

Environmental impact assessment

	Air quality	Cultural Heritage				Landscape and Visual		Biodiversity	Geology and Soils		Materials and Waste		Noise and Vibration	Road Drainage			People and Communities					Climate			
		Known Buried Heritage Assets	Unknown Below Ground Heritage Assets	Farthinghoe Conservation Area	Above Ground Heritage	Historic Landscapes	Landscape		Visual	Human Health/Below Ground Services/ Geology	Aquifers	Waste		Materials	Surface water features	Ground water features	Flood Risk/ Surface Water	Private property	Community Land	Development Land	Agricultural Land Holdings	WCH	Human Health	GHG	
Northern VO	Potential Beneficial Impacts for sensitive receptors of Farthinghoe - further surveys required.	Moderate to Large adverse	Unknown - further surveys required.	Potential Beneficial impacts during operation on the setting of Farthinghoe Conservation Area of High value - further surveys required.	Moderate adverse impacts on setting during construction.	Moderate adverse impact on setting	Slight to Moderate adverse	Moderate to Large adverse	Moderate adverse	Slight adverse	Moderate adverse	Slight adverse	Moderate adverse	Potential beneficial Impacts for sensitive receptors of Farthinghoe - further surveys required.	Neutral to Slight adverse	Minor adverse	Slight to Moderate adverse	Slight adverse	Neutral	Slight adverse	Moderate adverse	Large adverse	Unknown-further surveys required.	Slight adverse	
Northern V1	Potential Beneficial Impacts for sensitive receptors of Farthinghoe - further surveys required.	Moderate to Large adverse		Potential Beneficial impacts during operation on the setting of Farthinghoe Conservation Area of High value - further surveys required.	Moderate adverse impacts on setting during construction.	Moderate adverse impact on setting	Slight to Moderate adverse	Moderate to Large adverse	Moderate adverse	Slight adverse	Moderate adverse	Moderate adverse	Moderate adverse	Moderate adverse	Potential beneficial Impacts for sensitive receptors of Farthinghoe - further surveys required.	Neutral to Slight adverse	Slight adverse	Slight adverse	Slight adverse	Neutral	Slight adverse	Moderate adverse	Large adverse	Unknown-further surveys required.	Moderate adverse
Northern V2	Potential Beneficial Impacts for sensitive receptors of Farthinghoe - further surveys required.	Moderate to Large adverse		Potential Beneficial impacts during operation on the setting of Farthinghoe Conservation Area of High value - further surveys required.	Moderate adverse impacts on setting during construction.	Moderate adverse impact on setting	Moderate adverse	Moderate to Large adverse	Moderate adverse	Slight adverse	Moderate adverse	Slight adverse	Moderate adverse	Moderate adverse	Potential beneficial Impacts for sensitive receptors of Farthinghoe - further surveys required.	Neutral to Slight adverse	Neutral to Slight adverse	Neutral - Slight adverse	Slight adverse	Neutral	Slight adverse	Moderate adverse	Large adverse	Unknown-further surveys required.	Moderate adverse
Northern V3	Potential Beneficial Impacts for sensitive receptors of Farthinghoe - further surveys required.	Moderate to Large adverse		Potential Beneficial impacts during operation on the setting of Farthinghoe Conservation Area of High value - further surveys required.	Moderate adverse impacts on setting during construction.	Moderate adverse impact on setting	Moderate adverse	Moderate to Large adverse	Moderate adverse	Slight adverse	Moderate adverse	Slight adverse	Moderate adverse	Moderate adverse	Potential beneficial Impacts for sensitive receptors of Farthinghoe - further surveys required.	Neutral to Slight adverse	Negligible	Neutral - Slight adverse	Slight adverse	Neutral	Slight adverse	Moderate adverse	Large adverse	Unknown-further surveys required.	Moderate adverse
Southern VO	Potential adverse Impacts for sensitive receptors of Farthinghoe - further surveys required.	Slight adverse		Potential Beneficial impacts during operation on the setting of Farthinghoe Conservation Area of High value - further surveys required.	Moderate adverse impacts on setting during construction.	Moderate adverse impact on setting	Slight to Moderate adverse	Moderate to Large adverse	Moderate adverse	Slight adverse	Moderate adverse	Slight adverse	Moderate adverse	Moderate adverse	Potential beneficial Impacts for sensitive receptors of Farthinghoe - further surveys required.	Neutral to Slight adverse	Moderate adverse	Neutral	Slight adverse	Neutral	Slight adverse	Moderate adverse	Large adverse	Unknown-further surveys required.	Negligible

Alternative text (description) for the summary table above

A desk top study has been carried out on each route to provide an indication of its impact on the different environmental considerations. The results summarised below indicate, while there are subtle differences in the environmental impact of the different routes, overall there is very little differences between them. When determined further work will be undertaken on the preferred route to establish more precisely the environmental impact of the route and any mitigation measures necessary.

- **Air Quality** – All routes have the potential to have beneficial impacts on sensitive receptors in Farthinghoe.
- **Cultural Heritage** – All routes have the potential to have a moderate to large adverse impact on known buried heritage assets, moderate adverse impacts on the setting of heritage assets and historic landscape and beneficial impacts on Farthinghoe Conservation Area.

- **Landscape and Visual** – Northern V0 and V1 routes have the potential to have slight to moderate adverse impacts on landscape character whereas Northern V2 and V3 routes have potential to have moderate adverse impacts. All routes have the potential to have moderate to large adverse visual impacts.
- **Biodiversity** – All routes have the potential to have moderate adverse impacts on biodiversity.
- **Geology and Soils** – All routes have the potential to have slight adverse impacts on human health, below ground services and geology and moderate adverse impacts on aquifers.
- **Materials and Waste** – Northern V0, V2 and V3 routes have the potential to have slight adverse impacts on waste produced during construction whereas Northern V1 has the potential to have a moderate adverse impact. All routes have the potential to have moderate adverse impacts on materials used in construction.
- **Noise and Vibration** – All routes have the potential to have beneficial impacts on sensitive receptors in Farthinghoe.
- **Road Drainage and the Water Environment** – Northern V0 has the potential to have a slight to moderate adverse impact on flood risk, whereas, Northern V1 would have a slight adverse impact and Northern V2 and V3 would have neutral to slight adverse impact. Northern V0 and V1 has the potential to have a slight adverse impact on groundwater features, whereas, Northern V2 and V3 would have a neutral to slight adverse impact. All routes have the potential to have a neutral to slight adverse impact on surface water features.
- **People and Communities** – All routes have the potential to have a neutral impact on community land, a slight adverse impact on private property and development land, a moderate adverse impact on agricultural land and a large adverse impact on walkers, cyclist and horse riders.
- **Climate** – Northern V1, V2 and V3 have the potential to have a moderate adverse impact on greenhouse gas emissions, whereas, Northern V0 would have a slight adverse impact.