

**A66 Northern Trans-Pennine Project
TR010062**

**3.4 Environmental Statement
Appendix 9.1 Non-significant Effects**

APFP Regulations 5(2)(a)

Planning Act 2008

**Infrastructure Planning (Applications: Prescribed Forms and
Procedure) Regulations 2009**

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**The Infrastructure Planning
(Applications: Prescribed
Forms and Procedure)
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A66 Northern Trans-Pennine Project
Development Consent Order 202x

**3.4 ENVIRONMENTAL STATEMENT
APPENDIX 9.1 NON-SIGNIFICANT EFFECTS**

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APPENDICES

None

FIGURES

None

9.1 Non-Significant Effects

The following tables present the non-significant effects associated with the Project upon the identified receptors. Table 9- 1 Summary of non-significant effects – construction presents the anticipated impact magnitude at construction stage with mitigation measures applied.

Table 9- 2: Summary of non-significant effects – operation present the non-significant effects associated with the Project upon the identified receptors during the operational phase. The impact magnitude has been assessed against the anticipated change from baseline to operational phase. It is considered unlikely that significant impacts will arise during the operational phase for the Geology and soils. Most impacts are likely to have occurred as during the construction phase.

The significance of an effect is reported with the effectiveness of the design and mitigation measures (the residual effect). Non- significant effects comprise residual effects that are defined as Neutral or Slight.

9.1.1 Non-Significant Effects Summary

Table 9- 1 Summary of non-significant effects – construction

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
Exposure to soil contamination	On-site users	Human health: Residential	Very high	Further ground investigations prior to construction and where unacceptable risks are identified, remediation of contaminated soil/groundwater. Remediation strategies may involve source removal or pathway intervention as appropriate.	No change to negligible adverse	Neutral to slight adverse effect
		Human health: Public open space	High		No change to negligible adverse	Neutral to slight adverse effect
		Human health: Commercial	Medium		No change to negligible adverse	Neutral to slight adverse effect
		Human health: Highways (road users)	Low		No change to negligible adverse	Neutral to slight adverse effect

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
	Off-site users	Human health: Residential	Very high	Measures contained within the EMP with regards to soils handling and storage will control the impact resulting in a low and very low risk to these receptors.	No change	Neutral
		Human health: Public open space	High		No change	Neutral
		Human health: Commercial	Medium		No change to negligible adverse	Neutral to slight adverse
		Human health: Highways (road users)	Low		No change to negligible adverse	Neutral to slight adverse
Exposure to groundwater contamination	On-site users	Human health: Residential	Very high	Further ground investigations prior to construction and where unacceptable risks are identified, remediation of contaminated soil/groundwater. Remediation strategies may involve source removal or pathway intervention as appropriate.	No change to negligible adverse	Neutral to slight adverse effect
		Human health: Public open space	High		No change to negligible adverse	Neutral to slight adverse effect
		Human health: Commercial	Medium		No change to minor adverse	Neutral to slight adverse effect
		Human health: Highways (road users)	Low		No change to minor adverse	Neutral to slight adverse effect
	Off-site users	Human health: Residential	Very high	Measures contained within the EMP with regards to soils	No change to negligible	Neutral to slight adverse effect

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
		Human health: Public open space	High	handling and storage will control the impact resulting in a low and very low risk to these receptors.	No change to negligible	Neutral to slight adverse effect
		Human health: Commercial	Medium		No change to negligible	Neutral to slight adverse effect
		Human health: Highways (road users)	Low		No change to negligible	Neutral to slight adverse effect
Exposure to ground gas	On-site users	Human health: Residential	Very high	Further ground investigations prior to construction and where unacceptable risks are identified, remediation of risk from ground gas. Remediation strategies may involve source removal or pathway intervention as appropriate.	No change	Neutral effect
		Human health: Public open space	High		No change	Neutral effect
		Human health: Commercial	Medium		No change to negligible adverse	Neutral to slight adverse effect
		Human health: Highways (road users)	Low		No change	Neutral effect
	Off-site users	Human health: Residential	Very high	Further ground investigations prior to construction and where unacceptable risks are identified, remediation of risk from ground gas.	No change to negligible adverse	Neutral to slight adverse effect
		Human health: Public open space	High		No change to negligible adverse	Neutral to slight adverse effect

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
		Human health: Commercial	Medium	Remediation strategies may involve source removal or pathway intervention as appropriate.	No change to negligible adverse	Neutral to slight adverse effect
		Human health: Highways (road users)	Low		No change to negligible adverse	Neutral effect
Contaminated soil, leachate/groundwater and pollution of aquifers	Groundwater	Principal Aquifer	High	Further ground investigations prior to construction and where risks are identified, remediation of contaminated soil/groundwater. Remediation strategies may involve source removal or pathway intervention as appropriate. The impact will be controlled through appropriate hazardous materials storage and handling, pollution response and environmental management; the principles of which	No change to negligible adverse	Neutral to slight adverse effect
		Secondary A aquifer	Medium		No change to negligible adverse	Neutral to slight adverse effect
		Secondary (Undifferentiated) Aquifer	Low		No change to negligible adverse	Neutral to slight adverse effect

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
				will be set out in the EMP.		
impact on surface watercourses	Surface water	River Eamont	Very High	Further ground investigations prior to construction and where risks are identified, remediation of contaminated soil/groundwater. Remediation strategies may involve source removal or pathway intervention as appropriate. The impact will be controlled through appropriate hazardous materials storage and handling, pollution response and environmental management; the principles of which will be set out in the EMP.	No change to negligible adverse	Neutral to slight adverse effect
		River Eden	Very High		No change to negligible adverse	Neutral to slight adverse effect
		Trout Beck	High		No change to negligible adverse	Neutral to slight adverse effect
		Birk Sike	Medium		No change to negligible adverse	Neutral to slight adverse effect
		Surface water abstraction	Medium		No change to negligible adverse	Neutral to slight adverse effect
		Groundwater abstraction	Medium to High		No change to negligible adverse	Neutral to slight adverse effect
		Spring	Medium		No change to negligible adverse	Neutral to slight adverse effect
		Manyfold Beck	Medium		No change to negligible adverse	Neutral to slight adverse effect

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
		Myers	Medium	Measures that will contain and control any releases of contaminants along the highway and its associated infrastructure such as drainage control; the principles of which will be set out in the EMP.	No change to negligible adverse	Neutral to slight adverse effect
		Lowgill Beck	Medium		No change to negligible adverse	Neutral to slight adverse effect
		Tutta Beck	Medium		No change to negligible adverse	Neutral to slight adverse effect
		Swindale Brook	Medium		No change to negligible adverse	Neutral to slight adverse effect
		Moor Beck	Medium		No change to negligible adverse	Neutral to slight adverse effect
		Ordinary water course/ ponds	Low		No change to negligible adverse	Neutral to slight adverse effect
Impact on ecological designations: vertical and lateral migration of	Ecological designations	SSSI River Eamont, Trout Beck, River Eden Nature conservation	High	Further ground investigations prior to construction and where risks are identified,	No change to negligible adverse	Neutral to slight adverse effect

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
contamination and/or direct contact with soil contamination		North Pennines AONB/ UNESCO Global Geopark	Very high	remediation of contaminated soil/groundwater.	No change to negligible adverse	Neutral to slight adverse effect
Temporary and permanent impacts	Soil	ALC grade 5	Low	Production and implementation of a Soil Resource and Management Plan (SRMP), secured in the EMP (Application Document 2.7) Permanent land take cannot be mitigated but soil stripped maybe a resource for landscaping use on or off site or for land restoration off site e.g., for agricultural, forestry, amenity use.	Moderate	Slight effect

Table 9- 2: Summary of non-significant effects – operation

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
Exposure to soil contamination	On-site users	Human health: Residential	Very high	Remediation measures will have taken place at construction phase to removes contamination linkages.	No change to negligible beneficial	Neutral to slight beneficial effect
		Human health: Public open space	High		No change to negligible beneficial	Neutral to slight beneficial effect
		Human health: Commercial	Medium		No change to negligible beneficial	Neutral to slight beneficial effect
		Human health: Highways (road users)	Low		No change to negligible beneficial	Neutral to slight beneficial effect
	Off-site users	Human health: Residential	Very high	Pollution prevention drainage control measures.	No change to negligible beneficial	Neutral to slight beneficial effect
		Human health: Public open space	High		No change to negligible beneficial	Neutral to slight beneficial effect
		Human health: Commercial	Medium		No change to negligible beneficial	Neutral to slight beneficial effect
		Human health: Highways (road users)	Low		No change to negligible beneficial	Neutral to slight beneficial effect
Exposure to groundwater	On-site users	Human health: Residential	Very high		No change	Neutral effect

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
contamination		Human health: Public open space	High		No change	Neutral effect
		Human health: Commercial	Medium		No change	Neutral effect
		Human health: Highways (road users)	Low		No change	Neutral effect
	Off-site users	Human health: Residential	Very high		No change	Neutral effect
		Human health: Public open space	High		No change	Neutral effect
		Human health: Commercial	Medium		No change	Neutral effect
		Human health: Highways (road users)	Low		No change	Neutral effect
	Exposure to ground gas	On-site users	Human health: Residential		Very high	No change
Human health: Public open space			High	No change	Neutral effect	
Human health: Commercial			Medium	No change	Neutral effect	
Human health: Highways (road users)			Low	No change	Neutral effect	

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
	Off-site users	Human health: Residential	Very high		No change	Neutral effect
		Human health: Public open space	High		No change	Neutral effect
		Human health: Commercial	Medium		No change	Neutral effect
		Human health: Highways (road users)	Low		No change	Neutral effect
Contaminated soil, leachate/groundwater and pollution of aquifers	Groundwater	Principal Aquifer	High	Operational design will include measures to contain and control any releases of contaminants along the highway and its associated infrastructure such as drainage control.	No change	Neutral effect
		Secondary A aquifer	Medium		No change	Neutral effect
		Secondary (Undifferentiated) Aquifer	Low		No change	Neutral effect
		Groundwater abstraction	Medium to High		No change	Neutral effect
Contaminated soil,		River Eamont	Very High		No change	Neutral effect

Potential Impact	Receptor	Attribute	Receptor Sensitivity	Design and Mitigation Measures	Impact magnitude (with mitigation)	Residual effect (with mitigation)
leachate/ groundwater and impact on surface watercourses	Surface water	River Eden	Very High	Operational design will include measures to contain and control any releases of contaminants along the highway and its associated infrastructure such as drainage control.	No change	Neutral effect
		Trout Beck	High		No change	Neutral effect
		Birk Sike	Medium		No change	Neutral effect
		Surface water abstraction	Medium		No change	Neutral effect
		Spring	Medium		No change	Neutral effect
		Manyfold Beck	Medium		No change	Neutral effect
		Myers	Medium		No change	Neutral effect
		Lowgill Beck	Medium		No change	Neutral effect
		Tutta Beck	Medium		No change	Neutral effect
		Swindale Brook	Medium		No change	Neutral effect
		Moor Beck	Medium		No change	Neutral effect
Impact on ecological designations: and geological vertical and lateral migration of leachate, groundwater contamination and/or direct contact with soil contamination	Ecological and geological designations	SSSI River Eamont, Trout Beck, River Eden Nature conservation	High	n/a	No change	Neutral effect
		North Pennines AONB/ UNESCO Global Geopark	Very high		No change	Neutral effect