17 Summary of Key Impacts

17.1 Introduction

This chapter presents a summary of the key environmental impacts associated with this particular road improvement scheme.

17.2 Environmental Impact Table

An Environmental Impacts Table (Table 17.1) has been prepared for the scheme, the purpose of which is to present the main predicted residual impacts associated with each scheme option in summarised form (taking account of agreed outline mitigation measures).

The table includes the following:

- Description of the potential impact;
- Sensitivity / value of the receptor;
- Significance of impact without mitigation;
- Mitigation measure(s) to address specified impact;
- Significance of the impact with mitigation in place; and
- Duration of the impact.

A description of likely effects for the 'do nothing' should the scheme not be developed has also been included, and mainly comprises a no change situation for the existing site conditions.

The mitigation measures reference in Table 17.1 are described in more detail in Chapters 5 to 15 and are summarised into a Schedule of Environmental Mitigation Measures (see Chapter 18 – Schedule of Environmental Committments). Cross-referencing between the two tables is provided by the reference numbers noted in bold.

Table 17.1. Environmental Impacts Table.

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
AIR QUALITY						
One receptor on Link D (D47/5) unlikely to experience a change in air quality	High	Not significant	No specific mitigation required	N/A	Insignificant	No change from existing situation.
Three receptors on Link E (new side road) – unlikely to experience a change in air quality	High	Not significant	No specific mitigation required	N/A	Insignificant	No change from existing situation.
Air quality improvement for 94 receptors along Link A (C83 between D1/5 and C84)	High	Not significant	No specific mitigation required	N/A	Beneficial, long term	No change from existing situation.
Three receptors within 200m of A68 unlikely to experience a change	High	Not significant	No specific mitigation required	N/A	Insignificant	No change from existing situation.
Overall deterioration in NO_2 for four properties	High	Not significant	No specific mitigation required	N/A	Adverse, long term	No change from existing situation.
No change in NO_2 for 48 properties	High	Not significant	No specific mitigation required	N/A	Insignificant	No change from existing situation.
Improvement in NO_2 for 47 properties	High	Not significant	No specific mitigation required	N/A	Beneficial, long term	No change from existing situation.
Overall deterioration in PM_{10} for four properties.	High	Not significant	No specific mitigation required	N/A	Adverse, long term	No change from existing situation.
No change in PM_{10} for 94 properties	High	Not significant	No specific mitigation required	N/A	Insignificant	No change from existing situation.
Improvement in PM_{10} for one property	High	Not significant	No specific mitigation required	N/A	Beneficial, long term	No change from existing situation.
CULTURAL HERITAGE						
Demolition / loss / damage or severance of scheduled ancient Monuments (SAM) – Roman Fort / Annexes and Roman Camp	National	No impact	None required	No impact	N/A	No change from existing situation.
Damage to the B-listed Justice Hall/Courtroom	Regional	No impact	None required	No impact	N/A	No change from existing situation.

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
Potential to find undiscovered or unrecorded archaeological features during construction work	National	Major/Adverse	Preliminary archaeological investigation	Slight overall Impact	Significant, long term but beneficial	Adverse impact on currently undiscovered features of archaeological interest.
Damage to unscheduled Annfield Coaching Inn	Negligible / Local	Negligible/ Adverse	Archaeological evaluation, potential for slight adjustment to scheme alignment depending on results of archaeological evaluation Application of HS 'Special Requirements'	Not significant	Not significant	No change from existing situation.
Damage to Oxton village	Negligible / Local	Negligible/ Adverse				
Damage to the Oxton railway station listed building	Negligible / Local	Negligible/ Adverse				
Damage to the Justicehall Steading	Negligible / Local	Negligible/ Adverse				
Damage to the listed Tower Hotel Oxton	Negligible / Local	Negligible/ Adverse				
Damage to the listed Main Street, Oxton	Negligible / Local	Negligible/ Adverse				
Damage to the "Kings Road"	Negligible / Local	No impact	N/A	No impact	N/A	No change from existing situation.
Damage to Channelkirk crop marks	Negligible / Local	No impact		No impact	N/A	No change from existing situation.
Damage to Mountmill linear crop marks	Negligible / Local	No impact		No impact	N/A	No change from existing situation.
Damage to Carfraemill enclosures and ring ditches	Negligible / Local	No impact		No impact	N/A	No change from existing situation.
Damage to Flint/arrowhead find site, disrupting potential for future findings at the site	Negligible / Local	No impact		No impact	N/A	No change from existing situation.
Damage to the Carfrae enclosure and crop mark	Negligible / Local	No impact		No impact	N/A	No change from existing situation.
Damage to the Carfrae Fort	Negligible / Local	No impact		No impact	N/A	No change from existing situation.
Damage to the Carfraemill enclosure	Negligible / Local	No impact		No impact	N/A	No change from existing situation.
Damage to the Carfraemill field	Negligible /	No impact		No impact	N/A	No change from existing

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
systems and pits	Local					situation.
Damage to the Carfraegate dwelling	Negligible / Local	No impact		No impact	N/A	No change from existing situation.
LAND USE						
Disruption of access, damage to Riggsyde.	Medium	Moderate / Adverse	Access will be provided along the new side road for Riggsyde. This access will include a turning area	Slight	Adverse	No change from existing situation.
Community Land	None present	No impact	N/A	No impact	N/A	N/A
Development Land	None present	No impact	N/A	No impact	N/A	N/A
Henry's Wood	Low	Slight / Adverse	No mitigation measures required but minimise land take and best practice in terms of construction techniques to avoid unnecessary loss.	Not significant	Not significant	No change from existing situation.
Loss, damage or disturbance to agricultural land	Medium	Slight / Adverse	No mitigation measures required but minimise land take and best practice in terms of construction techniques to avoid unnecessary loss. Re-use excavated soils in earth mounding and landscaping operations. Restoration of disturb areas to original use wherever possible. Compensation for loss of land and relocation of access arrangements wherever possible. Provision of water troughs at Carfrae Farm and Kirktonhill Farm if deemed necessary as part of the accommodation works. Provision of stock-holding pens to assist in the movement of stock across the A68. (Note: All accommodation works are subject to the agreement of the affected landowners.)	Slight	Adverse	No change from existing situation

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
Disruption to stock movements at Carfrae Farm	Medium	Slight / Adverse	Provision of stock-holding pens to assist in the movement of stock across the A68. Provision of access tracks for Netherhowden Farm. (Note: All accommodation works are subject to the agreement of the affected landowners.)	Negligible	Adverse	No change
Land take and severance / access at Carfrae Farm	Medium	Slight / Adverse		Slight	Adverse	No change
Disruption to stock movements at Netherhowden Farm	Medium	Moderate / Adverse		Slight	Adverse	No change
Land take and loss or severance of existing access arrangements at Netherhowden Farm	Medium	Moderate / Adverse		Slight	Adverse	No change
Disruption or damage to land under forestry regimes	None present	No impact	N/A	No impact	N/A	N/A
Re-alignment of the D47/5	Negligible/ Local	Slight / Adverse	No mitigation measures required	Slight	Adverse	No change from existing situation
Disruption of waterways	None present	No impact	N/A	No impact	N/A	N/A
ECOLOGY AND NATURE CONSERVATION						
Impacts upon the ecological features of interest related to the River Tweed SAC: Fisheries Interests Otter Ranunclion fluitantis / Callitricho-Batrachion plants	 International International International	 Major / Adverse Neutral Neutral	Agreement with SNH and SEPA regarding the methodology to be used for construction of the extension to avoid smothering of eggs and fry. No in-river activities during spawning and fry development months (December to end of June). Otter passage would be restricted but still possible during construction works and afterwards, with the installation of an otter ledge within the Annfield Bridge along with the presence of the new underpass.	 Slight Neutral Neutral	 Adverse, long term Neutral, long term Neutral, long term	No change from existing conditions.
Loss of vegetation and habitat resulting from land take: Agricultural land / verge	 Negligible	 Neutral	None required but minimise land take and best practice in terms of construction techniques to avoid	 Neutral	 Neutral, long term	No change from existing conditions.

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
Riparian/river banks/aquatic Hedgerow	Local Negligible	Neutral Neutral	unnecessary loss. Re-instatement of hedgerows with native species, planting of trees along Headshaw Burn and additional landscape design.	Slight Slight	Beneficial, long term Beneficial, long term	
Disturbance / damage to wildlife and habitats from the demolition / extension of bridge and other structures (bats/otters/river): Annfield Bridge (extension)	International	Slight / Beneficial	None required but pre-construction surveys to be completed before any site works to ensure no changes in baseline information and no disturbance to nearby otter holt. No working out with daytime hours and within 30m of otter holt without licence. Also in-river engineering licence required. Production of a Method Statement for agreement with SNH/SEPA.	Slight	Beneficial, long term	No change to existing situation.
Fragmentation, RTA's and disturbance to protected mammal species and ornithological interests: Badger movements A68 Badger movements Annfield Bridge Setts/foraging activity Otters (mortality / RTAs) Bats (tree felling, bridge works) Breeding birds / non-protected species	 National National National International International Local	 Slight / Adverse Major / Adverse Neutral Neutral Critical / Adverse Neutral	Directional lighting to be used when required. Plant and machines turned off when not in use. Pre-construction checks for protected species and erection of temporary barriers or fencing to prevent damage / disturbance to holt. Erection of combined badger/otter fencing and otter ledges at Annfield Bridge. None required.	 Neutral Neutral Neutral Slight Slight Neutral	 Neutral, long term Neutral, long term Neutral, long term Beneficial, long term Adverse, short term Neutral, short term	No change to existing situation.
Changes to water quality of watercourses in terms of ecology and aquatic habitats: Direct pollution / accident spillage	International	Critical /	Improved drainage facilities using swales and attenuation pond to detain accidental spills/pollution incidents. Implementation of a Water Quality Protection Plan and Pollution	Slight	Adverse, long / short	No change to existing drainage system (no protection from spillage, direct discharge into Headshaw Burn / fields).

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
Indirect run-off from drainage	International	Adverse Neutral	Incident Response Plan.	Slight	term Adverse, long / short term	
LANDSCAPE EFFECTS						
Landscape Character						
Loss of hedgerow and creation of embankments	Low	Slight to Moderate / Adverse	Avoidance of loss ordamage to hedges, walls, woodlands and valued land forms by on-line alignment of the scheme. Minimise land take to reduce impacts on land use. Reinstatement of poor quality hedgerows with new planting of hedgerows.	Negligible	Beneficial	No change from current situation.
New side road construction and private access to Riggsyde	Medium	Slight to Moderate / Adverse	Creation of new private access to Riggsyde from new side road as opposed to current access from A68	Negligible	Beneficial	No change from current situation.
Landscape features	Low	Slight to Moderate / Adverse	Appropriate alignment of cutting to prevent visual impact, provision of screening measures such as mounds, fencing and tree planting to reduce visual impact	Negligible	Not significant	No change from current situation.
Visual Effects						
Visual impact pf vehicles, new side road and new road signage in general	Low	Slight / Adverse	Earth moulding and screen planting to screen road from sensitive receptors	Negligible	Not significant	No change from current situation.
TRAFFIC NOISE AND VIBRATION						
Increase in noise of less than 1dB(A) likely to affect 12 sensitive receptors in 2025 (Design Year)	Moderate	Insignificant / Adverse	No mitigation required	N/A	Adverse, long term	Slight increase in noise as traffic levels rise.
PEDESTRIANS, CYCLISTS, EQUESTRIANS AND COMMUNITY EFFECTS						
Pedestrians: Stopping up of C83 junction and realignment of D47/5 junction and	Low	Slight / Beneficial	No mitigation required due to installation of underpass to link C83	Slight	Beneficial long term	No change.

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
new side road construction			and D47/5 and re-classification of C83. These provisions should encourage additional pedestrian journeys.			
Cyclists: Stopping up of C83 junction and realignment of D47/5 junction and crossing of A68. Travelling along A68	Low Low	Slight / Beneficial Slight / Beneficial	No mitigation required due to underpass and re-classification of C83. Presence of 1m strips at side of new road.	Slight Slight	Beneficial, long term. Beneficial, long term.	No change. No change.
Equestrians: Stopping up of C83 junction and realignment of D47/5 junction.	Low	Slight / Beneficial	No mitigation required due to underpass provision.	Slight	Beneficial, long term.	No change.
Community: Removal of bus lay-bys on A68	Low	Negligible	N/A	Negligible	Adverse	No change.
Community: Closure of C83 and effect on community.	Medium	No impact	New side road construction between C83 and C84 results in no traffic increase in Oxton village	No impact	N/A	No change.
Vehicle Journeys: Increased vehicle journeys	Low	Slight / Adverse	New side road construction between C83 and C84. Access tracks to replace field gates closed off.	Slight	Adverse, long term	No change.
VEHICLE TRAVELLERS						
Views from the road	Medium	Negligible / Adverse	Mitigation measures incorporated into scheme design to reduce any impacts.	Negligible	Adverse long term	No change.
Driver Stress Southbound Northbound	 High Medium	 Major / Beneficial Slight / Beneficial		 Major Slight	 Beneficial long term Beneficial long term	
Accidents	Medium	Moderate / Beneficial		Moderate	Beneficial long term	

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
ROAD DRAINAGE AND THE WATER ENVIRONMENT						
Impacts of water quality of the Headshaw Burn as a result of increased run-off	Very High	Neutral	Appropriate timing and engineering techniques adopted. Bridge extension constructed in accordance with the Water Framework Directive and SEPA's licensing requirements. Development of Sustainable Urban Drainage Systems (SUDS) to mitigate for any potential water quality and drainage impacts. Construction of earthwork embankments for the D47/5 re-alignment which will control flooding of the A68 by the Headshaw Burn. Proposed tree planting in vicinity of soakaways to further prevent flooding.	Slight	Beneficial	No change to existing situation.
Impacts of water quality of the Headshaw Burn as a result of accidental spillage	Very High	Neutral		Slight	Beneficial	
Impacts of water quality of the Leader Water as a result of increased run-off	Very High	Neutral		Slight	Beneficial	
Impacts of water quality of the Leader Water as a result of accidental spillage	Very High	Neutral		Slight	Beneficial	
Groundwater impacts	Medium	Neutral	No specific mitigation due to inclusion of Sustainable Urban Drainage System (SUDS) to improve water quality and minimise drainage impacts.	Neutral	Beneficial	No change to existing situation.
Flooding	Low	Neutral	Construction of the earthwork embankments for the D47/5 re-alignment, construction of soakaways and tree planting.	Neutral	N/A	No change to existing situation.
Bridge extension / new bridge	Very High	Neutral	Construction Method Statement & Pollution Control Measures	Neutral	N/A	No change to existing situation.
GEOLOGY AND SOILS						
Earthworks impact upon geological and soil conditions of the site (from removal and fill processes)	Low	Negligible	No specific mitigation required. Best practice includes: Impact of excavated material generated through cutting activity will be reduced through on-site reuse of excavated material. On site storage	Negligible	Adverse	No change from current situation.

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
			facilities will be provided to protect excavated materials from weather. Contractor will be required to employ best practice to maximise reuse of excavated materials. Imported fill materials will be required, but these materials only be used where absolutely necessary.			
Hydrological impacts due to changes in ground permeability and embankment construction	Low	Negligible	No specific mitigation required. Inclusion of Sustainable Urban Drainage Systems (SUDS) to mitigate for any potential water quality and drainage impacts.	Negligible	Adverse	No change from current situation.
DISRUPTION DUE TO CONSTRUCTION						
Temporary increase in airborne dust levels due to construction activities	N/A	Insignificant	Use of dust suppression techniques such as regular water spraying to minimise airborne dust load. Ensure that any pollution emitting plants are not located in the vicinity of a receptor unnecessary.	Insignificant	Short term	No change from current situation.
Decrease in air quality due to construction activities (at properties within 100 metres of existing and proposed A68	N/A	Insignificant				
Damage to or disturbance of cultural heritage features (four identified within 100m).	Local	Major / Adverse	Preventing access to cultural heritage feature by identifying sensitive features in contract documents and fencing off prior the onset of construction. Archaeological monitoring of any works that may cause subsurface damage and recording of any archaeological features discovered. Inclusion of 'special requirements' provided by Historic Scotland in contract documents and implementation of 'special requirements' during works	Negligible	Adverse	No change from current situation.
Disruption to access arrangements	Medium	Slight /	Financial agreement between	Slight	Adverse/ Short term	No change from current

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
to land and property due to construction and temporary land take.		Adverse	contractor and land owner to compensate for temporary land take to facility construction compound. Reinstate temporary land take to its former use as quickly as possible.			situation.
Loss of access to Riggsyde during construction activities.	Medium	Negligible / Adverse	Provide temporary access where access is disrupted during construction	Negligible	Adverse / Short term	No change from current situation.
Disturbance to Headshaw Burn during extension of the Annfield Bridge	International	Critical / Adverse	Creation and implementation of Construction Method Statement (as per Habitat Regs requirements), application of sensitive construction techniques, no obstruction to banks or channels. Completion of a fish rescue. Application of British Standards.	Slight	Adverse, short term and possibly long term	No change from current situation.
Pollution of Headshaw Burn and other watercourses	International	Critical / Adverse	Application of a Construction Method Statement outlining construction techniques to be applied and pollution control mitigation requirements. Authorisation under the CAR and application of licence conditions. Adherance to SEPA PPG Guidelines and WFD Engineering guidelines along with restrictions in timing of certain activities and consultation with SEPA. Implementation of SUD systems and improved drainage design.	Slight	Adverse, short and long term	No change from current situation – risk of environmental damage due to pollution incident.
Disturbance to otter (both within places of shelter and movement behaviour) and protected species due to construction.			Clear demarkation of 10m zone around otter holt. Toolbox talks to contractors. Pre-construction survey of holt condition (natal status) and other potential new holts. Licence			No change to existing conditions.

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
Otter holt	International	Major / Adverse	from SE. Minimisation of disturbance within 100m and restricted work programs / timings	Slight	Adverse, short term	
Otter movement / passage	International	Major / Adverse		Slight	Adverse, short term	
Disturbance due to human activity, noise, dust and light:						
Breeding birds	Local	Slight / Adverse	Completion of pre-construction surveys, covering of culverts and excavations to avoid trapping of animals, ecological watching brief as required, sensitive timing of works (e.g. avoidance of breeding bird season), obtaining of licences to meet with legal requirements, dust suppression, application of an EMS and use of lighting minimised and directed away from sensitive receptors such as watercourses etc.	Neutral	N/A	Unchanged from current levels of disturbance from humans, dust, light and noise.
Otters / bats	International	Slight / Adverse		Neutral	N/A	
Badgers	National	Neutral		Neutral	N/A	
Dust	Not significant	Neutral		Neutral	N/A	
Light	International to Local	Neutral		Neutral	N/A	
Visual impact during construction upon nearby properties and road users.	Medium	Moderate / Adverse	Retention of existing vegetation; limit to size / extent of working and storage areas; good site management and housekeeping; limited use of temporary floodlighting.	Moderate	Adverse, short term	No change to effect from existing A68.
Noise and vibration impacts upon residential properties (Riggsyde and The Shieling) and wildlife.	N/A	Moderate / Adverse	Inclusion of the following control measures within the EMS: Sensitive programming of works during normal working hours;	Moderate	Adverse, short term	No change from existing conditions.

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
			Informing properties of duration and intensity of particularly noisy activities / processes; Adherence to standard noise levels set by SBC Environmental Health Officer; and Noisy activities timed for completion out with recognised breeding periods for sensitive species.			
Disruption to non-vehicle road users such as crossing of C83 and D47/5 junction, access to Carfraemill Hotel	Low	Negligible	N/A - alternative provisions to be provided by the contractor. Best practice to include: Fencing off of works and provide clear signage.	Negligible	Short term	Continued risk from crossing A68 at C83 and D47/5 junctions. No change to current hotel access arrangements.
Impairment of driver views by construction works and floodlighting	Medium	Moderate / Adverse	Limit size and extent of working areas; clear signage and traffic management; good site management and house keeping; advance notification via local radio and media of likely delays; and limited use of temporary floodlighting.	Moderate	Adverse, short term	No change from existing condition / stress levels.
Increased driver stress due to unfamiliar conditions / site plant presence and increase in journey times	Medium	Moderate / Adverse	Limit size and extent of working areas; clear signage and traffic management; good site management and house keeping; advance notification via local radio and media of likely delays; and limited use of temporary floodlighting.	Moderate	Adverse, short term	No change from existing condition / stress levels.
Hydrological and water quality impacts upon the Headshaw Burn, Leader Water and associated catchment (e.g. construction disturbance and damage and accidental spillage)	Very high	Moderate to Large / Adverse	Application of SEPA PPG's; consultation with SEPA re. detailed drainage design; inclusion of EMS procedures for appropriate storage on site of materials, temporary pollution control, restricted access near	Slight	Adverse, short and long term	Continued existing risk from current A68 drainage and maintenance work requirements / accidental spillage.

WITH PROPOSED SCHEME						DO MINIMUM
Description of Potential Impact	Sensitivity /Value of Receptor	Significance of Impact Without Mitigation	Mitigation Measure/s	Significance of Impact With Mitigation	Beneficial or Adverse Duration of Impact (long, medium or short term)	Description of Predicted Effects
			watercourses and contingency plans for emergency situations.			
Impact upon groundwater sources	Medium	Neutral	N/A	Neutral	N/A	As existing conditions.
Impact of importing fill material to site and associated disruption	Low	Slight / Adverse	No mitigation required. Best practice includes: Limitations on the extent and location of working / storage areas; Implementation of erosion and sediment controls; Appropriate handling and storage of spoil; and Re-use of excavated materials.	Slight	Adverse	No change to current situation
Storage of material on site prior to replacement as fill material	Low	Negligible / Adverse	No mitigation required. Best practice includes: Limitations on the extent and location of working / storage areas; Implementation of erosion and sediment controls; Appropriate handling and storage of spoil; and Re-use of excavated materials.	Negligible	Adverse	No change to current situation