- Airport passenger demand occurs 52 weeks of the year, 6.5 days per week (i.e. 338 days a year);
- Airport employees will work a five-day week, although this will be shift-based. Demand is therefore distributed over 52 weeks, 6 days per week (i.e. 312 days per year);
- Gyle/Edinburgh Park commuter demand will be 52 weeks of the year, 5 days per week (i.e. 260 days per year);
- Gyle/Edinburgh Park leisure demand will be 52 weeks of the year, 6.5 days per week (i.e. 338 days per year); and
- WEPA commuter demand will be 52 weeks of the year, 5 days per week (i.e. 260 days per year).

Table 4.2 indicates the estimated daily demand using the factors presented above.

Table 4.2: Estimated daily passenger demand (heavy rail), Gogar Interchange

Passenger type	2011	2025
Airport customers	615	1562
Airport employees	54	135
Gyle/Edinburgh Park commuters	1246	1562
Gyle/Edinburgh Park leisure passengers	130	337
West Edinburgh Planning Area (WEPA) commuters	0	269
Total	**2046**	**3865**

Passenger demand analysis was then undertaken for the period when demand is expected to be highest (i.e. between 0730 and 0830). The following assumptions were made to convert daily passenger demand to AM weekday peak hour passenger demand:

- During the AM weekday peak hour no Gyle/Edinburgh Park leisure passengers will use the transport interchange;
- 10% of the daily airport customers using Gogar Interchange will do so during the AM weekday peak hour, and these will be split equally between boarding and alighting journeys;
- 90% of the daily airport employees using Gogar Interchange will do so during the AM weekday peak hour, and these will consist entirely of alighting journeys (i.e. journeys from the heavy rail station onwards to the airport);
- 90% of daily Gyle/Edinburgh Park commuters will travel during the AM weekday peak hour. Of these, in the 2011 opening year 20% will originate at Gogar (i.e. boarding) and 80% will originate from other stations located on the Fife and Edinburgh/Glasgow line (i.e. alighting). In the 2025 future year, 13% will originate at Gogar and 87% from other stations; and

- 90% of daily WEPA commuters will travel during the AM weekday peak hour. For assessment purposes it is assumed that developments within the International Business Gateway will have been completed by the 2025 future year, but the actual timing and extent of these developments is currently unknown. These will consist entirely of alighting journeys, i.e. journeys originating from other stations located on the Fife and Edinburgh/Glasgow line.

The resulting AM weekday peak hour passenger demand is shown in **Table 4.3** below.

Table 4.3: Estimated weekday AM peak hour (0730-0830) passenger demand (heavy rail), Gogar Interchange

Passenger type	2011	2025
Airport customers (boarding)	31	78
Airport customers (alighting)	31	78
Airport employees (alighting)	49	121
Gyle/Edinburgh Park commuters (boarding)	225	182
Gyle/Edinburgh Park commuters (alighting)	897	1224
WEPA commuters (alighting)	0	242
Total	**1232**	**1925**

Source: Mott MacDonald calculations

Modal share factors were then used to disaggregate the above person trip demand into various modes of access to or egress from Gogar Interchange. These factors were identified with reference to the following;

- the rail access/egress mode identified from surveys undertaken by Mott MacDonald at South Gyle railway station;
- the 10% cycle mode share which has been identified as a target by CEC, and which the provision of cycle parking facilities at Gogar Interchange will support (Section 6); and
- professional judgement, based on the availability of high frequency tram services, buses stopping within the interchange and at existing stops on the A8 Glasgow Road within a realistic walking distance, together with high quality pedestrian and cycle linkages which it is assumed will be provided into the International Business Gateway, as well as the new subway providing direct access to the Gyle.

These factors are shown in **Table 4.4** below.

Table 4.4: Assumed AM peak hour modal share factors (heavy rail access/egress mode), Gogar Interchange

Passenger type	Access/Egress Mode					
	Walk	Cycle	Tram	Bus	Car (Kiss and Ride, Taxi)	Total
Airport customers (boarding)	0%	0%	100%	0%	0%	**100%**
Airport customers (alighting)	0%	0%	100%	0%	0%	**100%**
Airport employees (alighting)	0%	0%	100%	0%	0%	**100%**
Gyle/Edinburgh Park commuters (boarding)	20%	10%	33%	22%	15%	**100%**
Gyle/Edinburgh Park commuters (alighting)	20%	10%	33%	33%	4%	**100%**
WEPA commuters (alighting)	20%	10%	33%	33%	4%	**100%**

Source: Mott MacDonald calculations

Using the above modal share factors, **Tables 4.5** and **4.6** present the estimated AM weekday peak hour person trip generation by access/egress mode, for the 2011 opening year and 2025 future year respectively.

It should be noted that the estimated car-borne person trip demand shown in Tables 4.5 and 4.6 consists entirely of Kiss & Ride and taxi movements, not long stay Park & Ride movements. Cars and taxis will enter the interchange premises, pick up or set down passengers, and then exit.

Waiting at the public car parking spaces will be limited to 20 minutes. This will ensure a high turnover of car parking spaces, with each space being used by several vehicles in any given hour.

Table 4.5: AM weekday peak hour person trip demand by access/egress mode – 2011 opening year

	Access/Egress Mode					
Passenger type	Walk	Cycle	Tram	Bus	Car (Kiss & Ride, Taxi)	Total
Airport customers (boarding)	0	0	31	0	0	31
Airport customers (alighting)	0	0	31	0	0	31
Airport employees (alighting)	0	0	49	0	0	49
Gyle/Edinburgh Park commuters (boarding)	45	23	74	50	34	225
Gyle/Edinburgh Park commuters (alighting)	179	90	296	296	36	897
WEPA commuters (alighting)	0	0	0	0	0	0
Total	**224**	**112**	**481**	**345**	**70**	**1232**

Source: Mott MacDonald calculations

Table 4.6: AM weekday peak hour person trip demand by access/egress mode – 2025 design year

	Access/Egress Mode					
Passenger type	Walk	Cycle	Tram	Bus	Car (Kiss & Ride, Taxi)	Total
Airport customers (boarding)	0	0	78	0	0	78
Airport customers (alighting)	0	0	78	0	0	78
Airport employees (alighting)	0	0	121	0	0	121
Gyle/Edinburgh Park commuters (boarding)	36	18	60	40	27	182
Gyle/Edinburgh Park commuters (alighting)	245	122	404	404	49	1224
WEPA commuters (alighting)	48	24	80	80	10	242
Total	**330**	**165**	**821**	**524**	**86**	**1925**

Source: Mott MacDonald calculations

4.6.2 Estimated Vehicle Trip Generation

Weekday AM peak hour vehicle trip generation has been estimated based on the following assumptions:

- the person trips shown in Tables 4.5 and 4.6 which access and egress Gogar Interchange by car are assumed to each represent two vehicle trips, the first trip being to set down or pick up, the second trip being to exit from the interchange premises. No long term car parking will be permitted;
- deliveries to the station (such as to the retail kiosk) will be scheduled to take place outside the weekday AM peak period; and
- bus movements within Gogar Interchange (i.e. providing direct access, not stopping at the existing bus lay-bys to the west of Gogar Roundabout) have been estimated based on consultations with local bus operators and SEStran to define likely future requirements.

The bus movements to Gogar Interchange assumed for assessment purposes, in both the 2011 opening year and 2025 future year, are presented in **Table 4.7** below. All bus services are assumed to operate through Gogar Interchange with the exception of service 18, which could terminate there if Lothian Buses decided to extend this from its current terminus at Gyle Shopping Centre, which has been indicated as a possibility in the future.

Table 4.7: Bus services assumed to stop within Gogar Interchange

Route	Service	Buses per hour	Operator
Musselburgh - A720 City Bypass - Gogar - Airport	Orbital	12	To be confirmed
Royal Infirmary - Gyle Centre - Gogar Interchange	18	2	Lothian
South Queensferry - Edinburgh Park	63	1	E&M Horsburgh
Airport - Western General Hospital	64	1	E&M Horsburgh
Livingston - Gyle - Airport - Livingston	555	1	E&M Horsburgh
Bathgate - Edinburgh Park	559	1	E&M Horsburgh
Livingston - Airport - Gyle - Livingston	777	1	E&M Horsburgh

Source: Consultations with SESTran and local bus operators, August/September 2009

Combining the car and bus movements, the estimated AM weekday peak hour vehicle trip generation is presented in **Table 4.8** below.

Table 4.8: Estimated Vehicle Trip Generation (heavy rail), Gogar Interchange

Vehicle Type	2011 Opening Year		2025 Design Year	
	Arrivals	Departures	Arrivals	Departures
Cars (including taxis)	70	70	86	86
Buses	36	36	36	36

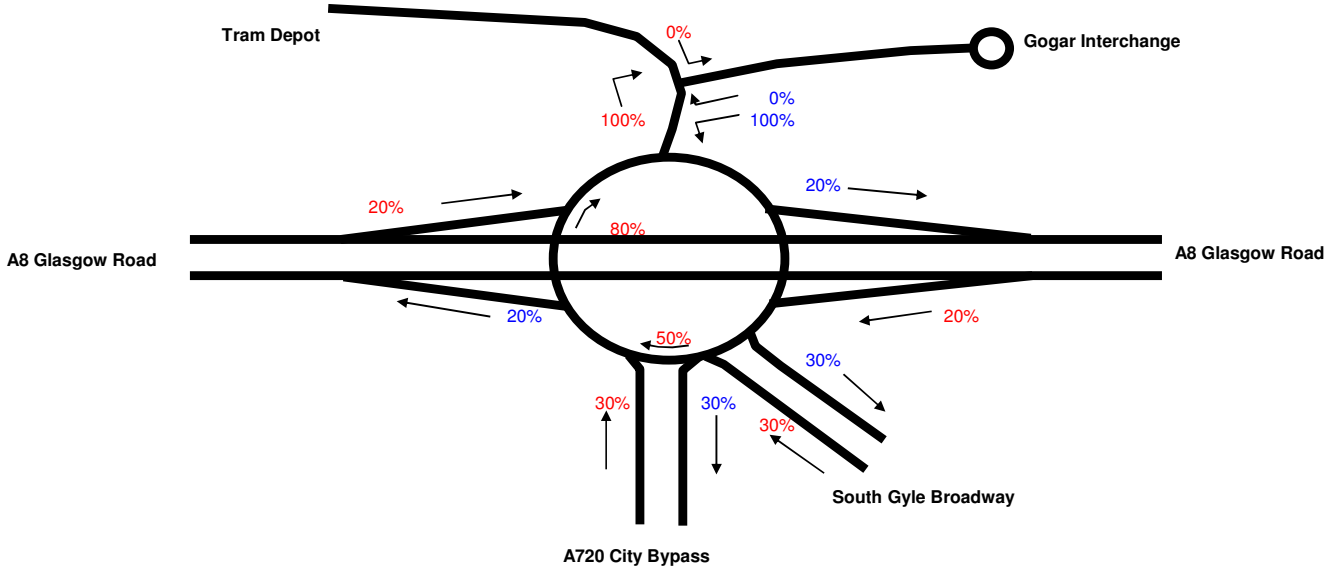
Source: Mott MacDonald calculations

4.7 Vehicle Trip Distribution

The car trips generated by the proposed heavy rail station have been distributed at the A8/A720 Gogar Roundabout using professional judgement for the 2011 opening year and 2025 design year (when it is assumed that the Gogar Link will be in place, connecting with the Airport/Eastfield Road).

Figure 4.1 shows the assumed car trip distribution for the 2011 opening year.

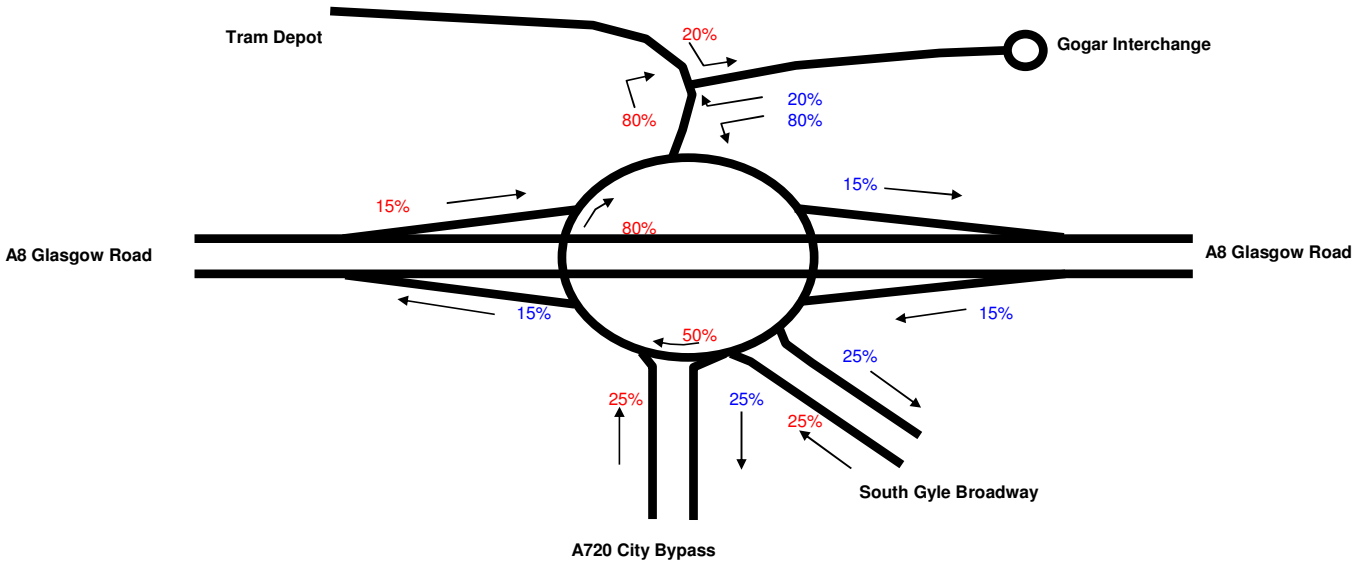
Figure 4.1: Assumed Development Trip Distribution(Cars), 2011 Opening Year



Source: Mott MacDonald calculations

Figure 4.2 shows the assumed car trip distribution for the 2025 design year. The predicted background and development turning movements for the base, opening and design years are presented in Section 5.2.

Figure 4.2: Assumed Development Trip Distribution (Cars), 2025 Design Year



Source: Mott MacDonald calculations

5. Transport Network Impact

5.1 Forecast Traffic Growth

The opening year for the development is assumed to be 2011. A design year of 2025, 14 years after opening, has also been analysed.

To obtain future traffic flows on the road network for the opening and design years, AM peak background traffic data collected during Mott MacDonald's sample count was factored using National Road Traffic Forecasts (Great Britain) 1997 (NRTF'97) central growth. The growth rates used are shown in **Table 5.1** below.

Table 5.1: Background Traffic Growth Factors

Period	Growth Factor (NRTF Central)
2009 – 2011	1.031
2009 – 2025	1.220

Source: National Road Traffic Forecasts (Great Britain) 1997

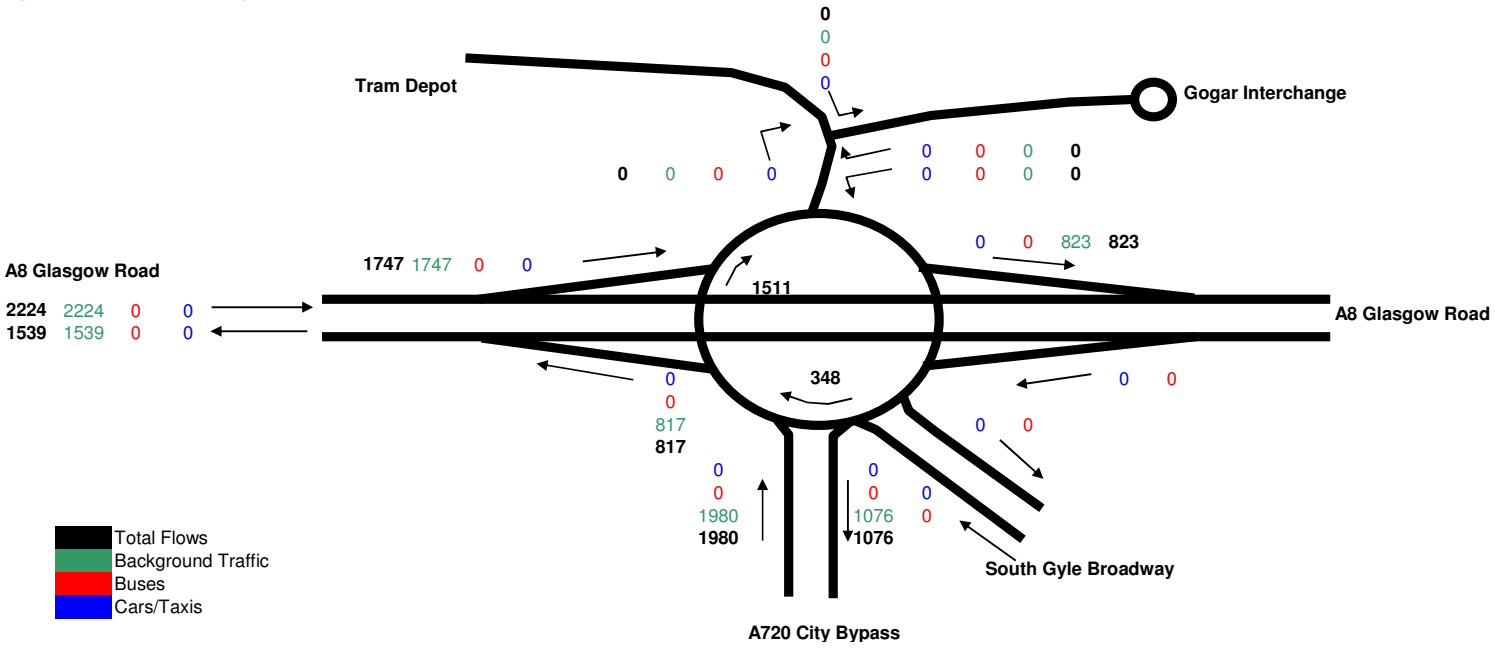
No growth has been applied to development traffic in accordance with accepted practice.

5.2 Future Traffic Flows

The predicted 2009 base year, 2011 opening year and 2025 design year traffic flows for the AM peak period (0730-0830) are presented in **Figures 5.1** to **5.3** below, disaggregated into background traffic, bus-based development traffic and car-based development traffic.

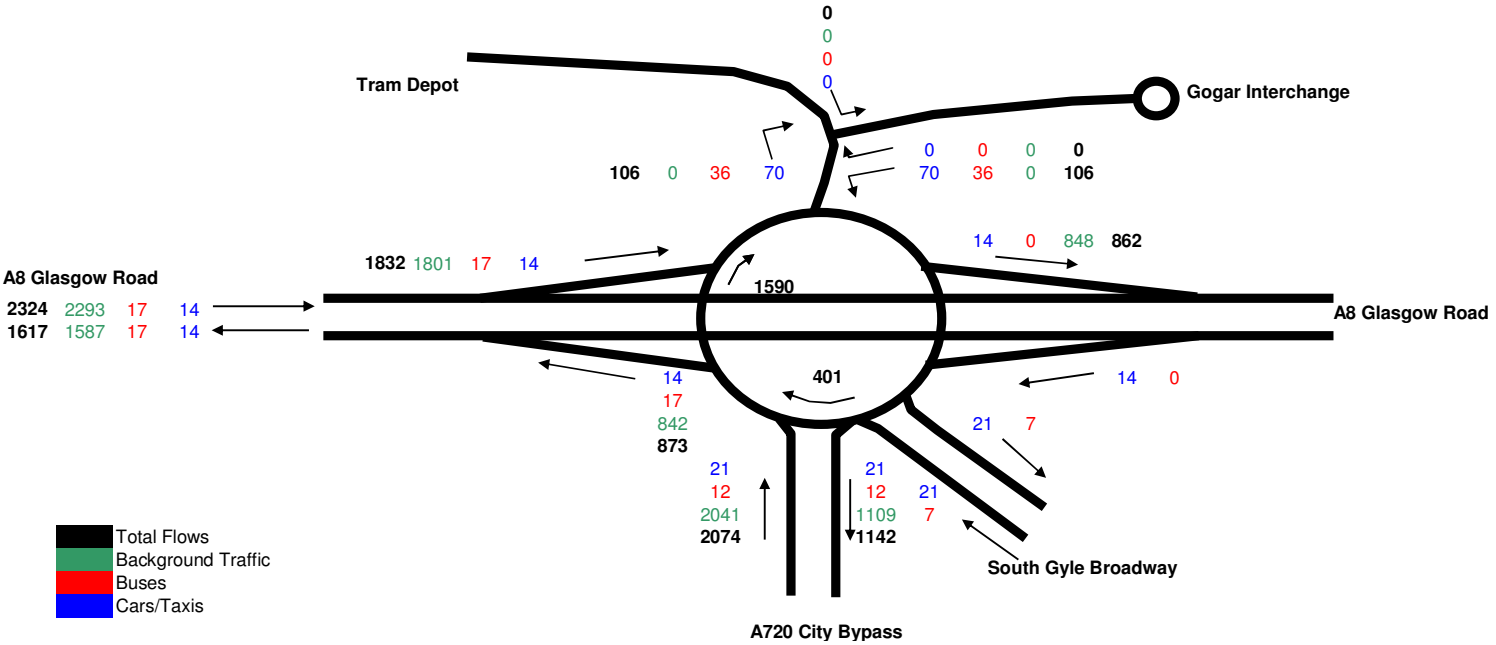
The Mott MacDonald sample count undertaken between 0740 and 0840 is assumed to be representative of base year traffic conditions and growth has been applied to the 2009 base in accordance with the growth factors specified in Table 5.1.

Figure 5.1: 2009 AM peak traffic flows



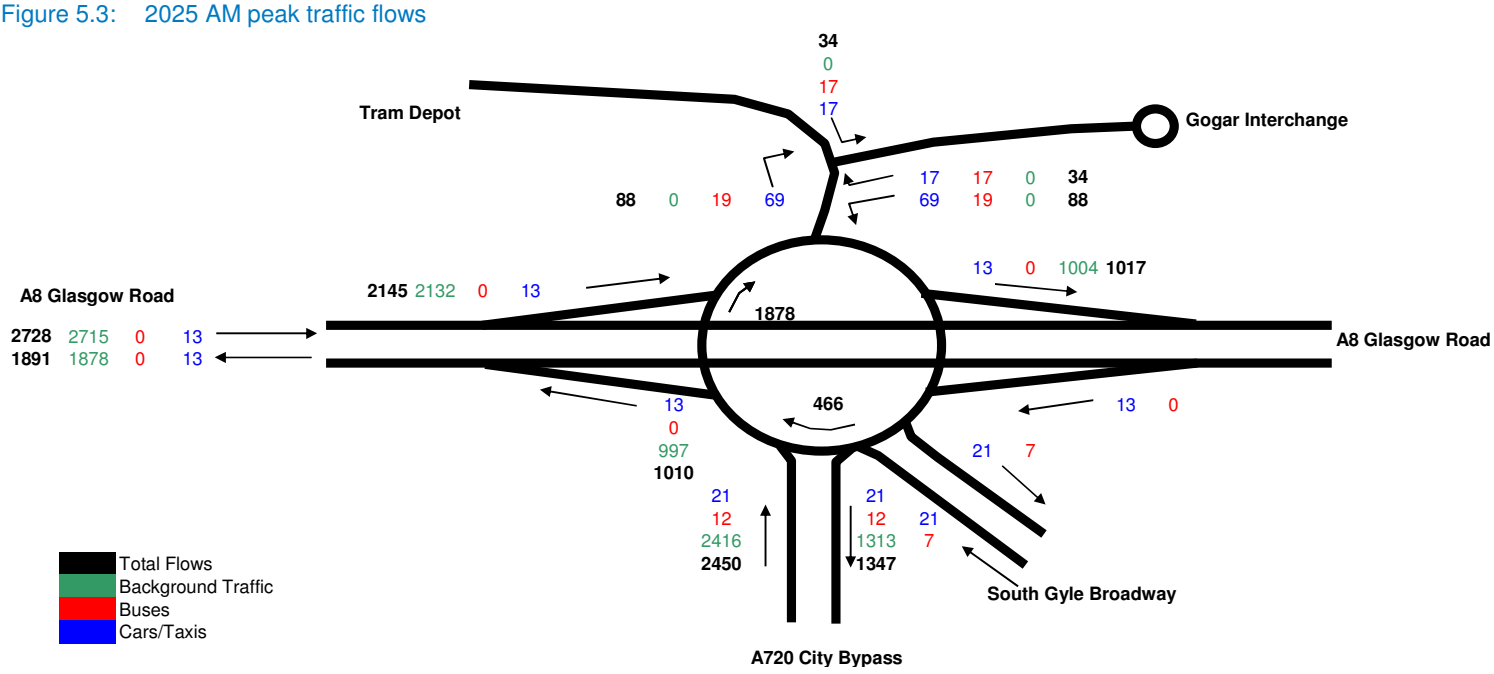
Source: Mott MacDonald calculations

Figure 5.2: 2011 AM peak traffic flows



Source: Mott MacDonald calculations

Figure 5.3: 2025 AM peak traffic flows



Source: Mott MacDonald calculations

5.3 Local Road Network Impact

The percentage change in two-way traffic flows with the development in place has been calculated for the A8 Glasgow Road (west) and A720 City Bypass approaches to Gogar Roundabout, shown in **Table 5.2** below.

Table 5.2: Percentage change in traffic flows with development

Arm	% change in traffic flows (two-way)	
	2011 opening year	2025 design year
A8 Glasgow Road (west)	1.6%	0.6%
A720 City Bypass	2.1%	1.8%

Source: Mott MacDonald calculations

Table 5.2 indicates that the percentage increase in vehicular traffic as a result of the heavy rail station at Gogar Interchange is small in the context of background traffic growth. Moreover, site observations made by Mott MacDonald suggest that Gogar Roundabout currently operates

within capacity. We therefore consider that Gogar Interchange will not have a significant impact on the operation of the local road network.

With regard to road safety, there is no evidence that the small percentage increase in traffic anticipated during the construction or operational periods of Gogar Interchange will cause any consequential increase in road traffic accidents. In addition, it is unlikely that there will be any significant additional risk to pedestrians or cyclists.

5.4 Car Parking Impact

We do not consider that current car parking conditions will be significantly worsened in the vicinity of Gogar Interchange as a result of the development

Although it is acknowledged that the proposed Gogar Interchange will be in a more prominent location compared to the existing South Gyle station, we do not consider that current car parking conditions will be significantly worsened in the vicinity of Gogar Interchange as a result of the development and the absence of long term parking provision. Our position is based on the following grounds:

- the impact of any potential reduced service levels at South Gyle is likely to be limited, as rail borne Park & Ride activity has been shown to be low by the two surveys undertaken in August and September 2009;

- similarly, we do not believe that potential reduced service levels will stimulate additional car parking demand from Gyle residents, as the additional walk/cycle distance to Gogar Interchange is relatively small and should not have a major impact on current travel behaviour. There are designated pedestrian/cycle routes from South Gyle station (shown on the Edinburgh Cycle Network map) which represent reasonably direct routes to Gogar Interchange. To the south of South Gyle station there is a route linking to the Gyle Shopping Centre, with routes available via the shopping centre car park to Gogar Interchange using the new subway. To the north of South Gyle station, there is a route from Gyle Park Gardens to Glasgow Road. We estimate the walk time between South Gyle station and Gogar Interchange via these routes to be approximately 20 minutes or less. Indeed the entire Gyle Shopping Centre area and West Craigs residential properties are within an 800m radius of the interchange, or approximately ten minutes' walk. An 800m isochrone for Gogar Interchange is included as **Appendix E**. Walking is likely to remain a major access mode for rail journeys, and will be supplemented by cycling, given the provision of high quality cycle parking facilities (100 spaces, covered, lit and monitored by CCTV);

Walking and cycling are likely to be major access modes for rail journeys

- free car parking facilities at Ingliston Park & Ride and a tram link to Gogar Interchange will be available for motorists from the west intending to board heavy rail services. The Edinburgh Tram is likely to represent an attractive alternative to driving to Gogar Interchange if used with a rail 'plus tram for one/two stop ticketing approach, particularly if background traffic growth worsens driving conditions on the A8 Glasgow Road during the weekday AM peak period;

- similarly, the interchange layout has been designed to accommodate proposed Orbital Bus services, which SEStran intends will call at strategic Park & Ride locations that are proposed at major road intersections along the A720 (such as Hermiston, Hillend and Straiton). If through Orbital Bus/rail ticketing is available from these strategic Park & Rides, as with the Ingliston Park & Ride this may prove an attractive option for motorists, providing an alternative to parking at Gogar Interchange and reducing the need for car travel;

Future levels of rail passenger demand could vary significantly, depending on the extent and timing of rail service improvements and development of the International Business Gateway

- it is not yet known what level of demand would be generated by either: any future rail services from Glasgow with the opening of the Dalmeny Chord; or developments within the International Business Gateway. The rail services from Glasgow (which could use the Fife Line) have yet to be determined and the timing and extent of the development of the International Business Gateway is, as we understand, not fully established. We therefore consider that the extent of this demand could vary significantly and as such, making provision at this stage would be speculative and could lead to significant over or under provision. No physical constraints have been identified which would preclude the provision of long term car parking in the future;

Indiscriminate parking is already a problem on Turnhouse Road

- the only available uncontrolled parking in the surrounding area is on Turnhouse Road, where indiscriminate parking is already a problem. All current on-street car parking occurs on the northeast side of Turnhouse Road and this is unlikely to change in the future, given its regular use as an HGV route and the lack of footway provision on the southwest side. Therefore, it is probable that any additional on-street parking following the opening of Gogar Interchange would occur further north, more than 1km from the station, which would be an unattractive option for intending rail commuters commencing their journey by car.

In summary, we see the provision of strategic Park & Ride sites, linked to Gogar Interchange by frequent bus and tram services, as catering for

potential long stay car parking demand. In addition, high quality pedestrian and cycle facilities, and the absence of uncontrolled car parking spaces, will ensure that current car parking conditions will not be significantly worsened in the vicinity.

5.5 Public Transport Impact

In the short term, E&M Horsburgh has expressed its interest in diverting some bus services (all of which are currently supported but some could be commercial in the future) via Gogar Interchange, potentially five buses per hour in total. SEStran is also keen for Gogar Interchange to be served, when Orbital Bus services (potentially providing 12 buses per hour) are introduced, potentially in 2012. Transfers between rail and Edinburgh Tram services (the latter operating on a ten minute headway) will be straightforward due to the step-free interchange design.

New and diverted bus and tram services will provide regular connections from Gogar Interchange to the Airport, Gyle, Edinburgh Park, International Business Gateway (in the longer term) and Ingliston Park & Ride as well as destinations to the south and east of Edinburgh

Taken together, the above services will provide regular public transport connections from Gogar Interchange to the Airport, Gyle, Edinburgh Park, International Business Gateway (in the longer term) and Ingliston Park & Ride as well as destinations to the south and east of Edinburgh. With through rail/tram ticketing, use of the tram for one/two stops into the Gyle and Edinburgh Park would be particularly attractive for commuters arriving by heavy rail during the weekday AM peak period.

In addition to the above, as rail passenger demand develops over time it is likely that bus operators such as Lothian Buses and First will respond on a commercial basis to the opportunities for new patronage by extending/diverting services via Gogar Interchange, especially given the proposed low level of car parking provision which will encourage rail users to access the station by more sustainable means. In particular, the provision of the Gogar Link through the International Business Gateway (potentially with bus priority measures), could encourage operators to divert existing services away from the A8 Glasgow Road, reducing the walk distance to Gogar Interchange.

In terms of public transport accessibility from the northeast of Gogar Interchange, Lothian Buses has indicated that there is potential to divert route 31 (East Craigs – Rosewell) via Turnhouse road, as and when the West Craigs development takes place. Under this scenario, Lothian Buses would be keen to have direct access to the northeast side of the station. It is possible that other services from North West Edinburgh, such as route 41 (Craighouse – Cramond), could be diverted to serve Gogar Interchange. There are no elements within the Gogar

Interchange scheme design which would preclude the provision of such access in the future.

Given the above considerations, we believe that the frequency of buses will be sufficient to cater for predicted future demand.

6. Sustainable Access Strategy

6.1 Overview

The proposed interchange layout is presented in **Appendix C**. This Section summarises the elements of the scheme design which are intended to promote the use of sustainable travel modes for access and egress from the heavy rail station, facilitate safe internal circulation and be fully accessible to all members of the community.

6.2 Tram access

Interchange between the tram and heavy rail platforms will be facilitated by lifts (connected by a covered footbridge) from the tram platforms to the tram stop entrance. From this entrance a level footbridge will be provided north eastwards across the tram tracks to the heavy rail station entrance. This will be a dedicated pedestrian area, protected by demountable bollards. Vehicular access will be prohibited except for emergency vehicles.

An emergency exit will be provided from the tram stop footbridge southwards to the shared footway/cycleway on the north side of Gogar Roundabout.

6.3 Bus access

Bus access to the interchange will be achieved via a looped arrangement from the tram depot access road. Two bus stands will be provided on the south side of the loop for stopping services. These stands will be designed to accommodate articulated buses of 18.0m length. Local footway widening will accommodate 2 No. bus shelters, with a step free walk of approximately 100m via a 2.0m footway to reach the main heavy rail and tram entrances. A vehicle restraint barrier (class N2) will be provided to the rear of the footway.

Facilities will be designed to accommodate 18.0m articulated buses

A layover facility for 3 No. buses will be provided on the north side of the loop. This will also act as a facility for replacement bus services when the tram and/or rail services are disrupted. A right turn facility will be provided for buses to reach the layover bays once they have set down passengers, removing the need for reversing manoeuvres.

A 2.0m footway will be provided alongside the layover bays, providing safe pedestrian access and egress eastwards to the heavy rail and tram entrances, and westwards to the International Business Gateway to all bus stopping/layover facilities.

We do not propose to provide any additional bus stop or lay-by provisions on the A8 Glasgow Road due to the limited land available and the road safety issues associated with conflicting traffic movements (this being a particular issue on the westbound offslip at Gogar Roundabout). However, the existing bus lay-bys to the west of the roundabout are within reasonable walking distance of Gogar Interchange, and footways will be provided along the tram depot access road and within the interchange site to facilitate pedestrian access/egress to these lay-bys. The bus lay-by on the eastbound off-slip is located within 400m, or approximately five minutes' walk time, whilst the bus lay-by on the westbound onslip is located within 600m, or approximately eight minutes' walk time. Although pedestrians from the latter bus stop are required to cross two slip roads, footways and dropped kerbs are provided on Gogar Roundabout to facilitate this movement.

6.4 Pedestrian and cycle access

The interchange will be accessible from the south, east and west by pedestrians and cyclists

The proposed interchange layout has been designed to achieve a high level of cycle/pedestrian permeability. To the south east, a 3.0m combined footway/cycleway will be provided from the north side of the A8 Glasgow Road, facilitating access from the designated Edinburgh Cycle Network route. To the west, a 2.0m footway will provide access to the proposed International Business Gateway and to Gogar Roundabout. To the south, a subway of 5.5m clear width and 2.75m clearance will be provided under the A8 Glasgow Road, east of the tram underpass, to connect with the Gyle Shopping Centre. The subway will be gated at its southern end to form an entrance to the interchange, which will be more attractive to users.

As a result, pedestrian users of the subway may not expect cyclists on their cycles to be using the subway. Signage will be installed to instruct cyclists to dismount within the subway, and so maximise the quality of the subway experience for the majority of users. The approximate gradient from the subway will be 1/25 (4%) at its steepest.

A total of 100 cycle parking spaces will be provided

With regard to cycle parking, a total of 100 spaces will be provided via 50 'Sheffield' type stands located either side of the heavy rail entrance, which will assist in achieving CEC's intended mode share of 10% for journeys to work. These stands will be covered, lit and monitored by CCTV.

Consideration was given to the provision of a limited number of cycle lockers. However, following consultations with the British Transport

Police this option was discounted as lockers could be used to store undesirable packages.

6.5 Car Parking and access

A total of 18 car parking spaces will be provided within the interchange site, including four spaces dedicated to Blue Badge holders near the main heavy rail station entrance. Access to the remaining 14 spaces will be made via the north side of the interchange access road loop. Four of these will be allocated for operational parking. First ScotRail has confirmed that this would be sufficient to meet operational needs.

The remaining ten spaces will be designated for public short stay use (waiting limited to 20 minutes), for rail/tram passenger pick up and set down manoeuvres.

In addition to the above car parking, a taxi rank will be provided at the eastern end of the interchange access road loop, accommodating three or four vehicles.

The proposed low level of car parking provision at Gogar Interchange reflects the high demand for space by other more sustainable transport modes

The proposed low level of car parking provision at Gogar Interchange reflects the high demand for space by other more sustainable transport modes, i.e. to provide bus stopping/layover facilities and cycle parking, as well as the desire to minimise car-borne commuter journeys.

Notwithstanding the above, should on-street parking problems be identified which can be attributed to users of Gogar Interchange, no physical constraints have been identified which would preclude the provision of long-term car parking in the future. Additional car parking spaces could be provided within the site access loop, whilst land has also been identified to the north of the proposed bus interchange/short stay car park which (depending upon the outcome of negotiations with the current landowner) could be used for long term car parking purposes if required.

6.6 Site servicing and access

A small number of servicing movements will be generated by the development, in particular deliveries to the retail kiosk, cleaning / refuse collection and general building maintenance. Four car parking spaces will be provided for First ScotRail operational use. It is anticipated that goods loading/unloading will take place in the vicinity of the taxi drop off area; however a management strategy will be developed to ensure that conflicts between delivery vehicles, refuse vehicles and peaks in rail passenger demand are minimised.

Emergency vehicles will be able to access all parts of the building envelope

The proposed site layout provides emergency access to the station concourse area via demountable bollards. Emergency vehicles will be able to access all parts of the building envelope, with access on the north side of the station achieved via the Saica Packaging (UK) industrial premises.

6.7 Access for mobility and visually impaired

The development will be fully DDA compliant

The development proposals will be designed to be fully accessible to all members of the community in accordance with the Disability Discrimination Act. Features providing this accessibility include the following:

- four disabled parking bays, located between the main entrances to the heavy rail and tram stops;
- lifts between the platforms and footbridge at both the heavy rail station and tram stop; and
- level access through the entire development.

7. Summary

7.1 Construction Phase

With regard to traffic associated with site clearance and construction, some abnormal loads are envisaged, as well as the staged occupation of the A8 Glasgow Road to facilitate subway construction. This will be agreed with CEC as the roads authority so as to minimise disruption to other road users.

No significant negative effects are expected to occur during the construction phase

It is anticipated that HGV movements will be restricted to daytime hours only, and the shifts of construction workers will be timed to avoid the peak periods on the local road network.

As there are no sensitive receptors nearby, and as the development site adjoins the strategic road network, no significant negative effects are expected to occur during the construction phase, impacting on either the surrounding transport infrastructure or on the local community.

7.2 Operational Phase

Our proposals contribute directly to the achievement of CEC's specific transport objectives

The proposed development is fully compliant with the current policy framework. Delivery of the WEPF places a priority on sustainable modes, and the proposals for Gogar Interchange reflect the desire to create a hub for sustainable transport modes which will contribute directly to the achievement of CEC's specified objectives for the transport system, as outlined in the Local Transport Strategy.

In particular, we do not believe that a 'predict and provide' approach to car parking provision is an appropriate means to improve the attractiveness of sustainable transport modes. Our interchange proposals reflect the high demand for space by pedestrians, cyclists and bus users, and we have prioritised their needs over those of Park & Ride users in an attempt to promote wholly sustainable travel behaviour from the outset, rather than encouraging car dependency (at least for the journey to the rail head). These behavioural habits will be very difficult to change at a later date.

We do not consider that Gogar Interchange will have a significant impact on the operation of the local road nework in capacity or road safety terms

It is not considered that the operation of Gogar Interchange will have a significant impact on the operation of the local road network, in either capacity or road safety terms. The low level of car parking provision will restrict car trip generation and, taken together with the anticipated level of bus movements, the percentage increase in vehicular traffic is forecast to be small in the context of background traffic growth.

Similarly we do not consider that current car parking conditions will be significantly worsened in the vicinity of Gogar Interchange as a result of the development and the absence of long term parking provision. In the event of rail service levels at South Gyle being reduced, the additional walk/cycle distance to Gogar Interchange is relatively small and should not have a major impact on current travel behaviour. Bus and tram services to Gogar Interchange will provide connections from Park & Ride facilities elsewhere, which may prove an attractive option for motorists if integrated public transport ticketing can be achieved.

The timing of future schemes affecting future rail passenger demand has yet to be determined

Moreover, the future level of rail passenger demand is uncertain. Although we have attempted to estimate future demand with the International Business Gateway in place, and with the opening of the Dalmeny Chord to facilitate the potential re-routeing of Edinburgh – Glasgow services, the timing of these developments and specific rail service levels have yet to be determined. The extent of rail passenger demand could therefore vary significantly. Speculative car parking provision could therefore lead to significant over provision, promoting car use at the expense of other more sustainable access modes, or to significant under provision.

There are no physical constraints which preclude the provision of long term car parking in the future

Notwithstanding the above, no physical constraints have been identified which would preclude the provision of long term car parking in the future, and land has been identified which (subject to the outcome of negotiations with the current landowner) could be used for this purpose if required.

Appendices

Appendix A. Minutes of Meeting with CEC, 3rd July 2009

Record of meeting/discussion

Mott MacDonald

Project title	Gogar Station Interchange - GRIP 4	**Division**	SNI
Subject	CEC Transport Assessment and Subway Proposal	**Project number**	252960
Location	CEC Offices - East Market Street, Edinburgh	**Date of meeting**	03 July 2009

Present	CEC:	Bill Stewart (BS)	Alex Patterson (AP)	Annie Bent (AB)
		George Kennedy (GK)	Andrew McBride (AMcB)	Chris Dey (CD)
	MM:	Ross Mitchell (RM)	Brian Duguid (BD)	John Dooley (JD)

Recorded by	**Distribution**
RM	John Rennie (JR), Mike Odling (MO), RM, BD, JD

Item		**Text**	**Action on**
01	01	**A8 Subway Proposals:**	
	02	BD presented outline design and construction proposals for the subway which was to follow the same principles as used for the Edinburgh Tram underpass (cut and cover with phased lane closures). CEC agreed in principle to our proposed form of construction for the subway. Further review of the traffic management arrangements will be required in due course by CEC, police etc.	
	03	MM will include indicative TM proposals in the Form A and in the transport assessment. MM don't intend to hold the further discussions with CEC, police etc i.e. these would be by the GRIP5 designer.	RM/BD
	04	Technical approval for both subway and footbridge over the tramway is to be by means of Network Rail Form A, with CEC to complete the NR form "Highway Authority Agreement to Proposed Bridgeworks".	
	05	CEC queried the status of the subway - is it to be private, part of the station, or is to be part of the public footway? Is it to be owned by NR or CEC? Is it to be maintained by NR or CEC? and whether the subway would be open to cyclists mounted or dismounted - this needs to be confirmed with NR. RM confirmed that the proposal is that NR (through agreement with First ScotRail) would be the owner, operator and maintainer of the subway. JR to reconfirm this is the proposal. The requirement for cycle access from the south of the A8 would be considered as part of the Transport Assessment.	JR

Record of Meeting/Discussion
Continuation Sheet

Project No. 252960 **Date of Meeting** 03/07/09

Item		Text	Action on
	06	NR therefore need to enter discussions with CEC on the legal agreement(s) that will be required for the subway (with it being under an adopted road). This must be agreed in principle before planning submission is made because of its affect on public safety and security issues.	JR
02	01	**Transport Assessment:**	
	02	JD presented the proposals for the Transport Assessment. The key issues raised by CEC are outlined below:	
	03	CEC highlighted that walking and cycling activity to and from South Gyle Station should also be considered.	JD
	04	CEC highlighted that a transport assessment had been carried out in the Turnhouse area. This transport assessment had identified issues with parking on Turnhouse Road. AP to provide link to report and JD to include in desk top review.	AP/JD
	05	CEC highlighted that bus shuttle services (Royal Bank of Scotland and EDI) were provided at South Gyle Station. These should also be considered in the Gogar Transport Assessment	JD
	06	JD confirmed that Bus Service Operators would be contacted as part of the assessment. This would establish what services are currently provided and what their likely interest would be in providing service to Gogar and what particular issues there might be. AP confirmed he would provide the necessary contact details.	AP/JD
	07	AP confirmed that he would also be able to provide contact details for Errol Flemming (re existing traffic data on Gogar Roundabout) and Janet Brown (existing environmental issues e.g. noise and pollution – based on Turnhouse EIA). JD to contact and include data review in Transport Assessment.	AP/JD
	08	JD to revise Transport Assessment scope to reflect above actions and other issues raised.	JD

Appendix B. Accident Data

Project Number _____

SS_DM.6.2 - Issue of Accident Information

Date of Request ..... Brief Location Description.....

Please find enclosed an A4 Plot of accidents by type (see key below) and a report aggregating these accidents by severity and casualty class. If there are less than 50 accidents within the area of your enquiry a summary on the circumstances of each accident is also enclosed

Prepared by .....Date..... Checked by.....Date.....

Notes on Accident Data

This enclosed accident information is a summary of data collected by Lothian & Borders Police and supplied to the City of Edinburgh Council for accident investigation purposes. The owner of the Data (as defined under the Freedom of Information (Scotland) Act 2002) is the Chief Constable of Lothian and Borders Police.

The information supplied as standard as detailed above has been shown to satisfy the vast majority of retrieval requirements. However if your investigation requires a different breakdown of ***STATS 19**** information please email roadsafety@edinburgh.gov.uk with your requirements..

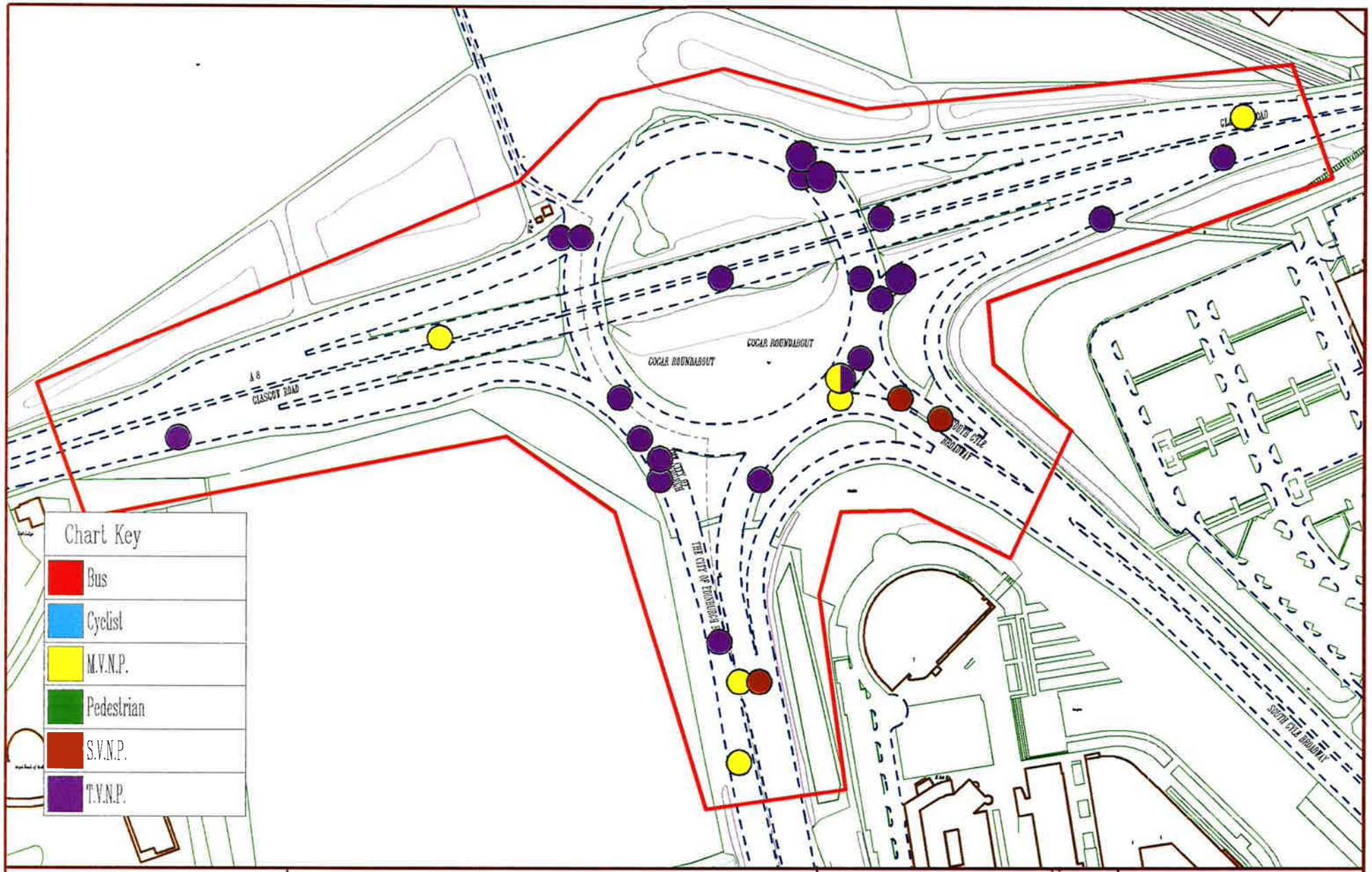
* For each accident almost 60 items of information are recorded by the attending police officer, all of which are held on our databases. The data can therefore be tailored into a variety of forms to suit most requirements (e.g. investigations into: skidding accidents, elderly bus passenger casualties, accidents including cycles etc.). Note however that additional staff, computer time and material costs may be recovered for such requests. Note also that the validation of accidents is not applied rigorously in the least commonly retrieved fields, and minor inconsistencies may be found in the data. If such inconsistencies become apparent, or if you wish information relating to the attending police officers report, you should contact the Force Information Officer at Lothian and Borders Police HQ, Fettes Ave, Edinburgh EH4 1RB.

PLOT AND REPORT KEYS:

The A3 plot key donates the *type* of accident in each location. This classification refers to:	
1~*pedestrian*	at least one pedestrian injured in accident
2~*cyclist*	no pedestrian injuries but at least one cyclist injured in accident
3~*bus*	no pedestrians or cyclist injuries but at least one bus passenger injured in accident
4~*SVNP*	no injured parties in any of the 3 categories above and only one vehicle involved in accident (**S**ingle **V**ehicle **N**on Pedestrian/cyclist/bus passenger)
5~*TVNP*	no injured parties in any of the 3 categories above and only two vehicles involved in accident (**T**wo **V**ehicle **N**on Pedestrian/cyclist/bus passenger)
6~*MVNP*	no injured parties in any of the 3 categories above and more than two vehicles involved in accident (**M**ulti **V**ehicle **N**on Pedestrian/cyclist/bus passenger)
Accident by Severity Report	
Fatal	The accident resulted in the death of at least one person
Serious	There were no deaths resulting from the accident but at least one person sustained serious injuries
Slight	There were no deaths or serious injuries but at least one person was slightly injured
Casualty by Class Report	
Driver or Rider	Casualty was a vehicle driver, rider of a motorcycle or a cyclist
Vehicle or Pillion Passenger	Casualty was a passenger in a vehicle or a pilion passenger on a motorbike or cycle
Pedestrain	Casualty was on footway or crossing road

VEHICLE MOVEMENT COMPASS POINT:-

1-North, 2-North east, 3-East, 4-South east, 5-South, 6-South west, 7-West, 8-North west, 00-Parked.



A8 at A720
Accidents 01/01/2004 - 31/12/2008

Scale: 1:2500 N

A8 at A720
Accidents 01/01/2004 - 31/12/2008

EDINBURGH CITY BYPASS A720 20M NORTH OF THE ROUNDABOUT JUNCTION WHICH LEADS TO GLASGOW ROAD A8 EDINBURGH 31																
0667406	T.V.N.P.	30/09/2006	Saturday	17	20	2	1	Fine	40	Changing lane to right	15	No Skid	-		
									20	Going Ahead	15	No Skid	20	Slight	Car Driver
GOGAR ROUNDABOUT 25 METRES SOUTH OF THE JUNCTION WITH EDINBURGH CITY BYPASS A720 EDINBURGH 317440E 672550																
0870008	T.V.N.P.	15/10/2008	Wednesday	12	30	2	1	Fine	28	Going Ahead	51	No Skid	22	Slight	Car Passenger
									30	Waiting to go ahead	51	No Skid	-		
NEWBRIDGE TO EDINBURGH ROAD A8 GOGAR ROUNDABOUT AT JUNCTION WITH SOUTH GYLE BROADWAY EDINBURGH 317550E 67256																
1074705	M.V.N.P.	30/11/2005	Wednesday	19	30	3	1	Fine	64	Going Ahead	37	No Skid	-		
									-9	Going Ahead	37	No Skid	-		
									50	Going Ahead	37	No Skid	50	Slight	Car Driver

Produced by: 0026125, at: 02/07/2009 08:38:06
Report includes details from the following subsets,
1 'A8 at A720 02 07 09'

A8 at A720
Accidents 01/01/2004 - 31/12/2008

GLASGOW ROAD A8 AT THE JUNCTION WITH SOUTH GYLE BROADWAY EDINBURGH 317580E 672550N													
0418708	S.V.N.P.	17/05/2008	Saturday	10	40	1	1	Fine	18	Going Ahead	15	No Skid	18	Slight	Car Driver
EDINBURGH CITY BYPASS A720 ON GOGAR ROUNDABOUT, AT THE JUNCTION WITH GLASGOW ROAD A8 EDINBURGH 317540E 672													
0423608	T.V.N.P.	19/05/2008	Monday	11	05	2	1	Fine	-9	Starting	73	No Skid	-		
									49	Starting	15	Overturn	49	Slight	Motorcyclist Driver
SOUTH GYLE BROADWAY SLIP ROAD LEADING ONTO EDINBURGH CITY BYPASS A720 EDINBURGH 317510E 672410N													
0438305	S.V.N.P.	18/05/2005	Wednesday	20	30	1	1	Raining	34	Going Ahead	73	Skid	34	Slight	Car Driver
EDINBURGH CITY BYPASS A720 APPROX 150M SOUTH OF IT'S JUNCTION WITH THE GOGAR ROUND ABOUT EDINBURGH 317500E 6													
0444906	M.V.N.P.	22/05/2006	Monday	16	20	4	3	Fine	35	Stopping	51	No Skid	35	Slight	Car Driver
									45	Stopping	51	No Skid	45	Slight	Car Driver
													48	Slight	Car Passenger
									33	Stopping	51	No Skid	-		
									50	Stopping	51	No Skid	-		
GLASGOW ROAD A8 APPROX 100 YARDS EAST OF ITS GOGAR ROUNDABOUT JUNCTION WITH A720 CITY BYPASS EDINBURGH 317680													
0447904	T.V.N.P.	29/05/2004	Saturday	12	30	2	1	Fine	20	Going Ahead	37	No Skid	-		
									48	Waiting to go ahead	37	No Skid	37	Slight	LGV Passenger
GOGAR ROUNDABOUT ON ITS ROUNDABOUT JUNCTION WITH CITY BYPASS A702 EDINBURGH 317420E 672630N													
0473108	T.V.N.P.	04/06/2008	Wednesday	15	10	2	1	Fine	39	Going Ahead	51	No Skid	-		
									45	Going Ahead	73	No Skid	45	Slight	Car Driver
EDINBURGH CITY BYPASS A720 AT ITS JUNCTION WITH GOGAR ROUNDABOUT EDINBURGH 317450E 672530N													
0551107	T.V.N.P.	17/06/2007	Sunday	18	35	2	1	Fine	36	Going Ahead	51	No Skid	-		
									35	Starting	51	No Skid	35	Slight	Car Driver
SOUTH GYLE BROADWAY APPROX 35 METRES SOUTH OF GOGAR ROUNDABOUT EDINBURGH 317600E 672540N													
0663006	S.V.N.P.	01/08/2006	Tuesday	09	30	1	1	Fine	64	Turning left	35	No Skid	64	Slight	Car Driver
GLASGOW ROAD A8 30 METRES EAST OF GOGAR ROUNDABOUT EDINBURGH 317570E 672640N													
0680306	T.V.N.P.	05/06/2006	Saturday	21	45	2	1	Fine	40	Going Ahead	73	No Skid	-		
									52	Going Ahead	73	No Skid	52	Slight	Car Driver
EDINBURGH BYPASS A720 ABOUT 10 METERS SOUTH OF GOGARSTONE TO NEWBRIDGE A8 EDINBURGH 317460E 672510N													
0727405	T.V.N.P.	23/08/2005	Tuesday	11	20	2	1	Rain&Wind	39	Stopping	51	No Skid	-		
									39	Waiting to go ahead	51	No Skid	39	Slight	Car Driver
GOGAR ROUNDABOUT AT THE EXIT JUNCTION TO GLASGOW ROAD A8 EDINBURGH 317530E 672670N													
0731504	T.V.N.P.	28/08/2004	Saturday	13	00	2	1	Fine	63	Changing lane to left	73	No Skid	63	Slight	Motorcyclist Driver
									15	Going Ahead	75	No Skid	-		
GLASGOW ROAD A8 AT THE ROUNDABOUT WITH SOUTH GYLE BROADWAY EDINBURGH 317580E 672610N													
0734204	T.V.N.P.	29/08/2004	Sunday	09	45	2	1	Fine	42	Going Ahead	73	No Skid	-		
									37	Stopping	37	No Skid	42	Slight	Car Passenger
GLASGOW ROAD A8 AT ITS ROUNDABOUT JUNCTION WITH EDINBURGH CITY BYPASS A720 EDINBURGH 317410E 672630N													
0822305	T.V.N.P.	15/09/2005	Thursday	07	40	2	1	Fine	-9	Going Ahead	73	No Skid	-		
									23	Waiting to go ahead	73	No Skid	23	Slight	Car Driver
GLASGOW ROAD A8 AT THE JUNCTION WITH EDINBURGH CITY BYPASS A720 EDINBURGH 317530E 672660N													
0832307	T.V.N.P.	04/10/2007	Thursday	12	45	2	1	Fine	51	Turning right	75	No Skid	-		
									63	Going Ahead	75	No Skid	63	Slight	Car Driver
GLASGOW ROAD A8 AT ITS ROUNDABOUT JUNCTION WITH EDINBURGH BYPASS A720 EDINBURGH 317430E 672650N													
0839107	T.V.N.P.	02/10/2007	Tuesday	16	45	2	1	Fine	-9	Changing lane to right	63	No Skid	-		
									49	Going Ahead	73	Skid	49	Slight	Motorcyclist Driver
EDINBURGH CITY BYPASS A720 70 METRES NORTH AT ITS JUNCTION WITH GOGAR ROUNDABOUT EDINBURGH 317500E 672410N													
0843006	M.V.N.P.	24/09/2006	Sunday	18	39	3	1	Raining	63	Going Ahead	15	Skid	-		
									37	Going Ahead	51	No Skid	37	Slight	LGV Driver
									30	Going Ahead	51	No Skid	-		

A8 at A720
Accidents 01/01/2004 - 31/12/2008

loc_descr acc_ref	acc_type	a_date	a_day	a_time_hr	a_time_min	no_veh	no_cas	weather	age_driver	manoeuvres	veh_movecp	skidding	cas_age	cas_severe	cas_type
A8 at A720 02 07 09. Number of Accidents: 33															
GOGAR ROUNDABOUT ON THE ROUNDABOUT APPROX 1 METRE FROM THE JUNCTION WITH SOUTH GYLE BROADWAY EDINBURGH 31755															
0027606	T.V.N.P.	12/01/2006	Thursday	13	20	2	1	Fine&Wind	45	Going Ahead	37	No Skid	-		
									36	Going Ahead	37	No Skid	43	Slight	LGV Passenger
GLASGOW ROAD A8 AT THE JUNCTION WITH SOUTH GYLE BROADWAY EDINBURGH															
0060304	M.V.N.P.	21/01/2004	Wednesday	19	15	3	1	Fine	51	Stopping	37	No Skid	-		
									41	Stopping	37	No Skid	41	Slight	Taxi Driver
									51	Stopping	37	No Skid	-		
GOGAR ROUNDABOUT ON THE ROUNDABOUT EDINBURGH 3175608 672570N															
0132906	T.V.N.P.	14/02/2006	Tuesday	10	50	2	1	Fine	58	Changing lane to left	19	No Skid	-		
									37	Going Ahead	19	No Skid	37	Slight	Car Driver
GLASGOW ROAD A8 ON ITS GOGAR ROUNDABOUT JUNCTION WITH SOUTH GYLE BROADWAY EDINBURGH 3175608 672610N															
0191406	T.V.N.P.	20/02/2006	Monday	08	15	2	1	Fine	45	Going Ahead	15	No Skid	-		
									39	Waiting to go ahead	15	No Skid	39	Slight	Car Driver
GLASGOW ROAD A8 ABOUT 300M W FROM MAYBURY ROAD EDINBURGH 3177508 672690N															
0209605	M.V.N.P.	05/03/2005	Saturday	15	45	3	1	Fine	17	Going Ahead	73	No Skid	-		
									24	Waiting to go ahead	73	No Skid	24	Slight	Car Driver
									39	Waiting to go ahead	37	No Skid	-		
NEWBRIDGE TO EDINBURGH ROAD A8 200 METRES WEST OF ITS JUNCTION WITH A720 EDINBURGH 3172208 672530N															
0258104	T.V.N.P.	26/03/2004	Friday	12	00	2	1	Fine	47	Going Ahead	37	No Skid	-		
									25	Going Ahead	37	No Skid	22	Slight	Car Passenger
GOGAR ROUNDABOUT AT JUNCTION WITH ST JOHNS ROAD A8 EDINBURGH 3175308 672670N															
0279606	T.V.N.P.	02/04/2004	Friday	10	30	2	1	Fine	32	Changing lane to left	73	No Skid	-		
									25	Going Ahead	73	No Skid	25	Slight	Car Driver
GLASGOW ROAD A8 AT ITS ROUNDABOUT JUNCTION WITH SOUTH GYLE BROADWAY EDINBURGH 3175808 672610N															
C207707	T.V.N.P.	02/04/2007	Monday	11	09	2	1	Fine	71	Stopping	37	No Skid	15	Slight	Car Passenger
									39	Waiting to go ahead	37	No Skid	-		
EDINBURGH BYPASS A720 APPROX 100 METRES SOUTH OF ITS JUNCTION WITH GOGAR ROUNDABOUT LEADING TO A8 SOUTH GYLE															
0320105	T.V.N.P.	14/04/2005	Thursday	08	48	2	1	Raining	21	Going Ahead	51	Skid	21	Serious	Motorcyclist Driver
									30	Changing lane to right	51	No Skid	-		
EDINBURGH TO NEWBRIDGE ROAD A8 100 YARDS EAST OF A720 EDINBURGH CITY BYPASS EDINBURGH 3176708 672650N															
0324304	T.V.N.P.	19/04/2004	Monday	12	55	2	1	Fine	46	Changing lane to left	37	No Skid	-		
									28	Going Ahead	37	No Skid	28	Slight	Car Driver
EDINBURGH CITY BYPASS A720 AT ITS ROUNDABOUT JUNCTION WITH GLASGOW ROAD A8 EDINBURGH 3174608 672520N															
0328605	T.V.N.P.	16/04/2005	Saturday	13	30	2	1	Raining	39	Starting	37	No Skid	-		
									23	Waiting to go ahead	37	No Skid	23	Slight	Car Driver
GOGAR UNDERPASS A8 50 METRES WEST OF THE JUNCTION WITH A720 EDINBURGH CITY BY-PASS EDINBURGH 3173508 672580N															
0342708	M.V.N.P.	16/04/2008	Wednesday	14	00	4	2	Fine	63	Going Ahead	73	No Skid	63	Serious	LGV Driver
									27	Going Ahead	73	No Skid	-		
									52	Going Ahead	73	No Skid	50	Slight	Car Passenger
									50	Going Ahead	73	No Skid	-		
GLASGOW ROAD A8 AT JUNCTION WITH EDINBURGH CITY BYPASS A720 EDINBURGH 3175708 672600N															
0387504	T.V.N.P.	08/05/2004	Saturday	10	15	2	2	Other	64	Going Ahead	37	Skid	-		
									51	Waiting to go ahead	37	No Skid	51	Slight	Car Driver
													29	Slight	Car Passenger
GLASGOW ROAD A8 ON THE UNDERPASS AT IT'S JUNCTION WITH EDINBURGH ROAD EDINBURGH 3174908 672610N															
0389507	T.V.N.P.	03/05/2007	Thursday	18	30	2	1	Fine	45	Going Ahead	37	No Skid	45	Slight	Taxi Driver
									51	Going Ahead	37	No Skid	-		

A8 at A720
Accidents 01/01/2004 - 31/12/2008

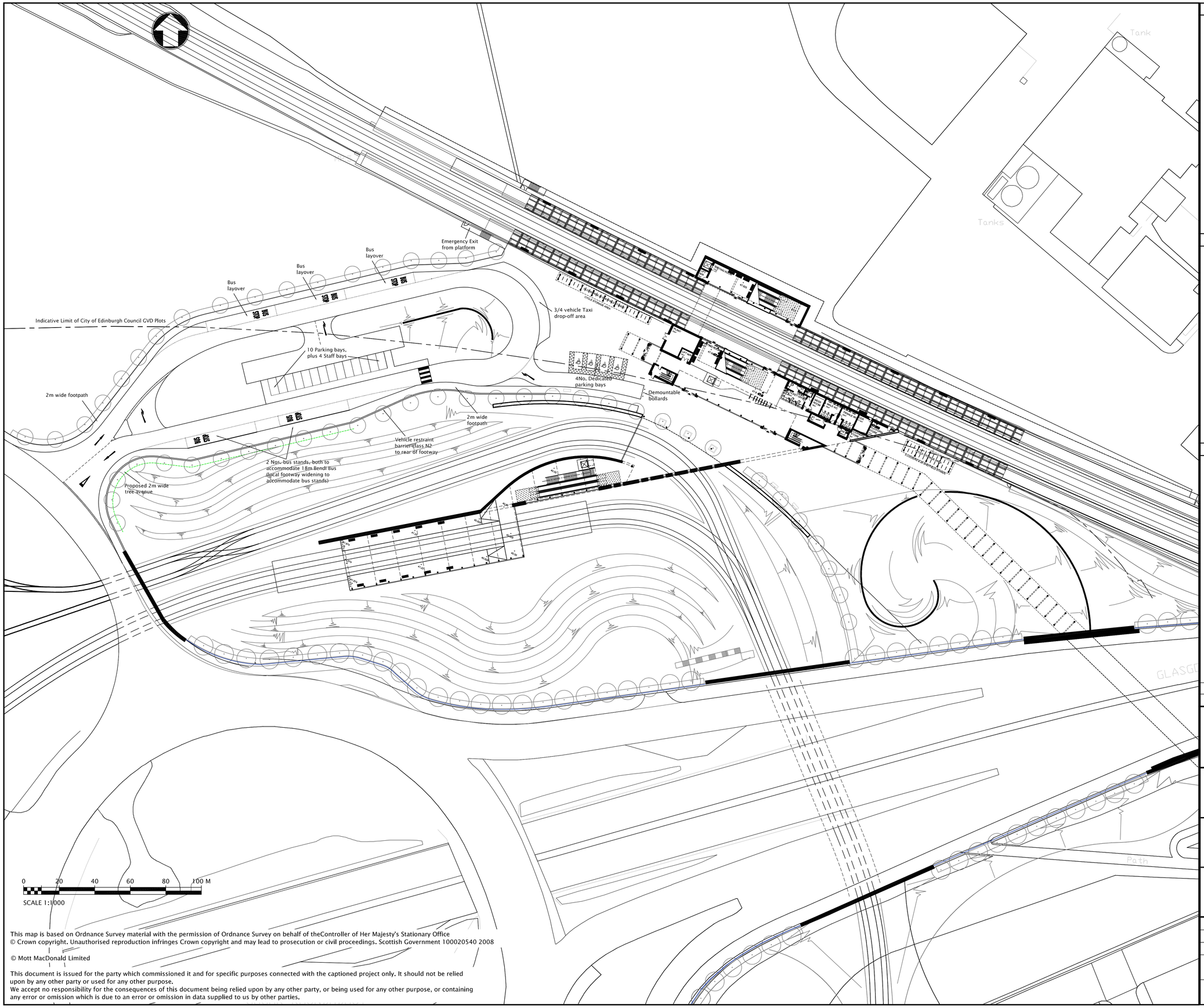
severity	No. of Accidents	% of total.
Fatal	0	0.0
Serious	2	6.1
Slight	31	93.9
Total	33	100.0

cas_class	No. of Casualties	% of total.
Driver or Rider	28	75.7
Vehicle or pillion passenger	9	24.3
Pedestrian	0	0.0
Total	37	100.0

cas_type	No. of Casualties	% of total.
Car Driver	20	54.1
Car Passenger	7	18.9
LGV Driver	2	5.4
LGV Passenger	2	5.4
Motorcyclist Driver	4	10.8
Taxi Driver	2	5.4
Total	37	100.0

Produced by: 0026125, at: 02/07/2009 08:29:39
Report includes details from the following subsets,
1 'A8 at A720 02 07 09'

Appendix C. Proposed Interchange Layout



Notes

1. Ordnance Survey (OS) Mastermap data provided by Transport Scotland (Order data 14/03/08: Order Ref: 44160) for the sole purposes of planning Gogar Inter-modal Transport Interchange. Due to OS licence conditions, any party other than the Scottish Government (hereafter referred to as such party) may only use this map for official business dealings with the Scottish Government. If such party wishes to use this map for other uses, such party must first obtain a separate licence from OS.
2. All dimensions are in meters unless otherwise stated.
3. All levels are in metres above Ordnance Datum (AOD).
4. Horizontal and vertical level information is indicative only and has been approximated from the EARL and Edinburgh Tram topographical survey information. Heavy rail level information has been taken from the topographical survey information provided by Transport Scotland (Babcock Rail Drawings BR/SUR/DWG/001 and 002).
5. The Edinburgh Tram Design Manual specifies that off-street tram stops have pedestrian crossings at each end of the stop. Only one pedestrian crossing is provided at the New Gogar Interchange to deter pedestrians from walking in a westerley direction towards tram depot and away from interchange.
6. The tram stop shown in this plan is intended for public use only.

Key to symbols

Reference drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
P1	06/10/09	DR	First Issue	DE	

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Client
Network Rail, Buchanan House, 58 Port Dundas Road Glasgow, G4 0HF

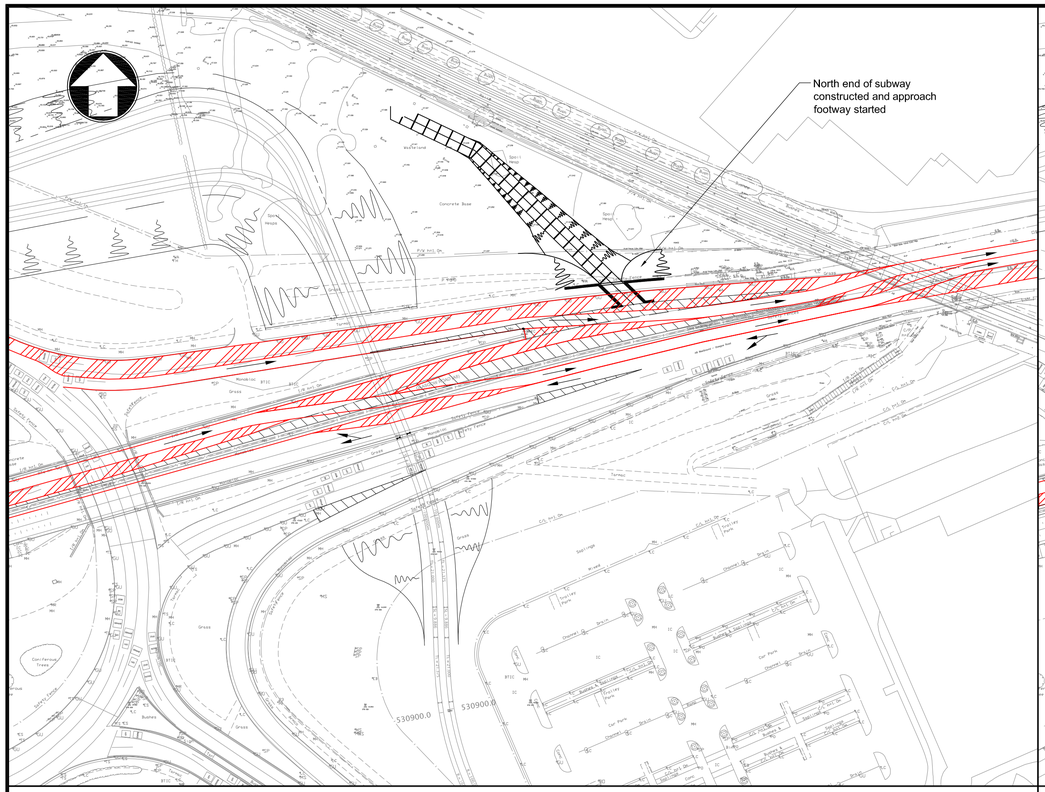
Project
Gogar Inter-modal Transport Interchange

Title
Proposed Site Layout Plan and Access Road

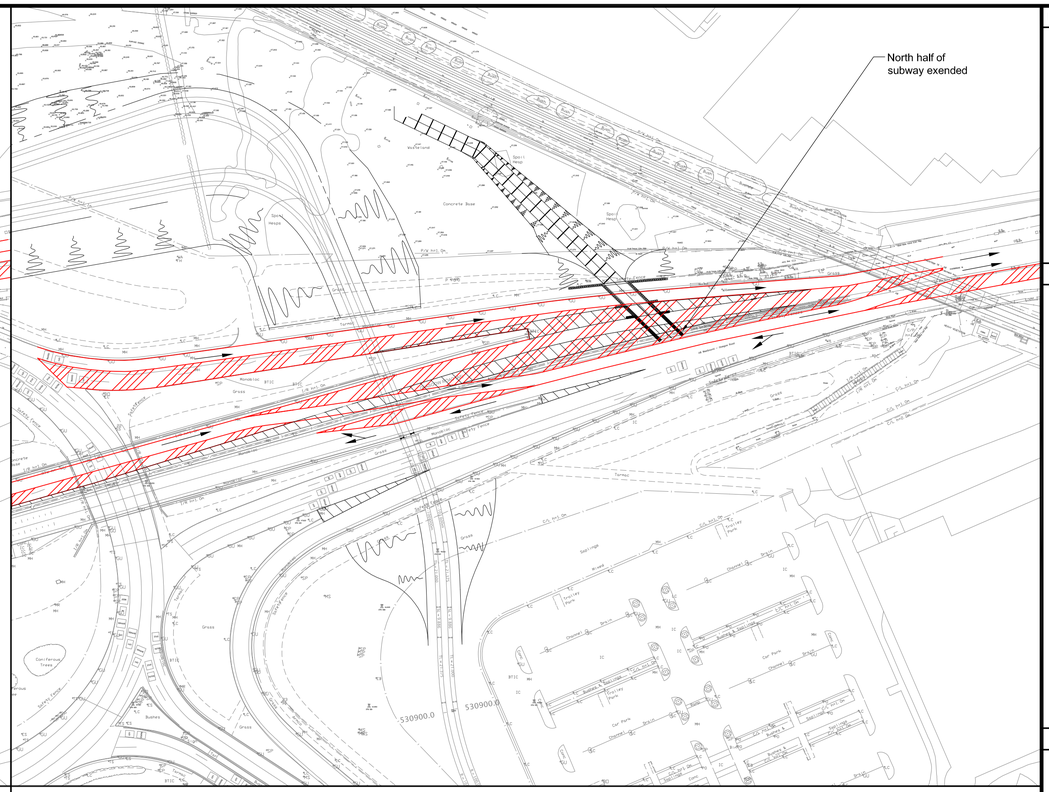
Designed	DJW	DJW	Eng.Chk.	RM	RM
Drawn	DJW	DJW	Coordination	DJW	DJW
Dwg.Chk.	RM	RM	Approved	SMcI	SMcI

Scale at A1: 1:500
Project: 243272
CAD file:
Status: PRE
Drawing No: 252960/ARC/0008
Rev: P01

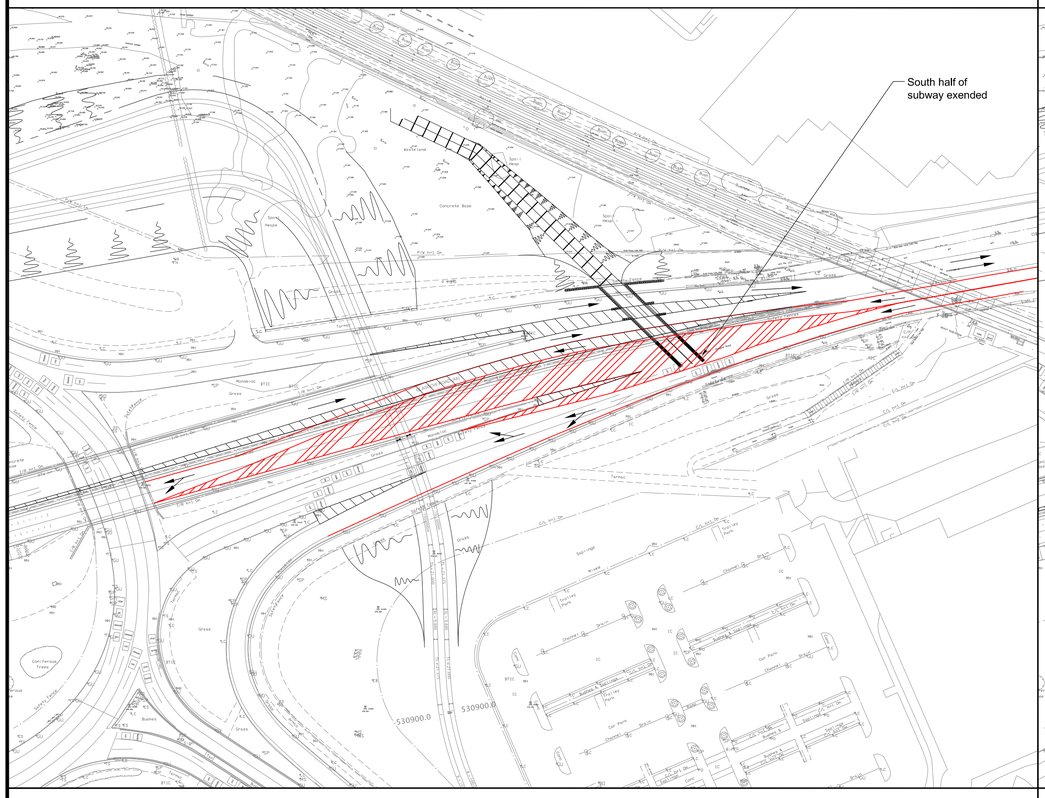
Appendix D. A8 Construction Traffic Management Proposals



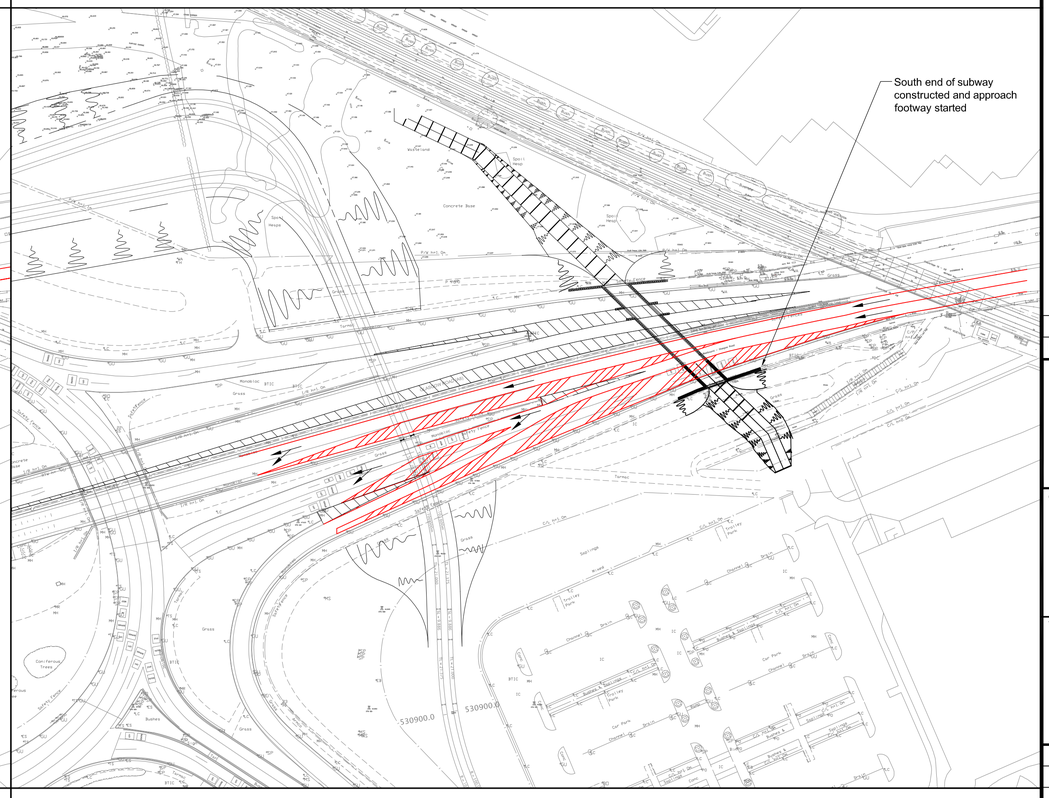
Traffic Management - Phase 1



Traffic Management - Phase 2



Traffic Management - Phase 3



Traffic Management - Phase 4

Notes

1. Traffic proposals are schematic and do not represent full geometric detail required for compliance with standards.
2. Detailed traffic management proposals shall be developed at GRIP stage 5 and agreed with the affected highway authorities.

Key to symbols

Lane closed

Existing chevrons

Lane open

Reference drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
P1	24/09/2009	MF	Preliminary issue.	BD	

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Client

Network Rail
Buchanan House
58 Port Dundas Road
Glasgow G4 0HF

Title

Gogar Transport Interchange
A8 Traffic Management Proposals

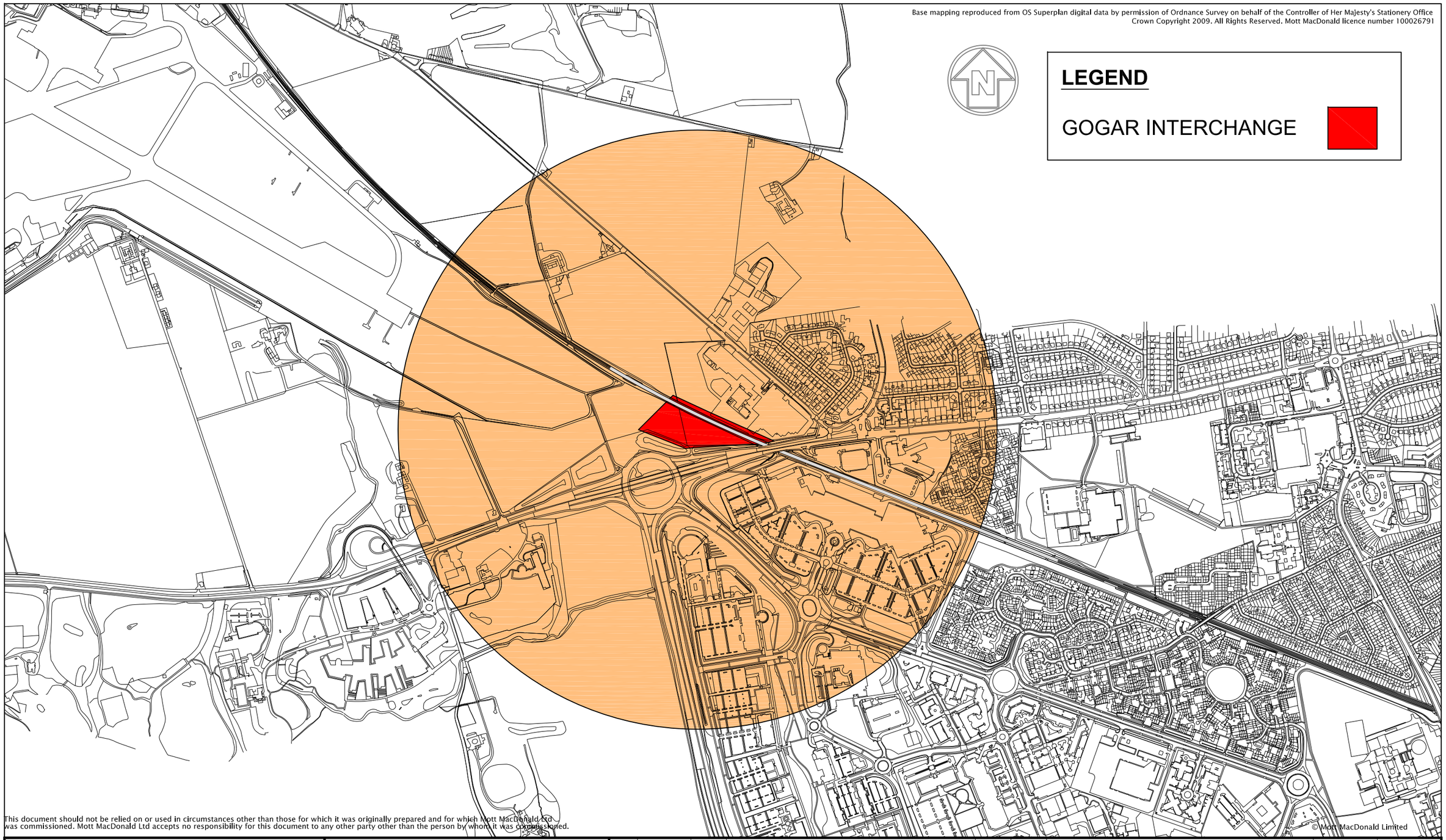
Designed	B Duguid	BD	Eng check	B Duguid	BD
Drawn	M Furness	MF	Coordination	M Odling	MO
Dwg check	P Sobers	PS	Approved	R Mitchell	RM

Scale at A1	Status	Rev
1:1000	PRE	P1

Drawing Number

252960-CIV-3003

Appendix E. 800m Isochrone



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GLASGOW
G4 0HF

Rev	Date	Drawn	Description	Ch'k'd	App'd
0	18-08-09	AR	DRAFT ISSUE 1	PG	-
1	06-10-09	AR	DRAFT ISSUE 1	PG	JD

Title

GOGAR INTER-MODAL TRANSPORT INTERCHANGE

TRANSPORT ASSESSMENT

APPENDIX E - 800m ISOCHRONE

Drawn	AR
Checked	PG
Approved	JD
Scale at A3	1:10,000 @ A3

Drawing No. 252960-TA-01

Rev	Status
1	DRAFT

P:\Glasgow\ITG\Transport Planning\Projects\252960 CC05 GOGAR\E - Drawings\03 - Working\ 252960-TA-01-rev1.dwg Oct 06, 2009 - 11:40am ros35994