>	<b>37</b>

## Cyclist (Rider and Pillion) and Pedestrian Casualties By Age

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious	0	2	0	0	2
Slight	0	1	0	0	1
<b>Total Casualties</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

## Casualties Broken Down By Type

Car (Driver)	0-15	16+	Total
Slight	0	17	17
<b>Total</b>	<b>0</b>	<b>17</b>	<b>17</b>
Car (Passenger)	0-15	16+	Total
Slight	0	6	6
<b>Total</b>	<b>0</b>	<b>6</b>	<b>6</b>
Pedestrian	0-15	16+	Total
Serious	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>
TWPV (Rider)	0-15	16+	Total
Slight	0	5	5
<b>Total</b>	<b>0</b>	<b>5</b>	<b>5</b>
TWPV (Pillion)	0-15	16+	Total
Slight	1	0	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>
Cyclist (Rider)	0-15	16+	Total
Serious	0	1	1
Slight	0	1	1
<b>Total</b>	<b>0</b>	<b>2</b>	<b>2</b>
PSV (Passenger)	0-15	16+	Total
Slight	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>
Other (Driver)	0-15	16+	Total
Slight	0	3	3
<b>Total</b>	<b>0</b>	<b>3</b>	<b>3</b>
Other (Passenger)	0-15	16+	Total
Slight	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>Total</b>	<b>1</b>	<b>36</b>	<b>37</b>

# Standard Report - Reported Road Injury Accidents for the Specified Area Around the Parkway Circle Roundabout, from 01/04/2009 to 31/03/2014

This printout has been generated from the Transport for Greater Manchester's database of road traffic accident records using the query system, GMAXI.

The road traffic accident database contains STATS19 data supplied by Greater Manchester Police and further validated by the Highways Forecasting and Analytical Services (HFAS) section of Transport for Greater Manchester. It is maintained by HFAS on behalf of the ten District Councils in Greater Manchester.

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Accident Reference Number: M2045371				Day: Wednesday		Contributory Factors			Date: 27/04/2011				Time 21:03					
Place Reported: Scene				District: Trafford														
Location: Parkway 300 metres S of Ashburton Road West						Factor Conf Ref			Vehicle Details				Casualty Details					
Description: Veh1 Trav N Hits Debris On C/way Rider Loses Control And Is Thrown From Vehicle						Dposit VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
									m/cl	Ahea	SW	NE		1 Rid	M	36	Slight	
Locational Details				Conditions		Accident Details												
Road:	A5081		Junction Details:		Road Surface:	Dry	Severity:		Slight									
OSGR:	378197	396714	Junction Control: n/a		Light Conditions:	Dark	No. of Vehicles:		1									
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:		1									

Accident Reference Number: M2033721				Day: Friday		Contributory Factors			Date: 02/07/2010				Time 06:56					
Place Reported: Scene				District: Trafford														
Location: Westinghouse Road at junction with Warren Road						Factor Conf Ref			Vehicle Details				Casualty Details					
Description: V1 Trav Nb. V2 Trav Sb. V1 Makes U-turn Into Entrance To Warren Rd And Re-enters Road Colliding With V2						DJnOv VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
						DTurn VLike V1			Car	Uturn	S	S						
Locational Details				Conditions		Accident Details												
Road:	C/U		Junction Details: Tjun		Road Surface:	Wet	Severity:		Slight									
OSGR:	378491	396745	Junction Control: GW		Light Conditions:	Light	No. of Vehicles:		2									
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:		1									
						DFLoo VLike V1			Car	Ahea	N	S		1 Drv	M	48	Slight	
						DJudg VLike V1												

<b>Accident Reference Number:</b> M2046710				<b>Day:</b> Friday		<b>Contributory Factors</b>			<b>Date:</b> 20/05/2011				<b>Time</b> 17:20		
<b>Place Reported:</b> Scene				<b>District:</b> Trafford											
<b>Location:</b> Westinghouse Road at junction with Parkway Circle						<b>Factor</b> <b>Conf</b> <b>Ref</b>									
<b>Description:</b> V1 Inside Lane Westinghosue Rd At Parkway Circle R/bout V2 Inside Lane Approachign Parkway Looking To Right Assumes V1 Has Entered R/bout Colls V2						DFLoo VLike V2									

Accident Reference Number: M2021785				Day: Sunday		Contributory Factors			Date: 20/09/2009					Time 17:05						
Place Reported: Else				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details						
Location: Parkway at junction with Westinghouse Road									Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil		
Description: V1 & V2 Exiting Parkway Circle Roundabout Onto Parkway V2 Comes Across V1's Path Into Rear Passenger Side V1 In Right Hand Lane V1 In Left Hand Lane									Car	Lbend	E	SW	Skid	1 Drv	M	25	Slight			
Locational Details				Conditions		Accident Details			Car	chlnR	E	N		2 Pas	F	17	Slight			
Road:	A5081/A5081		Junction Details:	Rdbt		Road Surface:	Dry		Severity:			Slight								
OSGR:	378443	396842	Junction Control:	GW		Light Conditions:	Light		No. of Vehicles:			2								
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:			2								
Accident Reference Number: M2046723				Day: Wednesday		Contributory Factors			Date: 18/05/2011					Time 16:00						
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details						
Location: Village Way at junction with Westinghouse Road						DFLoo VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil		
Description: V2 Staty Village Way V1 Travs Village Way Dir Parlway Circle V1 Faisl Tosee V2 Staty And Colls Rear V2 V1 Fts						DCare Poss V1			HGV	Ahea	E	W								
Locational Details				Conditions		Accident Details			DAggr	Poss	V1	Car	Ahea	E	W	1 Drv	F	37	Slight	
Road:	A5081/C		Junction Details:	Rdbt		Road Surface:	Dry		Severity:			Slight								
OSGR:	378544	396852	Junction Control:	GW		Light Conditions:	Light		No. of Vehicles:			2								
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:			1								
Accident Reference Number: M2059390				Day: Monday		Contributory Factors			Date: 09/04/2012					Time 09:30						
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details						
Location: Parkway Circle at junction with Village Way						DFLoo VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil		
Description: V2 Trav Parkway Circle Rbt As Approach Rbt V1 Joined Dir In Front Of V2 Cause V2 To Take Evasive Action Lost Ctrl Lands On Side						Slip VLike V2			LGV	Start	NE	NW								
Locational Details				Conditions		Accident Details			DSwer	VLike	V2	m/cl	Ahea	NE	NW	O/tn	1 Rid	M	50	Slight
Road:	A5081/A5081		Junction Details:	Rdbt		Road Surface:	Wet		Severity:			Slight					2 Pas	F	13	Slight
OSGR:	378541	396853	Junction Control:	GW		Light Conditions:	Light		No. of Vehicles:			2								
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Rain		No. of Casualties:			2								
Accident Reference Number: M2055165				Day: Sunday		Contributory Factors			Date: 25/12/2011					Time 17:15						
Place Reported: Else				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details						
Location: Village Way at junction with Parkway Circle									Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil		
Description: Veh2 App Roundabout On Village Way/parkway Circle Veh2 Giving Way To Traffic From R Veh1 Colls With The Rear Of Veh2									Car	Ahea	E	W								
Locational Details				Conditions		Accident Details			Car	Ahea	E	W		1 Drv	F	25	Slight			
Road:	A5081/A5081		Junction Details:	Rdbt		Road Surface:	Wet		Severity:			Slight								
OSGR:	378545	396856	Junction Control:	GW		Light Conditions:	Dark		No. of Vehicles:			2								
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Othr		No. of Casualties:			1								



Accident Reference Number: M2038685				Day: Thursday		Contributory Factors			Date: 11/11/2010				Time 16:18				
Place Reported: Scene				District: Trafford													
Location: Village Way 2 metres SE of Parkway Circle						Factor Conf Ref			Vehicle Details				Casualty Details				
Description: Staty V1 Attempts To Enter R/about, V2 Colls Rear V1						DJudg VLike V2			Type Move From To Skid				Type Sex Age Sev Pupil				
						DSpee Poss V2			Car Waitg E W								
						DTgate Poss V2			PCV Stopg E W				1 Pas F 22 Slight				
Locational Details				Conditions		Accident Details											
Road:	A5081/U		Junction Details:	Rdbt	Road Surface:	Dry		Severity:	Slight								
OSGR:	378550	396856	Junction Control:	GW	Light Conditions:	Dark		No. of Vehicles:	2								
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Wind		No. of Casualties:	1								

Accident Reference Number: M1048558				Day: Wednesday		Contributory Factors			Date: 06/07/2011				Time 18:00				
Place Reported: Scene				District: Trafford													
Location: Village Way at junction with Parkway Circle						Factor Conf Ref			Vehicle Details				Casualty Details				
Description: Cyclist Veh2 Is Hit By Veh1						DFLoo VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil				
									Car p/c Rben E S				1 Drv M 26 Slight				
									Rben E S								
Locational Details				Conditions		Accident Details											
Road:	A5081/A5081		Junction Details:	Rdbt	Road Surface:	Wet		Severity:	Slight								
OSGR:	378541	396858	Junction Control:	GW	Light Conditions:	Light		No. of Vehicles:	2								
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Fine		No. of Casualties:	1								

Accident Reference Number: M2068361				Day: Thursday		Contributory Factors			Date: 27/12/2012				Time 10:15				
Place Reported: Scene				District: Trafford													
Location: Parkway Circle at junction with Park Way						Factor Conf Ref			Vehicle Details				Casualty Details				
Description: V1 Approaches Roundabout And Fails To Give Way To V2 On The Roundabout Colliding With V2						DFLoo VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil				
									Car p/c Ahea SW NE								
									Ahea S N				1 Rid M 23 Slight				
Locational Details				Conditions		Accident Details											
Road:	A5081/A5081		Junction Details:	Rdbt	Road Surface:	Dry		Severity:	Slight								
OSGR:	378414	396919	Junction Control:	GW	Light Conditions:	Light		No. of Vehicles:	2								
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Fine		No. of Casualties:	1								

Accident Reference Number: M2060654				Day: Wednesday		Contributory Factors			Date: 23/05/2012				Time 15:20				
Place Reported: Scene				District: Trafford													
Location: Parkway Circle at junction with Park Way						Factor Conf Ref			Vehicle Details				Casualty Details				
Description: V1 Trvl Parkway To Parkway Circle Approaches R/bout Fails To See V2 Enters R/bout And Collides With The N/s Of V2						DFLoo VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil				
						DGWor Poss V1			m/p Start SW NE								
									m/p Ahea SE N				1 Rid M 44 Slight				
Locational Details				Conditions		Accident Details											
Road:	A5081/A5081		Junction Details:	Rdbt	Road Surface:	Dry		Severity:	Slight								
OSGR:	378415	396921	Junction Control:	GW	Light Conditions:	Light		No. of Vehicles:	2								
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Fine		No. of Casualties:	1								

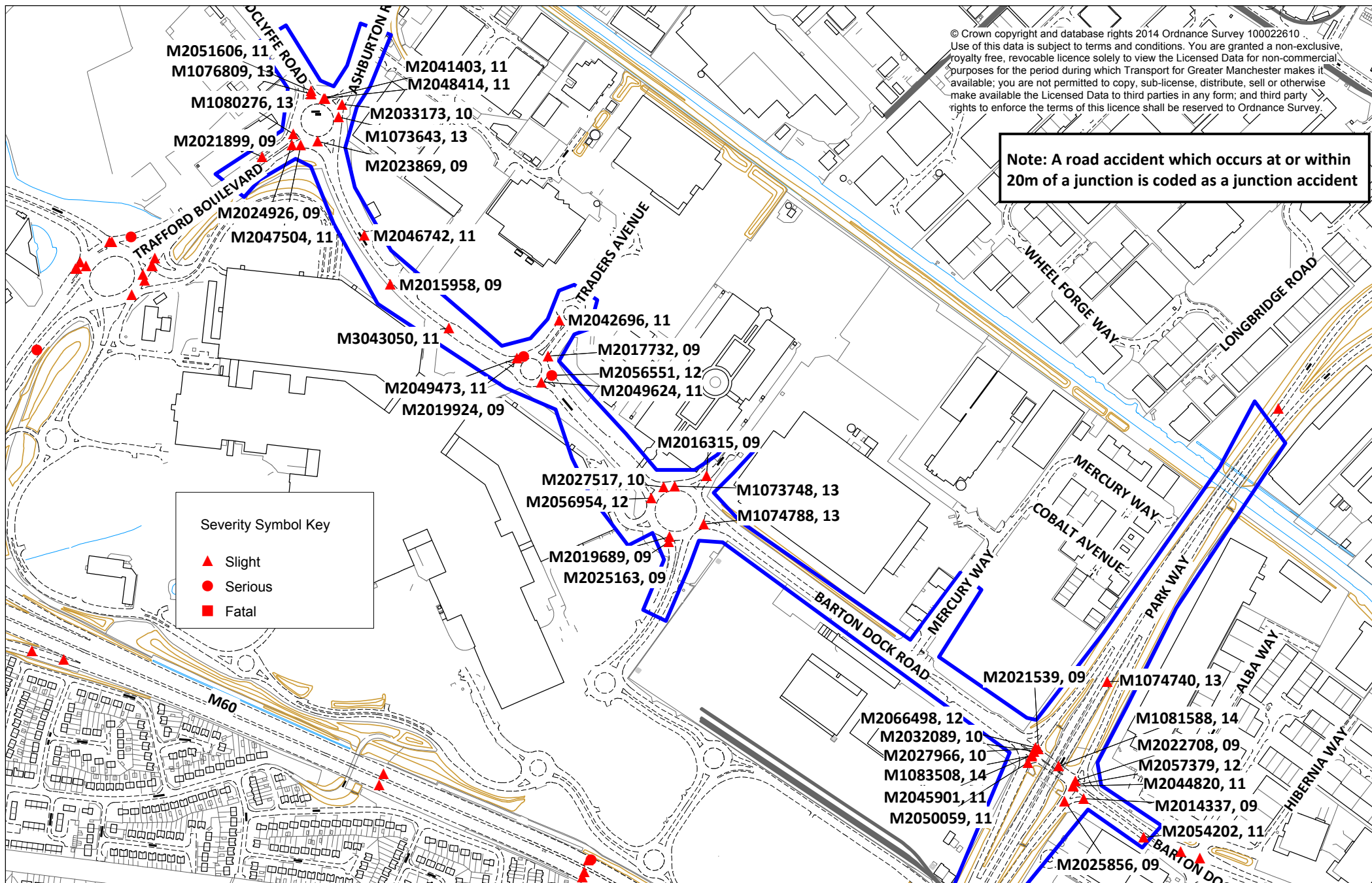
<b>Accident Reference Number:</b> M2044695			<b>Day:</b> Thursday			<b>Contributory Factors</b>			<b>Date:</b> 24/03/2011			<b>Time</b> 09:10		
<b>Place Reported:</b> Else			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Parkway at junction with Ashburton Road West									<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> V1 Staty At Jct Waiting To Join Roundabout When Hit In Rear By V2									Car Waitg SW NE			1 Drv F 46 Slight		
									Car Ahea SW NE					
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	A5081/A5081	Junction Details: Rdbt	Road Surface:	Dry		Severity:	Slight							
OSGR:	378408 396922	Junction Control: GW	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing: Ref	Weather Conditions:	Fine		No. of Casualties:	1							
<b>Accident Reference Number:</b> M2064248			<b>Day:</b> Tuesday			<b>Contributory Factors</b>			<b>Date:</b> 14/08/2012			<b>Time</b> 07:30		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Parkway Circle at junction with Village Way (Ashburton Road East)									<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> V1 Is On Roundabout.v2 Crosses In Front Of V1 To Exit The Roundabout And V1 Hits V2						DTurn Poss V2			HGV TurnR W E			1 Drv F 29 Slight		
						DTurn Poss V1			Car TurnL W E					
						DSign Poss V1								
						DJudg Poss V2								
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	A5081/A5081	Junction Details: Rdbt	Road Surface:	Dry		Severity:	Slight							
OSGR:	378542 396931	Junction Control: GW	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Fine		No. of Casualties:	1							
<b>Accident Reference Number:</b> M1084293			<b>Day:</b> Wednesday			<b>Contributory Factors</b>			<b>Date:</b> 19/03/2014			<b>Time</b> 19:05		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Parkway Circle at junction with Village Way									<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> V1 (Motorcycle) Trav Se On Rbt In Offside Lane. V2 Trav Same In Nearside Lane. V1 Tries To Exit Left Onto Village Way And Collides With V2.						DFLoo Poss V1			m/s TurnL NW E			1 Rid M 19 Slight		
						DSign Poss V1			Car Ahea N S					
						DFLoo Poss V2								
						DSign Poss V2								
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	A5081/A5081	Junction Details: Rdbt	Road Surface:	Dry		Severity:	Slight							
OSGR:	378542 396936	Junction Control: GW	Light Conditions:	Dark		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Fine		No. of Casualties:	1							
<b>Accident Reference Number:</b> M2017086			<b>Day:</b> Thursday			<b>Contributory Factors</b>			<b>Date:</b> 11/06/2009			<b>Time</b> 17:00		
<b>Place Reported:</b> Else			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Tenax Road at junction with Parkway									<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> V2 Approaching R/b V1 Hits V2									Car Waitg N S			1 Drv M 54 Slight		
									Car Ahea N S			2 Pas F 51 Slight		
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	A576/A5081	Junction Details: Rdbt	Road Surface:	Dry		Severity:	Slight							
OSGR:	378534 396939	Junction Control: GW	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Fine		No. of Casualties:	2							

Accident Reference Number: M2046798				Day: Wednesday		Contributory Factors			Date: 01/06/2011				Time 08:20				
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details				Casualty Details				
Location: Tenax Road at junction with Parkway Circle				DJudg VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil	
Description: V2 TravS Sth Tenax Rd To R/bout Parkway Circle V2 Stops At R/bout V1 TravS Same Dir Colls Rear V2 Rider V2 Falls Off							Car	Ahea	N	S							
							m/cl	Ahea	N	S		1 Rid	M	45	Slight		
Locational Details				Conditions		Accident Details											
Road:	A576/A5081		Junction Details:	Rdbt		Road Surface:	Dry		Severity:	Slight							
OSGR:	378535	396947	Junction Control:	GW		Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	1							
Accident Reference Number: M2031410				Day: Wednesday		Contributory Factors			Date: 14/04/2010				Time 07:30				
Place Reported: Else				District: Trafford		Factor Conf Ref			Vehicle Details				Casualty Details				
Location: Tenax Road at junction with Village Way				DJudg VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil	
Description: V1 Ttrav Tenax Road Stops At Roundabout V2 Colls Rear V1`							Car	Waitg	N	S		1 Drv	M	42	Slight		
												2 Pas	M	40	Slight		
Locational Details				Conditions		Accident Details											
Road:	A576/A5081		Junction Details:	Rdbt		Road Surface:	Dry		Severity:	Slight							
OSGR:	378529	396951	Junction Control:	GW		Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	4							
							Taxi	Stopg	N	S		4 Pas	M	53	Slight		
Accident Reference Number: M2017005				Day: Thursday		Contributory Factors			Date: 11/06/2009				Time 13:20				
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details				Casualty Details				
Location: Tenax Road at junction with Park Way				DJudg Poss V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil	
Description: V2 TravS S Stops At Giveway V1 TravS S Also Fts And Colls Rear V2							Car	Ahea	N	S							
							Car	Ahea	N	S		1 Drv	M	39	Slight		
Locational Details				Conditions		Accident Details											
Road:	A576/A5081		Junction Details:	Rdbt		Road Surface:	Dry		Severity:	Slight							
OSGR:	378530	396951	Junction Control:	GW		Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	40		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	1							
Accident Reference Number: M2019431				Day: Friday		Contributory Factors			Date: 07/08/2009				Time 08:50				
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details				Casualty Details				
Location: Tenax Road at junction with Parkway Circle				DCare VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil	
Description: V2 Trav Sth On Tenax Rd Approaches Parkway Circle Roudnabout Jct And Stops At Giveway V1 Also Trav Sth On Tenaax Rd Behind V2 Colls Rear V2				DPanic Poss V2			LGV	Ahea	N	S							
							Car	Waitg	N	S		1 Drv	M	25	Slight		
Locational Details				Conditions		Accident Details											
Road:	A576/A5081		Junction Details:	Rdbt		Road Surface:	Dry		Severity:	Slight							
OSGR:	378530	396954	Junction Control:	GW		Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	40		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	1							

<b>Accident Reference Number:</b> M1052807			<b>Day:</b> Tuesday			<b>Contributory Factors</b>			<b>Date:</b> 18/10/2011			<b>Time</b> 16:50		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Tenax Road at junction with Village Way (Ashburton Road East)						DJudg VLike V1			<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> V2 Lane 1 Of 2 V1 Lane 1 Of 2 Behind V2 V1 Colls Rear V2 And Fts									HGV Start N S					
									Car Waitg N S			1 Drv F 25 Slight		
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	A576/A5081	Junction Details:	Rdbt	Road Surface:	Dry	Severity:		Slight						
OSGR:	378525 396956	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:		2						
Speed Limit:	40	Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:		1						
<b>Accident Reference Number:</b> M2030572			<b>Day:</b> Tuesday			<b>Contributory Factors</b>			<b>Date:</b> 13/04/2010			<b>Time</b> 17:20		
<b>Place Reported:</b> Else			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Parkway Roundabout at junction with Tenax Road									<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> V1 Enters R/about In L/h Lane, V2 In R/h Lane, V2 T/I At Tenax Rd And Colls Occurs. V2 Fts									HGV Ahea W E			1 Drv M 57 Slight		
									LGV chlnL W N			2 Pas M 30 Slight		
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	A5081/A576	Junction Details:	Rdbt	Road Surface:	Dry	Severity:		Slight						
OSGR:	378493 396959	Junction Control:	STO	Light Conditions:	Light	No. of Vehicles:		2						
Speed Limit:	30	Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:		2						
<b>Accident Reference Number:</b> M2027687			<b>Day:</b> Monday			<b>Contributory Factors</b>			<b>Date:</b> 15/02/2010			<b>Time</b> 11:59		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Ashburton Road West at junction with Parkway Circle						DTurn VLike V1			<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> V1 Moves From Ln 1 Into Ln 2 Colliding With V2 In Ln 2									Agg Start N S					
									Car Start N S			1 Drv M 43 Slight		
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	A5081/B5214	Junction Details:	Rdbt	Road Surface:	Wet	Severity:		Slight						
OSGR:	378465 396960	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:		2						
Speed Limit:	30	Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:		1						
<b>Accident Reference Number:</b> M2058857			<b>Day:</b> Monday			<b>Contributory Factors</b>			<b>Date:</b> 26/03/2012			<b>Time</b> 14:15		
<b>Place Reported:</b> Else			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Ashburton Road West at junction with Parkway Circle									<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> V2 Hit At The Rear By V1 Transporter									othr Waitg N E					
									othr Waitg N E			1 Drv M 22 Slight		
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	A5081/B5214	Junction Details:	Rdbt	Road Surface:	Dry	Severity:		Slight						
OSGR:	378462 396963	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:		2						
Speed Limit:	30	Ped Crossing:		Weather Conditions:	N/A	No. of Casualties:		1						

<b>Accident Reference Number:</b> M2053354			<b>Day:</b> Wednesday			<b>Contributory Factors</b>			<b>Date:</b> 02/11/2011			<b>Time</b> 17:07		
<b>Place Reported:</b> Else			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Ashburton Road West at junction with Roundabout Parkway									<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> Veh2 Held Up At Roundabout Veh1 App Roundabout Colls With Rear Of Veh2 Veh1 Fts														
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5214/A5081	Junction Details: Rdbt	Road Surface:	Wet		Severity:	Slight		Car	Waitg	NW	SE		
OSGR:	378459 396967	Junction Control: GW	Light Conditions:	Dark		No. of Vehicles:	2		Car	Ahea	NW	SE	1 Drv	M 54 Slight
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Rain		No. of Casualties:	2						2 Pas	M 50 Slight
<b>Accident Reference Number:</b> M2066604			<b>Day:</b> Wednesday			<b>Contributory Factors</b>			<b>Date:</b> 07/11/2012			<b>Time</b> 17:00		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Ashburton Road West 30 metres N of Parkway Circle									<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> V1 Hits Ped On Rd 1														
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5214	Junction Details:	Road Surface:	Dry		Severity:	Serious		Car	Ahea	N	S	1 Ped	M 33 Serious
OSGR:	378447 396985	Junction Control: n/a	Light Conditions:	Dark		No. of Vehicles:	1							
Speed Limit:	30	Ped Crossing:	Weather Conditions:	Fine		No. of Casualties:	1							
<b>Accident Reference Number:</b> M2033558			<b>Day:</b> Tuesday			<b>Contributory Factors</b>			<b>Date:</b> 06/07/2010			<b>Time</b> 17:20		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Tenax Road 50 metres N of Village Way									<b>Type Move From To Skid</b>			<b>Type Sex Age Sev Pupil</b>		
<b>Description:</b> Veh1 Trav S On Cycle Lane Veh2 Emerging To Turn Left Veh1 And Veh2 Collide														
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	A576	Junction Details:	Road Surface:	Dry		Severity:	Serious		DGWor	VLike	V1			
OSGR:	378509 397005	Junction Control: n/a	Light Conditions:	Light		No. of Vehicles:	2		DCPav	VLike	V1	p/c	Ahea	N S
Speed Limit:	40	Ped Crossing:	Weather Conditions:	Fine		No. of Casualties:	1		DFLoo	VLike	V2	Car	Start	W N

**Note: A road accident which occurs at or within 20m of a junction is coded as a junction accident**





# TRANSPORT FOR GREATER MANCHESTER



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**Location: Specified Area of  
Trafford Quays to A5081 Parkway,  
Trafford  
from 01/04/2009 to 31/03/2014**

<b>Injury Accidents</b>	<b>Apr-Dec 2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Jan-Mar 2014</b>	<b>Total</b>
Fatal	0	0	0	0	0	0	0
Serious	1	0	0	1	0	0	2
Slight	12	4	13	3	6	2	40
<b>Total</b>	13	4	13	4	6	2	42

# Standard Totals Report : Reported Road Injury Accidents for the Specified Area Along Trafford Quays to Parkway, from 01/04/2009 to 31/04/2014

## Accidents

Serious	2
Slight	40
<b>Total Accidents</b>	<b>42</b>

## Casualties By Age and Sex

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious					
Male	0	2	0	0	2
<b>Total</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
Slight					
Male	2	17	0	0	19
Female	1	37	2	0	40
<b>Total</b>	<b>3</b>	<b>54</b>	<b>2</b>	<b>0</b>	<b>59</b>
<b>Total Casualties</b>	<b>3</b>	<b>56</b>	<b>2</b>	<b>0</b>	<b>61</b>

## Casualties By Age and Class

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Serious					
Driver or rider	0	2	0	0	2
<b>Total</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
Slight					
Driver or rider	0	35	1	0	36
Veh or pillion pas	3	18	1	0	22
Pedestrian	0	1	0	0	1
<b>Total</b>	<b>3</b>	<b>54</b>	<b>2</b>	<b>0</b>	<b>59</b>
<b>Total Casualties</b>	<b>3</b>	<b>56</b>	<b>2</b>	<b>0</b>	<b>61</b>

## Cyclist (Rider and Pillion) and Pedestrian Casualties By Age

Severity	0 - 15	16 - 59	60 - 69	70 +	Total
Slight	0	2	0	0	2
<b>Total Casualties</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

## Casualties Broken Down By Type

Car (Driver)	0-15	16+	Total
Serious	0	1	1
Slight	0	30	30
<b>Total</b>	<b>0</b>	<b>31</b>	<b>31</b>
Car (Passenger)	0-15	16+	Total
Slight	3	19	22
<b>Total</b>	<b>3</b>	<b>19</b>	<b>22</b>
Pedestrian	0-15	16+	Total
Slight	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>
TWPV (Rider)	0-15	16+	Total
Serious	0	1	1
Slight	0	4	4
<b>Total</b>	<b>0</b>	<b>5</b>	<b>5</b>
Cyclist (Rider)	0-15	16+	Total
Slight	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>
Other (Driver)	0-15	16+	Total
Slight	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>Total</b>	<b>3</b>	<b>58</b>	<b>61</b>

# Standard Report - Reported Road Injury Accidents for the Specified Area Along Trafford Quays to Parkway, from 01/04/2009 to 31/04/2014

This printout has been generated from the Transport for Greater Manchester's database of road traffic accident records using the query system, GMAXI.

The road traffic accident database contains STATS19 data supplied by Greater Manchester Police and further validated by the Highways Forecasting and Analytical Services (HFAS) section of Transport for Greater Manchester. It is maintained by HFAS on behalf of the ten District Councils in Greater Manchester.

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Accident Reference Number: M2054202				Day: Sunday		Contributory Factors			Date: 27/11/2011					Time 14:00				
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details				
Location: Barton Dock Road 100 metres SE of Park Way									Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: All 4 Vehs In Queuing Traffic Heading Twds Trafford Centre Veh1 Failed To Brake In Time And Hits Veh2 Which In Turn Hits V2 Hits V3 Hits V4									Car	Ahea	SE	NW		1 Drv	M	29	Slight	
Locational Details				Conditions		Accident Details			Car	Waitg	SE	NW		2 Drv	M	20	Slight	
									Car	Waitg	SE	NW						
									Car	Waitg	SE	NW						
Road:	B5211		Junction Details:		Road Surface:	Dry	Severity:	Slight										
OSGR:	378015	396135	Junction Control: n/a		Light Conditions:	Light	No. of Vehicles:	4										
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:	2										

Accident Reference Number: M2025856				Day: Thursday		Contributory Factors			Date: 17/12/2009					Time 14:50				
Place Reported: Else				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details				
Location: Parkway 20 metres S of Barton Dock Road						DJudg Poss V2			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 And V2 Trav On Access Slip Road And V1 Collides With Rear Of V2									Car	Ahea	NE	SW						
Locational Details				Conditions		Accident Details			Car	Waitg	NE	SW		1 Drv	F	47	Slight	
Road:	B5211/B5211		Junction Details: Xrds		Road Surface:	Wet	Severity:	Slight										
OSGR:	377908	396184	Junction Control: TS		Light Conditions:	Light	No. of Vehicles:	2										
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:	1										

Accident Reference Number: M2014337				Day: Tuesday		Contributory Factors			Date: 28/04/2009				Time 18:56		
Place Reported: Else				District: Trafford											
Location: Barton Dock Road at junction with Parkway						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: Veh2 In Urmston Lane On Barton Dock Rd When Veh1 Changes Lane And Colls With Veh2						DSwer VLike V1			Type Move From To Skid	Type Sex Age Sev Pupil					
						DFLoo VLike V1			Car chlnL SE W						
						DSign VLike V1			Car Waitg SE W	1 Drv F 19 Slight					
Locational Details				Conditions		Accident Details									
Road:	B5211/B5211		Junction Details:	Rdbt		Road Surface:	Dry		Severity:	Slight					
OSGR:	377934 396187		Junction Control:	TS		Light Conditions:	Light		No. of Vehicles:	2					
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	1					
Accident Reference Number: M2044820				Day: Tuesday		Contributory Factors			Date: 05/04/2011				Time 19:40		
Place Reported: Scene				District: Trafford											
Location: Barton Dock Road at junction with Parkway						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Trav East To West V2 Trav West To East V2 T/r To Trav Sth V1 Coll R/o/s V2 V2 Spins Colls Lampost						DSpee VLike V1			Type Move From To Skid	Type Sex Age Sev Pupil					
						DATS Poss V1			Car Ahea SE NW	1 Drv M 53 Slight					
										3 Pas F 22 Slight					
									Car TurnR NW SW	2 Drv F 30 Slight					
Locational Details				Conditions		Accident Details									
Road:	B5211/A5081		Junction Details:	Xrds		Road Surface:	Dry		Severity:	Slight					
OSGR:	377920 396204		Junction Control:	TS		Light Conditions:	Light		No. of Vehicles:	2					
Speed Limit:	40		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	3					
Accident Reference Number: M2057379				Day: Monday		Contributory Factors			Date: 23/01/2012				Time 19:45		
Place Reported: Scene				District: Trafford											
Location: Barton Dock Road at junction with Parkway						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: Veh2 Trav Along Barton Dock Rd Veh1 Trav Opp Dir Turns R At Jct In Front Of Veh2 And Collision Occurs						DATS VLike V1			Type Move From To Skid	Type Sex Age Sev Pupil					
						DATS Poss V2			Car TurnR NW SW	1 Drv F 25 Slight					
						DefAT Poss V1			PCV Ahea SE NW						
						DJudg VLike V1									
						DFLoo VLike V1									
Locational Details				Conditions		Accident Details									
Road:	B5211/B5211		Junction Details:	Xrds		Road Surface:	Wet		Severity:	Slight					
OSGR:	377920 396205		Junction Control:	TS		Light Conditions:	Dark		No. of Vehicles:	2					
Speed Limit:	40		Ped Crossing:	TSX		Weather Conditions:	Fine		No. of Casualties:	1					
Accident Reference Number: M2022708				Day: Tuesday		Contributory Factors			Date: 20/10/2009				Time 19:00		
Place Reported: Scene				District: Trafford											
Location: Barton Dock Road at junction with Parkway						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Stops Red Ats. V2 Trav N/b Ats Changes To Green And Collision Occurs						DATS VLike V1			Type Move From To Skid	Type Sex Age Sev Pupil					
									Car TurnR NE SW	1 Drv F 20 Slight					
									Car Ahea SE NE	2 Drv F 22 Slight					
										3 Pas F 23 Slight					
										4 Pas F 23 Slight					
Locational Details				Conditions		Accident Details									
Road:	B5211/B5211		Junction Details:	Xrds		Road Surface:	Wet		Severity:	Slight					
OSGR:	377923 396211		Junction Control:	TS		Light Conditions:	Dark		No. of Vehicles:	2					
Speed Limit:	40		Ped Crossing:			Weather Conditions:	Rain		No. of Casualties:	4					

<b>Accident Reference Number:</b> M1081588			<b>Day:</b> Wednesday			<b>Contributory Factors</b>			<b>Date:</b> 08/01/2014			<b>Time</b> 22:00		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Barton Dock Road at junction with Park Way Southbound Off-slip road						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>				<b>Type</b>	<b>Sex Age Sev Pupil</b>
<b>Description:</b> Both Vehs Trav Se Barton Dock Rd. V1 Hits V2 Stationary At Ats						Slip	VLike	V1						
						DRain	VLike	V1						
						Car	Ahea	NW	SE				1 Drv	F 52 Slight
						Car	Waitg	NW	SE				2 Pas	F 19 Slight
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5211/B5211	Junction Details: Xrds	Road Surface:	Wet		Severity:		Slight						
OSGR:	377900 396231	Junction Control: TS	Light Conditions:	Dark		No. of Vehicles:	2							
Speed Limit:	40	Ped Crossing: TSX	Weather Conditions:	Rain		No. of Casualties:	2							
<b>Accident Reference Number:</b> M2050059			<b>Day:</b> Monday			<b>Contributory Factors</b>			<b>Date:</b> 08/08/2011			<b>Time</b> 06:45		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Park Way Exit Slip at junction with Barton Dock Road						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>				<b>Type</b>	<b>Sex Age Sev Pupil</b>
<b>Description:</b> V1 Colls Lampost On Exit Slip						DTired	Poss	V1						
						DDisIn	Poss	V1					1 Drv	M 30 Slight
						DIIIIns	Poss	V1						
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5211/B5211	Junction Details: Xrds	Road Surface:	Wet		Severity:		Slight						
OSGR:	377859 396236	Junction Control: TS	Light Conditions:	Light		No. of Vehicles:	1							
Speed Limit:	40	Ped Crossing:	Weather Conditions:	Rain		No. of Casualties:	1							
<b>Accident Reference Number:</b> M1083508			<b>Day:</b> Sunday			<b>Contributory Factors</b>			<b>Date:</b> 09/02/2014			<b>Time</b> 07:15		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Barton Dock Road at junction with Parkway						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>				<b>Type</b>	<b>Sex Age Sev Pupil</b>
<b>Description:</b> V1 Heads Nw Towards Trafford Centre On Barton Dock Rd. V2 Heads Away From M60 Parkway. V2 Crosses Parkway And Through Red Ats. Collision Occurs In Jct.						DATS	VLike	V1						
						DFLoo	VLike	V1						
						DCare	VLike	V1					1 Pas	F 58 Slight
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5211/B5211	Junction Details: Xrds	Road Surface:	Wet		Severity:		Slight						
OSGR:	377864 396245	Junction Control: TS	Light Conditions:	Light		No. of Vehicles:	2							
Speed Limit:	40	Ped Crossing:	Weather Conditions:	Rain		No. of Casualties:	1							
<b>Accident Reference Number:</b> M2045901			<b>Day:</b> Thursday			<b>Contributory Factors</b>			<b>Date:</b> 05/05/2011			<b>Time</b> 23:20		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Barton Dock Road at junction with Parkway						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>				<b>Type</b>	<b>Sex Age Sev Pupil</b>
<b>Description:</b> V1 Trav Nw Through Ats Jct V2 Trav Sw To Ne V1 Colls V2						DAGgr	Poss	V1						
						DSpee	Poss	V1					1 Drv	M 17 Slight
						DATS	Poss	V1						
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5211/A5081	Junction Details: Xrds	Road Surface:	Dry		Severity:		Slight						
OSGR:	377864 396246	Junction Control: TS	Light Conditions:	Dark		No. of Vehicles:	2							
Speed Limit:	40	Ped Crossing:	Weather Conditions:	Fine		No. of Casualties:	1							

Accident Reference Number: M2032089				Day: Saturday		Contributory Factors			Date: 29/05/2010				Time 14:15		
Place Reported: Scene				District: Trafford											
Location: Barton Dock Road at junction with Parkway						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Facing Wds Traford Centre V2 Approaching Jct From Trafford Centre When V1 T/r To Go Onto Parkway Through Not Right Turn V2 Hits V1						DITurn VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil		
						DFLoo VLike V1			Car TurnR SE NE				1 Pas M 16 Slight		
									Car Ahea NW SE				2 Drv F 43 Slight		
Locational Details				Conditions		Accident Details									
Road:	B5211/B5211		Junction Details: Xrds		Road Surface:	Wet		Severity:	Slight						
OSGR:	377867	396251	Junction Control: TS		Light Conditions:	Light		No. of Vehicles:	2						
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Rain		No. of Casualties:	2						

Accident Reference Number: M2021539				Day: Monday		Contributory Factors			Date: 21/09/2009				Time 07:07		
Place Reported: Scene				District: Trafford											
Location: Barton Dock Road at junction with Parkway						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: Veh1 Trav Nw Contravene No Right Turn Sign Colls With Veh2 Trav Se						DITurn VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil		
									Car TurnR SE NE				1 Drv M 51 Slight		
									HGV Ahea NW SE						
Locational Details				Conditions		Accident Details									
Road:	B5211/B5211		Junction Details: Xrds		Road Surface:	Dry		Severity:	Slight						
OSGR:	377873	396254	Junction Control: TS		Light Conditions:	Light		No. of Vehicles:	2						
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Fine		No. of Casualties:	1						

Accident Reference Number: M2027966				Day: Tuesday		Contributory Factors			Date: 16/02/2010				Time 12:05		
Place Reported: Scene				District: Trafford											
Location: Barton Dock Road at junction with Parkway						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Trav S/e Barton Dock Road Fails To Conform Red Ats Colls V2 Trav N/e Off Slip Road Of Parkway						DATS VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil		
									Car Ahea NW SE				1 Drv M 55 Slight		
									Car Ahea SW NE						
Locational Details				Conditions		Accident Details									
Road:	B5211/B5211		Junction Details: Xrds		Road Surface:	Wet		Severity:	Slight						
OSGR:	377869	396255	Junction Control: TS		Light Conditions:	Light		No. of Vehicles:	2						
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Fine		No. of Casualties:	1						

Accident Reference Number: M2066498				Day: Thursday		Contributory Factors			Date: 08/11/2012				Time 08:13		
Place Reported: Scene				District: Trafford											
Location: Barton Dock Road at junction with Park Way						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Rides Into Side Of V2						DFLoo VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil		
						DJudg VLike V1			p/c Ahea NW SE				1 Rid M 16 Slight		
									HGV TurnR SE NE						
Locational Details				Conditions		Accident Details									
Road:	B5211/B5211		Junction Details: Xrds		Road Surface:	Dry		Severity:	Slight						
OSGR:	377869	396256	Junction Control: TS		Light Conditions:	Light		No. of Vehicles:	2						
Speed Limit:	40		Ped Crossing: TSX		Weather Conditions:	Fine		No. of Casualties:	1						



Accident Reference Number: M1074740				Day: Sunday		Contributory Factors			Date: 23/06/2013				Time 16:59			
Place Reported: Scene				District: Trafford												
Location: Parkway 130 metres NE of Barton Dock Road						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: V2 Travels Sw On Parkway South, Followed By V1. V2 Slows Down, V1 Brakes And Skids Into Rear Of V2.						DFLoo VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil			
						DBrake VLike V1			Car Ahea NE SW Skid							
						DJudg Poss V1			Car Ahea NE SW				1 Drv F 43 Slight			
Locational Details				Conditions		Accident Details										
Road: A5081		Junction Details:		Road Surface: Dry		Severity: Slight										
OSGR: 377966 396345		Junction Control: n/a		Light Conditions: Light		No. of Vehicles: 2										
Speed Limit: 40		Ped Crossing:		Weather Conditions: Fine		No. of Casualties: 1										
Accident Reference Number: M2025163				Day: Tuesday		Contributory Factors			Date: 08/12/2009				Time 20:00			
Place Reported: Else				District: Trafford												
Location: Trafford Centre Slip Road at junction with Peel Circle, Barton Dock Road						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: V2 Stops At Jct Giving Way, V1 Collides With R/o/s/ V2						DLoss Poss V1			Type Move From To Skid				Type Sex Age Sev Pupil			
									Car Ahea SW NW							
									Car wtgTL SW NW				1 Drv F 38 Slight			
Road: C/B5211				Junction Details: Rdbt		Road Surface: Wet		Severity: Slight						2 Pas F 55 Slight		
OSGR: 377374 396534		Junction Control: GW		Light Conditions: Dark		No. of Vehicles: 2						3 Pas F 51 Slight				
Speed Limit: 30		Ped Crossing:		Weather Conditions: Fine		No. of Casualties: 3										
Accident Reference Number: M2019689				Day: Friday		Contributory Factors			Date: 31/07/2009				Time 17:20			
Place Reported: Else				District: Trafford												
Location: Barton Dock Road at junction with Peel Circle						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: Veh1 Trav Barton Dock Rd From Stretford To Eccles Dir Veh2 Exits Trafford Centre Car Park Rd From Left Colls Rear Passenger Side Of Veh1									Type Move From To Skid				Type Sex Age Sev Pupil			
									Car Ahea SW NE				1 Drv M 49 Slight			
									Car Ahea NW SE							
Locational Details				Conditions		Accident Details										
Road: B5211/B5211		Junction Details: Rdbt		Road Surface: Dry		Severity: Slight										
OSGR: 377375 396541		Junction Control: GW		Light Conditions: Light		No. of Vehicles: 2										
Speed Limit: 30		Ped Crossing:		Weather Conditions: Fine		No. of Casualties: 1										
Accident Reference Number: M1074788				Day: Thursday		Contributory Factors			Date: 06/06/2013				Time 17:00			
Place Reported: Else				District: Trafford												
Location: Barton Dock Road at junction with Peel Circle						Factor Conf Ref			Vehicle Details				Casualty Details			
Description: V2 Trav W Barton Dock Rd Stat At Peel Circle, When V1 Shunted Into Rear Of V2									Type Move From To Skid				Type Sex Age Sev Pupil			
									Car Ahea SE W							
									Car Ahea SE W				1 Drv F 49 Slight			
Locational Details				Conditions		Accident Details										
Road: B5211/U		Junction Details: Rdbt		Road Surface: Dry		Severity: Slight										
OSGR: 377421 396558		Junction Control: GW		Light Conditions: Light		No. of Vehicles: 2										
Speed Limit: 40		Ped Crossing:		Weather Conditions: Fine		No. of Casualties: 1										

<b>Accident Reference Number:</b> M2056954			<b>Day:</b> Thursday			<b>Contributory Factors</b>			<b>Date:</b> 09/02/2012			<b>Time</b> 20:25		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Peel Circle at junction with Barton Dock Road						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>			<b>Type</b>	<b>Sex</b>	<b>Age</b>
<b>Description:</b> V2 Is In Front Of V1 V2 Thinks V1 Will Be Taking Same Exit So Moves Into 2nd Lane Of Barton Dock Road						Slip	VLike	V1						
V1 Then Collides With V2						Slip	VLike	V2	Car	Rben	SE N	1 Pas	F	40
						DJudg	Poss	V1	Car	TurnL	SE N	2 Pas	F	21
						DJudg	Poss	V2						
						DRain	VLike	V1						
						DRain	VLike	V2						
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5211/B5211	Junction Details:	Rdbt	Road Surface:	Wet	Severity:		Slight						
OSGR:	377350 396593	Junction Control:	GW	Light Conditions:	Dark	No. of Vehicles:	2							
Speed Limit:	40	Ped Crossing:		Weather Conditions:	Rain	No. of Casualties:	2							
<b>Accident Reference Number:</b> M2027517			<b>Day:</b> Saturday			<b>Contributory Factors</b>			<b>Date:</b> 30/01/2010			<b>Time</b> 15:10		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Barton Dock Road at junction with Phoenix Way						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>			<b>Type</b>	<b>Sex</b>	<b>Age</b>
<b>Description:</b> V2 Slows To Give Way At Roundabout V1 Colls Rear V2						DFluo	VLike	V1						
						DJudg	VLike	V1	Car	Ahea	NW SE	1 Drv	F	40
									Car	Ahea	NW SE	2 Pas	F	64
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5211/U	Junction Details:	Rdbt	Road Surface:	Dry	Severity:		Slight						
OSGR:	377367 396608	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:	2							
Speed Limit:	40	Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:	2							
<b>Accident Reference Number:</b> M1073748			<b>Day:</b> Thursday			<b>Contributory Factors</b>			<b>Date:</b> 23/05/2013			<b>Time</b> 18:38		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Barton Dock Road at junction with Phoenix Way						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>			<b>Type</b>	<b>Sex</b>	<b>Age</b>
<b>Description:</b> V1 Brakes Suddenly On Roundabout, V2 Swerves To Avoid And Coll With V3						DAggr	Poss	V1						
						DCare	Poss	V1	Car	TurnR	W N	1 Drv	F	64
						DPanic	Poss	V2	Car	TurnR	W N			
									PCV	TurnR	W N			
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5211/U	Junction Details:	Rdbt	Road Surface:	Dry	Severity:		Slight						
OSGR:	377382 396609	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:	3							
Speed Limit:	40	Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:	1							
<b>Accident Reference Number:</b> M2016315			<b>Day:</b> Tuesday			<b>Contributory Factors</b>			<b>Date:</b> 02/06/2009			<b>Time</b> 20:10		
<b>Place Reported:</b> Else			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Phoenix Way 30 metres N of Barton Dock Road						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>			<b>Type</b>	<b>Sex</b>	<b>Age</b>
<b>Description:</b> Veh2 Trav Along Minor Rd N To S Veh1 Facing Opp Dir Does Complete U Turn In Doing So Colls With O/s Of Veh2						DTurn	VLike	V1						
						DFluo	VLike	V1	Car	Uturn	SW SW	1 Drv	F	47
									Car	Ahea	NE SW			
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	U	Junction Details:		Road Surface:	Dry	Severity:		Slight						
OSGR:	377425 396623	Junction Control:	n/a	Light Conditions:	Light	No. of Vehicles:	2							
Speed Limit:	30	Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:	1							

Accident Reference Number: M2049624				Day: Thursday		Contributory Factors			Date: 04/08/2011					Time 09:25					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Barton Dock Road at junction with Traders Avenue										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Tarv Barton Dock Rd From Stretford Approaches R/bout At Jct Traders Ave Stops At Givew Ay Then Enters R/bout Lost Coontrol On Wet Road Bike Falls										m/p	Ahea	SE	NW	Skid	1 Rid	M	17	Slight	
Locational Details				Conditions		Accident Details													
Road:	B5211/B5211		Junction Details:	Rdbt	Road Surface:	Wet	Severity:	Slight											
OSGR:	377202	396750	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:	1											
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Rain	No. of Casualties:	1											
Accident Reference Number: M2056551				Day: Sunday		Contributory Factors			Date: 22/01/2012					Time 09:30					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Barton Dock Road at junction with Traders Avenue										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Trav Se Barton Dock Rd Diesel On Road Causing Rider V1 To Fall From M/c							Dposit VLike V1 Slip Poss V1			m/cl	Ahea	NW	SE	Skid	1 Rid	M	28	Serious	
Locational Details				Conditions		Accident Details													
Road:	B5211/U		Junction Details:	Rdbt	Road Surface:	Wet	Severity:	Serious											
OSGR:	377216	396759	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:	1											
Speed Limit:	40		Ped Crossing:		Weather Conditions:	R&W	No. of Casualties:	1											
Accident Reference Number: M2049473				Day: Sunday		Contributory Factors			Date: 31/07/2011					Time 13:10					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Barton Dock Road at junction with Traders Avenue							DJnRst Poss V1 DJudg Poss V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Enters R/bout Colls V2 Staty In Queue On Roundabout Pushes V2 Into V3 Also Staty In Queue										LGV Car Car	Start Waitg Waitg	NW NW NW	SE SE SE						
Road:	B5211/U		Junction Details:	Rdbt	Road Surface:	Dry	Severity:	Slight						1 Pas	F	30	Slight		
OSGR:	377169	396782	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:	3						2 Pas	F	23	Slight		
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:	2											
Accident Reference Number: M2019924				Day: Tuesday		Contributory Factors			Date: 18/08/2009					Time 18:10					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Traders Avenue at junction with Barton Dock Road							DCare VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: Veh2 Trav Se In Lane 1 Of 2 Veh1 Trav Se In Lane 2 Of 2 Veh2 Enter R/bout At Jct Veh1 Att To Turn L Veh2 Clips Veh1 Flipping Veh1 Onto Roof										Car	Lbend	NW	NE	O/tn	1 Drv	M	18	Serious	
Locational Details				Conditions		Accident Details				PCV	Lbend	NW	SE		2 Pas	F	16	Slight	
Road:	U/B5211		Junction Details:	Rdbt	Road Surface:	Dry	Severity:	Serious											
OSGR:	377178	396785	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:	2											
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:	2											

Accident Reference Number: M2017732				Day: Wednesday		Contributory Factors			Date: 01/07/2009					Time 19:15					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Traders Avenue 20 metres N of Barton Dock Road							PllIns VLike C1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: Pedestrian Suffer A Fit And Staggers Into Rd Btwn Staty Vehs Holds Onto Veh To Steady Herself Veh Moves Off Pedestrian Falls To Floor Veh Makes Off										Car	Waitg	NW	SE		1 Ped	F	24	Slight	
Locational Details				Conditions		Accident Details													
Road:	U/B5211		Junction Details:		Rdbt	Road Surface:	Dry		Severity:	Slight									
OSGR:	377211	396785	Junction Control:		GW	Light Conditions:	Light		No. of Vehicles:	1									
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	1									
Accident Reference Number: M3043050				Day: Tuesday		Contributory Factors			Date: 22/02/2011					Time 22:30					
Place Reported: Scene				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Barton Dock Road 100 metres N of Traders Ave							DFLoo VLike V1			Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Staty In Bus Lane/stop As Pasengers Alights Veh V1 Pulls Into C/way And Is Struck On O/s/r By V2 Trav West On Barton Dock Rd Rider Fell To Floor							DWscr Poss V1			Car	Start	SE	NW		1 Rid	M	17	Slight	
							DStat VLike V1			m/c	Ahea	SE	NW						
Locational Details				Conditions		Accident Details													
Road:	B5211		Junction Details:			Road Surface:	Dry		Severity:	Slight									
OSGR:	377077	396823	Junction Control:		n/a	Light Conditions:	Dark		No. of Vehicles:	2									
Speed Limit:	40		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	1									
Accident Reference Number: M2042696				Day: Wednesday		Contributory Factors			Date: 16/02/2011					Time 11:52					
Place Reported: Else				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Trader Avenue 75 metres E of Barton Dock Road										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V2 Approaching R/bout V1 Colls V2 V1 Stopped But Did Not Give Details										MGV	Ahea	SW	NE		1 Drv	F	31	Slight	
										Car	Ahea	SW	NE						
Locational Details				Conditions		Accident Details													
Road:	U/U		Junction Details:		Rdbt	Road Surface:	Dry		Severity:	Slight									
OSGR:	377226	396834	Junction Control:		GW	Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Fine		No. of Casualties:	1									
Accident Reference Number: M2015958				Day: Sunday		Contributory Factors			Date: 17/05/2009					Time 19:50					
Place Reported: Else				District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details					
Location: Barton Dock Road 200 metres N of Traders Ave										Type	Move	From	To	Skid	Type	Sex	Age	Sev	Pupil
Description: V1 Colls With Rear V2 V1 Fts										Car	Ahea	SE	NW		1 Drv	F	23	Slight	
										Car	Waitg	SE	NW						
Locational Details				Conditions		Accident Details													
Road:	B5211		Junction Details:			Road Surface:	Wet		Severity:	Slight									
OSGR:	376998	396882	Junction Control:		n/a	Light Conditions:	Light		No. of Vehicles:	2									
Speed Limit:	30		Ped Crossing:			Weather Conditions:	Rain		No. of Casualties:	1									

Accident Reference Number: M2046742				Day: Thursday		Contributory Factors			Date: 26/05/2011				Time 11:30		
Place Reported: Scene				District: Trafford											
Location: Barton Dock Road 140 metres S of Ellesmere Circle						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 On Exit Road Of Car Craft Jct Barton Dock Rd V2 Trav From Ellesmere (Dumplington) Circle Turning Onto Barton Dock Rd V1 Pulls Out Infront Of V2 Coll Occurs						DSign Poss V2			Type Move From To Skid				Type Sex Age Sev Pupil		
						DFLoo Poss V1			Car Start NE SE						
						DJudg Poss V1			Car Ahea NW SE				1 Pas M 0 Slight		
Locational Details				Conditions		Accident Details									
Road:	B5211/U		Junction Details: ent		Road Surface:	Wet		Severity:		Slight					
OSGR:	376963	396948	Junction Control: GW		Light Conditions:	Light		No. of Vehicles:		2					
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Rain		No. of Casualties:		1					

Accident Reference Number: M2021899				Day: Friday		Contributory Factors			Date: 02/10/2009				Time 14:00		
Place Reported: Scene				District: Trafford											
Location: Trafford Boulevard 60 metres S of Barton Dock Road						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: Veh1 Trav On Inside Lane Twds R/bout And Braked For Standing Traffic Veh Began To Skid And Veh1 Swerved Into Rear Of Veh2 Which Was Staty						Slip VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil		
									Car Stopg SW NE Skid						
									Taxi Waitg SW NE				1 Drv M 29 Slight		
													2 Pas M 19 Slight		
Locational Details				Conditions		Accident Details									
Road:	B5214		Junction Details:		Road Surface:	Wet		Severity:		Slight					
OSGR:	376825	397054	Junction Control: n/a		Light Conditions:	Light		No. of Vehicles:		2					
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Rain		No. of Casualties:		2					

Accident Reference Number: M2024926				Day: Thursday		Contributory Factors			Date: 03/12/2009				Time 12:27		
Place Reported: Scene				District: Trafford											
Location: Trafford Boulevard 20 metres S of Barton Dock Road						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Trav Barton Dock Rd Goes Onto Trafford Boulevard Due To Heavy Downpoor Skids Strikes Lampost						Slip VLike V1			Type Move From To Skid				Type Sex Age Sev Pupil		
						DJudg Poss V1			Car Lbend SE SW Skid				1 Drv F 25 Slight		
						DFast Poss V1									
Locational Details				Conditions		Accident Details									
Road:	B5214/B5211		Junction Details: Rdbt		Road Surface:	Wet		Severity:		Slight					
OSGR:	376865	397070	Junction Control: GW		Light Conditions:	Light		No. of Vehicles:		1					
Speed Limit:	40		Ped Crossing:		Weather Conditions:	Rain		No. of Casualties:		1					

Accident Reference Number: M2047504				Day: Sunday		Contributory Factors			Date: 12/06/2011				Time 16:55		
Place Reported: Else				District: Trafford											
Location: Trafford Boulevard at junction with Barton Dock Road						Factor Conf Ref			Vehicle Details				Casualty Details		
Description: V1 Trav In R/bout Comes Off Onto Trafford Boulevard When Hit In Rear By V2 Trav Off Barton Dock Rd In Wrong Lane									Type Move From To Skid				Type Sex Age Sev Pupil		
									Car TurnL NE SW				1 Drv M 46 Slight		
													2 Pas F 9 Slight		
									Car TurnR SE NW						
Locational Details				Conditions		Accident Details									
Road:	B5214/B5211		Junction Details: Rdbt		Road Surface:	Wet		Severity:		Slight					
OSGR:	376877	397070	Junction Control: GW		Light Conditions:	Light		No. of Vehicles:		2					
Speed Limit:	30		Ped Crossing:		Weather Conditions:	Rain		No. of Casualties:		2					

Accident Reference Number: M2023869					Day: Thursday		Contributory Factors			Date: 12/11/2009					Time 11:14				
Place Reported: Scene					District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details				
Location: Barton Dock Road at junction with Redclyffe Road					Factor Conf Ref			Type Move From To Skid					Type Sex Age Sev Pupil						
Description: V1 Trav On R/about With Barton Dock Rd To N/side. V2 Enters R/about, V1 + V2 Collide					DGWor VLike V2			Car					1 Drv F 50 Slight						
Locational Details					Conditions		Accident Details												
Road: B5211/B5211 Junction Details: Rdbt					Road Surface: Dry		Severity: Slight			Car									
OSGR: 376900 397075 Junction Control: GW					Light Conditions: Light		No. of Vehicles: 2			Car									
Speed Limit: 30 Ped Crossing:					Weather Conditions: Fine		No. of Casualties: 1												
Accident Reference Number: M1080276					Day: Tuesday		Contributory Factors			Date: 19/11/2013					Time 00:01				
Place Reported: Scene					District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details				
Location: Trafford Boulevard at junction with Redclyffe Road (Ellesmere Circle)					Factor Conf Ref			Type Move From To Skid					Type Sex Age Sev Pupil						
Description: All Vehs Trav Ne Trafford Boulevard. V1 In Lane 2, V2 In Lane 3. V1 Cuts Across Path Of V2 When Crossing Into Lane 3 And Collision Occurs.					DTurn VLike V1			Car					1 Drv F 35 Slight						
Locational Details					Conditions		Accident Details			Car									
Road: B5214/B5211 Junction Details: Rdbt					Road Surface: Dry		Severity: Slight			Car									
OSGR: 376867 397085 Junction Control: GW					Light Conditions: Dark		No. of Vehicles: 2												
Speed Limit: 30 Ped Crossing:					Weather Conditions: Fine		No. of Casualties: 1												
Accident Reference Number: M1073643					Day: Monday		Contributory Factors			Date: 27/05/2013					Time 14:30				
Place Reported: Scene					District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details				
Location: Redcliffe Road at junction with Barton Dock Road					Factor Conf Ref			Type Move From To Skid					Type Sex Age Sev Pupil						
Description: V2 Trav Se On B5211 Stops On Ellesmere Circle As V1 Enters R/bout From Ashburton Rd West. V1 Trav Se On R/bout Collides With Rear Of V2					DJudg VLike V1			Car					1 Drv F 42 Slight						
Locational Details					Conditions		Accident Details			Car					2 Pas F 43 Slight				
Road: B5211/B5214 Junction Details: Rdbt					Road Surface: Wet		Severity: Slight								3 Pas M 14 Slight				
OSGR: 376928 397108 Junction Control: GW					Light Conditions: Light		No. of Vehicles: 2								4 Pas F 19 Slight				
Speed Limit: 30 Ped Crossing:					Weather Conditions: Rain		No. of Casualties: 4												
Accident Reference Number: M2033173					Day: Tuesday		Contributory Factors			Date: 22/06/2010					Time 17:40				
Place Reported: Scene					District: Trafford		Factor Conf Ref			Vehicle Details					Casualty Details				
Location: Ashburton Road West at junction with Redclyffe Road					Factor Conf Ref			Type Move From To Skid					Type Sex Age Sev Pupil						
Description: V1 Trav S Attempts To O/take V2 Both Vehicles Collide					DJudg VLike V1			m/p					1 Rid M 35 Slight						
Locational Details					Conditions		Accident Details			Car									
Road: B5214/B5211 Junction Details: Rdbt					Road Surface: Dry		Severity: Slight												
OSGR: 376933 397125 Junction Control: GW					Light Conditions: Light		No. of Vehicles: 2												
Speed Limit: 30 Ped Crossing:					Weather Conditions: Fine		No. of Casualties: 1												



<b>Accident Reference Number:</b> M2041403			<b>Day:</b> Tuesday			<b>Contributory Factors</b>			<b>Date:</b> 18/01/2011			<b>Time</b> 22:40		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Ashburton Road West at junction with Redclyffe Road						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>				<b>Type</b>	<b>Sex Age Sev Pupil</b>
<b>Description:</b> V2 Trav Ne On Trafford Boulevard As Gets To R/bout At Dumplington Circle V1 Trav Se On R/bout Into Path V2 V2 Swerves To Avoid V1 Colls Tree						DFast	Poss	V1						
						DFLoo	Poss	V1	Car	Ahea	SW	NE		
						DJudg	Poss	V1	Car	Ahea	NW	SE	1 Pas	F 20 Slight
						DCare	Poss	V1						
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5214/B5211	Junction Details:	Rdbt	Road Surface:	Dry	Severity:		Slight						
OSGR:	376908 397133	Junction Control:	GW	Light Conditions:	Dark	No. of Vehicles:		2						
Speed Limit:	30	Ped Crossing:		Weather Conditions:	Fine	No. of Casualties:		1						
<b>Accident Reference Number:</b> M2048414			<b>Day:</b> Saturday			<b>Contributory Factors</b>			<b>Date:</b> 09/07/2011			<b>Time</b> 04:14		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Redclyffe Road at junction with Trafford Boulevard						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>				<b>Type</b>	<b>Sex Age Sev Pupil</b>
<b>Description:</b> Veh1 Loses Control On Roundabout Leaves C/way And Colls With Tree														
						Car	TurnR	N SE	Skid	1 Pas	F 16	Slight		
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5211/B5214	Junction Details:	Rdbt	Road Surface:	Wet	Severity:		Slight						
OSGR:	376910 397133	Junction Control:	GW	Light Conditions:	Dark	No. of Vehicles:		1						
Speed Limit:	30	Ped Crossing:		Weather Conditions:	Rain	No. of Casualties:		1						
<b>Accident Reference Number:</b> M1076809			<b>Day:</b> Friday			<b>Contributory Factors</b>			<b>Date:</b> 06/09/2013			<b>Time</b> 19:03		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Redcliffe Road at junction with Ashburton Road West						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>				<b>Type</b>	<b>Sex Age Sev Pupil</b>
<b>Description:</b> V1 (Motor Cycle) And V2 Trav Se Redclyffe Rd, V2 Skids C1 Falls Off V2 And Slides Into V1						Dposit	VLike	V1						
						Dposit	VLike	V2	m/s	Ahea	NW	SE	1 Rid	F 28 Slight
						Car	Ahea	NW	SE					
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5211/B5214	Junction Details:	Rdbt	Road Surface:	Wet	Severity:		Slight						
OSGR:	376891 397139	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:		2						
Speed Limit:	30	Ped Crossing:		Weather Conditions:	Rain	No. of Casualties:		1						
<b>Accident Reference Number:</b> M2051606			<b>Day:</b> Saturday			<b>Contributory Factors</b>			<b>Date:</b> 17/09/2011			<b>Time</b> 14:40		
<b>Place Reported:</b> Scene			<b>District:</b> Trafford			<b>Factor Conf Ref</b>			<b>Vehicle Details</b>			<b>Casualty Details</b>		
<b>Location:</b> Redclyffe Road at junction with Ashburton Road West						<b>Type</b>	<b>Move</b>	<b>From To</b>	<b>Skid</b>				<b>Type</b>	<b>Sex Age Sev Pupil</b>
<b>Description:</b> V1 Trav Redclyffe Rd Approaching R/bout Driver Distracted And Bumps Rear Of V2 V2 Into Rear V3						Slip	VLike	V1						
						DFog	Poss	V1	Car	Stopg	NW	SE		
									Taxi	Stopg	NW	SE	1 Drv	M 35 Slight
									Car	Stopg	NW	SE		
<b>Locational Details</b>			<b>Conditions</b>			<b>Accident Details</b>								
Road:	B5211/B5214	Junction Details:	Rdbt	Road Surface:	Wet	Severity:		Slight						
OSGR:	376891 397143	Junction Control:	GW	Light Conditions:	Light	No. of Vehicles:		3						
Speed Limit:	30	Ped Crossing:		Weather Conditions:	Rain	No. of Casualties:		1						

## Abbreviations used in GMAXI Reports for New Contributory Factors - 2005/06

**WARNING: Please note that -**

**Codes 101 to 999 only relate to accidents from 1 April 2005. - New National Factors introduced by DfT**

**Codes 1001 to 1154 relate to accidents from 1 April 1999 to 31 March 2005 only. - Local Factors introduced**

**Accidents before 1 April 1999 do not have contributory factors attached.**

Code	ContribFactor1Name	ContribFactor1Abb
0	None	
101	Poor or defective road surface	Surf
102	Deposit on road (eg oil, mud, chippings)	Dposit
103	Slippery road (due to weather)	Slip
104	Inadequate/masked signs or road markings	Mark
105	Defective traffic signals	DefATS
106	Traffic calming (eg speed cushions, road humps, chicanes)	TCalm
107	Temporary road layout (eg contraflow)	TmpRd
108	Road layout (eg bend, hill, narrow carriageway)	RdLay
109	Animal or object in carriageway	ObjInC
201	Tyres illegal, defective or under inflated	VTyres
202	Defective lights or indicators	VLight
203	Defective brakes	VBrake
204	Defective steering or suspension	VSteer
205	Defective or missing mirrors	VMirr
206	Overloaded or poorly loaded vehicle or trailer	VLoad
301	Disobeyed automatic traffic signal	DATS
302	Disobeyed Give Way or Stop sign or markings	DGWorS
303	Disobeyed double white line	DWhite
304	Disobeyed pedestrian crossing facility	DPedX
305	Illegal turn or direction of travel	DITurn
306	Exceeding speed limit	DSpeed
307	Travelling too fast for conditions	DFast
308	Following too close	DTgate
309	Vehicle travelling along pavement	DPave
310	Cyclist entering road from pavement	DCPave
401	Junction overshoot	DJnOvr
402	Junction restart	DJnRst
403	Poor turn or manoeuvre	DTurn
404	Failed to signal/misleading signal	DSign
405	Failed to look properly	DFLook
406	Failed to judge other person's path or speed	DJudge
407	Passing too close to cyclist, horse rider or pedestrian	DClose
408	Sudden braking	DBrake
409	Swerved	DSwerv
410	Loss of control	DLossC
501	Impaired by alcohol	DAlcoh
502	Impaired by drugs (illicit or medicinal)	DDrugs
503	Fatigue	DTired
504	Uncorrected, defective eyesight	DEye
505	Illness or disability, mental or physical	DIllns
506	Not displaying lights at night or in poor visibility	DNoLit
507	Cyclist wearing dark clothing at night	DCDark
508	Driver using mobile phone	DMobPh
509	Distraction in vehicle	DDisIn
510	Distraction outside vehicle	DDisOu
601	Aggressive driving	DAggre
602	Careless/reckless/in a hurry	DCare

603	Nervous/uncertain/panic	DPanic
604	Driving too slow or conditions or slow vehicle (eg tractor)	DSlow
605	Learner or inexperienced driver/rider	DLearn
606	Inexperience of driving on the left	DInDrL
607	Inexperience with type of vehicle	DInVeh
701	Stationary or parked vehicle(s)	DStat
702	Vegetation	DVeg
703	Road layout (eg bend, winding road, hill crest)	DRdLay
704	Buildings, road signs, street furniture	DBuild
705	Dazzling headlights	DHLigt
706	Dazzling sun	DSun
707	Rain, sleet, snow, or fog	DRain
708	Spray from other vehicles	DFog
709	Visor or windscreen dirty or scratched	DSpray
710	Vehicle blind spot	DWscrn
801	Crossed road masked by stationary or parked vehicle	PXMask
802	Failed to look properly	PFLook
803	Failed to judge vehicle's path or speed	PJudge
804	Wrong use of pedestrian crossing facility	PPedX
805	Dangerous action in carriageway (eg playing)	PDange
806	Impaired by alcohol	PAlcoh
807	Impaired by drugs (illicit or medicinal)	PDrugs
808	Careless/reckless/in a hurry	PCare
809	Pedestrian wearing dark clothing at night	PCloth
810	Disability or illness, mental or physical	PIllns
901	Stolen vehicle	StoVeh
902	Vehicle in course of crime	VCrime
903	Emergency vehicle on call	EmVeh
904	Vehicle door opened or closed negligently	VDoor
999	Other	Other
1001	Failed to stop (mandatory sign)	Fstop
1002	Failed to give way	Fgive
1003	Failed to avoid pedestrian (pedestrian not to blame)	FAPed
1004	Failed to avoid vehicle or object in carriageway	FAObj
1005	Failure to signal/misleading signal	Fsig
1006	Loss of control of vehicle	Loss
1007	Pedestrian entered carriageway without due care	Ped
1008	Passenger fell in or near PSV	Pfell
1009	Swerved to avoid object in carriageway	Swerv
1010	Sudden braking	Brake
1011	Poor turn/manoeuvre	Turn
1012	Poor overtaking	Over
1013	Drove wrong way (e.g. 1-way street)	1Way
1014	Opening door carelessly	Door
1015	Other	Other
1101	Impairment alcohol	Alcoh
1102	Impairment drugs	Drugs
1103	Impairment fatigue	Tired
1104	Impairment illness	Ill
1105	Distraction stress/emotional state of mind	Stress
1106	Distraction physical in/on vehicle	DPhIn
1107	Distraction physical outside vehicle	DPhOut
1108	Behaviour panic	Panic
1109	Behaviour careless/thoughtless/reckless	Care
1110	Behaviour nervous/uncertain	Nerve
1111	Behaviour in a hurry	Hurry

1112	Failure to judge other person's path or speed	Fjudg
1113	Disability	Disab
1114	Failed to look	F2look
1115	Looked but did not see	Nsee
1116	Inattention	Inatt
1117	Person hit wore dark or inconspicuous clothing	Cloth
1118	Other (Personal details)	Pother
1119	Crossed from behind parked vehicle etc	Cross
1120	Ignored lights at crossing	Xlight
1121	Excessive Speed	Speed
1122	Following too close	Tgate
1123	Inexperience of driving	InDri
1124	Inexperience of vehicle	InVeh
1125	Interaction or competition with other road users	Users
1126	Aggressive driving	Aggr
1127	Lack of judgement of own path	Judge
1128	Tyres wrong pressure	Press
1129	Tyres deflation before impact	Deflat
1130	Tyres worn/insufficient tread	Tread
1131	Defective lights or signals	Signal
1132	Defective brakes	Brakes
1133	Other (Vehicle defects)	Vother
1134	Site details poor road surface	Surf
1135	Site details poor/no street lighting	Lightg
1136	Site details inadequate signing	Sign
1137	Site details steep hill	Hill
1138	Site details narrow road	Narr
1139	Site details bend/winding road	Rbend
1140	Site details roadworks	Works
1141	Slippery road	Slip
1142	High winds	Winds
1143	Earlier accident	Earli
1144	Other (Local conditions)	Lother
1145	View windows obscured	Obs
1146	View glare from sun	Glare
1147	View glare from headlights	Head
1148	Surroundings bend/winding road	Bend
1149	Surroundings stationary parked vehicle	Stat
1150	Surroundings moving vehicle	Move
1151	Surroundings buildings, fences, vegetation etc	Fence
1152	Weather (e.g. mist or sleet)	Weath
1153	Failed to see pedestrian or vehicle in blindspot	Blind
1154	Animal out of control	Animal
9999	GMP Out of Range	OoR

## **APPENDIX H      Old Trafford Football Stadium Event Observations**

This appendix provides a summary of pre and post-match conditions in and around the Old Trafford Football Stadium and route of the TPL as observed during a football match in 2013.

### **H.1      Pre-Match Conditions**

In the Trafford Wharf Road area the majority of private off-street car parks (POSCPs) operate as controlled (charged) match time car parking. Numerous POSCPs were located along Trafford Wharf Road in the area between Sir Alex Ferguson Way and the Imperial War Museum (IWMN). The most heavily used of these POSCPs was the triangular strip of land (understood to form part of Sam Platts) between the north side of Wharf End and the Manchester Ship Canal (MSC) which would form part of the proposed Metrolink alignment.

In the pre-match period the dominant pedestrian movements were from Trafford Road (presumably from the Exchange Quay stop) and from the Waterfront area to the west. From the east pedestrian movements predominantly headed west along Wharf End and then south along Trafford Wharf Road around the rear of the Hilti complex, crossing at the pedestrian refuge on Trafford Wharf Road, albeit in a relatively hap-hazard manner, and hindered by vehicles passing in both directions. The pedestrian movements from the west originated in the Lowry / MediaCityUK area, crossing the Lowry bridge, walking eastbound along the canal and then accessing Trafford Wharf Road via the signed footpath located between Waterside and Sir Alex Ferguson Way. The pedestrians then crossed at the refuge immediately adjacent to the path, before walking east along the south side of Trafford Wharf Road to Sir Alex Ferguson Way.

Traffic was generally free flowing although there were periods of congestion as vehicles queuing to gain access to off-street car parks, rather than due to capacity related issues. Traffic management measures were put in place and the eastbound section of Wharfside Way, between Sir Matt Busby Way and A5063 Trafford Road, was closed.

### **H.2      Post-Match**

On the key highway links Trafford Wharf Road was noticeably busier than pre-match. Movements on Wharfside Way were significantly impacted by the match traffic management which closed down the Wharfside Way / Sir Alex Ferguson Way junction until approximately 40-50 minutes after the match end (see later paragraphs for more detail).

Approximately 10-minutes before the match-end a large number of vehicles (cars, private hire taxis and coaches) pulled up on Trafford Wharf Road (on both sides) to wait to pick up spectators. The presence of these vehicles restricted the carriageway width and combined with the pedestrian movements over Trafford Wharf Road added to the traffic congestion that was developing.

In terms of post-match traffic activity, three distinct phases were observed:

- Phase 1 (Approximately 20-minutes after match end): First surge of traffic along Trafford Wharf Road (eastbound) with queues of vehicles building up and stretching back from the Wharf End / Trafford Road junction to and through the Sir Alex Ferguson Way junction
- Phase 2 (Approximately 30-minutes after match end): The above surge abates and eastbound queuing begins to dissipate. At the same time the movements southbound on Sir Alex Ferguson Way begin to block back to the Trafford Wharf Road junction due to the closure of the Wharfside Way junction.
- Phase 3 (approximately 40 to 50-minutes after match end): Wharfside Way / Sir Alex Ferguson Way junction is opened to general traffic and releases a second surge of traffic down Sir Alex Ferguson Way to Wharf End, resulting in the queue from the Trafford Road junction building again. This second queue was noted as being larger than the first phase and blocked back to the area of the IWMN (see Figure H.1 below). The opening of this junction also releases a surge of traffic on Wharfside Way towards the White City junction. Queues for this movement stretched back to the Sir Alex Ferguson Way junction.



**Figure H.1 –Queuing at Trafford Wharf Road / Sir Alex Ferguson Way junction**



Also noticeable in this post-match period was the use of Sir Alex Ferguson Way by private hire taxis as a waiting area. This primarily occurred along the eastern kerbline and at its peak stretched up to the left turn lane into Wharfside Way, and back to the junction with Trafford Wharf Road.

Coaches and cars were parked illegally for a considerable amount of time along both sides of Trafford Wharf Road, adjacent to its junction with Sir Alex Ferguson Way.

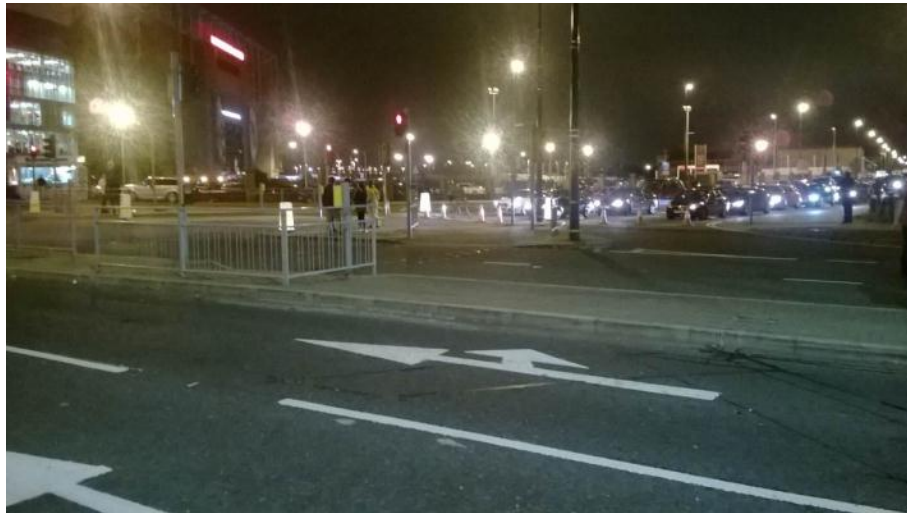
In terms of post-match pedestrian movements there were two distinct phases:

- Phase 1 (approximately 5 to 10-minutes after match end): continuous stream of pedestrians walking down Sir Alex Ferguson Way (see Figure H.2 below) and crossing over Trafford Wharf Road adjacent to the Sir Alex Ferguson Way junction (towards both IWMN and Wharf End to reach car parks and the Metrolink Exchange Quay stop) for approximately 20 to 30-minutes. These crossing movements were more hap-hazard than in the pre-match period and as the traffic flows became more intensive, the pedestrian crossing movements became more random. The act of crossing Trafford Wharf Road at this location was also made more hazardous by the presence of illegally parked coaches and cars along both sides of the highway, in the vicinity of the Sir Alex Ferguson Way junction.
- Phase 2 (approximately 30-minutes after match end): Second surge of fans, as the away fans that were initially held by the Police, were released. This second surge was of a lesser volume and intensity than the first surge and was more focused on movements to the car parks rather than towards the Exchange Quay Metrolink stop.



**Figure H.2 –Post-match pedestrian activity combined with significant vehicle delay (looking south along Sir Alex Ferguson Way)**

At the Wharfside Way / Sir Alex Ferguson Way junction, as mentioned above, post-match traffic management strategy involved the complete closure of this junction – see Figure H.3 below. The junction was re-opened in a phased manner.



**Figure H.3 –Wharfside Way / Sir Alex Ferguson Way junction closed during the initial post-match period**

This traffic management strategy involved the phased-opening of the junction as follows (During this period the junction operation was manually controlled via the on-street signal).

30-minutes after match end the vehicle movement from Sir Matt Busby Way was released for the left-turn only. Initially this was for cars leaving the eastern section of the car park, followed by the release of a stream of coaches (carrying away fans). At the same time the right turn from Sir Alex Ferguson Way was released. The queue on Wharfside Way (west arm) by this time was estimated to be stretching back to, and beyond the Village Way roundabout.

45 to 50-minutes after match end, the Wharfside Way arms were released (both directions). As the junction was under manual control the Wharfside Way approaches were given green for a long period of time at the expense of other approaches. This lasted until the queuing on the western arm began to clear. At this point (+55 to 60-minutes) the junction appeared to return to a more normal level of operation / timing.

**APPENDIX I      Alterations to Scheme Proposals (from  
Consultation)**

## Metrolink Trafford Park line to The Trafford Centre



Some stop names subject to confirmation  
Stop locations are indicative

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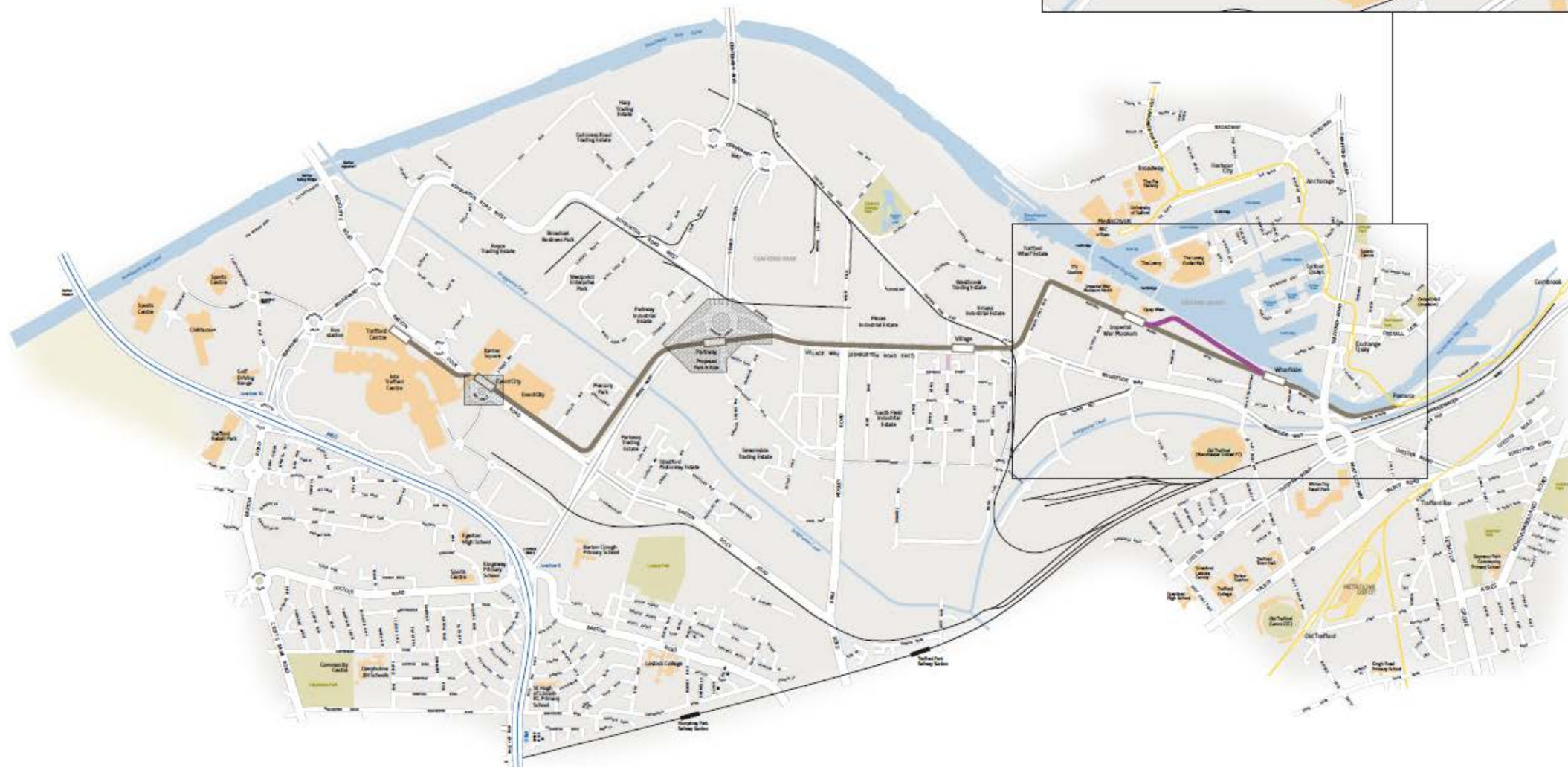


Figure I.1