



**Haweswater Aqueduct Resilience Programme - Proposed Bowland  
Section**

**Environmental Statement**

**Volume 4**

**Appendix 6.4: Schedule of Landscape Effects**

June 2021



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## Haweswater Aqueduct Resilience Programme - Proposed Bowland Section

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## 1. Schedule of Landscape Effects

Table 6.1: Schedule of Landscape Effects (Bowland)

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
1b. High Bowland Plateaux  Landscape Character Area  (01. Moorland Plateaux LCT)  Approx. Dist.: 2.9 km from Lower Houses Compound	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Bowland Section  Tree and shrub planting to replace vegetation removed during the enabling works.  Areas used for construction works returned to agriculture.  Reinstatement of existing landform after construction works.  Reinstatement of grass sward.  Reinstatement of stone walls, hedgerows and fences.	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the enabling works at the Newton-in-Bowland Compound. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>The enabling works would result in a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the construction activity at the Newton-in-Bowland Compound. Specific changes would result from the tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. The tall crane stationed at the launch portal would be visible within the setting and represent incongruous, large-scale feature within a very small number of elevated, outward views. Barely perceptible loss existing vegetation and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>The construction activities would result in a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the Newton-in-Bowland Compound. Specific changes would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain barely perceptible. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>The commissioning activities would result in a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features, such as the introduced valve house and access roads at the Newton-in-Bowland Compound. Barely perceptible loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>Operational effects (Year 1) would result in a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views of the above-ground features at the Newton-in-Bowland Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>Operational effects (Year 15) would result in a barely perceptible and predominately characteristic change to a very small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
2b. Central Bowland Fells  Landscape Character Area  (02. Moorland Hills LCT)  Approx. Dist.: 0m from Lower Houses Compound, 2.25 km from Newton-in-Bowland Compound	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section  Tree and shrub planting to replace vegetation removed during the enabling works.  Areas used for construction works returned to agriculture.  Reinstatement of existing landform after construction works.  Reinstatement of grass sward.	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from views of the enabling works at the Lower Houses Compound within the adjacent 04d. Bowland Gritstone Fringes, D13. Park House and I3. Hindburndale LCAs. Barely perceptible disturbance from the Newton-in-Bowland Compound, within the nearby G3. Upper Hodder and 05a. Upper Hodder Valley LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access road, would contrast with the predominately rural character and setting of this landscape.</p> <p>The enabling works would result in a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Noticeable disturbance from views of the construction activity at the Lower Houses Compound. Barely perceptible disturbance from the construction activity at the Newton-in-Bowland Compound. Specific changes would result from the creation of the working platform and tunnel portal through excavation and land reprofiling, the tunnel boring operation and open-cut trenching; and the storage and removal of excavated materials. Tall cranes stationed at the launch portal and reception shafts would be visible within the setting and represent incongruous, large-scale feature within</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
		Reinstatement of stone walls, hedgerows and fences.		<p>several outward views. Notable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and contrast with the predominately rural character and setting of this landscape.</p> <p>The combined effects from the Lower Houses Compound and Newton-in-Bowland Compound, would result in a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>					
			Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from views of the commissioning works at the Lower Houses Compound. Barely perceptible disturbance the commissioning works at the Newton-in-Bowland Compound. Specific changes would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. Tall cranes located at the launch portal and reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain evident. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>The combined effects from the Lower Houses Compound and Newton-in-Bowland Compound would result in a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor views towards from the above-ground features, such as the introduced valve house and access road at the Lower Houses Compound. Barely perceptible views towards the above-ground features at the Newton-in-Bowland Compound. Notable loss of existing vegetation within the landscape setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>The combined effects from the Lower Houses Compound and Newton-in-Bowland Compound would result in a minor and predominately characteristic change to a small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Lower Houses and Newton-in-Bowland Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p>	Negligible	Negligible	None	Negligible	Negligible

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				The combined effects from the Lower Houses Compound and Newton-in-Bowland Compound would result in a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.					
2d. Waddington Fell  Landscape Character Area  (02. Moorland Hills LCT)  Approx. Dist.: 1.45 km from Newton-in-Bowland Compound	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section  Tree and shrub planting to replace vegetation removed during the enabling works.  Areas used for construction works returned to agriculture.  Reinstatement of existing landform after construction works.  Reinstatement of grass sward.  Reinstatement of stone walls, hedgerows and fences.	Enabling Works Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Bowland Limestone Fringes, 05a. Upper Hodder Valley and G3. Upper Hodder LCAs. Barely perceptible disturbance from enabling works at the Newton-in-Bowland Compound, within the nearby G3. Upper Hodder and 05a. Upper Hodder Valley LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.  The enabling works would result in a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Negligible	Negligible	None	Negligible	Negligible
			Construction Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible disturbance from the construction activity at the Newton-in-Bowland compound. Specific changes would result from the creation of the working platform and tunnel portal through excavation and land reprofiling; the tunnel boring operation and open-cut trenching; and the storage and removal of excavated materials. Slight detectable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. The tall crane stationed at the launch portal would be visible within the setting. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.  The construction activity would result in a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Negligible	Negligible	None	Negligible	Negligible
			Commissioning Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible disturbance from the commissioning works at the Newton-in-Bowland Compound. Specific change would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the nearby launch portal would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain slightly detectable. Commissioning activity would continue to be uncharacteristic	Negligible	Negligible	None	Negligible	Negligible

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>The commissioning activity would result in a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>					
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Newton-in-Bowland Compound. Slight detectable loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views of the above-ground features at the Newton-in-Bowland Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
4d. Bowland Gritstone Fringes  Landscape Character Area  (04. Moorland Fringe LCT)  Approx. Dist.: 0m from Lower Houses Compound	High  (V: High / S: High)	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p> <p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p>	Enabling Works Phase	<p>Direct Effects: Noticeable disturbance from the enabling works at the Lower Houses Compound. Specific changes would result from the soil stripping and the installation of temporary drainage; removal of existing tree and shrub vegetation; disruption to the existing field pattern; the localised reprofiling of the existing landform; and the temporary closure and diversion of the local PRoW network at the Lower Houses Compound (1-38-FP 22). The installation of temporary construction and internal boundary fencing; establishment of the construction compound, laydown areas and temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>The enabling works would result in a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Construction Phase	<p>Direct Effects: Substantial disturbance from the construction activity at the Lower Houses Compound. Specific changes would result from the presence of construction plant and machinery, including TBM and crane at the tunnel shaft; the movement and disturbance from construction traffic and construction work, including tunnel boring operation and</p>	Moderate	Major Adverse	None	Moderate	Major Adverse



Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
		<p>Reinstatement of grass sward.</p> <p>Reinstatement of stone walls, hedgerows and fences.</p>		<p>open-cut trenching; the storage and movement of excavated materials; the presence of the construction compound, laydown areas and temporary access roads; and the introduction of temporary water management systems. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. The impact would also be more evident due to landform alterations for the working platform and the loss of existing vegetation and field boundaries undertaken at the enabling works phase.</p> <p>Placement of surplus material, excavated from the vertical tunnel shaft, would be located in a pre-agreed location where the local topography is slightly hollowed. The placed material would be carefully formed within the hollow to tie-in with the existing contours to help integrate with the surrounding slightly undulating topography.</p> <p>Reinstatement would occur within sections of the Lower Houses Compound, although the construction compound, laydown areas and temporary access roads would remain.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>The construction activities would result in a substantial and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>					
			Commissioning Phase	<p>Direct Effects: Noticeable disturbance from the commissioning works at the Lower Houses Compound. Specific changes would result from the presence and movement of plant and machinery; short sections of open-cut trenching; the movement and temporary storage of excavated material; the presence of the construction compound, laydown areas and temporary access road introduced during the enabling works; and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. The changes to landform, vegetation cover and field pattern arising during the enabling works would continue to be evident. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>The commissioning activities would result in a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Operational Phase (Year 1)	<p>Direct Effects: Minor change from the presence of the introduced valve house building and access road at the Lower Houses Compound. The impact would also be more evident due to the loss of existing tree and shrub vegetation undertaken at the enabling works phase. The grass sward covering the placed surplus material would have established sufficiently to integrate the area with the surrounding reinstated grass areas. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration, enclosure and screening at this stage.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>					
			Operational Phase (Year 15)	<p>Direct Effects: Barely perceptible change from the topographical alterations resulting from the placed surplus material and the presence of the introduced above-ground features at the Lower Houses Compound. Maturing mitigation planting would help to replace removed vegetation during the enabling works and provide some integration of introduced structures and features into the surrounding landscape.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of an adverse permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
4e. Bowland Limestone Fringes  Landscape Character Area  (04. Moorland Fringe LCT)  Approx. Dist.: 400 m from Newton-in-Bowland Compound	High  (V: High / S: High)	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p> <p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p> <p>Reinstatement of stone walls, hedgerows and fences.</p>	Enabling Works Phase	<p>Direct Effects: There would be no direct effects</p> <p>Indirect Effects: Minor disturbance from views of the enabling works at the Newton-in-Bowland Compound within the within the adjacent G3. Upper Hodder and 05a. Upper Hodder Valley LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>The enabling works would result in a perceptible and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Construction Phase	<p>Direct Effects: There would be no direct effects</p> <p>Indirect Effects: Noticeable disturbance from views of the construction activity at the Newton-in-Bowland Compound. Specific changes would result from the creation of the working platform and tunnel portal through excavation and land reprofiling; the tunnel boring operation and open-cut trenching; and the storage and removal of excavated materials. Slight detectable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. The tall crane stationed at the launch portal would be visible within the setting and represent incongruous, large-scale feature within outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>The construction activities would result in a noticeable and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>	Moderate	Moderate Adverse	None	Moderate	Major Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
			Commissioning Phase	<p>Direct Effects: There would be no direct effects</p> <p>Indirect Effects: Minor disturbance from views of the commissioning works at the Newton-in-Bowland Compound, including short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the launch shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain slightly evident. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>The commissioning activities would result in a perceptible and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects</p> <p>Indirect Effects: Minor views towards the above-ground features, such as the introduced valve house at the Newton-in-Bowland Compound. Slight detectable loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Newton-in-Bowland Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
5a. Upper Hodder Valley  Landscape Character Area  (05. Undulating	High  (V: High / S: High)	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed</p>	Enabling Works Phase	<p>Direct Effects: Noticeable disturbance from the enabling works at the Newton-in-Bowland Compound. This would include soil stripping and the installation of temporary drainage; the removal of existing tree and shrub vegetation; disruption to the existing field pattern; the localised reprofiling of the existing landform; and the temporary closure and diversion of the local PRow network at the Newton-in-Bowland Compound (3-29-FP 31 and 3-29-FP 26). The installation of temporary construction and internal boundary fencing; establishment of the construction compounds, laydown areas and temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape.</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
Lowland Farmland LCT)  Approx. Dist.: 0 m from Newton-in-Bowland Compound		during the enabling works.		Indirect Effects: There would be no indirect effects					
		Areas used for construction works returned to agriculture.		The enabling works would result in a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.					
		Reinstatement of existing landform after construction works.  Reinstatement of grass sward.  Reinstatement of stone walls, hedgerows and fences.	Construction Phase	<p>Direct Effects: Substantial disturbance from the construction activity at the Newton-in-Bowland Compound. Specific changes would result from the presence of construction plant and machinery, including TBM and crane at the tunnel shaft; the creation of the working platform and tunnel portal through excavation and land reprofiling; the movement and disturbance from construction traffic and construction work, including tunnel boring operation and open-cut trenching; the storage and movement of excavated materials, including the tunnel arisings at the Newton-in-Bowland Compound; the presence of the construction compound, laydown areas and temporary access roads; and the introduction of temporary water management systems. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. The impact would also be more evident due to landform alterations and the loss of existing vegetation and field boundaries undertaken at the enabling works phase. Reinstatement of the tunnel portal and within sections of the laydown areas would occur at the end of the construction phase, although the construction compounds, laydown areas and temporary access roads would remain.</p> <p>Indirect Effects: There would be no indirect effects</p> <p>The construction activities would result in a substantial and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>	Moderate	Major Adverse	None	Moderate	Major Adverse
	Commissioning Phase	<p>Direct Effects: Noticeable disturbance from the commissioning works at the Newton-in-Bowland compound. Specific changes would result from the presence and movement of plant and machinery; short sections of open-cut trenching; the movement and temporary storage of excavated material; the presence of the construction compounds, laydown areas and temporary access roads introduced during the enabling works; and the presence of above-ground features introduced during the construction phase. The tall crane located at the launch portal would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would continue to be present. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.</p> <p>Indirect Effects: There would be no indirect effects</p> <p>The commissioning activities would result in a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse		

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
			Operational Phase (Year 1)	<p>Direct Effects: Minor change from the presence of the introduced valve house building and access road at the Newton-in-Bowland Compound. The impact would also be more evident due to the loss of existing tree and shrub vegetation undertaken at the enabling works phase. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration, enclosure and screening at this stage.</p> <p>Indirect Effects: There would be no indirect effects</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: Barely perceptible change from the presence of the introduced above-ground features at the Newton-in-Bowland Compound. Maturing mitigation planting would help to replace removed vegetation during the enabling works and provide some integration of introduced structures and features into the surrounding landscape.</p> <p>Indirect Effects: There would be no indirect effects</p> <p>The would be a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of an adverse permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
5j. North Bowland Fringes  Landscape Character Area  (05. Undulating Lowland Farmland LCT)  Approx. Dist.: 850 m from Lower Houses Compound	High  (V: High / S: Medium)	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p> <p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p>	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from the enabling works at the Lower Houses Compound within the nearby 04d. Bowland Gritstone Fringes, D13. Park House and I3. Hindburndale LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from views of the construction activity at the Lower Houses Compound. Specific changes would result from the tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. Barely perceptible loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. The tall crane stationed at the reception shaft would be visible within the setting and represent incongruous, large-scale features within several outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a minor and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
		Reinstatement of stone walls and fences.	Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the commissioning works at the Lower Houses Compound. Specific changes would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain barely perceptible. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features, such as the introduced valve house at the Lower Houses Compound. Barely perceptible loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a barely perceptible and predominately characteristic change to a very small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Lower Houses Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
10b. North Bowland Valleys  Landscape Character Area	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section  Tree and shrub planting to replace vegetation removed	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from views of the enabling works at the Lower Houses Compound within the adjacent 04d. Bowland Gritstone Fringes, D13. Park House and I3. Hindburndale LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
(10. Wooded Rural Valleys LCT)  Approx. Dist.: 20 m from Lower Houses Compound		during the enabling works.		There would be a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.					
		Areas used for construction works returned to agriculture.	Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Noticeable disturbance from views of the construction activity at the Lower Houses Compound. Specific changes would result from the tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. The all crane stationed at the reception shaft would be highly visible within the setting and represent incongruous, large-scale features within several outward views. Slight detectable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a noticeable and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>	Moderate	Moderate Adverse	None	Moderate	Moderate Adverse
		Reinstatement of existing landform after construction works.	Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from views of the commissioning works at the Lower Houses Compound. Specific changes would result from short sections of open-cut trenching, the temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain evident. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
		Reinstatement of grass sward.		Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor views towards the above-ground features, such as the introduced valve house at the Lower Houses Compound. Slight detectable loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor
Reinstatement of stone walls and fences.									

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor views towards the above-ground features at the Lower Houses Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
<p>13b. Bentham-Clapham</p> <p>Landscape Character Area</p> <p>(13. Drumlin Field LCT)</p> <p>Approx. Dist.: 1.6 km from Lower Houses Compound</p>	<p>High</p> <p>(V: High / S: High)</p>	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p>	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: There would be no indirect effects.</p>	No Change	No Change	None	No Change	No Change
			Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the construction activity at the Lower Houses Compound. The tall crane stationed at the reception shaft would be visible within the setting and represent incongruous, large-scale features within a small number of outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a barely perceptible and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: There would be no indirect effects.</p>	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: There would be no indirect effects.</p>	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: There would be no indirect effects.</p>	No Change	No Change	None	No Change	No Change
<p>14a. Slaidburn-Giggleswick</p> <p>Landscape Character Area</p>	<p>High</p> <p>(V: High / S: High)</p>	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p>	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: There would be no indirect effects.</p>	No Change	No Change	None	No Change	No Change
			Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the construction activity at the Newton-in-Bowland Compound . The all crane stationed at the launch shaft would be</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse



Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
(14. Rolling Upland Farmland LCT)  Approx. Dist.: 1.75 km from Newton-in-Bowland Compound				visible within the setting and represent an incongruous, large-scale feature within a small number of outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.  There would be a barely perceptible and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change					
			Commissioning Phase	Direct Effects: There would be no direct effects.  Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 1)	Direct Effects: There would be no direct effects.  Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 15)	Direct Effects: There would be no direct effects.  Indirect Effects: There would be no direct effects.	No Change	No Change	None	No Change	No Change
B7. Langdon Landscape Character Area  (B. Unenclosed Moorland Hills LCT)  Approx. Dist.: 2.5 km from Newton-in-Bowland Compound	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section  Tree and shrub planting to replace vegetation removed during the enabling works.  Areas used for construction works returned to agriculture.  Reinstatement of existing landform after construction works.  Reinstatement of grass sward.	Enabling Works Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible disturbance from views of the enabling works at the Newton-in-Bowland Compound. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.  There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Construction Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible disturbance from views of the construction activity at the Newton-in-Bowland compound. Barely perceptible loss existing vegetation and landform alterations undertaken at the enabling works phase. The tall crane stationed at the launch portal would be visible within the setting and represent incongruous, large-scale features within a very small number of elevated, outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.  There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.	Negligible	Slight Adverse	None	Negligible	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
		Reinstatement of stone walls, hedgerows and fences.	Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the commissioning works at the Newton-in-Bowland Compound. Specific changes would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the launch shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain barely perceptible. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features, such as the introduced valve house at the Newton-in-Bowland Compound. Barely perceptible loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Newton-in-Bowland Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and predominately characteristic change to a very small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
B8. Crossdale to Lythe	High (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: There would be no indirect effects.</p>	No Change	No Change	None	No Change	No Change
Landscape Character Area  (B. Unenclosed)		Tree and shrub planting to replace vegetation removed	Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the construction activity at the Newton-in-Bowland Compound. The tall crane stationed at the launch portal would</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
Moorland Hills LCT)  Approx. Dist.: 2.1 km from Lower Houses Compound		during the enabling works.		be visible within the setting and represent incongruous, large-scale features within a very small number of elevated, outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.					
		Areas used for construction works returned to agriculture.		There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change					
		Reinstatement of existing landform after construction works.	Commissioning Phase	Direct Effects: There would be no direct effects.  Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
		Reinstatement of grass sward.	Operational Phase (Year 1)	Direct Effects: There would be no direct effects.  Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
		Reinstatement of stone walls and fences.	Operational Phase (Year 15)	Direct Effects: There would be no direct effects.  Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
B9. Goodber Common  Landscape Character Area  (B. Unenclosed Moorland Hills LCT)  Approx. Dist.: 200 m from Lower Houses Compound	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section	Enabling Works Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Minor disturbance from views of the enabling works at the Lower Houses Compound within the adjacent 04d. Bowland Gritstone Fringes, D13. Park House and I3. Hindburndale LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.	Minor	Slight Adverse	None	Minor	Slight Adverse
		Tree and shrub planting to replace vegetation removed during the enabling works.	Construction Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Noticeable disturbance from views of the construction activity at the Lower Houses Compound. Specific changes would result from tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. The tall crane stationed at the reception shaft would be highly visible within the setting and represent incongruous, large-scale features within several outward views. Slight detectable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and contrast with the predominately rural character and setting of this landscape.	Moderate	Moderate Adverse	None	Moderate	Moderate Adverse
		Areas used for construction works returned to agriculture.		There would be a minor and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.					
		Reinstatement of existing landform after construction works.		There would be a noticeable and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.					
		Reinstatement of grass sward.							

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
		Reinstatement of stone walls and fences.	Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from views of the commissioning works at the Lower Houses Compound. Specific changes would result from short sections of open-cut trenching, the temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain evident. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a minor and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features, such as the introduced valve house at the Lower Houses Compound. Slight detectable loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
C3. Easington  Landscape Character Area  (C. Enclosed Moorland Hills LCT)	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section  Tree and shrub planting to replace vegetation removed during the enabling works.	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the enabling works at the Newton-in-Bowland Compound within the within the nearby G3. Upper Hodder and 05a. Upper Hodder Valley LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
Approx. Dist.: 1.8 km from Newton-in-Bowland Compound		<p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p> <p>Reinstatement of stone walls, hedgerows and fences.</p>	Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the construction activity at the Newton-in-Bowland Compound. Specific changes would result from the creation of the working platform and tunnel portal through excavation and land reprofiling; the tunnel boring operation and open-cut trenching; and the storage and removal of excavated materials. The tall crane stationed at the launch shaft would be visible within the setting and represent incongruous, large-scale feature within a small number of outward views. Barely perceptible loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the commissioning works at the Newton-in-Bowland Compound. Specific changes would result from the short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the launch portal would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain barely perceptible. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Newton-in-Bowland Compound, such as the introduced valve house. Barely perceptible loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a barely perceptible and predominately characteristic change to a very small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Newton-in-Bowland Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
<p>C9. Newton and Birket</p> <p>Landscape Character Area</p> <p>(C. Enclosed Moorland Hills LCT)</p> <p>Approx. Dist.: 1.3 km from Newton-in-Bowland Compound,</p>	<p>High</p> <p>(V: High / S: High)</p>	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p> <p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p> <p>Reinstatement of stone walls, hedgerows and fences.</p>	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the enabling works at the Newton-in-Bowland Compound within the within the nearby G3. Upper Hodder and 05a. Upper Hodder Valley LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a barely perceptible and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from the construction activity at the Newton-in-Bowland Compound. Specific changes would result from the creation of the working platform and tunnel portal through excavation and land reprofiling (Newton-in-Bowland Compound only); the tunnel boring operation and open-cut trenching; and the storage and removal of excavated materials. The tall crane stationed at the launch and shaft would be visible within the setting and represent incongruous feature within several outward views. Barely perceptible loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a minor and uncharacteristic change to a large proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the commissioning works at the Newton-in-Bowland Compounds. Specific changes would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the launch portal and reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				works would remain barely perceptible. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.  There would be a barely perceptible and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.					
			Operational Phase (Year 1)	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible views towards the above-ground features at the Newton-in-Bowland Compounds, such as the introduced valve house. Barely perceptible loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.  There would be a barely perceptible and predominately characteristic change to a small proportion of the landscape. Introduction of a long-term / reversible change.	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 15)	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible views of the above-ground features at the Newton-in-Bowland Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.  There would be a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.	Negligible	Negligible	None	Negligible	Negligible
D2. Tatham  Landscape Character Area  (D. Moorland Fringe LCT)  Approx. Dist.: 1 km from Lower Houses Compound	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section  Tree and shrub planting to replace vegetation removed during the enabling works.  Areas used for construction works returned to agriculture.	Enabling Works Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible disturbance from views of the enabling works at the Lower Houses Compound within the nearby 04d. Bowland Gritstone Fringes, D13. Park House and I3. Hindburndale LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.  There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Construction Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible disturbance from views of the construction activity at the Lower Houses Compound. Specific changes would result from the tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. The tall crane stationed at the reception shaft would be visible within the setting and	Minor	Moderate Adverse	None	Minor	Moderate Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
		Reinstatement of existing landform after construction works.  Reinstatement of grass sward.  Reinstatement of stone walls and fences.		represent incongruous, large-scale features within several outward views. Barely perceptible loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.  There would be a minor and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change					
			Commissioning Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible disturbance from views of the Lower Houses compound. Specific changes would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain barely perceptible. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.  There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 1)	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible views towards the above-ground features at the Lower Houses Compound, such as the introduced valve house. Barely perceptible loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.  There would be a barely perceptible and predominately characteristic change to a very small proportion of the landscape. Introduction of a long-term / reversible change.	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 15)	Direct Effects: There would be no direct effects.  Indirect Effects: Barely perceptible long-distance views of the above-ground features at the Lower Houses Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.  There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.	Negligible	Negligible	None	Negligible	Negligible



Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
D5. Beatrix to Collyholme  Landscape Character Area  (D. Moorland Fringe LCT)  Approx. Dist.: 350 m from Newton-in-Bowland Compound	High  (V: High / S: Medium)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section  Tree and shrub planting to replace vegetation removed during the enabling works.  Areas used for construction works returned to agriculture.  Reinstatement of existing landform after construction works.  Reinstatement of grass sward.  Reinstatement of stone walls, hedgerows and fences.	Enabling Works Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Minor disturbance from views of the enabling works at the Newton-in-Bowland Compound within the within the adjacent G3. Upper Hodder and O5a. Upper Hodder Valley LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.  There would be a minor and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Minor	Slight Adverse	None	Minor	Slight Adverse
			Construction Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Noticeable disturbance from views of the construction activity at the Newton-in-Bowland Compound. Specific changes would result from the creation of the working platform and tunnel portal through excavation and land reprofiling the tunnel boring operation and open-cut trenching; and the storage and removal of excavated materials. The tall crane stationed at the launch shaft would be visible within the setting and represent incongruous, large-scale features within a small number of outward views. Slight detectable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.  There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Commissioning Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Minor disturbance from views of the commissioning works at the Newton-in-Bowland Compound. Specific changes would result from short sections of open-cut trenching, the temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the launch portal would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain evident. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.  There would be a minor and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 1)	Direct Effects: There would be no direct effects.  Indirect Effects: Minor views to the above-ground features at the Newton-in-Bowland Compound, such as the introduced vale house. Slight detectable loss of existing	Minor	Slight Adverse	None	Minor	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a minor and predominately characteristic change to a very small proportion of the landscape. Introduction of a long-term / reversible change.</p>					
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Newton-in-Bowland Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
D13. Park House  Landscape Character Area  (D. Moorland Fringe LCT)  Approx. Dist.: 0 m from Lower Houses Compound	High  (V: High / S: High)	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p> <p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p> <p>Reinstatement of stone walls and fences.</p>	Enabling Works Phase	<p>Direct Effects: Noticeable disturbance from the enabling works at the Lower Houses Compound. Specific changes would result from soil stripping and the installation of temporary drainage; removal of existing tree and shrub vegetation; disruption to the existing field pattern; the localised reprofiling of the existing landform; and the temporary closure and diversion of the local PRoW network at the Lower Houses Compound (1-38-FP 22). The installation of temporary construction and internal boundary fencing; establishment of the construction compound, laydown areas and temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Construction Phase	<p>Direct Effects: Substantial disturbance from the construction activity at the Lower Houses Compound. Specific changes would result from the presence of construction plant and machinery, including TBM and crane at the tunnel shaft; the movement and disturbance from construction traffic and construction work, including tunnel boring operation and open-cut trenching; the storage and movement of excavated materials; the presence of the construction compound, laydown areas and temporary access roads; and the introduction of temporary water management systems. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. The impact would also be more evident due to landform alterations for the working platform and the loss of existing vegetation and field boundaries undertaken at the enabling works phase.</p> <p>Placement of surplus material, excavated from the vertical tunnel shaft, would be located in a pre-agreed location where the local topography is slightly hollowed. The placed material would be carefully formed within the hollow to tie-in with the existing contours to help integrate with the surrounding slightly undulating topography.</p>	Moderate	Major Adverse	None	Moderate	Major Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>Reinstatement would occur within sections of the Lower Houses Compound, although the construction compound, laydown areas and temporary access roads would remain.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a substantial and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>					
			Commissioning Phase	<p>Direct Effects: Minor disturbance from the commissioning works at the Lower Houses Compound. Specific changes would result from the presence and movement of plant and machinery; short sections of open-cut trenching; the movement and temporary storage of excavated material; the presence of the construction compound, laydown areas and temporary access roads introduced during the enabling works; and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would continue to be present. Commissioning activity would continue to be uncharacteristic and contrast with the rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Operational Phase (Year 1)	<p>Direct Effects: Minor change from the presence of the introduced valve house building at the Lower Houses Compound. The impact would also be more evident due to the loss of existing tree and shrub vegetation undertaken at the enabling works phase. The grass sward covering the placed surplus material would have established sufficiently to integrate the area with the surrounding reinstated grass areas. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration, enclosure and screening at this stage.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: Barely perceptible change from the topographical alterations resulting from the placed surplus material and the presence of the introduced above-ground features at the Lower Houses Compound. Maturing mitigation planting would help to replace removed vegetation during the enabling works and provide some integration of introduced structures and features into the surrounding landscape.</p>	Negligible	Negligible	None	Negligible	Negligible

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of an adverse permanent / irreversible change.</p>					
<p>E3. Forest of Mewith</p> <p>Landscape Character Area</p> <p>(E. Undulating Lowland Farmland LCT)</p> <p>Approx. Dist.: 700 m from Lower Houses Compound</p>	<p>High</p> <p>(V: High / S: High)</p>	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p> <p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p> <p>Reinstatement of stone walls and fences.</p>	<p>Enabling Works Phase</p>	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the enabling works at the Lower Houses Compound within the nearby 04d. Bowland Gritstone Fringes, D13. Park House and I3. Hindburndale LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			<p>Construction Phase</p>	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from views of the construction activity at the Lower Houses Compound. Specific changes would result from the tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. The tall crane stationed at the reception shaft would be visible within the setting and represent incongruous, large-scale features within a small number of outward views. Barely perceptible loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			<p>Commissioning Phase</p>	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the commissioning works at the Lower Houses Compound. Specific changes would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain barely perceptible. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Lower Houses Compound, such as the introduced valve house. Barely perceptible loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a barely perceptible and largely characteristic change to a very small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views of the above-ground features at the Lower Houses Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
G3. Upper Hodder  Landscape Character Area  (G. Undulating Lowland Farmland with Parkland LCT)  Approx. Dist.: 0 m from Newton-in-Bowland Compound	High  (V: High / S: High)	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p> <p>Areas used for construction works returned to agriculture.</p>	Enabling Works Phase	<p>Direct Effects: Noticeable disturbance from the enabling works at the Newton-in-Bowland Compound. Specific changes would result from the soil stripping and the installation of temporary drainage; the removal of existing tree and shrub vegetation; disruption to the existing field pattern; the localised reprofiling of the existing landform; and the temporary closure and diversion of the local PRoW network at Newton-in-Bowland (3-29-FP 31 and 3-29-FP 26). The installation of temporary construction and internal boundary fencing; establishment of the construction compounds, laydown areas and temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a noticeable and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Moderate	Major Adverse	None	Moderate	Major Adverse
			Construction Phase	<p>Direct Effects: Substantial disturbance from the construction activity at the Newton-in-Bowland Compound. Specific changes would result from the presence of construction plant and machinery, including TBM and crane at the tunnel shaft; the creation of the working platform and tunnel portal through excavation and land reprofiling; the movement and disturbance from construction traffic and construction work, including tunnel boring operation and open-cut trenching; the storage and movement of excavated materials, including the tunnel arisings; the presence of the construction compounds, laydown areas and temporary access roads; and the introduction of temporary water management systems. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. The impact would also be more</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p>	Major	Major Adverse	None	Major	Major Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
		Reinstatement of stone walls, hedgerows and fences.		<p>evident due to landform alterations and the loss of existing vegetation and field boundaries undertaken at the enabling works phase. Reinstatement of the tunnel portal and within sections of the laydown areas would occur at the end of the construction phase, although the construction compounds, laydown areas and temporary access roads would remain.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a substantial and uncharacteristic change to a large proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>					
			Commissioning Phase	<p>Direct Effects: Noticeable disturbance from the commissioning works at the Newton-in-Bowland Compound. Specific changes would result from the presence and movement of plant and machinery; short sections of open-cut trenching; the movement and temporary storage of excavated material; the presence of the construction compounds, laydown areas and temporary access roads introduced during the enabling works; and the presence of above-ground features introduced during the construction phase. The tall crane located at the launch portal would no longer be present. Commissioning activity would continue to be uncharacteristic and contrast with the rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a noticeable and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Moderate	Moderate Adverse	None	Moderate	Moderate Adverse
			Operational Phase (Year 1)	<p>Direct Effects: Minor change from the presence of the introduced valve house building at the Newton-in-Bowland Compound. The impact would also be more evident due to the loss of existing tree and shrub vegetation undertaken at the enabling works phase. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration, enclosure and screening at this stage.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: Barely perceptible change from the introduced above-ground features. Maturing mitigation planting would help to replace removed vegetation during the enabling works and provide some integration of introduced structures and features into the surrounding landscape.</p> <p>Indirect Effects: There would be no indirect effects.</p>	Negligible	Negligible	None	Negligible	Negligible

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of an adverse permanent / irreversible change.					
I2. Roeburndale  Landscape Character Area  (I. Wooded Rural Valleys LCT)  Approx. Dist.: 450 m from Lower Houses Compound	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section  Tree and shrub planting to replace vegetation removed during the enabling works.  Areas used for construction works returned to agriculture.  Reinstatement of existing landform after construction works.  Reinstatement of grass sward.  Reinstatement of stone walls and fences.	Enabling Works Phase	Direct Effects: There would be no direct effects.  Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Construction Phase	Direct Effects: There would be no direct effects.  Indirect Effects: Minor disturbance from views of the construction activity at the Lower Houses Compound. The tall crane stationed at the reception shaft would be visible within the setting and represent incongruous, large-scale features within a small number of outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.  There would be a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change	Minor	Slight Adverse	None	Minor	Slight Adverse
			Commissioning Phase	Direct Effects: There would be no direct effects.  Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 1)	Direct Effects: There would be no direct effects.  Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 15)	Direct Effects: There would be no direct effects.  Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
I3. Hindburndale  Landscape Character Area  (I. Wooded Rural Valleys LCT)  Approx. Dist.: 0 m from	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section  Tree and shrub planting to replace vegetation removed during the enabling works.	Enabling Works Phase	Direct Effects: Noticeable disturbance from the enabling works at the Lower Houses Compound. Specific changes would result from soil stripping and the installation of temporary drainage; removal of existing tree and shrub vegetation; disruption to the existing field pattern; and the localised reprofiling of the existing landform. The installation of temporary construction and internal boundary fencing; establishment of the temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape.  Indirect Effects: Minor disturbance from views of the enabling works at the Lower Houses Compound within the adjacent 04d. Bowland Gritstone Fringes, D13. Park House and I3. Hindburndale LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound,	Minor	Moderate Adverse	None	Minor	Moderate Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
Lower Houses Compound		Areas used for construction works returned to agriculture.		laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.					
		Reinstatement of existing landform after construction works.	Construction Phase	There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.					
		Reinstatement of grass sward.		Direct Effects: Substantial disturbance from construction activity at the Lower Houses Compound. Specific changes would result from the presence of construction plant and machinery, the movement and disturbance from construction traffic and construction work; the storage and movement of excavated materials; the presence of the temporary access roads; and the introduction of temporary water management systems. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. The impact would also be more evident due to landform alterations and the loss of existing vegetation and field boundaries undertaken at the enabling works phase. Reinstatement would occur within sections of the Lower Houses Compound, although the construction compound, laydown areas and temporary access roads would remain.	Moderate	Major Adverse	None	Moderate	Major Adverse
Reinstatement of stone walls and fences.		Indirect Effects: Noticeable disturbance from views of the construction activity at the Lower Houses Compound. Specific changes would result from the tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. The tall crane stationed at the reception shaft would be highly visible within the setting and represent incongruous, large-scale features within several outward views. Notable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and contrast with the predominately rural character and setting of this landscape.							
			Commissioning Phase	There would be a substantial and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.					
				Direct Effects: Noticeable disturbance from the commissioning works at the Lower Houses Compound. Specific changes would result from the presence and movement of plant and machinery; the movement and temporary storage of excavated material; and the presence of the laydown areas introduced during the enabling works. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would continue to be present. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.	Minor	Moderate Adverse	None	Minor	Moderate Adverse
				Indirect Effects: Minor disturbance from views of the commissioning works at the Lower Houses Compound. Specific changes would result from short sections of open-cut trenching, the temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain evident. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural					



Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>					
			Operational Phase (Year 1)	<p>Direct Effects: Minor change from the loss of existing tree and shrub vegetation undertaken at the enabling works phase. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration, enclosure and screening at this stage.</p> <p>Indirect Effects: Minor views towards the above-ground features at the Lower Houses Compound, such as the introduced vale house. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: Maturing mitigation planting would help to replace removed vegetation during the enabling works.</p> <p>Indirect Effects: Barely perceptible views to the north towards the above-ground features. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of an adverse permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
K2. Lower Tatham  Landscape Character Area  (K. Drumlin Field LCT)  Approx. Dist.: 1.4 km from Lower Houses Compound	High  (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: There would be no indirect effects.</p>	No Change	No Change	None	No Change	No Change
			Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the construction activity at the Lower Houses Compound. The tall crane stationed at the reception shaft would be visible within the setting and represent incongruous, large-scale features within a small number of outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a barely perceptible and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p>	No Change	No Change	None	No Change	No Change

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				Indirect Effects: There would be no indirect effects.					
			Operational Phase (Year 1)	Direct Effects: There would be no direct effects. Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 15)	Direct Effects: There would be no direct effects. Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change