



Environmental Statement Non-Technical Summary Updated 2007





**Mouchel** FAIRHURST

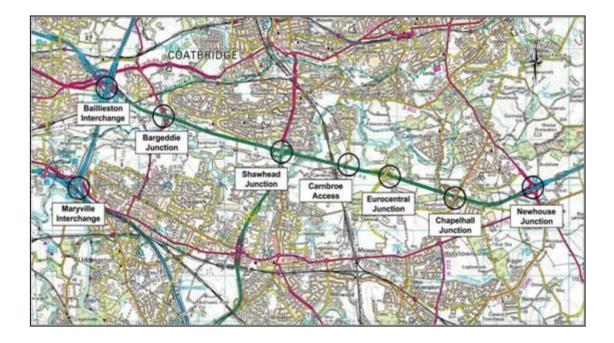
# M8 Baillieston to Newhouse Non-Technical Summary

#### Introduction

In 2003 Scottish Ministers announced that as part of their commitment to complete the Central Scotland Motorway network, the A8 dual carriageway between Baillieston and Newhouse would be upgraded to motorway standard.

An Environmental Impact Assessment was completed on the proposed motorway scheme and the findings were set out in an Environmental Statement published in March 2006. The scheme subsequently underwent some minor amendment, and the Environmental Statement has now been updated and republished, taking these amendments into account.

This Non-Technical Summary sets out the key findings of the Updated 2007 Environmental Statement.



#### **Background to the Scheme**

The 10 km section of the A8 trunk road between Baillieston and Newhouse forms part of the main Trunk Road network connecting Edinburgh and Glasgow. The A8 Corridor between Baillieston and Newhouse is:

- a key section of the trunk road network;
- a principal route for freight;
- an inter-urban connection between Central Scotland towns and Edinburgh and Glasgow business centres;
- an intra-regional distributor between population and employment centres within North Lanarkshire.

The combination of roles results in high levels of local, regional and long distance traffic using roads which fall significantly below suitable standards.

#### The Need for the Scheme

Even with the completion of the major maintenance commission in 2004 this section of the trunk road network suffers from traffic congestion, and all types of road user share the road.

The existing traffic capacities between Baillieston and Newhouse constrain local economic development due to poor access to approved development sites.

As a consequence of the Central Scotland Transport Corridors Studies, Scottish Ministers announced in 2003 that:

"The A8 between Baillieston and Newhouse will be upgraded to dual three lane equivalent motorway standard with preparatory work to start immediately for the scheme to be operational prior to 2010."



#### **Objectives**

The M8 Baillieston to Newhouse improvement has been developed in accordance with Transport Scotland's key transport objectives:

#### **Environment**

 to protect the natural and built environment and lessen adverse impacts of traffic on people through improved design and effective management of the network.

#### Safety

 to improve safety for all users within the road corridor, including where possible separating long distance strategic traffic from short distance local trips.

#### **Economy**

 to support sustainable economic activity along the road corridor, reducing delays and improving journey time reliability.

#### Integration

• to support the integration of transport policies by providing motorway connection to the Eurocentral Rail Freight Terminal.

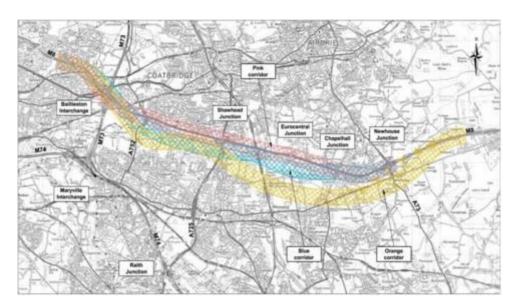
#### **Accessibility**

 to provide improved access to facilities and employment areas, and also maintain pedestrian and cyclist linkages and help avoid community severance by improving north-south routes.



#### **Alternative Route Options**

Various options for upgrading the A8 between Baillieston and Newhouse have been considered in the past. During recent studies approximately 26 alternative route options or combinations, within 3 distinct corridors, were subject to initial appraisal before a preferred scheme was identified which was considered to best meet the scheme objectives.



#### **The Proposed Scheme**

The scheme aims to separate strategic east-west traffic from more local north-south traffic. It also allows for the potential future upgrading at Baillieston Interchange to provide link roads that could improve traffic movements between the M8 east of Baillieston and the M73 south of Baillieston, and to use the proposed M74 completion as an east-west route to destinations west of Glasgow.

The proposed motorway includes junctions at Baillieston Interchange, Shawhead Junction (A725), Eurocentral Junction, Chapelhall Junction and Newhouse Junction. The scheme includes an All Purpose Road (APR) that caters for local movements between the surrounding built up areas including Baillieston, Bargeddie, Coatbridge, Bellshill and Chapelhall and the strategic motorway network. The APR also caters for traffic movements that are not directly provided via the proposed motorway junctions.

Further amendments to Swinton Roundabout at Baillieston have been made and the environmental impacts of the re-alignment of this roundabout have been assessed. Provision has also been made within the scheme for a new east-west footpath and cycleway link, which enhances non-motorised user access along the A8 corridor.

#### **Environmental Impact Assessment**

The Environmental Statement describes the Environmental Impact Assessment (EIA) carried out as part of the scheme design in relation to its potential impacts on humans, the natural and historic environment, and current and future uses of the environment.



#### **Consultations**

The design and environmental impact assessment of the scheme included consultation with a range of organisations, public bodies, non-governmental organisations and private individuals and businesses. Consultation responses were used to inform the evolution of the conceptual design, identify key environmental issues, and to develop mitigation measures.

#### **Environmental Impacts and Mitigation**

#### **Air Quality**

The proposed scheme is expected to improve local air quality in some locations and to cause a deterioration in others. In most places, the changes will be negligible. The largest deteriorations will be at the small number of properties that are directly adjacent to the proposed new route. The largest improvements will be at the properties that are close to the existing A8 where traffic would be relieved. Overall, the proposed scheme is expected to have a minor adverse effect on local air quality.

A slight improvement in annual mean concentrations of nitrogen dioxide and particulates ( $PM_{10}$ ) is expected in the Chapelhall and Coatbridge Air Quality Management Areas (AQMAs). Any changes in concentrations within the Motherwell AQMA will be negligible.

The scheme is expected to bring about an extremely small increase in the total emissions of relevant air pollutants across the road network.

Any effect of construction vehicle emissions on local air quality will be negligible. Dust generated during construction works will be controlled through mitigation measures. Properties that are closest to the construction works and to site entrances might experience occasional dust soiling.





#### **Cultural Heritage**

No Scheduled Monuments or Listed Buildings are directly affected by the scheme. There are no significant adverse impacts on cultural heritage and therefore no specific mitigation is required. Should any previously unrecorded remains be discovered during the construction phase, appropriate steps will followed by the Contractor to inform Historic Scotland and conserve, record or further investigate as considered necessary.

#### **Land Use**

Total land take for construction of the scheme is approximately 340 hectares, 195 hectares (57%) of which is already owned by the Scottish Ministers, having been purchased for an earlier M8 proposal in the mid 1990's. One property will require demolition. Land will be required in the Green Belt, but there will be very little effect on land used by the public. There will be some adverse impacts within ancient and other woodland, locations with Tree Preservation Orders, Protected Urban Woodland and Protected Open Space. Extensive new planting and landscaping will help to mitigate impacts over the long term.

Much of the land required is classified as capable of agricultural production, although significant areas are not in active farming use. Some of the land required is of prime quality and actual loss will be compounded by operational disturbance due to fragmentation, severance, and reduction in size of holdings, which may affect viability. There will be no residual severance due to the mitigating effects of proposed accommodation tracks and bridges which will also enhance the local and regional network of recreational routes.

There are minor impacts on community land which will be fully mitigated.

Some of the land required is designated for industrial or business use but on balance the scheme benefits development land largely due to anticipated increase in the attractiveness and marketability of the A8/M8 corridor.

Overall the principal land use impacts are on loss of and disruption to agricultural land and on the environmental planning aspects of development land, both of which are considered to be moderately adverse effects. In the longer term they should be outweighed by access and organisational improvement together with the potential economic development and landscape enhancement benefits which the scheme is expected to promote.

#### **Disruption Due to Construction**

The construction period is expected to last for approximately 30 months, with work carried out in phases along the length of the scheme. Two-lane running in both directions will be maintained on the A8 during the construction period, but construction is likely to cause direct and indirect disruption at and around the main intersections and where the new roads link to the existing network.

There will be temporary adverse visual impact to occupiers of properties with views across the scheme, and to road users. The most visually intrusive activities will relate to earthworks.

Careful programming and control of work will help to reduce impacts and to minimise disruption to local communities and road users.

To avoid or reduce impacts, mitigation measures will be specified in an Environmental Management Plan (EMP) and Method Statements prepared by the Contractor prior to commencement of works on site.



#### **Ecology and Nature Conservation**

Most of the habitat that will be lost as a direct result of the scheme is undesignated and of low nature conservation value. There will, however, be habitat loss within Sites of Interest for Nature Conservation (SINCs) at six separate points along the scheme. The North Calder Water SINC will be subject to habitat loss at Crowflat Pond, North Calder Wood and Rosehall Bridge – Carnbroe Mains and the Wilderness – Rosehall Bridge.

There are protected species present along the route corridor, including otter, kingfishers and badgers. Mitigation measures to protect these species have been identified, including: provision for the safe movement of wildlife across the motorway and along watercourses at key locations, additional surveys prior to construction allied with the implementation of protective measures during both the construction and operational phases, and new habitat creation.

Mitigation measures for habitat loss will include the creation of species-rich conservation grassland/wildflower areas and the addition of new wetlands in and around drainage attenuation and treatment ponds. Approximately 52 hectares of new woodland and scrub/shrub areas, and over 20 kilometres of new hedgerow will be planted, using native species appropriate to the area.

The scheme will cause some habitat fragmentation, primarily along the offline section of the motorway, which although difficult to mitigate fully, will be reduced over time by new areas of woodland, hedgerow, wetland habitat and conservation grassland planting which will help provide linking habitat as these areas establish and mature.



#### **Landscape and Visual Issues**

No nationally or regionally designated landscape areas are affected by the scheme. The off-line section of the proposed motorway will pass through agricultural land with occasional woodland of locally medium to high landscape quality (Kirkwood to Eurocentral). Elsewhere, business and commercial land adjoins most of the corridor, although there is more open countryside to the east of Newhouse of locally medium landscape quality. Generally, the scheme has the greatest effects on landscape and visual receptors at the western end of the route (Bargeddie – Eurocentral) and lesser effects at the eastern end (Eurocentral – Newhouse), with the exception of the proposals at the new Chapelhall Junction.

Landscape and visual impacts have been minimised where practicable by the route alignment and through extensive landscape planting. Much of the motorway lies in cutting, thereby minimising adverse visual effects. Some adverse impacts will remain where sections of the road are elevated and/or on embankment, and where mitigation measures cannot fully mitigate the associated effects.

Prominent engineered structures including bridges, earth embankments and engineered slopes are introduced where the proposed route crosses the valley of the North Calder Water and at major new road junctions (Shawhead and Chapelhall). Where the proposed motorway route follows closely the line of the existing A8 (Eurocentral – Newhouse) effects are less extensive as the landscape has already been significantly affected by the existing road development and associated road infrastructure. Here there will be no significant additional alterations to existing landscape/visual conditions.

The A8 is lit between Baillieston and east of Chapelhall with additional lighting at major junctions. The offline section of the proposed motorway will introduce additional lighting into a previously unlit area. This will be mitigated through the implementation of a mitigation strategy for lighting and planting to minimise light pollution whilst meeting visibility and road safety requirements.



#### **Vehicle Travellers**

The proposed road will result in reduced driver stress on both local users and users of the new section of motorway by reducing congestion and difficulties arising from the existing mixing of local and through traffic.

There will be permanent effects on driver views where the new road passes through cuttings and over embankments, and increased interruption of views from the all purpose road and in the vicinity of the new junctions. Views will be retained out to the countryside at specific points along the route; to the north of the A8 route corridor at Swinton, and between Shawhead and Newhouse, and to the south of the A8 route corridor from Bargeddie to Eurocentral.

Vegetation and planting, as it matures, will help to screen the route where it passes over embankments.

#### Traffic Noise and Vibration

It is estimated that under the proposed scheme over 7100 properties located in the study area will experience a change in noise level of 1dB(A) or more. The scheme will benefit more properties, both in terms of noise levels and noise nuisance, with the scheme in place compared with the scheme not being in place. The scheme is predicted to reduce noise at several locations currently experiencing high noise levels from traffic along the A8. Where the significance of increase in noise due to the scheme is predicted to be more than slight, acoustic barriers will be provided where practicable. There are 340 properties at which the predicted significance of impact is greater than slight and where acoustic barriers will reduce this impact.

Under the Noise Insulation (Scotland) Regulations 1975 some properties may be eligible for secondary glazing in order to further mitigate the impact of traffic noise due in part to the scheme.



#### **Pedestrians, Cyclists, Equestrians and Community Effects**

Impacts on pedestrians, cyclists and other non-motorised users, and on community severance have been identified at:

- Route 75 of the National Cycle Network between Bargeddie and Kirkwood and along the A752, including the SM05 Right of Way.
- Routes between Shawhead to the north and Shirrel and Strathclyde Business Park to the south, across the Shawhead (A725/B7070) junction.
- Path links south from the North Calder Heritage Trail via Calderbank and Eurocentral, including the B799 corridor.

The assessment confirmed that the existing A8 also presents a barrier to north-south movements at some locations.



#### Access mitigation proposals include:

- A new path accommodating a realigned SM05. This, in turn, will be linked to a proposed new pedestrian/cycle bridge crossing of the A8 between SM05 and Kirkwood, via the Showcase Cinema retail park.
- New sections of shared footway/cycleway across the Shawhead junction, including pedestrian/cycle overbridges to link to Shawhead to the north with Shirrel/Bellshill and Strathclyde Business Park to the south.
- Reconfiguration of existing footway/cycleway links at Eurocentral.
- Provision of shared footway/cycleway along a realigned B799 linked to the North Calder Heritage Trail and facilitating North Lanarkshire Council's proposed regional cycleway.
- New sections of footway/cycleway between the Bargeddie Bridge and the A725 and the Shawhead and Eurocentral interchanges.

The pedestrian/cyclist crossings of the new route or junctions are designed to be accessible to all user groups. The proposals will provide links between local communities (Swinton, Crosshill, Bargeddie, Kirkwood, Viewpark, Kirkshaws, Shawhead, Shirrel, Carnbroe, Calderbank and Newhouse) and areas of employment such as in the Strathclyde Business Park, Eurocentral and the Newhouse Industrial Estate.

These proposals will provide a significant improvement for the local communities in the standard of infrastructure currently available. They will help to promote increased pedestrian and cyclist activity along the corridor, in particular across the Shawhead Junction where existing connectivity between communities, jobs and other key services is constrained.

In addition to this mitigation, the scheme improves accessibility and interlinkage of the wider footpath and cycleway network through contributing to a continuous east-west pedestrian/cycleway link between Baillieston Interchange and Newhouse



#### **Water Quality and Drainage**

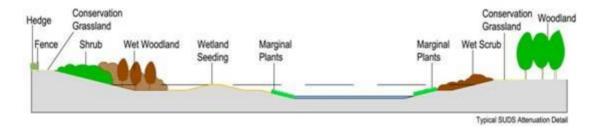
Five watercourses will be crossed by the scheme: the North Calder Water, Luggie Burn, Kennel Burn, and two small un-named burns. The North Calder Water will be bridged at Shawhead, the bridge design having been developed as a single span to avoid adverse impacts upon the watercourse and its bankside habitat as far as possible. Other diversion and culverting work will be designed to meet requirements for the free passage of fish and other wildlife. The drainage design will also open up two sections of small watercourses that are currently culverted.

The proposed scheme does not impinge on the floodplain of the North Calder Water and there will be no floodplain storage loss.

Erosion protection measures will be used to minimise damage to the banks and bed of receiving watercourses at the drainage outfalls.

The scheme incorporates a Sustainable Urban Drainage System (SUDS) which will treat runoff from the proposed scheme and protect existing watercourses, as well as provide areas of new wetland habitat. Spill containment storage features will be constructed to capture any potentially polluted runoff from the roads following collisions or accidents before they reach these ponds or local watercourses.

No significant adverse impacts on water quality or quantity are predicted with mitigation in place. During the construction phase special protection measures will be set in place by the Contractor to protect groundwater, watercourses and ponds from accidental damage. Temporary bridging of the Luggie Burn at Bargeddie and the North Calder Water will be necessary during construction which will also incorporate measures to protect the watercourses and their bank side habitats.



#### **Geology and Soils**

No sensitive hydrogeological or geological features or sites have been identified and there will be negligible impacts on groundwater as a result of the scheme.

Several areas of potentially unstable ground have been identified, associated with the potential collapse of shallow abandoned mine workings. These areas will require mitigation measures, such as grouting, to consolidate them.

At a small number of locations, past railway and mining activities may have caused some ground contamination. Mitigation measures will be set in place to protect construction and maintenance workers and the public, and to ensure that any possible migration of contaminants is avoided.

Approximately 2.4 million cubic metres of rock and soil will be excavated during construction, much of which will be re-used to meet the need for fill material for embankments. Much of the balance of excavated material will be incorporated within landscape areas and potentially contaminated materials will be contained or safely removed. Additional imports of bulk materials will be required for the construction phase, but the amount required will be kept to the minimum possible.

#### **Policies and Plans**

The scheme generally complies with the relevant planning policies and guidance at national, structure plan, and local plan levels. It realises the strategic roads policy designation (Policy TR5 from the North Lanarkshire Southern Area plan) which provides for an M8 route and it will contribute to improvements in the national road and transport infrastructure. It will also assist in promoting visibility, access, and marketability of employment land, as well as contributing to economic development and regeneration. The scheme will be compatible with the policy of reducing congestion on the route network.

There will be implications for existing SINCs, Green Belt, Protected Open Space and some access routes, which will require mitigation measures to be set in place. However, parts of these designated areas are also allocated and safeguarded in local planning policy for a strategic road link.

## **Scheme Development**

The Environmental Statement is based on a conceptual design. The final specimen design, and scheme as it will be implemented by the Contractor, will result in no material change to impacts described in the Environmental Statement without further consultation with statutory organisations and publication of an addendum to the Environmental Statement if required.

#### **Comments**

Any person wishing to comment on the Environmental Statement should write to:

# Chief Road Engineer Transport Scotland Trunk Road Infrastructure & Professional Services Buchanan House 58 Port Dundas Road Glasgow G4 0HF

Written responses are invited within 42 days of the advertised date of publication of the Environmental Statement. Further copies of the Non-Technical Summary are available free of charge. Copies of the Environmental Statement and the Non Technical Summary are available for download from the website <a href="www.m8completion.com">www.m8completion.com</a>. Printed copies of the Environmental Statement may be obtained from the above address at a charge of £250. A CD is also available for £10.

The Environmental Statement is also available for public viewing at the above address and at the following locations:

#### **Glasgow City Council**

City Chambers George Square Glasgow

#### **North Lanarkshire Council**

Civic Centre Motherwell

#### Viewpark Library Burnhead Street

Viewpark

#### **Baillieston Library**

141 Main Street Glasgow

#### **Bellshill Cultural Centre**

John Street Bellshill Lanarkshire

#### **Old Monkland Library**

Marshall Street Coatbridge

#### **North Lanarkshire Council**

Municipal Buildings Kildonan Street Coatbridge

#### **South Lanarkshire Council**

Montrose House 154 Montrose Crescent Hamilton

#### **Newarthill Library**

Kirkhall Road Newarthill

#### **Chapelhall Library**

2 Honeywell Crescent Airdrie

#### Whifflet Library

Easton Place Coatbridge

#### **Scheme Summary**

#### The scheme comprises:

- 2km of online dual 3-lane motorway
- 5km of offline dual 3-lane motorway
- 3km of online dual 2-lane motorway
- 10km of dual 2-lane all purpose road including 4.8km of the existing A8
- 16km of pedestrian/cycle path
- 3 new motorway junctions at Shawhead, Eurocentral and Chapelhall
- 2 amended motorway junctions at Baillieston and Newhouse
- 2 railway bridges, including a new Braehead (Cutty Sark) structure
- 30 road structures, including a major crossing of the North Calder Water
- Capacity improvements on M8 Eastbound, Junction 9 to Baillieston Interchange
- Significant environmental mitigation and enhancement works

The total length of the scheme: approximately 13.3km

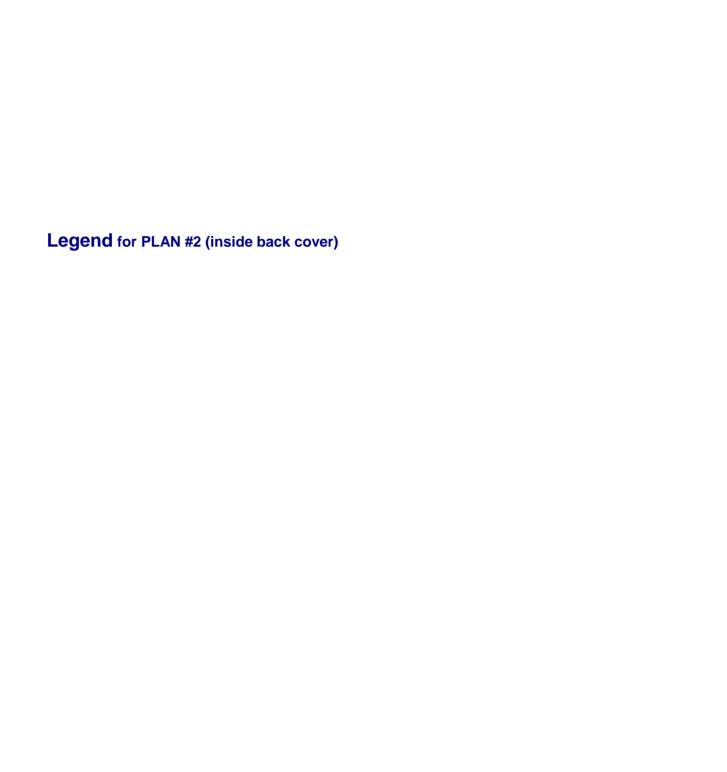
Land requirements: approximately 340 Ha in total

Construction Period: a maximum of 30 Months (estimated)

# Legend for PLAN #1

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### pull out map side 2











**Young Associates** (Environmental Consultants) Ltd



www.m8completion.com