



9. Landscape

9.1. Introduction

- 9.1.1. Landscape character assessment is the systematic description and analysis of the elements and features, such as landform, vegetation cover, settlement, land use and transport pattern present in the landscape which together make up the landscape pattern or sense of place.
- 9.1.2. The assessment of landscape receptors concerns direct anticipated changes to the landscape, including impacts to designated landscapes, to the landscape character, and considers the Special Landscape Qualities set out in NatureScot Commissioned Report 376: The Special Landscape Qualities of the Loch Lomond and The Trossachs National Park | NatureScot of the landscape as defined by the Loch Lomond and The Trossachs National Park Authority (LLTNPA). The assessment of landscape character is based on the NatureScot 2019 dataset. In addition, the Landscape Character Assessment: Loch Lomond and the Trossachs Landscape Evolution and Influences report has been considered.
- 9.1.3. This chapter identifies and assesses the existing landscape receptors within the identified study area. It is supported by:
 - Volume 4, Appendix 9.1 Landscape Legislation, Policy and Guidance
 - Volume 4, Appendix 9.2 Landscape Methodology
 - Volume 3, Figure 9.1 Landscape Designations
 - Volume 3, Figure 9.2 Landscape Character Types and
 - Volume 3, Figure 10.2 Zone of Theoretical Visibility.





9.2. Approach and Methods

- 9.2.1. The assessment has been carried out in accordance with Design Manual for Roads and Bridges (DMRB) <u>LA 107 Landscape and visual effects</u> and <u>LA 104 Environmental assessment and monitoring</u>, and the <u>Landscape Institute and Institute of Environmental Management and Assessment, Guidelines for Landscape and Visual Impact Assessment 3rd Edition, Routledge (GLVIA3).</u>
- 9.2.1. The approach and methods have been informed by legislation, policy and guidance. A full list of those that are most relevant to landscape assessment in the study area are contained in Volume 4, Appendix 9.1 Landscape Legislation, Policy and Guidance.
- 9.2.2. Alternative options for the road design were considered in the Jacobs Aecom Report Medium term strategy Options assessment report January 2023 A83

 Access to Argyll and Bute | Transport Scotland and alternative route options are addressed in the Access to Argyll and Bute (A83) Medium Term Strategy Options Assessment Report, January 2023. Further detail on the options assessment can be found in Chapter 3: Alternatives Considered. For the route selected (MTS) a further process of multi-disciplinary integrated design was undertaken utilising constraints mapping tools, and discussion forums comprising of the design and environmental teams. This informed MTS design development which was communicated in the bi-monthly meetings of the A83 Environmental Steering Group (ESG). The potential for impacts to the landscape formed a part of the assessment process undertaken.

Study Area

9.2.3. The study area for the landscape assessment extends to 1km as shown in Figure 9.1 Landscape Designations. It gives the wider landscape context which reflects the scale of the landscape in the context of the Loch Lomond and The Trossachs National Park (LLTNP), the Areas of Panoramic Quality (APQ), and the A83 Argyll Coastal Route (ACR), and the regional landscape assessments.





9.2.4. Based on the topography and forestry cover, potential landscape impacts, if they occur, are not likely to be significant beyond 1km. The extent of this study area was determined by desk studies including Volume 3, Figure 10.2 Zone of Theoretical Visibility (ZTV). The ZTV is based on a bare earth model and therefore indicates a much greater extent of theoretical visibility than is actually the case. The field surveys determined actual visibility which is limited within the study area by the topography and forestry cover. Due to the localised nature of the changes to the MTS and there being no lighting introduced, it is not considered that there would be any direct or indirect significant effect on the landscape beyond 1km.

Method of Baseline Collection

- 9.2.5. The baseline information has been collated from desk study including consideration of the landscape designations, residential receptors, the Core Paths and way-marked routes network, Listed Buildings, Ordnance Survey (OS) marked viewpoints and ZTV mapping (Volume 3, Figure 10.2 Zone of Theoretical Visibility). Site visits confirmed actual visibility, and any other likely visual receptors not identified during the desk study.
- 9.2.6. The assessment was undertaken by two Chartered Landscape Architects and comprised of desk study, field surveys and consultation. An initial site visit was undertaken in February/March 2023 and helped to gain an understanding of the landscape context and to supplement information gathered during the desk study. Site surveys were undertaken in August 2023 and October 2023 with good visibility.

Consultation

- 9.2.7. Consultation has been undertaken on the MTS development with the A83 Environmental Steering Group (ESG) which comprised, in relation to landscape, of LLTNPA and Scottish Forestry (SF).
- 9.2.8. Public consultation was undertaken between 02 June and 28 July 2023 which included four days of public exhibitions in Arrochar and Lochgilphead in June 2023 and the virtual exhibition online. Further public consultation was undertaken between 18 March and 10 May 2024 both online and at public exhibitions.





- 9.2.9. Although the focus during public consultation was primarily on the A83 works (LTS), there was also information provided for the Medium-Term Solution (MTS) and these sessions helped identify what the public valued about the landscape and visual amenity of the area which is also relevant to the Old Military Road (OMR). The findings are set out in Section 9.3 Baseline.
- 9.2.10. The LLTNPA and Scottish Forestry (SF) made a number of recommendations as part of their response to the EIA Screening / Scoping Report, these are summarised in Volume 4, Appendix 6.2 Summary of Scoping Consultation Responses, all of which (in relation to Landscape) are addressed within this assessment. However, with regards to potential cumulative effect of the MTS with the A83 MTS, this has been addressed in the Environmental Assessment Impact (EIA) Report for the Long-Term Solution (LTS) which includes improvements proposed for the OMR. The assessment shows that there is a potential for significant adverse effects on the landscape receptors as a result and that cumulative exercise has not been repeated here. Further detail can be found in Chapter 11: Cumulative Effects. This EIA Report for the MTS therefore sets out the potential effects on the landscape receptors for the MTS only.

Assessment Methodology

- 9.2.11. In accordance with DMRB LA107, DMRB LA104 and GLVIA3, the assessment has considered the sensitivity of the landscape receptor and the magnitude of impact of The MTS upon it, resulting in a determination of the significance of effect of the MTS on the landscape resource. The methodology can be found in Volume 4, Appendix 9.2 Landscape Methodology.
- 9.2.12. The landscape assessment considers designated landscapes and landscape character including the Special Qualities of the LLTNP. The methodology can be found in Volume 4, Appendix 9.2 Landscape Methodology.





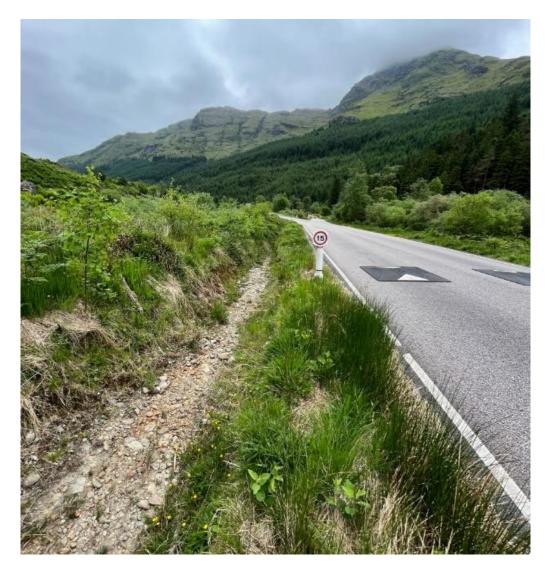
Limitations of the Assessment

- 9.2.13. The assessment was predominantly undertaken from publicly available locations. Where access to private land was required, this was agreed in advance of the assessment. This is the standard approach for Landscape and Visual Impact Assessment (LVIA).
- 9.2.14. Signage and speed control measures will be addressed at the detailed design stage and is not considered here. However, signage and speed control measures are anticipated to be unobtrusive and similar to those already in existence in this area as shown in Plate 9.1 and potentially some farm signs at the gates at either end. These would be limited as far as practicable to avoid impact on landscape character. Road markings are expected to be limited to edge delineation (solid line). Currently there is no centreline for the existing two way section and this is expected to be carried into the proposed widening.





Plate 9.1 - Existing Signage and Speed Control Measures



9.2.15. The installation of deer fencing has not been confirmed and will be considered at the detail design stage and is, therefore, not considered in this assessment.





9.3. Baseline Conditions

- 9.3.1. The entire study area lies within the LLTNP. The entire study area comprises of the highland landscape known as the 'Arrochar Alps' as described in the SNH Commissioned Report 376: The Special Landscape Qualities of the Loch Lomond and The Trossachs National Park (nature.scot). Glen Croe runs from Loch Restil through the centre of the study area to the upper reaches of Loch Long.
- 9.3.2. Landcover is predominantly upland moor with scattered conifer plantation with pastoral farmland on the floor of Glen Croe (See Plate 9.2).

Plate 9.2 - Glen Croe



9.3.3. The Croe Water lies within Glen Croe. The main waterbody is Loch Restil which lies outwith Glen Croe and the MTS scheme extents.





- 9.3.4. There is no settlement in the area. There are two residential properties, one of which is currently inhabited.
- 9.3.5. The A83 and OMR run through Glen Croe with the B828 in the northwest of the study area. There are a number of telecommunications masts clustered on the verge of the B828. The Rest and Be Thankful car park is located at the junction of the A83 and B828 and consists of a rest stop with picnic benches and the Listed (Category C) Rest and Be Thankful stone as well be being an OS mapped Viewpoint.
- 9.3.6. The landscape within the study area typically represents the key characteristics of the individual landscape character types. It is relatively intact, though there are some elements such as the drystone walls which are not always in a good state or repair. The scenic quality is high and it is valued by the designations (National Park, Argyll Coastal Route (A83) and the evidence of recreational use (walking routes and Rest and Be Thankful car park and OS marked viewpoint). The OMR is associated with General Wade and has been a 'drove road' for cattle, and more recently associated with motorsports. The cultural connections are strong with connections to both William Wordsworth and the poet John Keats.

Landscape Designations

9.3.7. There are three landscape related designations associated with the study area, LLTNP, Argyll Forest Park (AFP) and the Argyll Coastal Route. There is some direct impact upon them arising from the proposals for the OMR. The designations scoped in are described below and assigned a sensitivity rating. The A83 is the Argyll Coastal Route. There are no areas of Ancient Woodland Inventory in the study area. The designations are shown in Volume 3, Figure 9.1 Landscape Designations.

Loch Lomond and The Trossachs National Park

9.3.8. The study area lies within the LLTNP. The LLTNPA have identified the Special Landscape Qualities (SLQs) of the Park.





- 9.3.9. The Special Landscape Qualities of the Loch Lomond and the Trossachs National Park Report states that "the identification of the special qualities provides a sound baseline for future work on the celebration, promotion and safeguarding of the Loch Lomond and The Trossachs National Park".
- 9.3.10. The SLQs considered to be most relevant to the designation within the study area are:
 - World renowned landscape
 - Wild and rugged highlands containing pastoral lowland
 - Famous through routes
 - Tranquillity
 - Easily accessible landscape splendour
 - a remote area of high hills and deep glens
 - a land of forests and trees
 - Arrochar's mountains and distinctive peaks
 - · the variety of glens and
 - the dramatic pass of Rest and Be Thankful.
- 9.3.11. The SLQs are considered separately in the assessment tables set out below, including their sensitivity which may vary.
- 9.3.12. The LLTNP is Very High Sensitivity due to its national importance and value associated with the designation.

Northern Area Argyll Forest Park (NAAFP)

9.3.13. The NAAFP is extensive across the study area and beyond over the Cowal Peninsula and to the east of Loch Lomond to Strathearn and Callander as shown on Volume 3, Figure 9.1 Landscape Designations. The forest parks within LLTNP were designated for recreation and are one of the SLQs of the LLTNP. Part of the MTS lies within the AFP. It is of High Sensitivity due to its national importance and because it contains distinctive features and elements.





Argyll Coastal Route (A83)

9.3.14. The Argyll Coastal Route (A83) runs parallel to the OMR through the study area as shown on Volume 3, Figure 9.1 Landscape Designations. It is of Medium Sensitivity.

Landscape Character

- 9.3.15. The Landscape Assessment, which includes mapping and descriptions detailing key characteristics of each numbered Landscape Character Type (LCT), is available from NatureScot and was produced in WebGIS (see Volume 3, Figure 9.2 Landscape Character Types).
- 9.3.16. The Landscape Character Type in which The MTS lies is the Upland Glens LCT No.252.
- 9.3.17. LCTs through which the MTS does not run, but which have ZTV coverage within the 1km study area as shown on Volume 3, Figure 10.2 Zone of Theoretical Visibility, have also been assessed.
- 9.3.18. The LCTs outwith the study area that do not include any part of the MTS footprint but fall within the ZTV, have not been subject to further consideration due to their distance from the OMR (and that the ZTV is theoretical based on the bare earth model). However, for contextual understanding, they are depicted on Volume 3, Figure 9.2 Landscape Character Types.

Upland Glens LCT No.252, Loch Lomond and the Trossachs

- 9.3.19. This is a Very High Sensitivity LCT due to being within the LLTNP and having iconic rare features such as the Rest and Be Thankful pass, and associated value of the culture and heritage of the drover's route and OMR. Key characteristics of the LCT most relevant to the study area are:
 - Often narrow with little flat glen floor, strongly enclosed by steep hill slopes of the adjacent Steep Ridges and Hills (LCT No. 250), Highland Summits (LCT No. 251), Steep Ridges and Mountains (LCT No. 34) and Rugged Mountains (LCT No. 35). Only the two LCT within the 1km study area have been assessed for the MTS.





- Steep glen sides often patterned with rocky outcrops, boulders and screes but also extensively forested, particularly on lower slopes.
- Tributary burns and rivers cut deep gullies into slopes and many feature waterfalls and cascades, pools and rocky outcrops.
- Walled pastures sometimes occasionally occurring on lower (usually southfacing) slopes. Heather covers better drained areas and bright green flushes appear at spring lines on hill slopes.
- Some glens covered with extensive coniferous forestry.
- Scattered trees and native woodland trace the edges of burns.
- Sparsely settled, with a few isolated farms situated in the lower reaches of glens, which often have a south-facing aspect.
- Significant cultural features in more open glens, including shielings and abandoned field systems.
- Areas of crofting evident on some lower slopes.
- Historically important strategic routes have evolved to support and accommodate key road and rail links that are vital for communication today.
- Classic views channelled up and down the Glens, with steep side slopes framing landscapes that lie beyond them.

Highland Summits LCT No. 251 (LLTNP)

- 9.3.20. This is a Very High Sensitivity LCT due to being within the LLTNP and having iconic peaks such as The Cobbler. Key characteristics of the LCT most relevant to the study area are:
 - High mountains generally lying above 800 metres, but lower and intensely craggy in the core of the Trossachs where geology is particularly complex.
 - Steep slopes often covered in scree.
 - Narrow rocky ridges, deeply scooped corries and rocky gullies on many of these mountains.
 - Narrow glens deeply cut into the mountains, often contain fast-flowing burns and waterfalls.





- Strongly patterned landscape with exposed rock, crags, small lochs and myriad water courses significantly increasing complexity.
- Simple vegetation cover is, largely comprising semi-natural grassland with patchy heather and ground-hugging alpine species on upper slopes and summits. Bracken and bog occur on lower slopes and within glen floors.
 Coniferous forestry is present on some lower slopes, extending up into glens.
- Broadleaf woodlands rare, confined to steeper slopes with fragments of oak and birch tracing burns and gullies.
- Very sparsely populated with roads and dispersed settlement occurring only on its fringes.
- Highly visible massive peaks and ridges of the mountains forming a scenic rugged backdrop to the lower settled loch shores, glens and straths.
- Instantly recognisable mountain forms such as The Cobbler and Ben Lomond.
 Ben Ledi, Ben Vorlich and Ben Lomond are important landmark features,
 marking the Highland edge seen widely from the Central Lowlands of Scotland.
- Popular mountains with walkers because of their highly natural and rugged character, and the presence of 'Munro' and 'Corbett' peaks. The higher summits offer extensive views.
- Distinct sense of wild character of the summits due to their rugged and natural qualities, especially away from hydro-electric infrastructure and poorly integrated forestry.
- 9.3.21. The SLQs are considered in more detail in the assessment tables.

Public Perception of Landscape Value

9.3.22. The DMRB LA107 standard requires that the public perception of landscape value is considered in the landscape assessment. Following the consultation set out in Section 9.2 Approach and Methods: Consultation, a total of 21 respondents commented on what they considered valuable in the landscape. Whilst the focus was on the changes to the A83, some responses highlighted what was considered important in Glen Croe more generally.





- 9.3.23. During the 2023 consultation, two respondents stated the 'gateway' experience to Argyll and Bute was of importance.
- 9.3.24. Three stated trees/native trees were important, and one respondent mentioned prevention of light pollution as being important.
- 9.3.25. The assessment uses mitigation measures (Table 9.2) to prevent unnecessary felling of trees. No permanent lighting is proposed for the OMR.

Future Baseline

9.3.26. In the absence of the MTS, there would be ongoing interventions on the slopes and traffic management interventions due to anticipated continued impact of debris flows and landslips, including, including diversions to the OMR as there is at present.

9.4. Embedded Mitigation

9.4.1. There are two types of mitigation – essential and embedded. Essential mitigation would include planting and seeding. The MTS has been developed through an iterative design process involving both engineering and environmental specialists. Embedded mitigation LV-Embed 1 as it relates to landscape, therefore, states that the HESCO, barrier extension will match the colour of the existing HESCO barrier as far as possible and the grassing of the bund to the south to blend into the landscape while still allowing vehicle access for occasional maintenance.

9.5. Potential Impacts

Construction Impacts

- 9.5.1. The MTS would have construction impacts which would include the following:
 - removal of vegetation to facilitate works
 - resulting bare earth due to the removal of vegetation and earthworks
 - changes in landform due to earthworks, including temporary soil storage areas
 - vehicle activity due to excavation, earthmoving and construction
 - widening of the bridge and culvert upgrades





- localised areas of stabilisation measures:
- site compound areas, storage of materials and lighting to facilitate work during hours of darkness and
- traffic management systems.

Operational Impacts

- 9.5.2. Potential effects for the MTS are described during operation in the Winter of year 1 (WY1) and the Summer of year 15 (SY15). The potential landscape impacts associated with the MTS include (but are not limited to):
 - changes to landscape character and/or SLQs as a result of additional new manmade elements
 - changes to landscape character and/or SLQs as a result of additional new permanent engineering safety measures (rock debris fall fences and bunds) and
 - changes to the landscape character and/or SLQs due to removal of landscape elements and/or features
- 9.5.3. Effects on landscape / landscape related designations and the landscape character including the SLQs of the LLTNP have been described in Table 9.1 below. The SLQs have been 'grouped' separately based on people's perception of tranquillity and famous through routes being impacted upon as a result of the MTS.





Table 9.1 - Potential Effects on Landscape Receptors

Landscape Receptor, Sensitivity, Description, Magnitude of Effect	Construction Effect	Significance of Effect WY1 Operation	Significance of Effect SY15 Operation
Loch Lomond and The Trossachs National Park (LLTNP) Sensitivity: Very high (due to the high value associated with the LLTNP designation and the medium susceptibility). Due to the extent of the designation in relation to the localised scale of the MTS interventions, the MTS is not predicted to result in a significant adverse impact upon it. In terms of compliance with policy, the landscape character is considered in the assessment of landscape character areas. Magnitude: Construction activity includes the felling of a single tree at chainage (ch. 1400) and a limited number of scattered trees at the watercourses between the A83 and the OMR, the extension of an existing bridge over the watercourse, the extension of the existing HESCO barrier and the formation of a new bund, the widening of part of the OMR and localised widening of some bends, updates to culverts and additional debris catch fences. Due to the extent of the LLTNP, and the existing baseline of the elements and features associated with the ongoing engineering solutions and works, the magnitude of effect would be negligible adverse during construction and during operation.	Slight adverse	Slight adverse	Slight adverse
Northern Area Argyll Forest Park (NAAFP). Sensitivity: Medium (due to high value of being partly designated for recreation, being within the LLTNP and low susceptibility as the NAAFP is expected to be able to accommodate the MTS without undue consequence). Magnitude: The southern extent of the MTS, and part of the northern and central parts of the MTS, lie within/partly within the NAAFP. However, these areas are part of Biodiversity Net Gain (BNG) enhancement areas (assessed separately in Volume 4, Appendix 4.1 Biodiversity Net Gain / Natural Capital Assessment). There is no direct impact of the MTS upon them. The magnitude of effect to the designation would be no change at construction and operation.	Neutral	Neutral	Neutral





Landscape Receptor, Sensitivity, Description, Magnitude of Effect	Construction Effect	Significance of Effect WY1 Operation	Significance of Effect SY15 Operation
Upland Glens LCT No.252 (LLTNP)	Moderate	Slight adverse	Slight
Sensitivity: Very high (due to the high value of the LLTNPA and the medium susceptibility whereby the LCT is expected to be able to accommodate the MTS but with some consequences).	adverse		adverse
Magnitude: The MTS lies within this LCT. The MTS is located mostly within the open upland glen part of this LCT, lying in the forested area only for its southerly extent and the BNG enhancement areas. The extension of the existing HESCO barrier and the formation of new bund, the widening of part of the OMR and localised widening of some bends, updated culverts and additional debris catch fences would be additional man-made elements. The magnitude of effect to the LCT would be minor adverse during construction in the context of the existing activity and traffic diversions. This would reduce to negligible magnitude of effect during operation as the key characteristics of the LCT would not be compromised.			
Highland Summits LCT No. 251 (LLTNP).	Slight	Neutral	Neutral
Sensitivity: Very high (due to the LLTNP due to the high value of the LLTNPA and the medium susceptibility whereby the LCT is expected to be able to accommodate the MTS but with some consequences).	adverse		
Magnitude: No part of the MTS lies within this LCT. Construction activity would be limited to Glen Croe though partially visible from a limited area of the Highland Summits LCT for a limited period. The magnitude of effect to the LCT would be negligible during construction due to the elevation and distance and type of works in the context of the existing works and traffic diversions within Glen Croe.			
During operation the magnitude would be no change.			
Argyll Coastal Route (A83)	Slight	Neutral	Neutral
<u>Sensitivity</u> : Medium. (due to the high value of the LLTNPA and the low susceptibility whereby the LCT is expected to be able to accommodate the MTS but with some consequences).	adverse		
Magnitude: The MTS has no direct impact on this designation. Construction activity on the OMR would be temporarily visible but at a lower elevation for a very limited extent of this designated route. The magnitude would be minor during construction and negligible during operation			





Landscape Receptor, Sensitivity, Description, Magnitude of Effect	Construction Effect	Significance of Effect WY1 Operation	Significance of Effect SY15 Operation
SLQs of the LLTNP: Tranquillity and Famous through routes	Moderate adverse	Slight adverse	Slight adverse
<u>Sensitivity:</u> Very high due to due to the high value of the SLQs of the LLTNPA and the medium susceptibility whereby the LCT is expected to be able to accommodate the MTS but with some consequences).			
These SLQs have been grouped together because they are potentially affected by the less tangible elements of multi senses (e.g. Tranquillity may be affected by more than visual changes and Famous through routes may be affected by an appreciation of the historical and cultural importance of the OMR).			
Magnitude (on Tranquillity): There would be a direct effect on the OMR resulting from the work and an effect on tranquillity. The changes would include localised widening and the introduction of additional man-made elements in close proximity (HESCO barrier extension, bund to the south of the existing HESCO barrier and upgrades to culverts). The OMR would be accessible in a convoy during any closure of the A83, and the route would be experienced, as it is now, from locations in varying proximity (as represented by the Viewpoints). The magnitude of impact is moderate at construction. Magnitude of impact will reduce to minor during operation as construction works cease.			
Magnitude: (on Famous through routes) During construction the perception of this SLQ would be impacted by there being direct works to the OMR for the duration of the construction period – magnitude is moderate. During operation the <i>famous through routes</i> SLQ would continue to have some localised changes, which would have a localised magnitude of minor.			





Landscape Receptor, Sensitivity, Description, Magnitude of Effect	Construction Effect	Significance of Effect WY1 Operation	Significance of Effect SY15 Operation
SLQs of the LLTNP (listed below).	Slight adverse	Neutral	Neutral
<u>Sensitivity:</u> Very high due to the high value of the LLTNPA and the medium susceptibility whereby the LCT is expected to be able to accommodate the MTS but with some consequences).			
These SLQs have been grouped as they are experienced at a similar landscape scale within the MTS study area and are not likely to be significantly affected by the MTS changes.			
Magnitude: During construction, changes would include localised widening and the introduction of additional man-made elements (HESCO barrier extension, bund to the south of the existing HESCO barrier and upgrades to culverts). The OMR would be accessible in a convoy during any closure of the A83 for users and the route would be experienced, as it is now, from elevated locations (as represented by the Viewpoints – Volume 3, Figure 10.1 Viewpoint Locations). The magnitude is negligible as the construction activity would be in the context of existing activity and traffic diversions and the focus on the SLQs would not be compromised.			
During operation the changes would be seen in the context of the existing HESCO barrier and engineering solutions and would be barely perceptible. The experience of the SLQs would not be compromised. For example, the appreciation of the glens, mountains and woodlands and their splendour and iconic nature will remain intact. The magnitude of effect is no change. This applies to the following SLQs:			
World-renowned landscape;			
Wild and rugged highlands containing pastoral lowland;			
Easily accessible landscape splendour;			
A land of forests and trees;			
Arrochar's mountains and distinctive peaks;			
A variety of glens; and			
The dramatic pass of the Rest and Be Thankful			





9.6. Mitigation

- 9.6.1. Mitigation falls into four categories avoidance, prevention, reduction and off-setting. Mitigation proposals have been developed in accordance with Transport Scotland's <u>Fitting Landscapes: Securing more Sustainable Landscape</u> (2014) and the SLQs of the LLTNP. Embedded mitigation is set out in Section 9.4.
- 9.6.2. During the construction phase standard mitigation measures will be applied (Table 9.2, LV1-LV7). However, not all construction impacts can be fully mitigated.

Table 9.2 - Mitigation measures

Mitigation Reference	Mitigation Measures
LV1	Construction activity will be kept to the minimum practicable time to reduce the duration of impacts. Areas will be cleared for construction as close as possible to the works commencing and topsoiling, reseeding and planting will be undertaken as soon as possible after the works are complete, allowing for the appropriate planting/seeding season.
LV2	Work compound and storage areas will, as far as practicable, be located where existing features can provide screening.
LV3	Construction areas will be kept tidy and free of litter and debris.
LV4	Work will be avoided during hours of darkness as far as is practicable and where necessary, directed lighting will be used to minimise glare.





Mitigation Reference	Mitigation Measures
LV5	To protect soil quality:
	 uncontaminated topsoil for re-use shall be stored in un-compacted mounds up to 2m in height separate from subsoil material;
	 stripped topsoil shall be used in areas of the same vegetation type; and
	 subsoil in proposed planting areas shall be replaced after construction and ripped to a depth agreed with the Environmental Clerk of Works (ECoW), landscape architect or soil scientist as appropriate prior to topsoiling and planting.
LV6	Minimise loss of all existing vegetation as far as practicable. Retention of existing trees and vegetation and incorporation with new planting proposals. Trees shall only be removed where it can be demonstrated that this is required for construction or safety purposes.
LV7	Fence off existing trees and shrubs not affected by construction with a suitable type of fencing which shall extend to the root zone of the tree canopy and remain in situ until works are completed.
LV8	Earthworks proposals will:
	use retaining solutions where appropriate to avoid extensive cuttings into slopes or large embankments which increase land disturbance
	sensitive grading of earthworks to integrate with surrounding landform and/or reduce requirement for/extent of felling.





Mitigation Reference	Mitigation Measures
LV9	Mitigation planting to replace trees lost during the construction of the MTS. Planting shall aid integration with the landscape character and be predominantly based on native species established in the area. Planting or density of planting shall be light to align with landscape character or to afford open or glimpsed views of landscape features. Species-rich mixes for the majority of grass verges with the aim of integrating these into the wider landscape character. The exception to this would be the use of less diverse grass species in areas associated with visibility splays which are capable of withstanding regular cutting. Please refer to Volume 3, Figure 9.3 Landscape and Ecological Mitigation.
LV10	The detail of any required mammal fencing shall be designed to minimise landscape and visual impact.

9.7. Residual Effects

Residual Effects – Construction

9.7.1. Effects remaining after mitigation is in place are termed residual effects. The Upland Glens LCT has been identified as having likely significant residual effects (moderate adverse). The SLQs of *famous through routes* and *tranquillity* would have a likely moderate adverse effect upon them. This would be for the construction period as set out in Table 9.3. Even with construction practices (LV1-7), it is predicted that there would be residual significant effect due to the nature, scale and duration of the construction period.





Table 9.3 - Residual Effects Construction

Reference	Pre-Mitigation Effect Magnitude	Pre-Mitigation Effect Significance	Mitigation Measures	Post-Mitigation Effect Magnitude	Post-Mitigation Effect Significance
Loch Lomond and The Trossachs National Park	Negligible	Slight adverse	LV1-7 would avoid, prevent or reduce impacts though still within the negligible magnitude impact band criteria.	Negligible	Slight adverse
Argyll Forest Park (Northern Area)	No change	Neutral	LV1-7 would avoid, prevent or reduce impacts though still within the no change magnitude impact band criteria.	No change	Neutral
Upland Glen LCT No. 252 (LLTNP)	Moderate	Moderate adverse	LV1-7 would avoid, prevent or reduce impacts though still within the moderate. magnitude impact band criteria	Moderate	Moderate adverse
Highland Summits LCT No. 251 (LLTNP)	Negligible	Slight adverse	LV1-4 mitigation would avoid or reduce impact on the LCT to non-significant though still within the negligible impact band criteria.	Negligible	Slight adverse
Argyll Coastal Route (A83)	Minor	Slight adverse	LV1-4 mitigation would avoid or reduce impact on the designation though still within the minor impact band criteria.	Minor	Slight adverse
SLQs: • Famous through routes • Tranquillity	Minor	Moderate adverse	LV1-7 would avoid, prevent or reduce impact on the SLQs though still within the minor impact band criteria.	Minor	Moderate adverse





Reference	Pre-Mitigation Effect Magnitude	Pre-Mitigation Effect Significance	Mitigation Measures	Post-Mitigation Effect Magnitude	Post-Mitigation Effect Significance
 SLQs: World-renowned landscape Wild and rugged highlands containing pastoral lowland Easily accessible landscape splendour a remote area of high hills and deep glens a land of forests and trees Arrochar's mountains and distinctive peaks the variety of glens and the dramatic pass of Rest and Be Thankful. 	Negligible	Slight adverse	LV1-4 and LV-6 will avoid or reduce impact on these SLQs to non-significant though still within the negligible impact band criteria.	Negligible	Slight adverse

Residual Effects – Operation

9.7.2. No landscape receptors or SLQs have been identified as having likely significant residual effects for the operation period as set out in Table 9.4.

Table 9.4 - Residual Effects Operation

Reference	Pre-Mitigation Effect Magnitude	Pre-Mitigation Effect Significance	Mitigation Measures	Post-Mitigation Effect Magnitude	Post-Mitigation Effect Significance
Loch Lomond and The Trossachs National Park	Negligible	WY1 Slight adverse	LV8-10 will avoid and/or reduce impact to non-significant though still within the negligible impact band criteria.	Negligible	WY1 Slight adverse
Loch Lomond and The Trossachs National Park	Negligible	SY15 Slight adverse	LV8-10 will avoid and/or reduce impact to non-significant though still within the negligible impact band criteria.	Negligible	SY15 Slight adverse





Reference	Pre-Mitigation Effect Magnitude	Pre-Mitigation Effect Significance	Mitigation Measures	Post-Mitigation Effect Magnitude	Post-Mitigation Effect Significance
Northern Area Argyll Forest Park	No change	WY1	Not applicable	No change	WY1
		Neutral			Neutral
Northern Area Argyll Forest Park	No change	SY15	Not applicable	No change	SY15
		Neutral			Neutral
Upland Glen LCT No. 252 (LLTNP)	Negligible	WY1	LV8-10 will avoid and/or reduce impact to	Negligible	WY1
		Slight adverse	non-significant though still within the negligible impact band criteria.		Slight adverse
Upland Glen LCT No. 252 (LLTNP)	Negligible	SY15	LV8-10 will avoid and/or reduce impact to	Negligible	SY15
		Slight adverse	non-significant though still within the negligible impact band criteria.		Slight adverse
Highland Summits LCT No. 251 (LLTNP)	No change	WY1	Not applicable	No change	WY1
		Neutral			Neutral
Highland Summits LCT No. 251 (LLTNP)	No change	SY15	Not applicable	No change	SY15
		Neutral			Neutral
Argyll Coastal Route (A83)	Negligible	WY1	LV8-10 will avoid and/or reduce impact to	Negligible	WY1
		Neutral	non-significant though still within the negligible impact band criteria.		Neutral
Argyll Coastal Route (A83)	Negligible	SY15	LV8-10 will avoid and/or reduce impact to	Negligible	SY15
		Neutral	non-significant though still within the negligible impact band criteria.		Neutral





Reference	Pre-Mitigation Effect Magnitude	Pre-Mitigation Effect Significance	Mitigation Measures	Post-Mitigation Effect Magnitude	Post-Mitigation Effect Significance
SLQs: • Famous through routes • Tranquillity	Negligible	WY1 Slight adverse	LV8-10 will avoid and/or reduce impact to non-significant though still within the negligible impact band criteria.	Negligible	WY1 Slight adverse
SLQs: • Famous through routes Tranquillity	Negligible	SY15 Slight adverse	LV8-10 will avoid and/or reduce impact to non-significant though still within the negligible impact band criteria.	Negligible	SY15 Slight adverse
 SLQs: World-renowned landscape Wild and rugged highlands containing pastoral lowland Easily accessible landscape splendour a remote area of high hills and deep glens a land of forests and trees Arrochar's mountains and distinctive peaks the variety of glens and the dramatic pass of Rest and Be Thankful 	Negligible	WY1 Slight adverse	LV8-10 will avoid and/or reduce impact to non-significant though still within the negligible impact band criteria.	Negligible	WY1 Slight adverse





Reference	Pre-Mitigation Effect Magnitude	Pre-Mitigation Effect Significance	Mitigation Measures	Post-Mitigation Effect Magnitude	Post-Mitigation Effect Significance
 SLQs: World renowned landscape Wild and rugged highlands containing pastoral lowland Easily accessible landscape splendour a remote area of high hills and deep glens a land of forests and trees Arrochar's mountains and distinctive peaks the variety of glens and the dramatic pass of Rest and Be Thankful 	Negligible	SY15 Slight adverse	LV8-10 will avoid and/or reduce impact though still within the negligible impact band criteria.	Negligible	SY15 Slight adverse





Compliance with Planning Policy

- 9.7.3. Effects on legislation, plans, policies and guidance related to landscape (as set out in full Appendix 9.1) have been considered. NPF4 concerns the objectives and integrity of the National Park as well as any significant effects on the SLQs. The overall objectives and integrity of the LLTNP is not likely to be compromised at construction or operation and there will be no residual significant adverse effect upon them. The SLQs of the LLTNP have been assessed.
- 9.7.4. The NPF4 Policy 6 (National Planning Framework 4 (NPF4) 2023) states that existing trees and woodland should be protected, expanded and/or improved and that there should be no ancient woodland loss or loss of individual trees of high value. The woodland loss has been minimised, with no loss of ancient woodland, or individual trees of high value as a result of the MTS.
- 9.7.5. The UK Forestry Strategy 4th and 5th editions <u>UK Forestry Standard (UKFS) 4th Edition, 2017 and UKFS 5th Edition, 2024)</u> are concerned with proposed forestry creation or forest clearance. Neither apply as a result of the MTS. There is some felling to facilitate the MTS. As required, the visual impact resulting from this has been assessed.
- 9.7.6. Woodland Removal Policy, 2009 advocates for no woodland removal and limited reduction. The MTS complies with this as there is the removal of some scattered trees only.
- 9.7.7. The MTS is not fully compliant with the LLTNP Local Development Plan 2017-2021 Policy 2 as there is some slight adverse effect on the landscape character of Glen Croe (Upland Glen LCT). It complies with Policy 2 in terms of protecting important views and the landscape character of the wider study area. Natural Environment Policy 1 concerns the SLQs as well as woodland and trees and their management. The SLQs have been assessed for any likely significant effect upon them as a result of the MTS. The trees and woodland are protected by the recommended British Standard BS 5837:2012 Trees in relation to design demolition or construction. An Outline Landscape and Environmental Management Plan has been produced.





- 9.7.8. The Loch Lomond and the Trossachs Partnership Plan 2024 -2029 identifies a Woodland Expansion Priority Area. Please refer to the BNG enhancement areas (Volume 4, Appendix 4.1 Biodiversity Net Gain Natural Capital Assessment)
- 9.7.9. The conclusion of the landscape assessment as a result of the construction and operation of the Proposed Scheme is complaint with the relevant policies identified in Volume 4, Appendix 9.1 Landscape Legislation, Policy and Guidance with the exception of Policy 2 in the LLTNP Local Development Plan 2017-2021 as set out in paragraph 9.7.7 above.
- 9.7.10. Mitigation, and monitoring if applicable, is set out in Chapter 12: Schedule of Environmental Commitments.