11 Monitoring and Evaluation

11.1 Introduction

- 11.1.1 Monitoring and Evaluation is a key aspect of the STAG process. The goal is to evaluate the success of the project against the set planning objectives identified in the initial stages of the STAG process.
- 11.1.2 The goal of monitoring should be to measure the outcomes of the projects rather than the activities or improvements put in place by the planning authorities. Monitoring should identify the levels of change and the likely reasons for change. In order to do this, Key Performance Indicators should be identified which are used to evaluate the projects success against the planning objectives.

*"Selecting measurable indicators of progress towards meeting objectives should be seen as a priority. If this is not possible, identification of relevant and appropriate surrogate indicators will enable monitoring activity to proceed efficiently. Key performance indicators (KPIs) must however be set early in the development process."*²⁰

11.2 Objectives, Targets and Key Performance Indicators

- 11.2.1 To effectively monitor the impacts of the scheme, it is essential to identify indicators of change. These indicators should relate directly to the planning objectives set out in the initial stages of STAG.
- 11.2.2 Planning objectives for the Dumfries Southern Bypass were identified as follows:
 - [RTS1] Improve transport links within Dumfries and Galloway and provide fast, safe and reliable journey opportunities to significant markets including the national economic centres of Edinburgh and Glasgow, as well as England and Northern Ireland;
 - [RTS2] Contribute to improved economic growth and social inclusion in the region whilst minimising the environmental impacts of transport;
 - [RTS3] Support the National transport target of road traffic stabilisation;
 - [RTS4] Add value to the broader Scottish economy and underpin national economic growth;
 - [RTS5] Assist in getting visitors/tourists to the region from other parts of Scotland, England, Ireland and beyond;
 - [RTS6] Making it possible for more people to do business in and from Dumfries and Galloway by providing sustainable connections to key business centres in the Central Belt and other locations such as Ayrshire and Cumbria;
 - [RTS7] Support vibrant places that provide employment, healthcare, educational and other services that people need and want, so that their quality of life is maximised;
 - [RTS8] Reduce the constraint of peripherality, both between the region's main settlements and its outlying areas, and between the region and its external markets;

²⁰ STAG Section 15.4.2

- [RTS9] Capitalise on improvements to critical long distance corridors to create new transport services, nodes and development opportunities for Dumfries and Galloway; and
- [RTS10] Pursue certain transport schemes in the context of local and national economic development, while at the same time recognising wider context of economic, social and environmental imperatives.
- 11.2.3
 KPIs must be SMART (see adjacent box), and it is important that they can be adequately measured as part of the monitoring process.
 Specific saying in precise terms what is sought;

 Measurable quantifiable wherever possible;
 Measurable with general agreement that the objective can be reached;

 Relevant a sensible indicator or proxy for the change sought; and
 Timed having an agreed future point by which it will have been met.

11.3 Reporting

- 11.3.1 Monitoring reports should be produced at appropriate intervals; it is suggested that a new report should be produced every 6 months to detail progress towards objective goals.
- 11.3.2 Monitoring reports should not be large documents, but instead a short summary containing findings and trends in an accessible manner and similar to a non-technical summary. Charts, diagrams and statistics should be used where possible to present the data in a succinct accessible manner.

11.4 Evaluation

11.4.1 Evaluation is necessary to demonstrate how effectively the scheme has met its objectives. Evaluation is carried out after the final stage of monitoring, after the scheme has been completed and in full operation for some time.

"Evaluations are specific post-implementation events designed to identify whether or not a project is performing as originally intended, whether established objectives are being achieved and whether the implemented project continues to represent value for money. An evaluation will use information gathered for monitoring purposes but will also involve data gathering, analysis and detailed interpretation that is particular to the evaluation itself."²¹

- 11.4.2 The evaluation should be a summation of the work and the monitoring reports, it should take into account:
 - whether scheme objectives have been met;
 - reasons for any failures to meet objectives;
 - analysis of performance measure indicators; and
 - interpretation using criteria of economy, efficiency, effectiveness and equity.

²¹ STAG Section 15.8.2

11.5 Conclusion

11.5.1 A monitoring and evaluation programme has been suggested which could be implemented as the scheme goes forward through construction. This would ensure that the success of the project against its set objectives is evaluated. Key Performance Indicators (KPIs) have been identified that could be used to monitor the scheme and how it meets the planning objectives in the short, medium and longer term. Table 11.1 outlines the KPIs that will be used to track the success of the scheme in terms of the planning objectives.

Table 11.1 Monitoring Method

Objective	Indicator	Monitoring Method	Timescale
Improve transport links within Dumfries and Galloway, providing fast and reliable journey times to significant markets, including the national economic centres of Glasgow and Edinburgh, as well as Northern England and Ireland	Journey Time Reliability	Journey time surveys using ANPR or GPS transponder technology	Bi-monthly in year of opening
Maximise the economic growth whilst minimising social exclusion and environmental impacts	Accessibility Emissions		
Assist with the National transport target of traffic stabilisation	Vehicle Numbers	Classified Traffic Counts	Continuous monitoring with annual analysis
Add value to the broader Scottish economy and underpin national economic growth			
Assist in getting visitors/tourists to	Accessibility	Travel Surveys	Bi-annually for a
the region from other parts of Scotland, England and Ireland		Desk and timetable research	period of 3 years
		Accessibility Package	
Improve connections between the	Accessibility	Travel Surveys	Bi-annually for a
region's communities, and between the region and its main external markets		Desk and timetable research	period of 3 years
markets		Accessibility Package	
Facilitate sustainable long distance commuting between Dumfries and Galloway to the central belt, Ayrshire and Cumbria, providing access to jobs whilst making it	Journey Time Reliability Accessibility		

Objective	Indicator	Monitoring Method	Timescale
possible for people to remain living in the South West. Offering the alternative of a move to "The Natural Place to Live" for people seeking to relocate elsewhere without moving job			
Create the kind of places that provide employment, healthcare, educational and other services that people need and want, so that their quality of life is maximised	Accessibility		
Reduce the constraint of peripherality, both between the region's main settlements and its outlying areas, and between the region and its external markets	Accessibility	Travel Surveys Desk and timetable research Accessibility Package	Bi-annually for a period of 3 years
Pursue certain transport schemes in the context of local and national economic development, while at the same time recognising environmental imperatives. Transport schemes should be seen in the wider context of economic, social and environmental objectives			

12.1 Conclusions

- 12.1.1 Based on the appraisal set out in the preceding chapters, we have prepared an Appraisal Summary Table (AST) for the Dumfries Southern Bypass provided in Appendix A.
- 12.1.2 We can summarise the Part 2 appraisal conclusions in the following table. In each case reference should be made to the AST and the preceding chapters for further explanation of how the impacts have been identified.

		Dumfries Southern Bypass
	[RTP 1] Improve transport links within Dumfries and Galloway and provide fast, safe and reliable journey opportunities to significant markets including the national economic centres of Edinburgh and Glasgow, as well as England and Northern Ireland	$\checkmark \checkmark \checkmark$
	[RTP 2] Contribute to improved economic growth and social inclusion in the region whilst minimising the environmental impacts of transport	Ο
	[RTP 3] Support the National transport target of road traffic stabilisation	×
	[RTP 4] Add value to the broader Scottish economy and underpin national economic growth	$\checkmark\checkmark$
ves	[RTP 5] Assist in getting visitors/tourists to the region from other parts of Scotland, England, Ireland and beyond	$\checkmark\checkmark$
Planning Objectives	[RTS6] Making it possible for more people to do business in and from Dumfries and Galloway by providing sustainable connections to key business centres in the Central Belt and other locations such as Ayrshire and Cumbria	$\checkmark\checkmark$
Plan	[RTS7] Support vibrant places that provide employment, healthcare, educational and other services that people need and want, so that their quality of life is maximised	$\checkmark\checkmark$
	[RTS8] Reduce the constraint of peripherality, both between the region's main settlements and its outlying areas, and between the region and its external markets	$\checkmark\checkmark$
	[RTS9] Capitalise on improvements to critical long distance corridors to create new transport services, nodes and development opportunities for Dumfries and Galloway	Ο
	[RTS10] Pursue certain transport schemes in the context of local and national economic development, while at the same time recognising wider context of economic, social and environmental imperatives	Ο

Table 12.1Summary of STAG2 Conclusions

			Dumfries Southern Bypass
	Environment		O to ***
eria	Safety		×
STAG Criteria	Economy		$\checkmark\checkmark\checkmark$
STA	Integration	✓	
	Accessibility/Social Inclusion		✓
	Implementability		\checkmark
✓✓✓ Major Benefit × Minor Disbenefit/impac			ıpact
	✓ Moderate Benefit ★★ Moderate Disbenefit/		it/impact
	✓ Minor Benefit ★★★ Major Disbenefit/impact		
	O No Benefit/Impact		

12.2 Recommendations

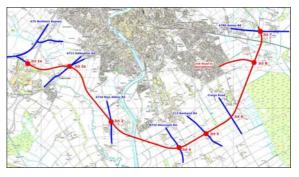
- 12.2.1 Based on the foregoing it would appear that the Dumfries Southern Bypass offers a very robust Benefit Cost Ratio, supports the delivery of the approved Regional Transport Strategy, has generally limited adverse impact on the environment, has only minor disbenefits related to safety, has significantly positive impacts on accessibility and economic activity across wide areas of the region, and it is therefore recommended that it would be a suitable project to progress further.
- 12.2.2 The next steps would be to prepare a more detailed design taking full account of the proposed environmental mitigation measures (which are intrinsic to the environmental appraisal described above), and which will allow firming up of the likely project cost. Note should be taken of the requirements for Appropriate Assessment and Environmental Assessment set out in the course of the STAG environmental appraisal.

Possible Phased Implementation

12.2.3 To date we have considered the Southern Bypass project as a complete scheme, but during the consultation a number of respondents suggested that a phased approach might be worthwhile.

12 Conclusions and Recommendations

12.2.4 From an engineering and traffic management perspective it would certainly be feasible to split the scheme into two broadly equal parts, respectively east and west of Glencaple Road. This would allow early implementation of relief to congestion in and around Georgetown, and make an immediate improvement for access to the Crichton area from the east.



- 12.2.5 We have not examined this option in greater detail than to confirm its apparent feasibility, and we have not tested the impact on costs, benefits or BCR. Whilst many of the benefits of the scheme arise from improved access to the Crichton area and therefore could be broadly expected to be proportional to the volumes of traffic on the eastern and western sections of the proposed bypass a phased implementation would mean that benefits for through traffic would not be delivered until the whole scheme was completed.
- 12.2.6 Splitting the scheme into two discrete phases could, therefore, run the risk that the BCR for the first phase alone would be insufficient to support the investment required, in which case the whole scheme would stall. If there is a desire to consider phased implementation further then we would recommend more detailed examination of the costs and benefits associated with the two sections, along with potential additional costs in delivering two discrete projects rather than one holistic project.

Appendix A – Appraisal Summary Table (AST)

Proposal Details				
Name and address of authority or organisation promoting the proposal: (Also provide name of any subsidiary organisations also involved in promoting the proposal)		Dumfries and Galloway Council (Planning and Environment), Kirkbank House, English Street, Dumfries, DG1 2HS		
Proposal Name:	Dumfries Southern Bypass	Name of Planner:	Russell Wears	
	Provision of a new road link to bypass and provide enhanced connectivity to the		£36 million (2002 prices)	
Proposal Description:	Crichton and wider area. The new road would be a single carriageway with a	Estimated Total Public Sector Funding	NPV = £199 million	
	length of approximately 10 km with connections to the A75 at either end.	Requirement:	BCR = 6.4	
Funding Sought From: (if applicable)		Amount of Application:		
Background Information				
Geographic Context:	Geographic Context:The route connects to the A75 at the west of Dumfries and circumvents the south of Dumfries with connections to several local roads then connects back into the A75 to the east of Dumfries. The land is predominately rural and would result in the small loss of agricultural land.The Dumfries South area currently suffers from restricted access as a result of the River Nith to the west and physically constrained junctions south of the town centre.			
Social Context:	Dumfries and Galloway, due to its rural location and geography, is heavily reliant on the private car as a form of transport. Dumfries is the main service centre for the region and future expansion of the town is focused on the Crichton area. The creation of the Southern bypass will significantly enhance connectivity to the area and should also help to relieve traffic congestion in the area, particularly within the town centre.			
Economic Context: The Dumfries South area is expected to undergo a considerable transformation in the near future. The re-development and expansion of the Crichton area is seen as pivotal to the development of the economy in Dumfries. The southern bypass will significantly increase connectivity to the area and act as catalyst for future growth.				

Planning Objectives			
Objective:	Performance against planning objective:		
Improve transport links within Dumfries and Galloway, providing fast and reliable journey times to significant markets, including the national economic centres of Glasgow and Edinburgh, as well as Northern England and Ireland.	The southern bypass will provide lower journey times to the south of Dumfries and the Crichton area. It should also relieve congestion in other areas of the road network, particularly Dumfries town centre.		
Maximise the economic growth whilst minimising social exclusion and environmental impacts.	The bypass will provide significantly enhanced connectivity to the Crichton area, where a large number of developments are planned, including health and education services. There will be a variety of environmental impacts, some positive and some negative		
Assist with the National transport target of traffic stabilisation.	The bypass proposals are intended to improve connectivity to an established area for what is a predominantly car dependent population. It is not intended to increase travel demand.		
Add value to the broader Scottish economy and underpin national economic growth.	The development of the Crichton area is seen as key to economic growth in the wider area and will be underpinned by the creation of a southern bypass.		
Assist in getting visitors/tourists to the region from other parts of Scotland, England and Ireland.	The bypass will have a small positive impact on this objective in that there may be some reduction in congestion on roads providing national connections.		
Improve connections between the region's communities, and between the region and its main external markets.	The bypass will significantly enhance connectivity to the south of Dumfries and the Crichton area, which is planned to house business, health and education services, all key destinations.		
Facilitate sustainable long distance commuting between Dumfries and Galloway to the central belt, Ayrshire and Cumbria, providing access to jobs whilst making it possible for people to remain living in the South West. Offering the alternative of a move to "The Natural Place to Live" for people seeking to relocate elsewhere without moving job.	The bypass will have no impact on this objective.		
Create the kind of places that provide employment, healthcare, educational and other services that people need and want, so that their quality of life is maximised.	The bypass will act as catalyst in the development of the Crichton area which will house a number of essential services such as the regional hospital and a higher education facility.		

Reduce the constraint of peripherality, both between the region's main settlements and its outlying areas, and between the region and its external markets.		The bypass will have minimal impact on this objective, however, there may be some reduction in congestion on roads providing key regional connections.
Pursue certain transport schemes in the context of local and national economic development, while at the same time recognising environmental imperatives. Transport schemes should be seen in the wider context of economic, social and environmental objectives.		The bypass will provide significantly enhanced connectivity to the Crichton area where local economic development is focussed. There will be a variety of environmental impacts, some positive and some negative
Rationale for Selection or Rejection of Proposal:On the basis of the overall appraisal set out in this AST and the accompanying Part 2 Report, we recomm that this scheme should be progressed to Detailed Design Appraisal.		

Implementability Appraisal			
Technical:	There are no technical challenges associated with the bypass proposals, which have been developed using well established engineering techniques.		
Operational:	There are no operational challenges anticipated		
Financial:	Funding of the construction of the construction of the Dumfries bypass, subject to a sufficiently robust business case, is unlikely to pose any impediment to proceeding with the development.		
Public:	It is anticipated that the public would generally be very accepting of a bypass.		

Governments Objective	es for Transport	
Objective	Assessment Summary	Supporting Information
Environment:	×	See following section.
Safety:	×	The bypass is expected to have a minor negative impact in terms of accidents.
Economy:	~~	The bypass is expected to significantly lower journey times to the south of Dumfries with associated economic benefits. In addition the bypass should also relieve other parts of the road network with journey time and reliability benefits. Positive EALIs would potentially be generated by strengthening the growth of Gross Value Added in the regional economy of Dumfries and Galloway, which is currently under-performing neighbouring regions. This may be related to the level of geographic deprivation identified.
Integration:	· · · · · · · · · · · · · · · · · · ·	Benefits for transport integration captured through the TEE. There may be benefits for transport/land-use integration, but these appear likely to be minor. Similarly with wider policy integration.
Accessibility & Social Inclusion:	·	No additional public transport services are assumed as part of this option. Although impacts fall directly on car users, there may be indirect benefits for non-car users (eg reduced congestion). Benefits would not be particularly focused on vulnerable people groups or on areas of deprivation.

Safety	Safety				
Sub-objective	Item	Qualitative Information	Quantitative Information		
Accidents	Change in Annual Personal Injury Accidents	Estimates of the changes in the number and severity of accidents have been prepared using the ACCDNT V7.8 program, which is compliant with the NESA guidance. This program evaluates traffic model outputs in the form of traffic flow by link type to estimate total accident rates and costs.	Negligible change in fatal accidents (less than 1 per annum by 2020). Estimated 1 more serious accident in 2020 and 5 more slight accidents by 2020.		
	Change in Balance of Severity	As above.	No change in fatal or serious accidents. Slight reduction in slight accidents.		
	Total Discounted Savings	As above.	£0.9million, in 2002 prices		
Security		There are no anticipated impacts in terms of security and, therefore, no analysis has been undertaken. For road-based schemes, the security aspect tends to be related to lay-bys/ emergency help points and approaches to junctions where vehicles are slow moving. It is anticipated that	n/a		
		no stopping facilities will be provided on this bypass and adequate lighting provision will be provided at junctions.			

Economy (Trans	Economy (Transport Economic Efficiency)			
Sub-objective	Item	Qualitative InformationQuantitative Information		
User Benefits	Travel Time	The bypass is expected to significantly lower journey times to the south of Dumfries with associated economic benefits, which have been calculated using TUBA.		
	User Charges	No anticipated impact.	£O	
	Vehicle Operating Costs	The reduction in journey times will be partly offset by an increase in distance. There is, however an anticipated net reduction in vehicle operating costs as a result of the bypass proposals.	£8.9 million, in 2002 prices	
	Quality / Reliability Benefits	There are expected to be some reliability benefits, however, these have not been quantified.	£O	
Private Sector			£O	
Operator Impacts	Operating & Maintenance Costs	None	£O	
	Revenues	None	£O	
Grant/Subsidy payments None £0				

APPRAISAL SUMMARY TABLE – ECOLOGY AND BIODIVERSITY

Note. This appraisal is based on available data and may be subject to change after site specific surveys.

FEATURE	KEY ISSUE	SCALE / DURATION /NATURE	SEVERITY	SUMMARY OF EFFECT WITH MITIGATION/OVERALL SIGNIFICANCE	COMMENTS
Designated sites of nature conservation importance	Impacts on European designated sites: Solway Firth SPA Upper Solway Flats and Marshes SPA Solway Ramsar Solway Mosses SAC	International/short term/indirect	Negative-slight	No direct impacts on SPA/Ramsar. Very minor loss of improved pasture outwith SPA/Ramsar for foraging Pink-footed Geese. Short-term feeding disturbance to three SPA/Ramsar qualifying species No likely effects on the SAC. Overall- Neutral or Negative slight-moderate	Bridging the River Nith could have potential direct impacts capable of mitigation through design and best construction practice. Appropriate assessment of effects on European Sites required, which will have to be informed by autumn/winter/spring feeding goose and bird surveys.
	Impacts on UK designated sites: Solway Firth SSSI Kirkconnell Flow SSSI Longbridge Muir SSSI	National/short term/indirect	Neutral or negative slight	No effect likely on Kirkconnell and Lingbridge SSSI. Solway Firth SSSI boundary contiguous with SPA/Ramsar therefore effects are as above. <i>Overall- Neutral or slight</i>	Surveys required as above.
Protected species	European Protected Species: Otter & Bats	International/short term/direct& indirect	Negative-slight	River Nith crossing could disturb Otter during construction, less so after completion and in operation.	Otter habituate to people and noise very quickly. Pollution Plan must be in place to protect Otter prey populations in the Nith. All watercourses to be bridged must be assessed for possible Otter culverts.
				Bat roosts could be lost.	All trees to be felled, and any buildings likely to be affected must be surveyed before works for signs of roosting bats. Where possible potential foraging

					corridors for bats should be maintained.
				Overall Negative slight-moderate	
	UK Protected species: Badger and Red Squirrel	National/Short-long/direct	Negative slight	Badger territories could be fragmented by the road resulting in local population changes and possible road casualties	Full Badger survey required with mitigation in the form of Badger underpasses and guide fencing where, and if necessary.
				Overall: Negative slight for Badger neutral for Red Squirrel.	
Biodiversity: habitats	Direct loss of priority habitat	National/short-medium term/direct	Negative slight	Residual impact may be neutral after compensatory works for habitat losses.	Most of the proposed corridor is agricultural grassland. Specific areas of greater interest along the route include, field margins, hedgerows, wetland, rivers and streams.
				Overall-negative slight	
	Indirect impacts due to changes in drainage and fragmentation of habitat	National/short-medium term/direct	Negative slight	Small short-term changes likely.	Best practice should make it possible to mitigate or avoid significant indirect impacts.
				Overall-negative slight	
Biodiversity: species	Loss of breeding habitat for priority action and Red List species	National/short-medium term/direct	Negative slight	Small negative local changes to some populations	A Site Biodiversity Action Plan could target losses and attract other priority species
				Overall-negative slight	
Other local interest	Mature Broad-leaved trees Minor wetland habitats	Local/short-medium term/direct	Negative slight	Short to medium term losses of these local features	A Site Biodiversity Action Plan could target losses and attract other priority species
				Overall-negligible	

Economy (Economic Activity and Location Impacts)					
Sub-objective	Item	Qualitative Information	Quantitative Information		
Economic Activity	Local Economic Impacts	Expected to assist in attracting economic activity to the region, but will generally just be active displaced from other regions.			
and Location Impacts	National Economic Impacts	but will generally just be active displaced from other regions.			
	Distributional Impacts				

Integration					
Sub-objective	Item	Qualitative Information	Quantitative Information		
Transport Interchanges	Services & Ticketing	Not appropriate	Not appropriate		
	Infrastructure & Information	Not appropriate	Not appropriate		
Land-use Transport Integration		Benefits	Not appropriate		
Policy Integration		There are comprehensive sections in the integration section of the STAG document which set how the aims of the package is supported by current national policy. These aims include:	Not appropriate		
		 Supporting the strategic outcomes of the National Transport Strategy (NTS). 			
		 The SWESTRANS RTS includes the Dumfries Southern Bypass as a key component to support economic development of the Dumfries South area. 			

Accessibility & Social Inclusion						
Sub-objective Item Qualitative Information Quantitative Information						
Community Accessibility	Public Transport Network Coverage	No adverse impacts anticipated				
	Access to Other Local Services	No adverse impacts anticipated				
Comparative Accessibility	Distribution/Spatial Impacts by Social Group	Improvements in accessibility for socially deprived groups identified	See detailed tables in full report.			
	Distribution/Spatial Impacts by Area	Improvements in accessibility for socially deprived areas identified	See detailed tables in full report.			

Cost to Public Sector					
Item	Qualitative information	Quantitative information			
Public Sector Investment Costs	The estimated cost of construction of a new bypass has been prepared using standard methods with 44% optimum bias applied.	£31.0 million, in 2002 prices			
Public Sector Operating & Maintenance Costs	Annual maintenance costs have been estimated using NESA values applied to the length of new road.	£8.6 million (discounted) over 60 years, in 2002 prices			
Grant/Subsidy Payments	None	£O			
Revenues	None	£O			
Taxation impacts	Indirect tax revenues, due to loss of fuel tax revenues	£5.6 million, in 2002 prices			

Monetised Summary	Monetised Summary			
Present Value of Transport Benefits	£235.7 million, in 2002 prices			
Present Value of Cost to Government	£45.3 million, in 2002 prices			
Net Present Value	£190 million, in 2002 prices			
Benefit-Cost to Government Ratio	5.205			

APPRAISAL SUMMARY TABLE – CULTURAL HERITAGE

CRITERIA	KEY ISSUE	SCALE / DURATION /NATURE	SIGNIFICANCE	Overall Summary of Impact with Mitigation	COMMENTS
Cultural Heritage	Archaeological sites	Local-National/ permanent/ direct – indirect.	Negligible to Major adverse depending on the individual site of interest.	Negligible to Minor adverse depending on the individual site of interest.	Assumes further archaeological assessment at the detailed design stage and full mitigation based on any recommendations from this in consultation with Historic Scotland and DGC Archaeologist.

APPRAISAL SUMMARY TABLE - GEOLOGY

CRITERIA	KEY ISSUE	SCALE / DURATION /NATURE	SIGNIFICANCE	Overall Summary of Impact with Mitigation	COMMENTS
Geology	Solid and Drift Geology	Temporary/adverse/local/ direct	Negative Minor	Negligible	Full ground investigation will be required for detailed route selection. The impacts will depend on the volumes of cut and fill required as part of the preferred route established at the detailed design stage. No designated sites for geology/geomorphology are affected by the proposed route.

APPRAISAL SUMMARY TABLE - Land Use, Agriculture & Soils

CRITERIA	KEY ISSUE	SCALE / DURATION /NATURE	Overall Summary of Impact without Mitigation	Overall Summary of Impact with Mitigation	COMMENTS
Land Use, Agriculture & Soils	Loss of agricultural use/farm viability	Local-Regional /Direct/Permanent	Moderate/Major	Minor	 Consultation with SGRIPID as part of EIA process Reducing permanent impacts by reinstating all areas of temporary land take on completion of the works Minimising disruption to SAC Royal Crichton Farm and ensure loss of land and severance issues are satisfactorily addressed.
	Impacts on Rights of Way/Community facilities/Schools	Local/Temporary/small scale	Minor/Moderate	Negligible	 Identifying and minimising impacts and disruption to sensitive receptors e.g. schools and community facilities Reducing permanent impacts by reinstating all areas of temporary land take on completion of the works.
					 Minimising land take in the construction of any junctions with existing roads. Minimising disruption to existing road infrastructure and ensuring public right of ways/cycle routes are unaffected by construction/operation of the route

Loss of Woodland	Local/Temporary	Negligible	Negligible	Minimise the impacts on woodland and areas of shelterbelt planting
Impact on Road Infrastructure	Local-Regional /Temporary	Negligible	Negligible	Minimising land take in the construction of any junctions with existing roads.
				 Minimising disruption to existing road infrastructure and ensuring public right of ways/cycle routes are unaffected by construction/operation of the route
Impact on Overhead power lines	Local/Temporary	Negligible	Negligible	Consultation with Utilities companies at detailed design stage
Impact on Utilities	Local/Temporary	Negligible	Negligible	Consultation with Utilities companies at detailed design stage

APPRAISAL SUMMARY TABLE – LANDSCAPE & VISUAL

CRITERIA	KEY ISSUE	SCALE / DURATION /NATURE	SIGNIFICANCE	Overall Summary of Impact of Proposed scheme	COMMENTS
Landscape & Visual	Impacts on landscape character	Permanent/adverse/local- Regional/Direct and Indirect	Slight moderate – Substantial adverse	Significant Adverse overall for scheme	Detailed specific mitigation measures will be developed at the detailed design stage, and have not been considered as part of this assessment.
	Impacts on landscape designations	Permanent/adverse/local- Regional/Direct and Indirect	Moderate adverse	Significant Adverse overall for scheme	As above
	Visual Impacts - Properties	Permanent/adverse/local/Direct and Indirect	Moderate adverse – substantial adverse	Significant Adverse overall for scheme	As above
	Visual Impacts - Motorists	Permanent/adverse/local- Regional/Direct and Indirect	Moderate adverse – substantial adverse	Significant Adverse overall for scheme	As above

APPRAISAL SUMMARY TABLE - WATER QUALITY AND DRAINAGE

CRITERIA	KEY ISSUE	SCALE / DURATION /NATURE	SIGNIFICANCE	Overall Summary of Impact with Mitigation	COMMENTS
	Surface water quality	Local/temporary/mitigated/Minor Risk	Minor/Moderate	Negligible adverse	Assumes full compliance with pollution prevention guidelines and appropriate use of SUDS. A strategy for a sustainable urban drainage system (SUDS) will inform the road design. The aim is to provide a full level of attenuation and treatment in accordance with SEPA requirements.
	Groundwater Quality	Regional/temporary/mitigated/Minor Risk	Minor/Moderate	Negligible/minor adverse	AS ABOVE
Water and Drainage	Flooding	Local/temporary/mitigated/Minor Risk	Moderate	Minor adverse	Assumes flood risk assessment recommendations are adopted.
	Drainage	Local/temporary/mitigated/Minor Risk	Minor/Moderate	Negligible adverse	Assumes full compliance with pollution prevention guidelines and appropriate use of SUDS. A strategy for a sustainable urban drainage system (SUDS) will inform the road design. The aim is to provide a full level of attenuation and treatment in accordance with SEPA requirements.

Appendix B – Traffic Flows

Flows

Base Network

			AM	PM
				-
Buccleuch St Bridge	Ir	۱	991	832
Buccleuch St Bridge	C	Out	663	1151
St Michaels Bridge	Ir	า	785	457
St Michaels Bridge	C)ut	541	744

2020 RC - No Bypass - High Growth

		AM		PM
Buccleuch St Bridge	In		1018	948
Buccleuch St Bridge	Out		633	1281
St Michaels Bridge	In		824	526
St Michaels Bridge	Out		732	956

2020 DS - With Bypass - High Growth

		AM	PM
Buccleuch St Bridge	In	988	948
Buccleuch St Bridge	Out	577	1252
St Michaels Bridge	In	758	463
St Michaels Bridge	Out	562	844

Demand

Base Network

		AM	PM
Buccleuch St Bridge	In	1069	842
Buccleuch St Bridge	Out	703	1167
St Michaels Bridge	In	788	459
St Michaels Bridge	Out	560	763

2020 RC - No Bypass - High Growth

		AM	PM
Buccleuch St Bridge	In	1329	1419
Buccleuch St Bridge	Out	850	1582
St Michaels Bridge	In	950	670
St Michaels Bridge	Out	1102	1366

2020 DS - With Bypass - High Growth

		AM	PM
Buccleuch St Bridge	In	1120	1090
Buccleuch St Bridge	Out	658	
St Michaels Bridge	In	766	472
St Michaels Bridge	Out	614	899

Total queuing pcu's/per hour

Base Network

		AM	PM
		-	
Buccleuch St Bridge	In	78	10
Buccleuch St Bridge	Out	40	16
St Michaels Bridge	In	3	2
St Michaels Bridge	Out	19	19

2020 RC - No Bypass - High Growth

		AM	PM
Buccleuch St Bridge	In	311	471
Buccleuch St Bridge	Out	217	301
St Michaels Bridge	In	126	144
St Michaels Bridge	Out	370	410

2020 DS - With Bypass - High Growth

			AM	PM
Duradauch Ot Driders	1	1	400	4.40
Buccleuch St Bridge		In	132	142
Buccleuch St Bridge		Out	81	86
•				00
St Michaels Bridge		In	8	9
St Michaels Bridge		Out	52	55
St mionacio Dhage		Out	52	55

Appendix C – Policy Integration Summary

Table 1 Transport Land Use Integration

Policy Ref	Policy Description	Dumfries Bypass
Dumfri	es and Galloway Structure Plan	
5.13	Trunk roads are the responsibility of Central Government. The Scottish Executive's policy in respect of trunk road upgrading is summarised in "Roads Traffic & Safety 1992". This established a core network of strategic routes, including the A74 and A75, where capital expenditure was to be targeted. The level of service on most of Dumfries and Galloway's trunk road network falls well below a standard appropriate for these routes taking into account the nature and mix of local and long distance traffic. It is important that development along these route corridors should not adversely affect the quality of service on these trunk roads. The Scottish Trunk Roads Programme is currently under review.	~
Policy S5	The Council will continue to press the Government to undertake a rapid review of its policy for the A75, to reflect its national and international role and resolve deficiencies along the route.	✓
5.15	The role of the A75 in local, national and international terms was recognized by the (then) Scottish Office in its identification as a "Core Route". The route is included in the Trans European Road Network and is the only Scottish road to feature in the European Priority Ireland - UK - Benelux Road Upgrading Project. The mix of traffic along the A75 compounded by the impact of ferry related traffic has generated conditions that are unique in Scotland. Upgrading of this route is required to address the traffic problems associated with this route, to support the investment in ferry terminal facilities and ferries at Loch Ryan and to match significant other investment along most other sections included in the Ireland - UK -Benelux Road Project.	~
5.16	Along the A75, the only major improvement scheme currently in progress is 'The Glen' Improvement, west of Dumfries, which started in 1998. No further significant expenditure is indicated for the A75 in the short or medium term. A series of low-cost accident remedial measures, has not addressed the underlying deficiencies identified along this route, or set them in a context of assisting in the social and economic development of the area. A Route Study has been commissioned by the Scottish Office; however it is considered that this does not fully address the strategic need within the A75 corridor. The Council considers that improvement of this route to accommodate the existing mix of traffic will require provision of dual carriageway and high capacity single carriageway sections along the greater proportion of the route.	*
Policy S9	 The A75 is one of the roads which forms the strategic road network. For these routes: Development which involves a new direct access onto these roads should not, individually or incrementally, materially 	1
	 Local plans will identify a network of distributor roads and proposals for a new direct access onto these roads and will be assessed in relation to the traffic capacity of the route and current level of use. 	

Ref

Proposals for major infrastructure provision on land not allocated for such uses, will be required to satisfy the Council on the following matters:-

- 1. the reason for selecting the site or route;
- 2. impact on the landscape and the environment;
- 3. discharges to air and water;
- 4. traffic impact;
- 5. safety, security and noise implications; and
- 6. impact on the amenity of the area.

Large scale infrastructure developments can have significant community and environmental impacts. In some cases such development is outwith Planning control but many operators consult the Council on major schemes and it is therefore appropriate to set out clearly the main areas of concern to the Council.

SPP17 – Planning for Transport – August 2005

- 15 Maintaining and improving transport infrastructure has an important role to play in growing Scotland's economy. Congestion has a major impact on the economy of Scotland. The Scottish Executive is tackling this through a range of interventions, delivering improvements to key congestion points on the road network and enhancing public transport in order to change people's attitudes to their travel choices.
- 25 The Scottish Executive and local authorities are responsible for promoting road improvement schemes on the strategic network. Local Authority planning and transport staff should be involved in the early modelling and appraisal work for such projects, and therefore be able to assess the implications for their own development strategies. Where emerging development strategies suggest that improvements are required to strategic roads, planning authorities should pursue the issues with the appropriate roads authority, so that the impact of the development strategy and the need for new infrastructure is identified. There is a general presumption against new motorway or trunk road junctions. The Scottish Executive will consider the case for such junctions where nationally significant growth or regeneration benefits can be demonstrated.

PAN 75 - Transport and Planning – August 2005

53 Circular 15/1999 explains the Environmental Impact Assessment (Scotland) Regulations 1999. The regulations apply to projects which require planning permission, certain trunk road projects comprising construction and improvement authorised under the

 \checkmark

~

~

✓

Poli	icy	Policy Description	Dumfries Bypass
Ref			
		Deads (Sectional) Act 1004 and drainage works outborized under the Land Drainage (Sectional) Act 1050	

~

✓

Roads (Scotland) Act 1984, and drainage works authorised under the Land Drainage (Scotland) Act 1958.

56 It is a requirement of the Scottish Executive that all transport related projects which require its approval or for which it provides funding shall be appraised in accordance with the Scottish Transport Appraisal Guidance: STAG (except for projects which were before Scottish Ministers before July 2001)

PAN 66 - Best Practice in Handling Planning Applications affecting Trunk Roads

11 Under the Town and Country Planning (General Development Procedure) (Scotland) Order 1992 (which will be consolidated in 2003), planning authorities are required to consult the Scottish Ministers as trunk road authority in relation to planning applications affecting existing or proposed trunk roads or special roads under the following circumstances:

• proposed developments within 67 metres of the middle of the road;

• where the development consists of, or includes, the formation, laying out or alteration of any means of access to such a road; or

• where the development is likely to result in a material increase in the volume or a material change in the character of traffic entering or leaving the road.

Policy Reference	Policy Description	Dumfries Bypass
Scotland's 1	Transport Future – White Paper (2004)	
2.1	Transport promotes economic growth. We are committed to delivering the infrastructure and services that link people and places to enable the economy to grow and develop. This involves investing in new public transport (buses, rail, ferries, trams and park and ride), better facilities for freight, targeted improvements in the trunk road network, encouraging greater use of sea routes and canals and developing new direct air routes from and to Scotland.	✓
4.2	There have been many years of under-investment in local roads. Since 1999 Scottish Ministers have taken opportunities to allocate additional, specific funding to help councils. There are also some larger-scale roads projects which, although not part of the trunk network, are of importance in developing and improving local transport links, to encourage economic development, access to work and leisure facilities, or to promote tourism. While such projects will remain the responsibility of councils, we will seek opportunities to work with local authorities or through strengthened regional transport partnerships to explore ways which these larger-scale schemes can be delivered.	~
	Building a Better Scotland	
	Increase rail passenger journeys on the ScotRail network by a further 5% by 2006 on 2002-03 levels.	Ο
	Increase local bus passenger journeys by 5% by 2006 on 2000-01 levels.	Ο
	Increase passenger numbers passing through HIAL airports by 5% by 2006 on 2001-02 levels.	0
	Increase the quality and quantity of lifeline ferry services and ensure 98% of planned sailings actually sail and 98% arrive on time, by 2006.	0
	Reduce the time taken to undertake trunk road journeys on congested/heavily trafficked sections of the road network by 2006.	0
	Achieve best value for money by reducing the proportion of the trunk road network that requires close monitoring to 6% for motorways and 8% for dual carriageways by 2006.	0
	Reduce the number of serious and fatal road accident casualties by 40% by 2010 and by 50% for children over the same period, compared with 1994-98 annual averages.	0

Policy Reference	Policy Description	Dumfries Bypass
	Traveline Scotland Ltd to answer at least 1 million enquiries per year by 2006 and for performance and output standards to be met.	4
	Transport Direct portal to achieve at least 1.5 million visits per annum by 2006 and for performance and output standards to be met.	~
	Scottish Climate Change Programme	
	Make an equitable contribution to the UK Kyoto target of a 12.5% reduction in 1990 levels of greenhouse gas emissions.	\checkmark
	The Air Quality Strategy for England, Scotland, Wales and Northern Ireland	
	To work in partnership with local authorities with the aim of meeting the annual nitrogen dioxide objective by 2005 and the objective for PM10 by 2010 in all areas.	\checkmark
Scotland's N	lational Transport Strategy 2006	
6	 Promote economic growth by building, enhancing managing and maintaining transport services, infrastructure and networks to maximise their efficiency; 	✓
	 Promote social inclusion by connecting remote and disadvantaged communities and increasing the accessibility of the transport network; 	\checkmark
	 Protect our environment and improve health by building and investing in public transport and other types of efficient and sustainable transport which minimise emissions and consumption of resources and energy; 	Ο
	• Improve safety of journeys by reducing accidents and enhancing the personal safety of pedestrians, drivers, passengers and staff; and,	0
	• Improve integration by making journey planning and ticketing easier and working to ensure smooth connection between different forms of transport.	Ο

Appendix D – Consultation Responses

Information Note			
Project Title:	Dumfries Southern Bypass		
MVA Project Number:	C3683600		
Subject:	Public Consultation of Southern Bypass		
Note Number:	1 Version: 1		
Author(s):	Chris Cullen		
Reviewer(s):	Nazan Kocak		
Date:	30 March 2009		

1 Introduction

1.1 The following information note highlights the results of the public consultation for a potential southern bypass around Dumfries.

2 The Public Exhibition and Consultation

- 2.1 The consultation took place in Dumfries customer service centre between 10am and 4pm on Thursday 5th, Friday 6th and Saturday 7th March. There were a series of screens on display outlining the proposed new plans as well as a representative each from SWESTRANS and MVA on hand to answer any questions and discuss the project should anyone wish. Visitors were then asked to fill in a questionnaire either on site or if they wished it could be returned by a pre-paid envelop at a later date (by 20 March 2009).
- 2.2 By the end of the response period 318 questionnaires had been returned along with some specific letters.
- 2.3 The general feeling at the consultation was for the bypass in principle, with most people feeling that it should have been in place long ago, most notably before the



Customer Service Centre, Queensberry Square, Dumfries



Come Along, Have Your Say!

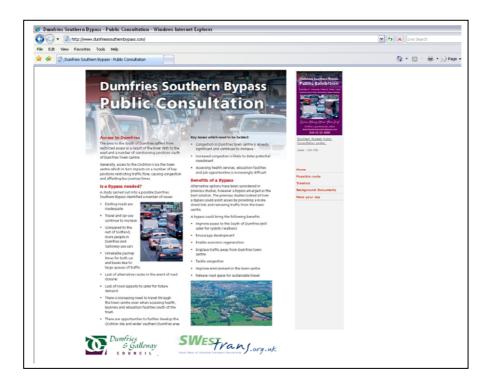
Or fill in a questionnaire online www.DumfriesSouthernBypass.com 030 33 33 3000

local development of the Crichton area on the southern site of the city where a hospital and university campus now reside as these were seen as key sources of congestion.

2.4 Other concerns were that the original northern bypass should have been made dual carriageway and with less roundabouts as these factors prevented it from working properly.

3 Dumfries Southern Bypass Website

- 3.1 Prior to the public exhibition, a consultation website was prepared at <u>http://www.dumfriessouthernbypass.com</u> to reach a wider population. The website included a call for the public exhibition and a printable version of the '*have your say*' questionnaire. An e-mail address was also created for public to make queries and/or send filled-in questionnaires.
- 3.2 The website presented the same information which was displayed at the public exhibition. It consisted of 5 pages as follows:
 - A home page, outlining the problems that were outlined with the Dumfries road network as well as benefits that implementation of a southern bypass would bring;
 - A broad outline of a possible route;
 - A timeline to show what has gone on up to this point, and what will happen next should the plan go ahead;
 - Background documents consisting of the Dumfries South Study and the Dumfries Southern Bypass STAG; and
 - A page about the public exhibition inviting people to come along to the consultation day, also giving details on where and when it would take place.



4 Spread of Respondents

4.1 The first question established where the respondent came from in order to find an affected range of influence of the bypass. The results are shown in the map below and as expected most respondents come from the Dumfries area (172 within a 2 mile radius of the city centre).

5 Age of Respondents

- 5.1 Question 2 identified an age range of the respondents. The two lower brackets (under 18 and 18-24) evidently did not respond to the public appraisal, yet they are the people most affected by the outcomes ad they will live with it the longest. Interest in the appraisal gradually increased with age until the lower limit of 45 where the classes above this shared an equal proportion of returned forms.
- 5.2 Perhaps surprisingly, over 55's showed an equal level of interest as the under 55's yet by the time a bypass would come into effect (no sooner than 2020) most if not all of these people would be retired and wouldn't have to use the road network at peak periods, making them less affected by congestion issues.

6 General Feeling Towards the Proposed Bypass

6.1 Public feeling towards the bypass proposal was overwhelmingly good with 84% of the sample responding favourably to the idea, 12% being against, and 4% undecided. Taking into account location of the respondent along with their general feeling we can see that most of the people against the bypass did come from the south or centre of the city and would be most directly affected by the proposal.

7 Likely Benefits of a Bypass

- 7.1 There first part of question 4 consisted of four benefits which the questionnaire outlined explicitly and the respondent was asked to agree or disagree whether these were likely benefits. Of the 318 returned questionnaires, 78% indicated the bypass would ease congestion, coupled with 86% feeling that journey times would be reduced. 57% of respondents thought that the proposed bypass would reduce noise and pollution while only 40% felt that the proposed idea would reduce road accidents.
- 7.2 Additionally to these four suggested benefits, respondents were asked whether they could think of any other likely benefits the scheme would bring. These were quite varied although some of the major thoughts were as follows:
 - The bypass would ease congestion in other parts of Dumfries and Galloway (22%)
 - There would be better access to specific points of interest in Dumfries, such as the hospital, university etc. (20%) as well as reduced journey times to the same (18%)
 - The scheme would help stimulate an economic development and encourage growth and tourism (12%)

- There would be better access to the road network (7%) and also reduced congestion and journey times through the town centre (4%)
- The bypass would reduce emissions in the town area (1%) and make the town look more attractive (3%) as well as just generally improve Dumfries (2%)
- There would be a reduction in stress levels leading to less road rage accidents (3%) and the area would be safer for pedestrians and cyclists (8%)
- 7.3 Further details of responses may be found in the appendices.

8 Concerns over a Possible Bypass

- 8.1 This was an open question and as such, a variety of answers were returned. Perhaps surprisingly, the most common answer was that people had no concerns (28%), followed by the feeling that the bypass was needed now, and the proposed wait of 10 years was just too long (15%).
- 8.2 Some of the other concerns are highlighted below.
 - The bypass would not be aesthetically pleasing and would increase pollution in the town, therefore detracting from the towns appeal (13%)
 - The cost and/or funding could be an issue (9%) or the money could be better spent elsewhere (4%)
 - It would result in more congestion (7%) or have little effect on same (3%)
 - The bypass would encourage growth away from the town and have a negative economic impact on the centre (4%)
 - Some respondents queried why the bypass was not linked to other projects, such as the development of a new hospital and university in the south end of the town which was a source of congestion through the city centre (1%)
 - There were concerns regarding the route (1%) and proximity to existing housing (3%)
 - Some respondents felt that construction would raise issues, such as the effect on disruption of traffic (1%), the need to stick to budget (1%), the need to work around an existing gas pipeline (1%) and the fact that the route would cross flood plains (1%).
- 8.3 Some of these concerns were felt to be a little forward thinking, and at the consultation effort was made to explain exactly what was being assessed and what stage the scheme was at.
- 8.4 For instance, when people had questions about money it was explained that funding had not been obtained as this scheme at present was not part of the Local Development Plan. Similarly, only a **general** proposed route was shown at the consultation (i.e. a thick red line with no level of detail), and where concerns were raised or any degree of accuracy was assumed (such as seeing how close it would come to the persons house) it was carefully explained that this was a

proposed route and at this moment no level of detail existed and people should not get caught up in the finer details.

9 Additional Comments on the Proposed Bypass

- 9.1 The final question sought additional comments about the proposed scheme and the responses varied between criticism, questions and proposed alternatives. One of the over-riding feelings was that this should have been done long ago (27%), preferably before the re-location of the college and other developments in Crichton (6%), and that the current proposed timeline is too long (7%).
- 9.2 General support was voiced (3%) towards the scheme and was evident in responses such as Dumfries would be brought into the 21st Century (2%), it would become a more attractive town (2%), the bypass would improve the town in general (2%), and that the town centre would be re-opened (1%).
- 9.3 Money also became a predominant issue here, with concerns ranging from the fact that funding could be a problem (2%), more money should be invested in other places (5%) such as PT (2%), and why should the public be expected to pay for it (1%)?
- 9.4 Some respondents expressed concern over the scheme in that they felt not enough consideration was given to alternatives (5%), or that they felt a bypass was an unimaginative response to the problem (1%).
- 9.5 The potential effect on pedestrians and cyclists was an area raised, with a need for safer walking/cycling routes identified (1%) as well as shorter ones (1%), or just general interest in the topic (1%).
- 9.6 The actual route to be taken was also discussed, with priority access to Dumfries and Galloway Royal Infirmary being a focal point (1%), or the route alignment being re-examined (1%).
- 9.7 As well as this, the actual design of the bypass was an area of concern, with respondents feeling a need for 'proper engineering' (5%) i.e. upgrade to dual carriageway, effective roundabouts for HGV (1%). Some people also felt the plan should be introduced in sections rather than opening the whole bypass (4%) to ease congestion sooner.
- 9.8 Impact on future growth was hinted at with the need to include land within the bypass as part of the Local Development Plan (1%), no building being allowed outside the bypass (1%) to prevent negative economic impact on the town and 'new build' houses should cease until the bypass is ready (1%).
- 9.9 One last issue that was raised was that local people felt a need to be kept informed (1%) and concern was raised that this hadn't particularly happened up to this point.

10 Additional Responses

10.1 As well as the questionnaire responses, some organisations/individuals sent in their own responses in writing, adding their own views on the proposed bypass, the scheme to date, and

other issues of concern. As these were generally more in depth than the questionnaire catered for they have been treated separately. An outline of these responses follows.

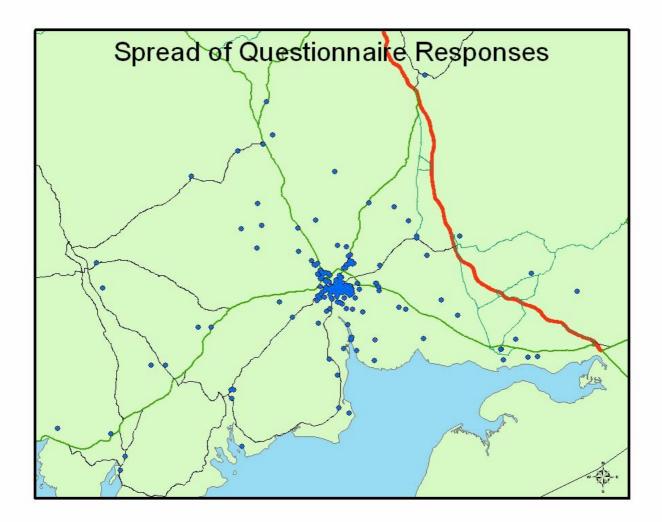
- 10.2 One respondent felt that the location of DMRI made the Dumfries Bypass a concern for the whole region and that the views of those outside the town should be included in any consultation. It should be noted that the session was announced on local radio and there was no stipulation of needing to live in the town: everyone was more than welcome.
- 10.3 Secondly the felt that rather than a complete bypass, perhaps a stretch between the eastern end of the current bypass towards the Crichton area would be sufficient.
- 10.4 Professor David Deakins of University of the West of Scotland (which has a campus located in Crichton) conveyed the general feelings amongst university staff and students as having limited support for the bypass but greater support for alternative measures such as improving the bus service, or improving the rail service (potentially reinstating a stop at Thornhill).
- 10.5 Peter Bulmer, Corporate Director of Planning and Environment Services relayed the feelings of the council's Planning, Housing and Environment Services Committee and the Nithsdale Area Committee. In principle they supported the idea of the Southern Bypass and felt that the benefits of such a scheme would be assisted economic regeneration in Dumfries and Galloway and the address of significant traffic management issues in the local area.
- 10.6 A group of local landowners expressed concern over the lack of communication of specific plans, especially as the location of their land was directly affected by the bypass either by going through it or being close enough to experience increased noise and environmental pollution and the subsequent decrease in property value.
- 10.7 They were also anxious that problems with the northern bypass (too close to the town, subdividing major housing developments from the town centre, inability to cope with traffic etc.) would be repeated in the southern scheme.
- 10.8 A local farm owner expressed a range of concerns (which can be found in the appendices) which are broadly outlined as follows:
 - General disturbance
 - Effect on local environment through pollution, noise, disturbance of local wildlife etc.
 - Compensation for land, legal fees, annoyance factor, loss of earning potential
 - Concerns over local access to town
- 10.9 Lindsay Lauder, a Team Leader (Investment) at Loreburn Housing Association Ltd expressed interest in implementation of new housing in conjunction of the new bypass
- 10.10 Denhill Developments Limited expressed agreement with the need for a Southern Bypass, citing previous recommendations for expansion to the south and west of the town. They suggest that the best way forward is the implementation of a bypass along with an integrated approach to housing within the bypass.

11 Conclusion

- 11.1 The majority of people who attended the consultation are in favour of a bypass **in principle**. They still have concerns however, most notably environmental impact, route and design choice, funding issues and perhaps most importantly, how does it affect individuals, especially local residents/land owners who live near or on the proposed route.
- 11.2 However, this is balanced by the overwhelming agreement that something needs to be done and the fact that a bypass seems like a viable option which will address congestion in the town centre, promote expansion through economic growth and generally make transport easier, most notably in the Crichton and DMRI vicinity.

Appendices

Questionnaire spread



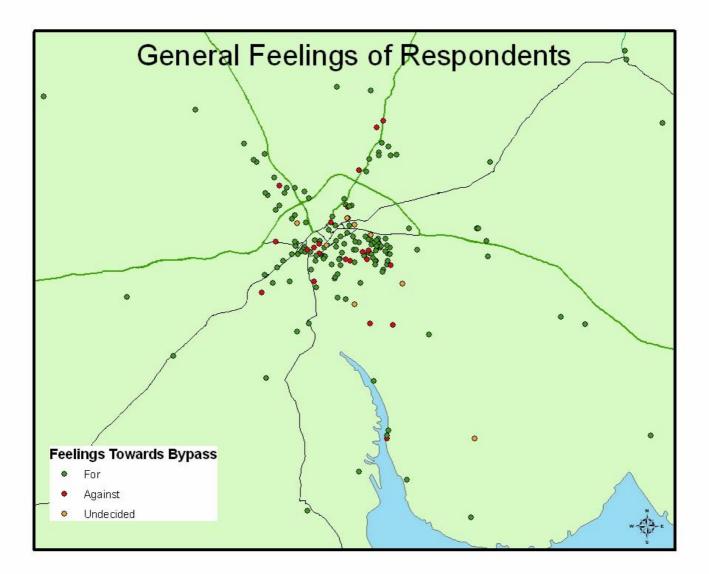
Questionnaire age analysis

Age	Actual number	% of total
Under 18	1	0.3%
18-24	3	0.9%
25-34	20	6.3%
35-44	46	14.5%
45-54	83	26.1%
55-64	84	26.4%
65+	81	25.5%
Total	318	100.0%

Principle Feelings Towards Bypass

In favour of?	Actual number	% of total
Yes	268	84.3%
No	38	11.9%
Undecided	12	3.8%
Total	318	100.0%

General Feelings Correlated Against Location



Likely Benefits of Proposed Bypass

Likely Benefits	Actual Number	% of total (318)
Ease Congestion	249	78.3%
Reduce Noise, pollution	182	57.2%
Speed up journey times	272	85.5%
Reduce accidents	128	40.3%
What other benefits (of a bypass) can you think of?	Actual Count	% of total (318)
Eases congestion in other areas of Dumfries & Galloway	71	22.3%
Better access to Dumfries & Galloway Royal Infirmary/educational facilities (college)	62	19.5%
Reduced journey times to specific points (school, college, hospital etc)	56	17.6%
Will stimulate economic development/tourism/re-generation of Dumfries	37	11.6%
Safer for pedestrians/school children/cyclists; saves lives	25	7.9%
Better access to the road network	22	6.9%
Reduction/removal of through traffic in town centre	13	4.1%
None	9	2.8%
Reduction in stress levels leading to less road rage incidents	9	2.8%
Will make Dumfries more attractive	9	2.8%
May help buses to run on time	6	1.9%
Will benefit Dumfries in general	5	1.6%
Will reduce emissions in the town area	3	0.9%
Will bring Dumfries into the 21st century	2	0.6%
Will result in a complete ring-road around Dumfries	2	0.6%
Improved management of road system	2	0.6%
More route choices	1	0.3%
Easier road crossing	1	0.3%
Less money needed to be spent on the repair of other roads	1	0.3%
Will create employment during the construction phase	1	0.3%
Will encourage cycling to college/hospital if it included an extended cycle network	1	0.3%

Concerns about Proposed Bypass

Do you have any concerns about a possible bypass?	Actual Count	% of total (318)
No	90	28.3%
Will take too long to build/need it now	46	14.5%
Bypass would spoil/damage the environment/aesthetically unpleasant/noise pollution	41	12.9%
The cost and/or funding	27	8.5%
It will result in more traffic/congestion/pollution	21	6.6%
Will encourage development away from the town/negative impact on town	13	4.1%
Bypass not needed/waste of money/money could be better spent	11	3.5%
It will have a limited effect on congestion	8	2.5%
The proximity to existing housing	8	2.5%
The effect of the disruption of traffic (problems) during the construction	4	1.3%
Concerns regarding the route	4	1.3%
The bypass will have a significant impact on river navigation	4	1.3%
Traffic control methods will need to be re-thought through	3	0.9%
Contractors must stick to budget – money must not be squandered	3	0.9%
Local people should have more of a say	3	0.9%
Concern that it may not happen at all	3	0.9%
Concern that it is not linked to other projects	3	0.9%
Too many roundabouts	2	0.6%
Should address the problem of litter on the bypass	2	0.6%
It ought to be done in stages/phases/sections	2	0.6%
At which end will the work commence?	2	0.6%
Greater route choice is not helpful	2	0.6%
On-road parking problems on specific roads	1	0.3%
The diversion of the existing gas pipeline	1	0.3%
There will be objections	1	0.3%
Too many delays in implementing	1	0.3%
The bypass will pass through flood plains	1	0.3%
Have to ensure that the bypass is dual carriageway	1	0.3%
Will increase serious road accidents	1	0.3%

Additional Comments

Do you have any other comments on the proposed bypass?	Actual Count	% of total (318)
The sooner the better/it is long overdue/just get on with it/need it now	86	27.0%
Timescale – will take far too long to complete/has taken too long already	22	6.9%
The Southern Bypass should have been built before other developments/the re-location of the college	19	6.0%
New bypass needs to be properly engineered – dual carriageway/roundabouts/slip-roads etc	17	5.3%
Not enough consideration has been given to alternatives	17	5.3%
Bypass not needed/waste of money/money could be better spent	16	5.0%
No	12	3.8%
Should be done in stages/phases/sections	12	3.8%
It is a good idea	10	3.1%
The cost/funding could be a problem	7	2.2%
More money should be invested elsewhere – eg Public Transport	6	1.9%
Bypass will bring Dumfries into the 21st century	5	1.6%
Bypass will make Dumfries a more attractive town	5	1.6%
What kind of facilities will there be for cyclists and/or pedestrians?	5	1.6%
There is a need for safer walking/cycling routes	4	1.3%
Access to DGRI should be a priority	4	1.3%
Bypass will be good in general for Dumfries	4	1.3%
The public should be kept informed of progress/decisions	4	1.3%
Change the route alignment	3	0.9%
sequencing of traffic lights needs to be changed (same as 7?)	2	0.6%
A bypass is an unimaginative response	2	0.6%
Why should the money to pay for it come from the public purse?	2	0.6%
There is a need for shorter walking/cycling routes	1	0.3%
It would re-open the town centre	1	0.3%
The land within the bypass line should be included in the 2010 Local Plan	1	0.3%
No building should be allowed on the outer side of the bypass	1	0.3%
'New Build' houses should cease until the bypass is ready	1	0.3%
Make roundabouts big enough to accommodate HGVs	1	0.3%
Priority should be given to the Eastern end	1	0.3%
Ensure that roundabouts are properly lane-marked	1	0.3%
Provide adequate signage to tourist destinations	1	0.3%
Should be built as close to the town as possible	1	0.3%
Impact on river navigation	1	0.3%

18 February 2008

Ironside Farrar 111 McDonald Road Edinburgh EH7 4NW

SCOTTISH WATER

Dumfries Office Marchmount House Marchmount Avenue Dumfries DG1 1PW

Customer Helpline T: 0845 601 8855 F: 01387 270225 W: www.scottishwater.co.uk E: customer.service@scottishwater.co.uk

Dear Sirs

DUMFRIES SOUTHERN BYPASS SCOTTISH TRANSPORT APPRAISAL GUIDANCE - INFO REQUEST - STAGE 2 Your Ref: 7070/JMcL Our Ref: 14-1DG: PH/MF

I refer to your letter date 28 January 2008 with enclosures. Scottish Water apparatus highlighted on drawings in November 2006 are areas still likely to require protection or diversion.

More Details on Areas: (Highlighted on previous drawings)

Sewers

- A Garroch Loaning Pumping Line
- B Cargenbridge Pumping Line
- C Airds Point Strategic Trade Effluent Pumping Line from Dupont
- D Millburn Surface Water
- E Sewage Pumping Line (Private) from Shell Garage and Little Chef.

<u>Water</u>

- A Garroch Loaning 180mm Diameter MDPE Strategic Link
- B A711 Dalbeattie Road 180mm Diameter DI Strategic
- C A710 New Abbey Road 4" uPVC diameter Distribution
- D Stanehouse Loaning Junction with Glencaple Road 160mm Diameter HPPE 7" Diameter AC Both Strategic
- E Bankend Road 90mm Diameter MDPE Distribution
- F Cairn of Craigs 2" Diameter CI Distribution
- G Junction 8, Link Road to Georgetown 7" Diameter AC Strategic
- H Newfield 1.5" Diameter AC Distribution
- I Roundabout A75 200mm Diameter DI Strategic

Future Augmentation

Scottish Water will take the opportunity to augment supply to Glencaple and Bankend Areas by laying a new water main from Junction 4 to Junction 7 (Annan Road to Glencaple Road) during your road construction.

Can you give Scottish Water an indication at this stage for timescales for this project?

I trust the foregoing will prove helpful.

Yours faithfully

Paul Hyles Network Support Analyst

Enc



Carmont House The Crichton Bankend Road Dumfries DG1 4ZF Telephone: 01387 247010

Fax: 01387 259247 Web Site: www.snh.org.uk

James Miller Ironside Farrar Environmental Consultants 12 Gayfield Square EDINBURGH EH1 3NX

Your Ref:7070/JMcL/JSMOur Ref:PUB AEI 45993Date:11 February 2008

Dear Sirs

DUMFRIES SOUTHERN BYPASS SCOTTISH TRANSPORT APPRAISAL GUIDANCE – INFORMATION REQUEST – STAG 2

Thank you for your letter of 24 January 2008 asking Scottish Natural Heritage (SNH) for any further information we may hold on the natural heritage interest of the proposed route for a southern bypass around Dumfries in addition to that already provided in our response to your information request of 24 November 2006.

SNH have no further information regarding the proposed route at this time. We would recommend however that you contact the Dumfries and Galloway Environmental Resources Centre (http://www.dgerc.org.uk) for up to date species records for the area of interest.

If you have any questions regarding this response please do not hesitate to contact me at the above address.

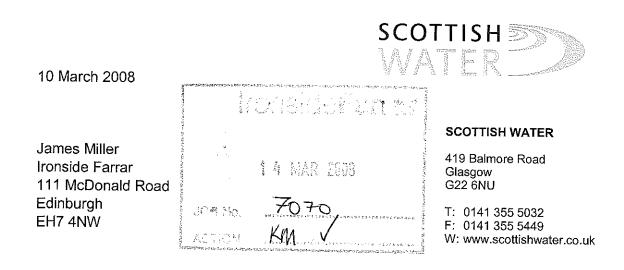
Yours faithfully

BETH WILSON Area Officer Nithsdale

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Working with Scotland's people to care for our natural heritage



Dear Sir,

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Dumfries Southern Bypass Scottish Transport Appraisal Guidance - Information Request - STAG 2

Further to your letter dated 24th January 2008, I am writing to confirm that I have no additional comments to add to the ones I made in December 2006.

I believe that Paul Hyles from our Dumfries Office has sent a response to you (a further copy attached) with our Network requirements.

I hope that this is of use to you should you require any further information please do not hesitate to contact this office.

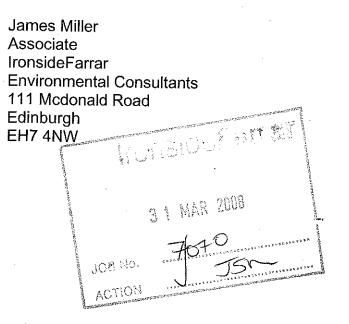
Yours faithfully,

Nighe

John Nisbet Development Planner j.nisbet@scottishwater.co.uk

HISTORIC SCOTLAND

We safeguard the nation's historic environment and promote its understanding and enjoyment



Development Assessment Team Room E3 Longmore House Salisbury Place Edinburgh EH9 1SH

Direct Line: 0131 668 8898 Direct Fax: 0131 668 8765 Switchboard: 0131 668 8600 <u>HS.DAT@scotland.gsi.gov.uk</u>

Our ref: AMN/16/D Your ref: 7070/JMcL/JSM dated 24 January 2008

28 March 2008

Dear Mr Miller

DUMFRIES SOUTHERN BYPASS SCOTTISH TRANSPORT APPRAISAL GUIDANCE – INFORMATION REQUEST – STAG 2

Thank you for your letter of January 24th 2008. Further to our previous correspondence on this matter we have no further information to offer regarding location of cultural heritage features along the route to the bypass that is not available from pastmap or our digital data sets we forwarded previously. However we would be happy to offer any specific advice or guidance on particular sites as required.

Should you wish to discuss this response please do not hesitate to contact Katrina Biggs on 0131 668 8657 or by email at Katrina.biggs@scotland.gsi.gov.uk

Yours sincerely

William Kidd Development Assessment Administrator









Ironside Farrar Environmental Consultants 12 Gayfield Square Edinburgh EH1 3NX

16 May 2008

FAO: James Miller

Dear Sirs

ENVIRONMENTAL INFORMATION REQUEST – DUMFRIES SOUTHERN BYPASS (STAG 2)

I thank you for your letter of enquiry regarding the above site. I can now confirm that this has been passed round our teams and I have the pleasure of responding as follows: -

AIR

• No further addition since previous response. (January 2007).

GROUNDWATER

• Detailed information sent to applicant James Miller by email (16 May 2008).

HYDROLOGY

- Information accessible via SEPA Flood Maps (<u>www.sepa.org.uk</u>) show there are some areas of floodplain on the proposed route of the bypass; including the Cargen Water, the tidal Nith and the Dow Lochar.
- Furthermore there are a number of other smaller watercourses out with the scope of the flood map (catchment less than 3 km2) for which we hold no information which may pose a flood risk.
- Clearly the consideration of these risks needs to be taken into account in relation to the guidance provided in SPP7 Planning and Flooding.

WATER

No further addition since previous response (January 2007).

WASTE

No further addition to previous response (January 2007).

Please note that all future requests **MUST** contain a NGR for the relevant site to enable us to produce quicker and more accurate information. We would also prefer to have a sufficient plan of the area you are requiring information on. If we receive a request for information and there is insufficient plan or no NGR we will not be able to supply the information.

Please note that due the volume of this kind of enquiry received by SEPA and the time taken to collate and issue the information all requests received at SEPA from 1st March



Chairman David Sigsworth

Chief Executive Dr Campbell Gemmell East Kilbride Office Redwood Crescent, Peel Park, East Kilbride G74 5PP tel 01355 574200 fax 01355 574688 www.sepa.org.uk MVA Consultancy provides advice on transport and other policy areas, to central, regional and local government, agencies, developers, operators and financiers.

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