



THE SCOTTISH OFFICE  
DEVELOPMENT DEPARTMENT

## M80/M73 STEPPS TO HAGGS



CONSULTATION FORUM

Summer 1996

## Foreword

In December last year, the Secretary of State announced to Parliament that the M80/M73 - the missing section of the central Scotland motorway network - should be taken forward within The Scottish Office's three-year construction plan.

As you may be aware, two options are under consideration to upgrade the existing A80 between Stepps and Haggis. These are known as the A80 Route and the Kelvin Valley Route.

Irrespective of whether the new motorway runs round or through Cumbernauld, the justification for the scheme is clear. However, before a decision is made on which option to take forward, The Scottish Office wish to hear the public's views on the benefits and disadvantages of the options.

Accordingly, a consultation exercise is underway which will culminate in a Consultation Forum. This brochure describes the background to the exercise and how you can take part to give your views.

Your views are important therefore you are very much urged to participate.

THE SCOTTISH OFFICE DEVELOPMENT DEPARTMENT  
NATIONAL ROADS DIRECTORATE

## THE CONSULTATION FORUM

### What is the Objective?

The objective of the consultation exercise is to inform the public and interested parties about the motorway proposals and allow them to put forward their views on the two route options. This information will be used to assist and inform the decisions to be taken by the Secretary of State concerning route choice.

### What is the Forum Process?

The consultation process will follow a structured programme of meetings and presentations culminating in a Consultation Forum. An independent Facilitator, Drew Mackie, has been appointed to preside and collate the views of the local population and interested bodies.

Initial presentations have been made to local authorities, statutory consultees and other bodies. Details of the Kelvin Valley and A80 Routes have been provided and the consultees have been invited to nominate a delegate who will present their views at the Consultation Forum.

Following these initial presentations, a number of local exhibitions will be held with Community Councils at which communities will be given the opportunity to view the alternative proposals in detail. In the evenings after the exhibitions, workshop sessions will be run by the Facilitator at which the public will be able to discuss the proposals in small informal groups.



Traffic Lights - Moodiesburn

The Facilitator will forward the opinions he collects to the local Community Council, who will consider them when formulating a response to the routes. The Community Council will then nominate a delegate to attend the Forum. If there are conflicting views within the community, exceptionally, they may send more than one delegate.

The Facilitator will chair the Consultation Forum at which the delegates will present their views. He will also be responsible for preparing a factual record of the proceedings. This record will be considered in conjunction with other aspects of scheme appraisal, such as environmental impact, economic and operational performance and other views collected during the exercise, when the Secretary of State decides which option to take forward.

### THE ROLE YOU CAN PLAY

The Scottish Office wish to know what you think of the two routes. You can make your views known as follows.

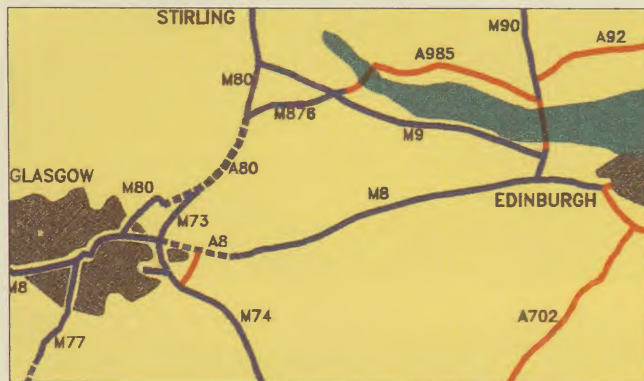
1. Please look at the exhibition material carefully. Staff are on hand to answer any queries you may have.
2. If you can, attend one of the workshops which take place in the evenings after the exhibition. Here you will have the opportunity to air your views.
3. The views expressed at the workshop will be recorded by an independent Facilitator and presented to the local Community Council.
4. The Community Council will formulate a local response to the proposals which will be presented at the Consultation Forum.



Auchenkilns Roundabout from the West

## THE EXISTING SITUATION

The A80 between Stepps and Haggs is an all-purpose dual two lane carriageway which is one of Scotland's most important Trunk Routes. It is a vital artery for commercial long distance traffic travelling to and from the north and north-east of the country, as well as an important communication link for the central belt. The annual average daily flow is already in excess of 70,000 vehicles at the busiest section, and includes a high proportion of heavy goods vehicles (16%). This level of traffic exceeds the normally accepted maximum for two lane dual carriageway roads and results in congestion, delay and a reduction in safety.



Central Scotland Strategic Network

The major constraints of the existing route include traffic signals and speed restrictions at Muirhead and Moodiesburn and Auchenkilns at-grade roundabout linking with the A73. The M73 motorway joins via a free flow arrangement at Mollinsburn before the route passes the new town of Cumbernauld which has developed around it.

After passing between the masonry piers of the Castlecary Railway Viaduct, the A80 crosses over the Forth and Clyde Canal before tying in with the existing M80 just before the M876 interchange. Sections of the route have sub-standard alignment and visibility, and junction layouts do not comply with current standards.

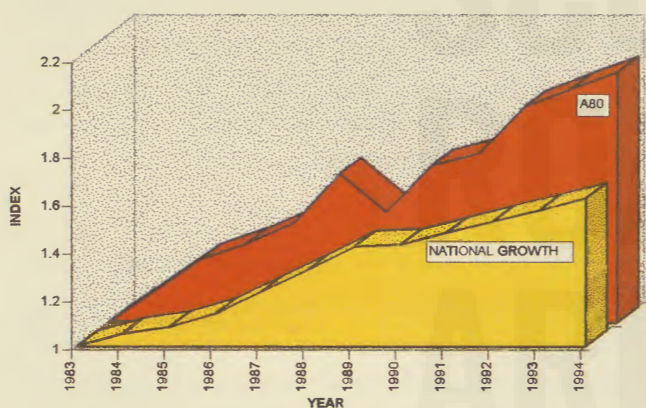


Queueing at Mollinsburn

266 accidents causing personal injury were reported between 1990 and 1995 on the A80. Of these, 8 resulted in death, 59 caused serious injuries and 199 caused slight injuries.

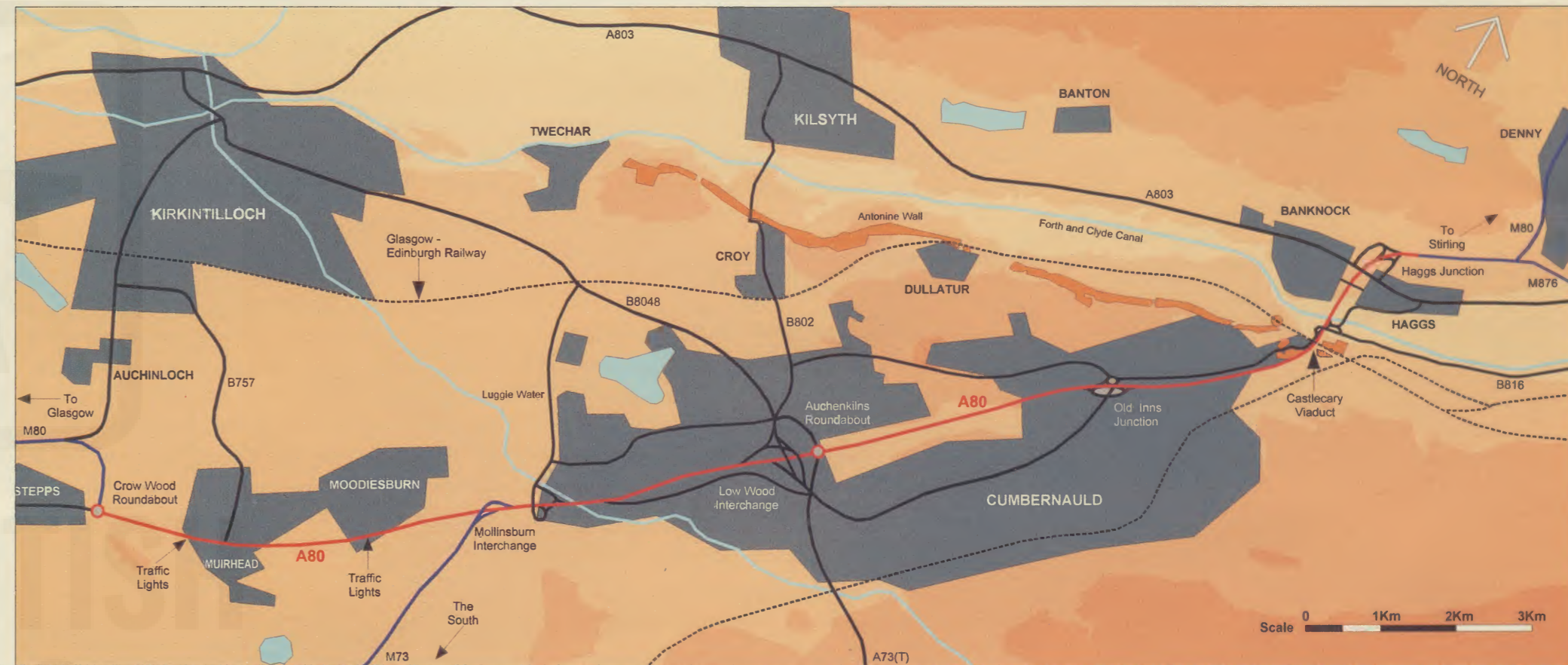
The deteriorating condition of the existing road will require substantial maintenance and reconstruction works in the near future. If undertaken in isolation, this will cause severe congestion because of the lack of satisfactory diversion routes. For example, it is predicted that carriageway repairs on the approach to Auchenkilns roundabout could result in further delays during peak times of up to 15 minutes. Traffic will also divert to the local road network, causing disruption in the communities along the route.

On the section of the route from Mollinsburn to Haggs, which carries predominantly long distance traffic, the rate of traffic growth now exceeds that predicted nationally for high growth. However, a much lower rate of growth has occurred between Crow Wood and Mollinsburn, reflecting the effect of constraint in Central Glasgow on local trips.



Traffic Growth at Castlecary

## THE EXISTING ROUTE



### KEY

- |                     |                   |                     |
|---------------------|-------------------|---------------------|
| Less than 50 m AOD. | 150 to 200 m AOD. | Existing Roads.     |
| 50 to 100 m AOD.    | Urban Areas.      | Existing Motorways. |
| 100 to 150 m AOD.   | Water Bodies.     | Existing A80.       |

# THE NEED FOR THE SCHEME: PLANNING BACKGROUND

## Policy Objectives

It is clear that the existing A80 does not satisfy even the requirements of today's traffic, both in terms of standards and the condition of the carriageway. The Scottish Office recognise this and have identified key Policy Objectives for the upgrade of the A80 which are listed below.

The Government's Policy Objectives in upgrading the A80 are to:

1. Enhance the competitive performance of the Scottish economy and increase employment and inward investment by providing good, quick and reliable strategic road links.
2. Complete the Central Scotland motorway network.
3. Link North and North East Scotland with the M6 main route to European markets.
4. Improve safety in the A80 corridor and help meet the government's overall target of reducing road casualties by a third by the year 2000 from the average level of the first half of the 1980's, with particular emphasis on reducing fatal, serious and child casualties.
5. Minimise the intrusion of traffic on the environment by improved design and sensitive management of the network.
6. Achieve good value for money for both taxpayers and transport users.

## Procurement

The route will be procured as part of the Government's Private Finance Initiative by means of a Design, Build, Finance and Operate (DBFO) contract. The Government intends to start construction work before April 1999.

## Available Corridors for Improvement

The constraints map shown opposite illustrates the features which affect route selection. Investigations have identified two corridors which are dictated, largely, by the need to minimise the impact on existing communities and ecologically sensitive and historically valuable sites. The first corridor bypasses Muirhead and Moodiesburn, proceeds between Kilsyth and Croy and passes to the north of Banknock. The route developed within this corridor is known as the Kelvin Valley Route. The other corridor also bypasses Muirhead and Moodiesburn before joining the line of the existing A80 dual carriageway at Mollinsburn; consequently the option produced in this corridor is named the A80 Route. Each option is reviewed in greater detail in the remainder of this brochure.

## Alternative Transport Modes

The potential for transfer of trips from car to public transport (bus or rail) has been assessed. The analysis undertaken indicates that the transfer in the A80 corridor is relatively small. The route carries significant volumes of longer

distance strategic traffic for which there is little potential for modal transfer. However, investigations continue to refine the analysis taking full account of any public transport initiatives likely to impact on the scheme.

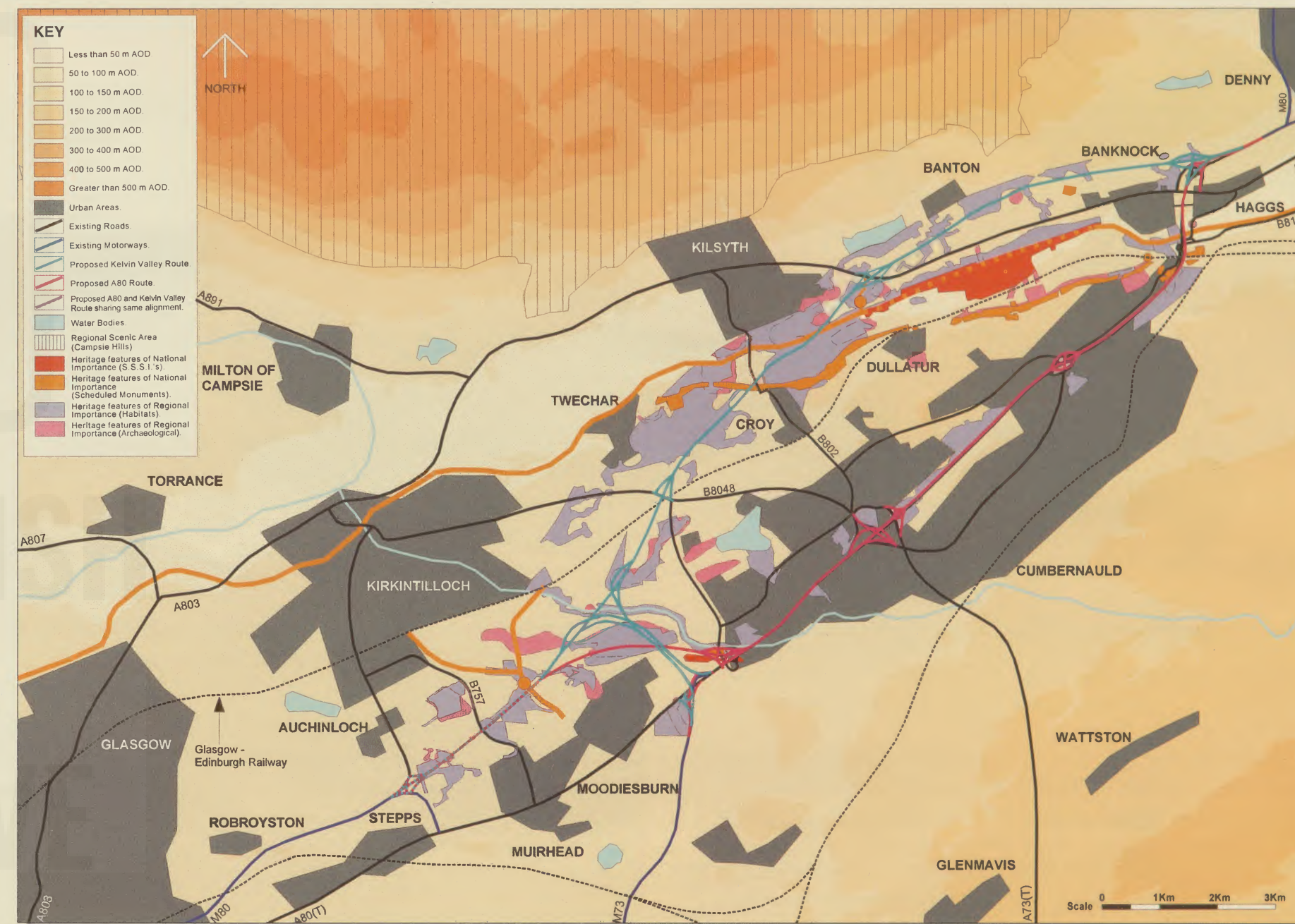
## Generated Traffic

Recent developments in the appraisal of major road schemes include the assessment of the potential for traffic to be generated beyond normal growth assumptions by the improvement in travel conditions. Such generation would indicate a potential increase in economic activity but could reintroduce congestion within the network to reduce the benefits expected from the scheme. An assessment has been undertaken for this scheme which shows the potential to be at a moderate level, and this needs to be considered in the development strategy.

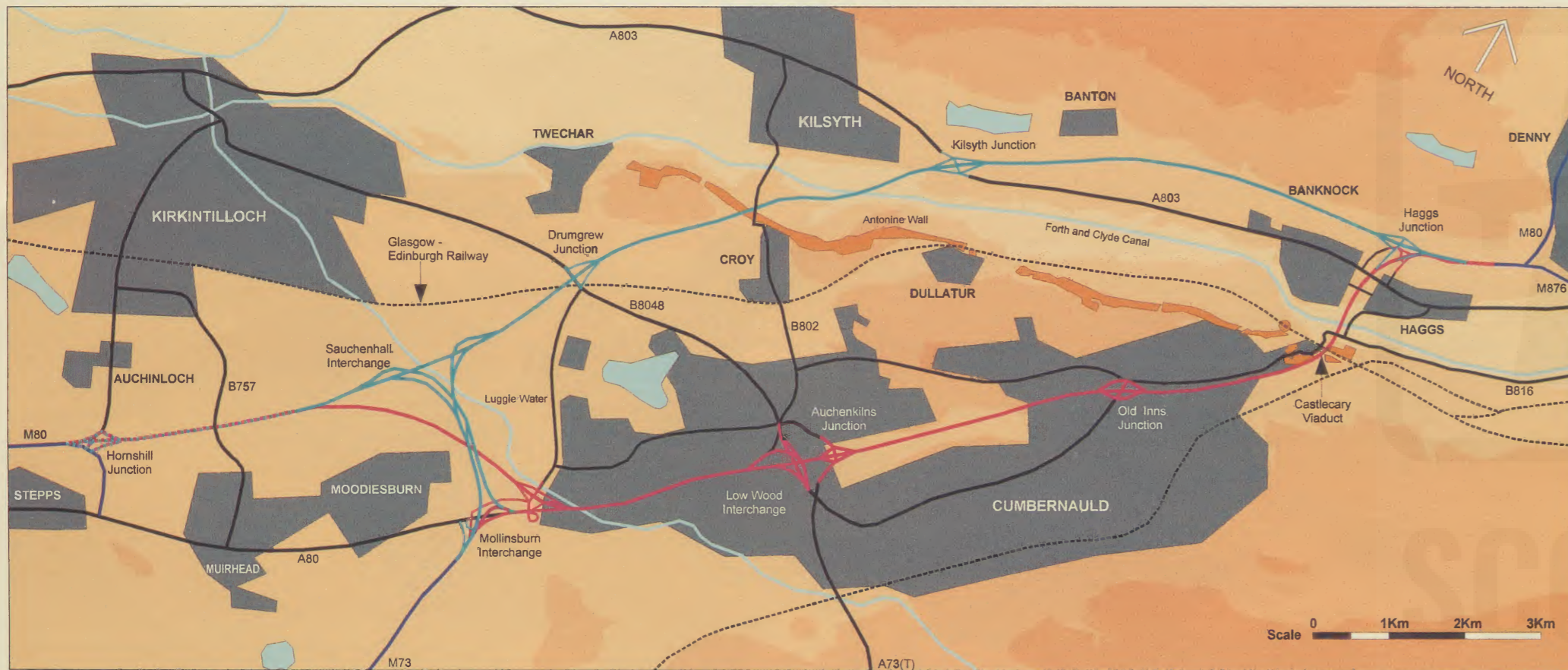


Looking East from Auchenkilns

# CONSTRAINTS MAP



## ROUTE OPTION PLAN



### KEY

	Less than 50 m AOD.		150 to 200 m AOD.		Existing Roads.		Proposed A80 Route.
	50 to 100 m AOD.		Urban Areas.		Existing Motorways.		A80 and Kelvin Valley Routes following same alignment.
	100 to 150 m AOD.		Water Bodies.		Proposed Kelvin Valley Route.		

## THE TWO OPTIONS

### KELVIN VALLEY ROUTE

The Kelvin Valley Route is 20.3km in length and is shown coloured blue on the route option plan opposite. The route continues on the line of the existing Stepps Bypass from Hornshill Junction, passing north of Muirhead and Moodiesburn to Sauchenhall Interchange where it crosses the Luggie Water. This section of the road will be constructed as dual two lane motorway.

An extension of the M73 runs from a new interchange at Mollinsburn to join the M80 at Sauchenhall to provide a strategic link for long distance traffic from the national west coast motorway spine M74/M6/M1-M40.

From Sauchenhall the motorway climbs to the north, crossing the main Glasgow-Edinburgh railway line at Drumgrew. The route continues in a north easterly direction crossing the Antonine Wall to the north of Croy and the Forth and Clyde Canal to the south of Kilsyth. From Kilsyth the motorway runs in an easterly direction passing south of Banton to a new junction at Haggs. Between Sauchenhall and Haggs the route will be constructed as dual three lane motorway. From Haggs junction the route will tie back into the existing M80 alignment terminating at the M80/M876 Interchange. This section of the route will be dual four lane motorway.

Five junctions will be provided on the route at Hornshill, Sauchenhall, Drumgrew, Kilsyth and Haggs with a junction also provided at Mollinsburn for the M73 extension. The existing A80 will remain as a local distributor road for Cumbernauld, an arrangement which offers operational benefits in comparison to the A80 Route. 3 properties will be demolished to construct the route.

Provision will be made during construction to facilitate the widening of the Hornshill to Sauchenhall section to dual three lane standards if future traffic conditions exceed predictions and it is required (for example the construction of wider bridges). The total scheme cost of this route is estimated to fall within the range £128M to £143M (including VAT) at today's prices. The route offers a good economic return to the nation.

### A80 ROUTE

The A80 Route is 20km in length and is shown coloured red on the route option plan opposite. The route follows the same alignment as the Kelvin Valley Route over the first three kilometres. This section of the route is dual two lane motorway. After bypassing Moodiesburn and Muirhead it swings to the east to join the line of the existing A80 at Mollinsburn. At this location there will be a new high capacity interchange with the M73.

Between Mollinsburn and Castlecary the A80 Route is an upgrade of the existing road which passes close to Condorrat and through Cumbernauld. This section comprises dual four lane motorway between Mollinsburn and Low Wood Interchange and dual three lane motorway between Auchenkilns Interchange and Old Inns Interchange.

From Old Inns Interchange the route continues as dual three lane motorway on the line of the existing A80 to Castlecary, where each carriageway divides in two, to allow it to pass through the arches of Castlecary Viaduct. Once through the viaduct the route crosses the Forth and Clyde Canal with sufficient clearance to allow navigation, before swinging off the line of the existing road at Haggs and tying back into the existing M80 at the M80/M876 Interchange. Between Haggs and the M80/M876 Interchange dual four lane motorway will be provided.

Six junctions are provided on the A80 Route at Hornshill, Mollinsburn, Low Wood, Auchenkilns, Old Inns and Haggs. 6 properties and 4 outbuildings will be demolished and 24 gardens will be partially affected in terms of landtake.

Provision will be made during construction to facilitate the widening of the Hornshill to Mollinsburn section to dual three lane standards and the Auchenkilns to Haggs section to dual four lane standards if future traffic conditions exceed predictions and it is required (for example the construction of wider bridges). The total scheme cost of this route is estimated to fall within the range £133M to £157M (including VAT) at today's prices. The route offers a good economic return to the nation.

# ENVIRONMENTAL CONSIDERATIONS

## KELVIN VALLEY ROUTE

Three Scheduled Monuments of national importance are directly affected: the Antonine Wall; the Forth and Clyde Canal; and a section of the Canal Feeder system. The alignment crosses the Wall to the north of Croy at a site disturbed by quarrying and an existing road, resulting in moderate impact. The bridge crossing of the Canal causes moderate impact to what is considered to be one of the most attractive and quiet sections of the canal. The Canal Feeder also suffers moderate impact. An unscheduled monument of national importance, Monklands and Kirkintilloch Railway, is severed at a location already disturbed by colliery activity and is moderately affected. A further 6 sites or buildings of regional importance and 17 of local importance are directly affected to some degree.

No areas of national importance are affected, but 14 sites of regional importance are affected. Of these, the raised bog remnants at Barbeth and Gartshore Moss will potentially be very severely affected; the ground water regimes within these sites are extremely complex and mitigation proposals may not be entirely successful in maintaining present conditions.

In summary:

- Regional Importance - 2 sites very severely affected  
5 sites severely affected  
5 sites moderately affected  
2 sites slightly affected
- Local Importance - 7 sites affected to varying degrees

Many of the sites which are severely affected form habitat corridors such as Bothlin/Garnkirk Burn and the Canal Feeder at Townhead and these will suffer fragmentation by the route.

Comprehensive mitigation measures are proposed, such as habitat creation to replace areas lost and the appointment of an ecological inspector during construction in order to minimise disturbance. However, the impact on sites of nature conservation interest will remain as very considerable.

## A80 ROUTE

Four Scheduled Monuments of national importance are directly affected: Mollins Roman Fort; Garnhall temporary Roman Camp; the Antonine Wall; and the Forth and Clyde Canal. The Mollins archaeological site is destroyed and there is a slight impact on the other three sites. The bridge over the Canal at Castlecary replaces the existing unnavigable A80 structure thereby restricting the impact and offering the potential to reopen the Canal. Monklands and Kirkintilloch Railway, an unscheduled site of national importance, suffers the same moderate impact as for the Kelvin Valley Route. A further 5 sites or buildings of regional importance and 7 of local importance are directly affected to some degree.

The route impinges slightly on Mollins Craig SSSI, a site of national importance to geology. No significant effect on ecology is envisaged. 10 sites of regional ecological importance are affected, but only one of these, Barbeth Moss will potentially be very severely affected.

In summary:

- National Importance - 1 site not significantly affected
- Regional Importance - 1 site very severely affected  
2 sites severely affected  
1 site moderately affected  
6 sites slightly affected
- Local Importance - 8 sites affected to varying degrees

Similar mitigation measures to those outlined for the Kelvin Valley Route would be implemented. However, the impact on sites of nature conservation interest will remain as considerable.

## KELVIN VALLEY ROUTE

### LANDSCAPE AND VISUAL IMPACTS

The areas through which this route will pass are not designated as being landscape of particular value although construction of the motorway will have some adverse effect on the landscape character. The most severely affected areas include between Stepps and Sauchenhall where the road will sever a number of prominent ridges and woodland blocks as well as crossing the Luggie Water Valley. Also south of Kilsyth the route will cross the Forth and Clyde Canal and the flood-plain of the Kelvin Valley on embankment.

The route will have a substantial visual impact on the buildings in South Barwood and the southern edges of Kilsyth although elsewhere impacts will occur mainly at individual buildings and properties on the fringes of communities close to the route. Additional benefits will accrue to residents along the existing A80 arising from reductions in traffic volumes.

Approximately 16 watercourses are affected by the route of which 3 are classified as high quality, i.e. important for fish spawning and as a source of clean water. Temporary disturbance during construction can be potentially considerable, but will be limited by mitigation measures. In operation the impact will be significant because a number of outfalls are required on currently unaffected watercourses. The requirements of the Scottish Environment Protection Agency will be met.

Disruption to vehicle travellers, which will occur during construction of the motorway tie-in sections at Hornhill, Mollinsburn and Haggs, will be of a significant, but relatively short term nature. The route passes through mainly green-field sites and therefore relatively few properties will experience construction impacts such as noise, vibration and dust.

## A80 ROUTE

The section of this route which lies on the line of the existing A80 will have a minimal impact on the landscape character. For the off-line section the areas through which it passes are not designated as being landscape of particular value although the motorway will have some adverse effect on landscape character. As for the Kelvin Valley option the most severely affected areas for the A80 Route are at the south end of the alignment where a number of ridges and woodland blocks will be severed.

Significant visual impacts will occur on both the off-line and on-line sections of the A80 Route with in particular communities alongside the existing A80 suffering an increase in the current levels of visual impact

None of the estimated 14 watercourses affected by the route are of high quality. Temporary disturbance during construction is potentially considerable, if less significant than for the Kelvin Valley Route, and will be limited by mitigation measures. In operation impact will be moderate because existing outfalls will be used over much of the route. The requirements of the Scottish Environment Protection Agency will be met.

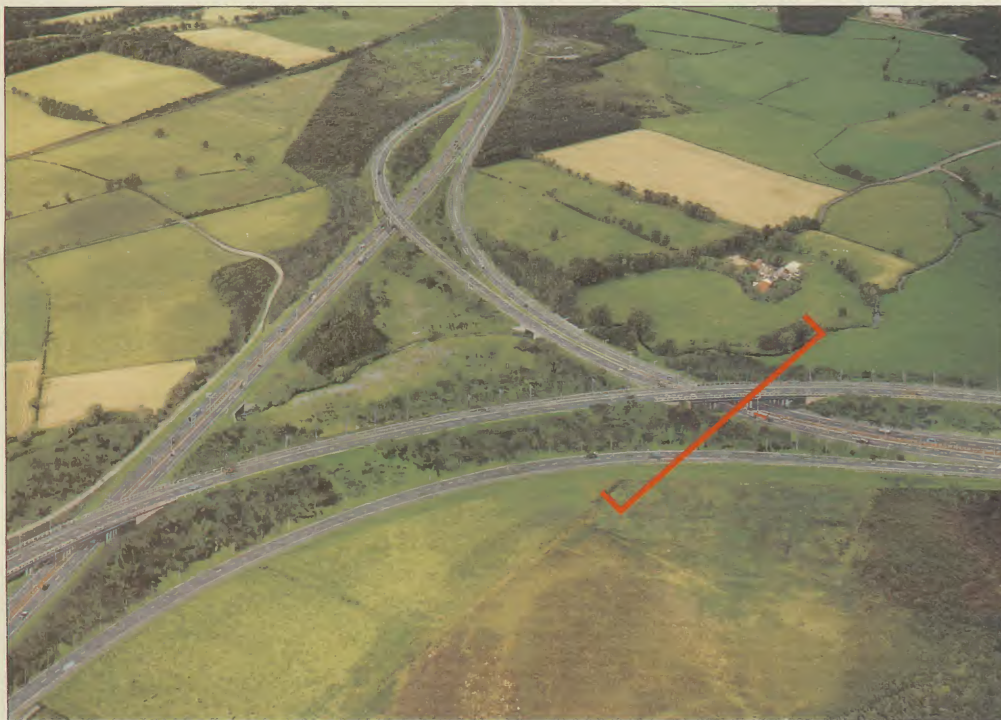
The 13 km section between Mollinsburn and Haggs is constructed on the line of the existing A80 and there is potential for major traffic disruption. However, techniques for upgrading heavily trafficked roads have improved dramatically in recent years and these will be used to the full to minimise disruption. This may result in an increase in traffic flows on alternative routes through residential areas. The route passes through a number of communities and a significant number of properties will suffer severe disruption due to construction generated noise, vibration and dust.

### ECOLOGY

### WATER AND DRAINAGE

### DISRUPTION DUE TO CONSTRUCTION

## KELVIN VALLEY ROUTE



*Photomontage - Sauchenhall Interchange looking east*

## A80 ROUTE



*Photomontage - looking towards Auchenkilns*

## KELVIN VALLEY ROUTE

### AIR QUALITY

The Kelvin Valley Route option will significantly improve air quality for residents in communities lying adjacent to the existing A80. At two locations emission levels currently exceed the recommended maximum value but upon opening of the route levels will drop below those which are potentially damaging to health.

Conversely, air pollution in the vicinity of the new motorway will increase, although there are very few adjacent properties and the air pollution will not approach harmful levels.

## A80 ROUTE

The impact on pollution levels resulting from the off-line section will be similar to that of the Kelvin Valley Route. Residents of properties on the bypassed section of the existing route will experience a decrease in air pollution levels, while there will be an increase in the vicinity of the new motorway.

The on-line section of the route between Mollinsburn and Haggs will produce an improvement in air quality compared to the existing situation. This is due to the removal of traffic congestion and the associated high emission levels. However, although harmful levels will not be approached, air quality will be inferior to that resulting from the construction of the Kelvin Valley Route.

### NOISE

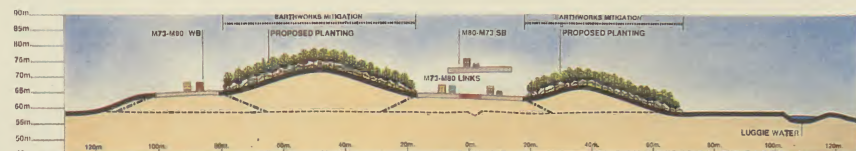
Construction of the Kelvin Valley Route will greatly reduce traffic noise on the A80. The decrease will be immediately apparent to nearby residents. On average, affected properties in Moodiesburn, Chryston and Muirhead will experience a 30-50% drop in noise levels, while levels through Cumbernauld and at Castlecary Village will fall by approximately 25%. Around 900 residencies will receive a substantial benefit, while a further 1400 will notice some degree of improvement.

There will be an adverse impact on the 51 properties close to the line of the proposed route. Potential increases for a small number of these properties are significant and will approach levels generally experienced in urban areas.

Mitigation measures such as earth mounding and use of noise barriers will be employed where practicable to reduce the impacts.

The benefits offered by the A80 Route are restricted to the off-line section bypassing Muirhead, Chryston and Moodiesburn. Here, 240 properties close to the existing A80 will experience a 30-50% reduction in noise levels. 30 properties will be adversely affected by the off-line section to a similar extent as those impacted by the Kelvin Valley Route.

Throughout the on-line section noise levels will rise by 1-2 decibels. However, the noise levels experienced at the great majority of properties will show little or no increase over current levels as a result of the adoption of appropriate mitigation measures. Earth mounding will be provided where possible, but noise barriers will be specified at a number of locations because of a lack of available space.



*Cross-section of Photomontage at Location Shown*



*Cross-section of Photomontage at Location Shown*

Photomontage and sections show planting with 15 years of growth

## KELVIN VALLEY ROUTE

### ROAD USERS TRAFFIC

The motorway provides higher design standards and level of provision in comparison to the A80 and therefore motorists will experience greatly improved conditions and consequently a reduction in driver stress. Local traffic, pedestrians, cyclists and other road users travelling on the existing A80 will benefit from significantly reduced traffic volumes on this route. The severance of communities bisected by the A80 will also be reduced. A slight increase in journey time for all road users will result where minor roads have been diverted to cross the new motorway, but community severance effects will be minimised.

### OTHER NOTABLE EFFECTS

Approximately 15 km of the route traverses land zoned as Greenbelt. Where feasible, impacts are minimised by routeing through areas of land formerly used for quarrying, mining, colliery spoil deposition and landfilling operations. 35 farm units will be affected by landtake with approximately half suffering severance. Vehicular access will be maintained to areas of viable severed land.

The route will have a significant impact on recreational activities centred around the Kelvin Valley, the Antonine Wall and Croy Hill orienteering site. The reduction in the A80 traffic will make it easier to replace the existing road crossing which acts as a barrier to navigation of the Forth and Clyde Canal.

### SCHEME MITIGATION

While both scheme designs take cognisance of the various engineering, environmental and planning constraints, construction will inevitably create adverse effects. The landscape proposals aim to both reduce these negative impacts and to increase environmental quality along the route through a combination of the following:-

- earthworks to help assimilate the road into the landscape or for screening purposes;
- planting of woodland, hedgerows and shrubs to extend severed or isolated vegetation, to assist in absorbing the road into the landscape and provide screening;

## A80 ROUTE

In common with the Kelvin Valley Route, the motorway will provide greatly improved conditions for motorists and therefore driver stress levels will reduce. However, where the motorway remains on the line of the existing A80, local and strategic traffic will share the route and the additional width of the motorway will perpetuate community severance. Pedestrians, cyclists and other road users prohibited from using the motorway will travel along the longer all purpose routes.

The initial 5.5 km of the route passes through land zoned as Greenbelt. Landtake is required from 15 farm units, mainly through the off-line section, with 11 of these experiencing severance. Access will be provided to areas of severed land which remain viable. The overall impact on agricultural land is less than that for the Kelvin Valley Route as 65% of the route follows the line of the existing A80.

The route will have little effect on recreational activities. At Castlecary the proposed bridge removes a blockage to navigation on the Forth and Clyde Canal.

## KELVIN VALLEY ROUTE



Photomontage - A803 Junction at Kilsyth

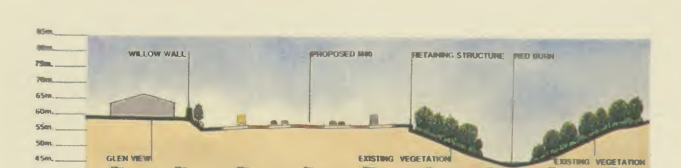
## A80 ROUTE



Photomontage - Bifurcated Carriageway at Castlecary



Cross-section of Photomontage at Location Shown



Cross-section of Photomontage at Location Shown

Photomontage and sections show planting with 15 years of growth

# THE WAY FORWARD

## What Happens Next ?

The Secretary of State will consider the views expressed during the Consultation Forum as part of the general scheme appraisal before deciding which option to take forward. Draft Statutory Schemes, as required by the Roads (Scotland) Act 1984, will then be published for the chosen option. Anyone wishing to comment or object will have an opportunity to do so at that time. By contributing to the consultation exercise now you will not prejudice your right to comment for or against any route subsequently published as Draft Statutory Schemes.

Any further enquiries about the proposals or the consultation process may be addressed to:

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*Auchenkilns Roundabout and Low Wood Interchange*



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