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Welsh Government



A55(T) Chester to Bangor Trunk Road: Abergwyngregyn to Tai'r Meibion Improvement

ENVIRONMENTAL STATEMENT
VOLUME 2: TECHNICAL APPENDIX B
LANDSCAPE

This Technical Appendix contains the following documents, which support Chapter 5.3 (Landscape) of the Environmental Statement:

- A55(T) Abergwyngregyn to Tai'r Meibion Landscape and Visual Impact Assessment report (Mouchel, 2016)

A55(T) Chester to Bangor Trunk Road – Abergwyngregyn to Tai'r Meibion Improvement

Volume 2 Technical Appendix

Landscape Effects

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1 Introduction

- 1.0.1 Mouchel has been commissioned by YGC on behalf of the Welsh Government: Transport to provide an updated environmental support, specifically Landscape Effects, for the proposed upgrade and improvements to the A55(T) Chester to Bangor Trunk Road from Abergwyngregyn to Tai'r Meibion.
- 1.0.2 The scheme will involve the on-line widening and improvement of a 2.2km length of dual carriageway trunk road to dualled carriageway standards with hard shoulders. An updated central concrete vehicle containment barrier will be constructed and existing cattle creeps will be extended. A new 1.6km County road will join Tal y Bont interchange with Wig Crossing junction. From here a Private Means of Access/Non-Motorised User Route will run to Wig Bach, before becoming a Non-Motorised User route only from here to the Abergwyngregyn Interchange. In addition an 800m section of the existing Roman Road will be widened and a new agricultural access track will be provided to Wig Farm along with a footway along the local road to Tan y Lon, between Tan-yr-allt Cottages and Llain-y-Ffwlbart. The A55(T) passes through pastoral agricultural land and the area affected is drained via eight watercourses.
- 1.0.3 The assessment has been undertaken to update a previous assessment undertaken in 2008, updated in 2012 and 2015, and has been carried out in accordance with the guidance outlined in Interim Advice Note 135/10 (Wales)¹ that replaces the previous advice provided in the Design Manual for Roads and Bridges (DMRB) Volume 11: Environmental Assessment². Where appropriate, methods described in the 'Guidelines for landscape and visual impact assessment' – Third Edition³ and 'Welsh Transport Planning and Appraisal Guidance – WelTAG'⁴ have been utilised to support the standard DMRB approach to the assessment of Landscape Effects.

1.1 Potential Effects

- 1.1.1 The assessment of effects on landscape character and visual amenity are two separate, but interlinked, procedures. The baseline landscape, its analysis and the assessment of character contribute to the definition of the baseline for the assessment of visual amenity.
- 1.1.2 Landscape effects primarily derive from modifications to the physical landscape which may give rise to changes in character and how this is perceived and experienced by users.
- 1.1.3 Visual effects relate to changes arising from the modification of the composition of views as a result of changes to the landscape, to people's responses to the changes and the overall effects in respect of visual amenity.

Landscape Character

- 1.1.4 There are a number of ways in which development of the type proposed can influence landscape character:
- The scale and form of development can prove inappropriate and intrusive in the context of existing landform, characteristics and landscape elements which contribute to overall character;
 - Development proposals can affect important landscape elements, possibly involving the loss or fragmentation of important and distinctive landscape features such as hedgerows, woodland, trees, field pattern and built form;

¹ Interim Advice Note 135/10 (W): April 2014, Welsh Government

² Design Manual for Roads and Bridges: Volume 11 - Environmental Assessment (1993 - 2005), published by HMSO.

³ Guidelines for landscape and visual impact assessment: Third edition – 2013, published by The Landscape Institute and Institute of Environmental Management and Assessment

⁴ Welsh Transport Planning and Appraisal Guidance – WelTAG, June 2008, The Welsh Assembly Government

- The proposals can introduce activity, features and forms that are out of keeping with established land use, cultural or historical landscapes; and
- The proposals can contribute to the regeneration of despoiled landscapes and the establishment of areas of new landscape.

Visual Amenity

- 1.1.5 Development can change people's direct experience and perception of the landscape depending on existing context, the scale, form, colour and texture of the proposals, the nature of activity associated with the development and the distance and angle of view.
- 1.1.6 In relation to visual effects, the quality of view and the experience of the viewer can be downgraded or improved. Proposals may not just alter the composition of a view but can, by virtue of proximity; obstruct the overall outlook to a degree.
- 1.1.7 Visual effects on residents, visitors and users of open space can encompass the following:
- The loss of the whole or part of an existing view where earthworks or structures forming part of the proposals obstruct views;
 - The introduction of intrusive elements such as earthworks, structures, lighting and traffic flows into existing views; and
 - Removal of existing intrusive elements in existing views or removal of associated structures and road related features.

Key Issues

- 1.2 The Proposed Improvement would result in the widening of an existing highway with the addition of a number of off-line side road improvements aimed at increasing safety for road users. The changes would occur within the context of an established highway corridor, which already influences the perception of the landscape and represents a notable feature of many of the local views from nearby visual receptors. Full details of the Proposed Improvement can be found in Chapter 2.3 – Scheme Description. The key issues to emerge in relation to landscape and visual effects are therefore associated with the modifications to the existing corridor, namely:
- The loss of existing landscape features such as roadside hedgerows, mature trees and other landscape features that contribute to the local landscape character and sense of place;
 - The broadening of the established corridor as a result of off-line and side road improvements;
 - The introduction of a new drainage channel and small bund (<1m height) running parallel with the existing road to the south between The Old School and Tai'r Meibion;
 - Minor modifications (<1m) to the vertical alignment to accommodate local undulations in the existing road surface to comply with current standards;
 - Removal of existing roadside hedgerows and hedge banks alongside roads to provide access to property where direct access from the A55(T) has been removed; and
 - The visual effects that would occur to local sensitive receptors due to changes to the existing road corridor and local access roads as a result of the removal of roadside vegetation resulting in exposed views of the road itself and associated traffic.

1.3 *Statutory and Planning Context*

- 1.3.1 The following guidelines, legislation and planning policy documents provide the framework for the protection and conservation of landscape within the study area.

- 1.3.2 Specific planning policy designations relating to the proposed development and surrounding study area are dealt with separately in the Environmental Statement (Chapter 2, Section 2.7). Existing planning policy and legislation directly relevant to the assessment of landscape and visual effects is briefly outlined below.

National Legislation

- 1.3.3 Numerous statutes exist to ensure both direct and indirect protection of our most valued and important landscapes, their intrinsic visual qualities and the individual elements and components that constitute their appeal. Those with direct relevance to the assessment include the following.

- The National Parks and Access to the Countryside Act, 1949;
- Planning Policy Wales January 2016;
- Technical Advice Note 12, Design, March 2016
- Countryside and Rights of Way Act 2000;
- Wildlife and Countryside Act 1981;
- Town and Country Planning Act 1990;
- Hedgerows Regulations 1997;
- Environment Act 1995; and
- Countryside Act 1968.

- 1.3.4 Statutes and national planning policy make no direct provision for the protection or conservation of specific views. They are, however, an implicit part of the values and qualities recognised in broader landscape designations that seek to protect areas of recognised scenic quality.

Key Policies and Plans

- 1.3.5 The Wales Transport Strategy, published by the Welsh Assembly Government in April 2008, identifies the importance of Wales' heritage including the unique landscapes and townscape. The report identifies a number of Outcomes aimed at achieving a sustainable transport strategy for Wales, Outcome 16 requires an improved effect of transport projects on heritage and indicators of this would be the neutral effect of new transport schemes on landscape and townscape, please refer to Section 5.2 – Cultural Heritage for an assessment of the policies relating directly to heritage resources.

Planning Policy Wales - Edition 8 (January 2016)

- 1.3.6 Planning Policy Wales (PPW) (Edition 8, January 2016) sets out planning policies of the National Assembly for Wales in relation to land use. Of particular relevance to this assessment is Chapter 5 - Conserving and Improving Natural Heritage and the Coast which outlines the Welsh Government's commitments to the natural heritage of Wales. The Welsh Government's objectives for the conservation and improvement of the natural heritage and that are relevant to landscape and visual amenity are to:

- promote the conservation of landscape and biodiversity, in particular the conservation of native wildlife and habitats;
- ensure that action in Wales contributes to meeting international responsibilities and obligations for the natural environment;
- ensure that statutorily designated sites are properly protected and managed;

1.3.7 The document is supplemented by a series of Technical Advice Notes; those that are relevant to this proposal are:

- Technical Advice Note 5 (2009) – Nature Conservation and Planning, provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation, which includes landform;
- Technical Advice Note 12 (2016) – Design, the purpose being to equip all those involved in the design of development with advice on 'Promoting sustainability through good design', and;
- Technical Advice Note 18 (2007) – Transport, aims to establish an approach to sustainable travel, including the use of existing landscape features to mitigate the potentially harmful effects of transport infrastructure projects.

Local Policy Context

1.3.8 The Gwynedd Unitary Development Plan (UDP) 2001-2016 is the current planning document for the area. It establishes a policy framework for the development needs to provide a basis for consistent and appropriate decisions. It is supported by Supplementary Planning Guidance (SPG) aimed at supporting the policies contained within the UDP. Of specific relevance to the assessment of potential landscape effects is the SPG: Landscape Character and this is a material consideration in the determination of planning applications that are likely to affect the landscape.

1.3.9 Local planning authorities have powers to designate local areas of outstanding scenic quality and character via the development plan process. Specific policies relating to the protection, conservation and enhancement of landscape relevant to the study area are outlined below:

Policy B12 - Protecting Historic Landscapes, Parks and Gardens

Proposals that are within or on sites visible from a park and garden identified and described in Part 1 of the Register of Historic Landscapes, Parks and Gardens of Special Interest in Wales will be refused if they cause significant harm to their character, appearance or setting. The scheme extents have been identified as being within a Historic Landscape, as defined in the Gwynedd Unitary Development Plan.

Policy B13 - Protecting the Open Coastline

Outside the Heritage Coast, proposals on open coastal areas included in the Plan area will only be approved if they comply with all the following criteria:

- they require a location on or in close proximity to the coast or open estuaries;
- there will be no adverse impact on:
 - a. water quality
 - b. public access considerations
 - c. the built environment or the landscape
 - d. nature conservation interest of the area due to their location, noise, scale, form, appearance, materials, noise or emissions or due to an unacceptable increase in traffic;
- priority will be given to locations that are visually well related to existing buildings or structures;
- there are no suitable locations within developed areas of coastline

Policy B14 - Protecting the Landscape Character of Snowdonia National Park

Development and land use changes will not be permitted where these would adversely affect the qualities and special character of the Snowdonia National Park by:

- causing significant visual intrusion, and/or
- being insensitively and unsympathetically sited within the landscape

1.3.10 The scheme extents lie on an area of the coastal plain between the Menai Straits and the hills forming the Snowdonia National Park, therefore policies B13 and B14 are of relevance to the assessment.

1.3.11 Gwynedd Council in conjunction with Anglesey Council are currently preparing a Joint Local Development Plan (JLDP), setting out the planning policy framework for the next 15 years (2011 – 2026). Whilst the UDP remains the current planning document, policies emerging as part of the joint development plan are a material consideration as part of the planning decision process.

1.3.12 Policies contained within the JLDP of relevance to the assessment include:

Policy AMG 1: Special Landscape Areas

When considering proposals within Special Landscape Areas (SLA) as identified by the proposals map and listed below, there will be a need to appropriately consider the scale and nature of the development thus ensuring that there is no detrimental impact on the landscape. The development should aim to add to the historic, visual, geographical, ecological and cultural features of the SLA.

Proposals should address and coincide with the prepared 'Statement of Significance'.

Where there are reasonable grounds to suggest that proposals may result in a significant adverse impact on the SLA (either located within or directly outside) the Council will require a Landscape and Visual Impact Assessment in order to further consider the impact of the development on the designated area.

In exceptional circumstances, where development is necessary and could result in significant impact on the landscape, appropriate mitigation and compensation measures should be provided.

1.3.13 Within the southern part of the study area (refer to Figure 5.3.1, Volume 1a) the landscape has been designated locally as a Special Landscape Area. Whilst the proposals do not directly impact on the landscape within the designation, they do occur in close proximity to its boundary and therefore have the potential to adversely affect the perception of the landscape that contributes to the wider understanding of the landscape as a whole.

Policy AMG2: Protecting and Enhancing Features and Qualities that are Unique to the Local Landscape Character

Proposals that would have an adverse impact upon landscape character as defined by the Landscape Character Areas included within the current Landscape Strategy for the relevant authority, must demonstrate through a landscape assessment how landscape character has influenced the design, scale, nature and site selection of the development.

A proposal will be granted provided that it doesn't have an adverse impact upon features and qualities which are unique to the local landscape in terms of visual, historic, geological, ecological or cultural aspects. Measures should be taken to ensure that the development doesn't:

- Cause significant adverse impact to the character of the built or natural landscape;
- Fail to harmonise with, or enhance the landform and landscape;

- Lose or fails to incorporate traditional features, patterns, structures and layout of settlements and landscape of both the built and natural environment.

Particular emphasis will be given to the landscapes identified through the Landscape Character Areas as being of high and outstanding quality because of a certain landscape quality or a combination of qualities.

Additional consideration will also be given to developments which directly affect the landscape character and setting of the AONBs or the National Park.

Landscape Designations

- 1.3.14 The National Parks and Access to the Countryside Act, 1949 allows the designation of National Parks and Areas of Outstanding Natural Beauty (AONB's). The Act also provides for public access to the countryside through access agreements and restrictions on the destruction, removal, alteration and stopping-off of any means of access. The Act has since been amended by the Countryside Act 1968, the Wildlife and Countryside Act 1981 and the Environment Act 1995.
- 1.3.15 Designations of direct relevance to the baseline receiving landscape, its contextual setting and overall character comprise the following, supported by descriptive comments, as depicted in Figure 5.3.1, Volume 1a.

Snowdonia National Park

- 1.3.16 The landscape quality associated with the study area was judged not to merit inclusion within the Snowdonia National Park when it was designated in 1949, but it is close to the boundary, as indicated on Figure 5.3.1, Volume 1a.
- 1.3.17 The boundary of Snowdonia National Park is approximately 620m from the Proposed Improvement to the A55(T) at its western end and approximately 110m at its eastern end (see Figure 5.3.1, Volume 1a), becoming closer still (25m) within the village of Abergwyngregyn. However widening of the Roman Road between Tai'r Meibion and Crymlyn would bring changes to the local road within 170m of the National Park boundary as it extends to follow the route of the Roman Road to the east, from Crymlyn to Abergwyngregyn.

Traeth Lafan/Lafan Sands SPA/SSSI/LNR; Y Fenai a Bae Conwy/Menai Strait and Conwy Bay SAC

- 1.3.18 The site lies between Traeth Lafan/Lafan Sands with its expansive mud flats and sands fully exposed at low tide and the partially wooded hills to the south, which peak at Moel Wnion approximately 2.5km away at 580m above ordnance datum (AOD). The topography of the area is illustrated in the site photographs in Figures 5.3.2 – 5.3.5, Volume 1a.

Landscape Character Areas

- 1.3.19 LANDMAP, with contribution from Gwynedd Council, has identified local Landscape Character Areas (LCA) that are within the proposed site boundary or within close proximity, see Figure 5.3.1, Volume 1a. LANDMAP is the national information system for Wales, devised by the Countryside Council for Wales, now part of Natural Resources Wales, for taking landscape into account in decision-making, and studies are undertaken at a County or National Park scale throughout Wales.
- 1.3.20 The area is also included within the non-statutory Register of Landscapes of Historic Interest in Wales; refer to Chapter 5.2 – Cultural Heritage (ES, Volume 1).

Public Rights of Way

- 1.3.21 There are a number of public rights of way, including footpaths, bridleways and strategic recreational routes, in the area with an appreciation of the existing A55(T), refer to Section 3.2.7 for details of the rights of way associated with the Proposed Improvement (please see Figure 5.3.6, Volume 1a and Chapter 5.8 – Effects on All Travellers, ES, Volume 1).

2 Method of Assessment

- 2.0.1 This section of the report outlines the techniques and methodologies used in the assessment. It defines set criteria for the quantification and evaluation of potential effects in respect of landscape character and visual impact.
- 2.0.2 The assessment has been undertaken in accordance with the methods outlined in the following core Environmental Impact Assessment and transport related assessment documentation.
- Interim Advice Note 135/10 (W): April 2014, Welsh Government.
- 2.0.3 The following additional guidelines and guidance documentation relevant to the assessment of Landscape Effects have also been referenced.
- Guidelines for landscape and visual impact assessment: Third edition – 2013, published by The Landscape Institute and Institute of Environmental Management and Assessment;
 - Landscape Character Assessment: Guidance for England and Scotland, published by Scottish Natural Heritage and the Countryside Agency (2002); and
 - Welsh Transport Planning and Appraisal Guidance – WelTAG, June 2008, The Welsh Government.
- 2.0.4 Professional judgement has been used in determining sensitivity and likely effects arising as a result of the Proposed Improvement. This is based on previous experience in the study of landscape character and visual sensitivity and a sound understanding of the nature of the project and changes likely to arise as a result of its implementation. The level of uncertainty is low as the design of the Proposed Intervention is at an advanced stage.
- 2.0.5 The guidelines acknowledge the relationship between the perception of landscape character and the experience of viewers (referred to as receptors - defined as residents, people in their workplace, attending school, using recreational facilities, using the countryside and shoppers etc).
- 2.0.6 The guidelines rely on an appreciation of the existing physical baseline conditions and visual context, using professional judgement and a thorough understanding of the development proposals, determination of sensitivity, sensitivity to change, the magnitude of impact and the potential to mitigate significant effects. This assessment reports the findings relating to landscape character and visual effects separately.
- 2.0.7 The Proposed Improvement is situated on the northern fringes of the Snowdonia National Park, a landscape of distinctive quality. Much of the surrounding landscape demonstrates features of good quality that contribute to the setting of the broader designation, as a result of which a detailed assessment of landscape character has been undertaken. A detailed assessment of the likely visual effects has also been undertaken due to the proximity of a number of sensitive receptors to the changes arising from the Proposed Improvement.

2.1 *Stages in the Assessment Process*

- 2.1.1 The assessment involves an iterative process in which the analysis and evaluation of potential effects inform the development of the scheme design and landscape mitigation measures.
- 2.1.2 There are five key stages to the assessment process:
- Recording and analysis of the existing landscape and visual context of the receiving environment;
 - An appreciation of the nature, forms and features of the proposals;
 - An assessment of the magnitude of impact likely to result from the development and the susceptibility of the existing landscape and identified visual receptors to change, pre-mitigation;

- Identification of design and mitigation measures appropriate to the Proposed Improvement and landscape of the receiving local area; and
- Evaluation of the significance of the effects identified based on the above assessment.

2.1.3 The assessment relies on thorough understanding and observation of the existing landscape and visual context of the proposed road corridor and a thorough understanding of the development proposals. These enable the sensitivity to change and magnitude of impact to be derived. Mitigation measures can then be identified and the order of any residual effects can be assessed to arrive at the declared effect of the proposal.

Impact Assessment

2.1.4 The following key tasks have been undertaken as part of the landscape and visual assessment:

- Analysis of existing landscape and visual assessment data derived from previous environmental studies of the area;
- Desk based analysis of OS mapping relating to landform, vegetation, settlement patterns and the drainage regime in the wider area;
- Desk based analysis of aerial photography for the area;
- Preliminary desk based plotting of potential character zones derived from the above analyses;
- Site appraisal and appropriate modification of preliminary zones. Site recording involved annotation of 1:1250 and 1:25000 scale Ordnance Survey plans defining the zones and the key elements determining character;
- Site photography to illustrate character zones, notable views / viewpoints and key landscape elements;
- Drafting and description of character zones including analysis of their susceptibility to change;
- Consultation with statutory agencies;
- Evaluation of change in character and potential resultant effect on existing quality; and
- Review of available statutory planning and policy documentation relevant to the study area.

Change Over Time

2.1.5 Impacts change over time as planting included as part of the development mitigation proposals establishes and matures, and as the existing landscape surrounding the development evolves. The assessment acknowledges this change and reports on the impacts during the construction phase; upon opening of the scheme during the winter (effectively pre-mitigation, prior to the maturation of any proposed planting) when it is considered that potential effects would be at their most significant; and those 15 years following opening of the scheme, both in summer and winter periods when mitigation will have substantially matured.

2.2 *Landscape Character*

2.2.1 Landscape character assessment is broadly based on identification of the sensitivity of the landscape to change within the proposed study area, and the magnitude of impact within the landscape that would result from the construction and operation of the proposed development. It also involves a combination of identification of character and analysis of the quality and value of a defined area.

2.2.2 The wider landscape of the study area is broken down into distinctive Landscape Character Areas (LCA) underpinned from LANDMAPs identified regional character areas and site analysis. Assessment is undertaken in relation to each specific character area and the significance of effect for each is identified.

- 2.2.3 The process involves analysis of landscape character and quality within and between areas, and an analysis of value, leading to the recognition of the sensitivity of the area to any changes likely to result from the construction of the proposals.

Character, Quality and Value

- 2.2.4 The classification of landscape character involves the appraisal of the baseline landscape in relation to three criteria; character, quality and value; to inform the evaluation of character.

Character

- 2.2.5 Landscape character is a composite of physical and cultural elements. Landform, hydrology, vegetation and land cover, land use pattern and cultural and historic features and associations combine to create a common 'sense of place' and identity which can be used to categorise areas into definable units (character areas). The level of detail and size of unit can be varied to reflect the scale of definition required. It can be applied at national, regional and local levels. Criteria applied to define character include scale, density and mix, appearance, layout, cultural associations and land use.

Quality

- 2.2.6 Quality relates to the intrinsic aesthetic appeal demonstrated by a character area or feature/composition within the landscape. Factors such as accessibility and local scarcity can render areas that are of nationally unremarkable quality to highly valuable as a local resource.

- 2.2.7 A five point scale has been adopted to describe quality, prior to and post development.

- Highest Quality - Areas comprising a clear composition of valued landscape components in robust form and health, free of disruptive visual detractors and with a strong sense of place. Areas containing a strong, balanced structure with distinct features worthy of conservation. Such areas would generally be Internationally or Nationally recognised, e.g. World Heritage Sites, National Parks and Areas of Outstanding Natural Beauty (AONB).
- Very Attractive - Areas primarily of valued landscape components combined in an aesthetically pleasing composition and lacking prominent disruptive visual detractors. Areas containing a strong structure with noteworthy features or elements, exhibiting a strong sense of place. Such areas would generally be Regionally recognised locations, e.g. Areas of Great Landscape Value (AGLV) or equivalent, or contribute to the setting of Nationally recognised locations e.g. National Parks or AONBs.
- Good - Areas primarily of valued landscape components combined in an aesthetically pleasing composition with low levels of disruptive visual detractors, exhibiting a recognisable landscape/townscape structure. Such areas would generally be Regionally and Locally recognised areas, e.g. AGLV designations and the majority of Areas of Local Landscape Importance.
- Ordinary - Areas containing some features of landscape value but lacking a coherent and aesthetically pleasing composition with frequent detracting visual elements, exhibiting a distinguishable structure often concealed by mixed land uses or development. Such areas would be commonplace at the local level and would generally be undesignated, offering scope for improvement.
- Poor - Areas lacking valued landscape components or comprising degraded, disturbed or derelict features, lacking any aesthetically pleasing composition with a dominance of visually detracting elements, exhibiting mixed land uses which conceal the baseline structure. Such areas would generally be restricted to the local level and identified as requiring recovery.

Sensitivity to Change

- 2.2.8 Sensitivity to change considers the structure, quality and value of the existing landscape and the extent to which it is considered as being capable of accepting the type of development proposed. In this assessment, sensitivity to change is ranked as follows:

- High Sensitivity - A landscape displaying particularly distinctive character of high quality, highly valued through use, historic or cultural associations and considered susceptible to relatively small changes. Likely to contain features or elements that are rare and irreplaceable.
- Moderate Sensitivity - A landscape of commonplace features with an unremarkable character but with a perceptible sense of place. May contain local designations or of value expressed through local publications. May contain features and elements that could not be replaced.
- Low Sensitivity - A landscape of few, if any, valued features through use, perception or historic and/or cultural associations. Features or elements that are discordant, derelict or in decline. Lack any formal designations.

Magnitude of Impact

2.2.9 Magnitude of impact considers the extent to which the proposed development would emerge as a new component in the landscape and would change the balance between components that currently constitute baseline character.

2.2.10 Magnitude of impact might be high in landscape terms where significant areas of tree planting are lost to construction, a strong hedgerow pattern is severed or sensitive landform is lost. Conversely, low magnitude might be represented by proposals that require minimal loss of important landscape features or where the overall landform and pattern is able to accommodate the proposed development with a good degree of integration. Within IAN 135/10 (W) magnitude of impact is described as:

- Major Adverse – Total loss or large scale damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic conspicuous features and elements
- Moderate Adverse – Partial loss or noticeable damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic noticeable features and elements
- Minor Adverse – Slight loss or damage to existing character or features and elements, and/or the addition of new but uncharacteristic features and elements.
- Negligible Adverse – Barely noticeable loss or damage to existing character or features and elements, and/or the addition of new but uncharacteristic features and elements
- No Change – No noticeable loss, damage or alteration to character or features or elements.
- Negligible Beneficial – Barely noticeable improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic features and elements, or by the addition of new characteristics features
- Minor Beneficial – Slight improvement of character by the restoration of existing features and elements, and/or the removal of characteristics features and elements, or by the addition of new characteristic elements.
- Moderate Beneficial – Partial or noticeable improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic and noticeable features and elements, or by the addition of new characteristics features.
- Major Beneficial – Large scale improvement of character by the restoration of features and elements, and/or the removal of uncharacteristic and conspicuous features and elements, or by the addition of new distinctive features.

Significance of Effect Criteria

2.2.11 The prime criteria used to evaluate effects on landscape character are centred on the extent to which existing landscape elements, features and key characteristics would be lost or modified in conjunction with their contribution to determining landscape quality and value.

- 2.2.12 Other criteria used to ascertain effects on character include the size, scale, elevation and configuration of the proposed development in respect of the receiving environment and the degree to which activity within the receiving environment would alter, both during and post construction. Other aspects such as tranquillity are also considered. Cumulative landscape effects on the baseline environment are also taken account of in respect of the proposed development.
- 2.2.13 Effects can be detrimental where features or key characteristics such as established planting have to be removed to permit construction. Conversely, effects can prove beneficial where poorly maintained landscape features are restored, replaced or better maintained, or where there is the introduction of a new planting framework and structure where none currently exists, constituting an improvement in the existing pattern.
- 2.2.14 Account is taken of the effect that mitigation proposals and measures are likely to have in offsetting or effectively minimising potentially adverse effects. The assessment also acknowledges the extent to which the engineering proposals and their attendant landscape proposals would effectively benefit or enhance the existing landscape quality.

Significance of Effect Ratings

- 2.2.15 The findings are represented using a descriptive, descending scale ranging from large - moderate - slight and adverse through neutral to an ascending scale of slight - moderate - large and beneficial. There is a further rating, very large adverse, used to indicate adverse effects on a very high quality landscape or on important and rare combinations of landscape features and their elements. Such a rating would indicate that the effect is considered highly prejudicial in relation to the specific topic of landscape character. Explanation of the significance of effect ratings is provided below.

Large Beneficial Effect

- 2.2.16 The proposals:
- Constitute a major restructuring/restoration of a degraded landscape and characteristic features enabling a sense of place to be enhanced or that form an essential part of a landscape strategy to improve management.

Moderate Beneficial Effect

- 2.2.17 The proposals provide an opportunity to enhance the landscape because:
- They fit very well with the scale, landform and pattern of the landscape;
 - There is potential, through mitigation, to enable the restoration of characteristic features, partially lost or diminished as the result of changes to the baseline context, e.g. from previous inappropriate development;
 - They would enable a sense of place and scale to be restored through well designed planting and mitigation measures. Characteristic features are enhanced through the use of local materials and planting species to fit the proposal into the surrounding landscape; and
 - They enable some sense of quality to be restored or enhanced through beneficial landscaping and sensitive road design.

Slight Beneficial Effect

- 2.2.18 The proposals:
- Fit well with the scale, landform and pattern of the landscape;
 - Incorporate measures for mitigation to ensure they would blend in well with the surrounding landscape structure;

- Would enable some sense of place and scale to be restored through well designed planting and mitigation measures; and
- Maintain or enhance existing landscape quality and character.

Neutral Effect

2.2.19 The proposals:

- Complement the scale, landform and pattern of the landscape;
- Incorporate measures for mitigation to ensure that the scheme would blend in well with surrounding features and elements; and
- Maintain existing landscape quality and character.

Slight Adverse Effect

2.2.20 The proposals:

- Do not quite fit the landform and scale of the landscape;
- Although not very visually intrusive, would impact on certain views into and across the area;
- Cannot be completely mitigated for because of the nature of the proposal itself or the character of the landscape in which the development would sit; and
- May affect an area of recognised landscape quality.

Moderate Adverse Effect

2.2.21 The proposals:

- Are out of scale with the landscape, or at odds with the local landscape pattern;
- Are not possible to fully mitigate for, that is, mitigation would not prevent the scheme from scarring the landscape in the longer term as some features of interest would be partly destroyed or their setting reduced or removed; and
- Would have an adverse effect on a landscape of recognised quality or on vulnerable and important characteristic features or elements.

Large Adverse Effect

2.2.22 The proposals are very damaging to the landscape in that they:

- Are at considerable variance with the landform, scale and pattern;
- Are visually intrusive and would disrupt fine and valued views of the area;
- Are likely to degrade, diminish or even destroy the integrity of a range of characteristic features and elements of their setting;
- Would be substantially damaging to a high quality or highly vulnerable landscape, resulting in fundamental change and be considerably diminished in quality; and
- Cannot be adequately mitigated for.

Very Large Adverse Effect

2.2.23 The proposals would result in exceptionally severe adverse impacts on the landscape because they:

- Are at complete variance with the landform, scale and pattern;
- Are highly visually and extremely intrusive, destroying fine and valued views both into and across the study area;
- Would irrevocably damage or degrade, badly diminish or even destroy the integrity of characteristic features and elements and their setting;
- Would cause a very high quality or highly vulnerable landscape to be irrevocably changed and its quality very considerably diminished; and
- Cannot be mitigated for, that is, there are no measures that would protect or replace the loss of a nationally important landscape.

Significance of Effect Application and Evaluation

- 2.2.24 Each of the character areas identified in Section 3.1 have been evaluated against the key character criteria and allocated a significance of effect rating accordingly. The assessment and evaluation for each identified character area concludes with a summary statement of the effect of the proposed development on the character, taking into account mitigation measures and reflecting the changes that are predicted over time.

2.3 Visual Effects

- 2.3.1 The assessment of visual effects is based on identification of the sensitivity of receptors (locations from which people would be able to view the development) within the proposed study area and the magnitude of impact that would result from the construction and operation of the proposed development, based upon information gathered through site surveys and analysis of the design proposals.
- 2.3.2 It describes the current visual context from important viewpoints and evaluates the implications of the proposals for residents, visitors and users of the areas neighbouring the proposed development. It also describes the landscape proposals and other mitigation measures that would form an integral part of the scheme and the extent to which they would mitigate potentially significant visual effects.

Zone of Theoretical Visibility

- 2.3.3 The purpose of identifying the Zone of Theoretical Visibility (ZTV) is to define the effective boundaries within which the proposed development could potentially affect receptor views of the landscape within the wider area surrounding the development. It is a task which can be undertaken manually by way of field survey or through a combination of Computer Aided Design (CAD) based analysis validated by targeted field survey. In this instance, the containment resulting from the surrounding landscape, landform, vegetation and settlement pattern of the study area has enabled the visual envelope to be readily identified through site-based appraisal.
- 2.3.4 The ZTV is also commonly known as the visual envelope, a term which is adopted throughout this assessment. The visual envelope, once mapped, indicates the maximum area of land likely to be able to gain views of the proposed development. It provides a means of identifying potential receptors so that an assessment of visual effects can be undertaken. It is not representative of visual impact in itself, nor does it indicate that the proposals would be visible from all locations within the envelope.
- 2.3.5 A Visual Envelope Plan would normally be produced for this type of study but due to the scale of the proposed changes within the context of extensive views, particularly to the north and south it was considered appropriate to limit the extent of the ZTV to within 1km; this representing a distance beyond which the likely scale of the proposed changes would not risk potentially significant effects, refer to Figure 5.3.6, Volume 1a.

Identification of Key Receptors

- 2.3.6 Potential visual receptors have been initially recorded by reviewing the settlement, land use, topography, vegetation, access and transportation pattern of the study area contained within the boundaries of the visual envelope. Key receptors plotted via the desk based review and validated through site survey include the following.
- Settlements, farmhouses and individual properties;
 - Local roads with views of the corridor;
 - Public access areas including footpaths and other rights of way; and
 - The northern fringes of the Snowdonia National Park.
- 2.3.7 The desk study included analysis of Ordnance Survey plans of various scales up to 1:10,000 and correlation with detailed plans and sections of the scheme. The field studies included:
- visiting each property/farmstead and recording existing and potential views;
 - walking the local footpaths and the slopes to the south of the scheme location;
 - driving the route along the A55(T) over a period of several years, summer and winter; and
 - driving around the local road network to assess more distant views.
- 2.3.8 The site work included analysis of the visual 'shadows' cast by significant tree belts as well as mature woodland, and by variations in topography and landform gradient. This latter factor is particularly important given that even subtle variations can have a large bearing on whether or not the effects of the Proposed Improvement would be visible from certain viewpoints.
- 2.3.9 In addition to the assessment of effects on individual receptors, several key viewpoints have also been assessed (refer to Figure 5.3.1, Volume 1a for the locations). These have been selected in consultation with Snowdonia National Park Authority as representative views that are typical of views available within the wider landscape.

Field Assessment of Affected Receptors

- 2.3.10 For the assessment of visual effects, each receptor or receptor grouping identified above was visited and surveyed. Weather conditions during the initial assessment period in November 2008 were damp although visibility remained good, the subsequent survey undertaken in July 2015 was bright and sunny with good visibility. Factors considered during the visual assessment include:
- Receptor type and number (e.g. dwelling / footpath);
 - Receptor height;
 - Existing view;
 - Distance of view;
 - Percentage and elements of scheme visible;
 - Viewpoint position (view up / view down / level view);
 - Angle of view (acute / perpendicular / average);
 - Type of view (foreground / mid ground / background) and position of the scheme in the view; and

- Analysis of potential impact during construction, upon opening of the scheme and fifteen years into operation, summer and winter.

Analysis of Visual Effects

- 2.3.11 Analysis of visual effects and evaluation involves consideration of the visual sensitivity to change and magnitude of impact based upon information gathered through site surveys and analysis of the aesthetics of the proposals.
- 2.3.12 Analysis of visual effects relates to the potential effects during construction, subsequent opening of the facilities and fifteen years into operation (the end of the assessment period), for both summer and winter periods. The analysis assumes that the visual context applicable at the year of opening is that which would be experienced during winter months when the degree of visual exposure is potentially greatest.
- 2.3.13 The analysis fifteen years into operation demonstrates the effectiveness of any landscape and mitigation proposals for the scheme. The analysis relates to each key receptor and concludes with an evaluation of the significance of effect related to each receptor.

Visual Sensitivity to Change

- 2.3.14 Visual sensitivity to change considers the nature of the receptor. Least sensitive receptors are considered, for example, to be people engaged in work whose primary focus would not necessarily be on the surrounding landscape views. Conversely, more emphasis is placed upon receptors whose change in view or visual amenity is either the prime focus, greater in scale or potentially covers a wider area.
- 2.3.15 The degree and importance of the view gained by a receptor also contributes to an understanding of how sensitive a given receptor is towards change. Therefore, value of the view and scenic quality are also taken into account in the assessment. In this assessment, visual sensitivity to change is ranked as follows:

High Sensitivity

- Individual dwellings or dwelling groupings with a view in which the new scheme would become an important focal element from either gardens or room windows, both upper and lower storey;
- Users of footpaths and bridleways, and public open spaces with a view in which the new scheme would be an important focal element in that view; and
- Users of recreational spaces where the main purpose of the recreational resource is the enjoyment of the countryside.

Moderate Sensitivity

- Workers within the outdoor environment;
- Users of scenic routes, railways or waterways or users of designated tourist routes with a view in which the new scheme would not be a focal element but would be a notable element in the view; and
- Industrial / commercial buildings or educational/institutional buildings and their outdoor space with a view in which the new scheme would be a focal element in the view.

Low Sensitivity

- Users of main roads, arterial routes or public transport in which the new scheme would not be a notable element in the view but would be discernible;
- Industrial / commercial buildings or indoor workers with a view in which the new scheme would not be a focal element but would be a notable element in the view; and

- Users of recreational spaces where the main purpose of the recreational resource is not the enjoyment of the countryside.

Magnitude of Impact

- 2.3.16 Magnitude of impact considers the extent of development visible, the percentage of the existing view newly occupied by the proposals and the viewing distance from the receptor to the development. In this assessment magnitude is ranked as follows:

Major Magnitude

- Where the development would be the dominant feature or focal point and cause a substantial change to the existing view.

Moderate Magnitude

- Where the development would be a very noticeable feature or element within the view and cause a readily apparent change to the existing view.

Minor Magnitude

- Where the development would be a perceptible feature or element within the view but not alter the overall balance of features that comprise the existing views.

Negligible

- A small part of the project or part of it would be discernible, or at such a distance that it would be a barely noticeable feature of element.

No Change

- Where the development would cause no discernible change to the existing view.

Significance of Effect Criteria

- 2.3.17 The prime criteria used to evaluate visual effects relate to the extent to which existing views for key receptors, (such as residents, users of public facilities and visitors to open space and public areas), would change, taking into account landscape proposals and mitigation measures.
- 2.3.18 Other criteria used to ascertain visual effects include the size, elevation and proportion of the scheme in respect of the receiving environment and the degree to which activity within the receiving environment would alter, both during and post construction, and be visible. Cumulative visual effects on the baseline environment are also taken account of in respect of the proposals.
- 2.3.19 Effects can be detrimental where features or key characteristics such as established planting, old buildings or structures have to be removed, directly affecting the view or outlook of a given receptor. Conversely, effects can prove beneficial where derelict buildings or poorly maintained landscape features are restored, replaced or maintained, or where there is the introduction of new tree planting and a landscape structure where none currently exists, constituting a perceived improvement in the current view.

Significance of Effect Ratings

- 2.3.20 The findings are represented using a descriptive scale ranging from large - moderate - slight and adverse through neutral to an ascending scale of slight - moderate - large and beneficial. There is a further rating, very large adverse, which is used to indicate effects on a receptor of very high sensitivity, significantly affecting an existing view of very high value and quality. Such a rating would indicate that the effect is considered highly prejudicial in relation to the specific topic of visual effects.

- 2.3.21 The various levels of visual effect can be applied to individual properties, businesses, groups of housing, areas of open space and lengths of footpath. Explanation of the significance of effect ratings is provided below:

Large Beneficial Effect

- This would typically apply where a proposal leads to the removal of a significant eyesore such as a derelict site or buildings and incorporates landscape measures which substantially remodel and enhance the outlook for a large number of people, or where the proposal would cause a significant improvement in the existing highly sensitive view.

Moderate Beneficial Effect

- This would typically apply where visual intrusion associated with the existing view is noticeably relieved, or where the proposals would result in a noticeable improvement. It would also apply where the proposals include provision for landscape proposals which would largely reduce the visual intrusion of the existing sensitive outlook and enhance views for a considerable number of people.

Slight Beneficial Effect

- This would typically occur where existing visual impact associated with the current outlook is slightly relieved, or where the proposals would cause a barely perceptible improvement in existing receptor view. It would also apply where significant improvements in the view may occur from a receptor considered to be of low sensitivity.

Neutral Effect

- This would typically occur where implementation of the proposals would not result in a discernible improvement or deterioration in existing receptor view or outlook.

Slight Adverse Effect

- This would typically occur where the receptor is at some distance from the proposals, or where the proposal would not constitute a new point of principal focus. It would also occur where the proposal is closely located to the viewpoint but is seen at an acute angle and at the extremity of the overall available view, or viewed from rarely occupied upper storey rooms or less sensitive receptor types.

Moderate Adverse Effect

- This would typically apply where the proposals result in an obvious deterioration to the current outlook of a more sensitive receptor. It would also occur where large new structures are introduced as part of the proposals which may appear at distance but be positioned as a focal point in the field of view, or where the proposal can only be partially mitigated.

Large Adverse Effect

- This would typically apply where the proposal would cause a major deterioration in the current sensitive receptor's view or outlook, be positioned prominently within an existing view of local interest in a valued landscape, or where only selected elements of the proposal can be effectively mitigated.

Very Large Adverse Effect

- This would typically apply where the proposal would cause a highly prejudicial deterioration in the current highly sensitive view, be positioned prominently within an existing view of regional or national importance in a valued landscape, or where the proposal cannot be effectively mitigated.

- 2.3.22 Each of the receptors identified has been evaluated against the key visual criteria and has been allocated a significance of effect rating. The assessment then concludes with a brief discussion of the overall visual implications of the development proposal and a summary rating for the overall visual effects.

3 Baseline Environment

- 3.0.1 The purpose of the baseline assessment is to provide an understanding of the existing landscape and visual context of the receiving environment.
- 3.0.2 Key elements, characteristics and receptor viewpoints, important contributors in giving an area a sense of place, are identified and appraised using the criteria of character, quality, value and sensitivity to change. The assessment appraises the sensitivity to change and considers the capacity of the landscape or townscape to accept change of the proposed development type without consequential effects on character and visual amenity.
- 3.0.3 The existing wider context has been appraised from the national level through to the sub-regional level, to a local scale commensurate to the proposed development. This assessment sets the contextual background to the baseline receiving landscape of the proposed development. The section also describes the relationships between the receiving environment and sensitive visual receptor locations where applicable.
- 3.0.4 The proposed improvement runs through the centre of a landscape that continues for an extensive length of the North Wales coast. This is mainly a 1km wide coastal plain bounded to the north by the Menai Strait and to the south by the foothills of the Carneddau of north-west Snowdonia. The site lies between Traeth Lafan/Lafan Sands with its expansive mud flats and sands fully exposed at low tide and the partially wooded hills to the south, which peak at Moel Wnion approximately 2.5km away and at 580m above ordnance datum (AOD). The topography of the area is illustrated in the site photographs in Figures 5.3.2 – 5.3.5, Volume 1a.
- 3.0.5 The hills form the lowland slopes of the Carneddau and extensive views can be obtained from their higher slopes, looking north-west across the Menai Strait to Beaumaris and the Isle of Anglesey 5km distant and north-east across Conwy Bay towards the Great Orme and Llandudno.
- 3.0.6 The area's landscape quality was judged not to merit inclusion within the Snowdonia National Park when it was designated in 1949, but it is close to the boundary, as indicated on Figure 5.3.1, Volume 1a. The scheme would not pass directly through an area of statutory landscape designation, although an area of Special Landscape Value has been defined in the emerging JDLF. The area is also included within the non-statutory Register of Landscapes of Historic Interest in Wales.

3.1 *Baseline Conditions - Landscape Character*

- 3.1.1 LANDMAP is the national information system for Wales, devised by the Countryside Council for Wales, now Natural Resources Wales, for taking landscape into account in decision-making and studies are undertaken at a County or National Park scale throughout Wales. LANDMAP is a unique system, allowing information about landscape to be gathered, organised and evaluated into a nationally consistent data set.

Landscape Character Areas

- 3.1.2 The LANDMAP information is provided at a scale appropriate to the study area and has been used to describe the local baseline landscape character. Each Landscape Character Area (LCA) is visually and/or physically distinct from its surroundings. This distinction and determination of zoning references physical attributes such as existing water features, built form, landcover, woodland cover, land use, settlement pattern and accessibility. The wealth of physical attributes applied to each area can result in interfaces between LCA's and the wider landscape character areas not being defined as absolute.
- 3.1.3 The main characteristics of each local character are outlined below, incorporating an assessment of value, quality and sensitivity. Comment is made on the scale at which elements within each LCA matter, their scarcity and their ability to be replaced or substituted.

LCA 1 - Abergwyngregyn, Scarp slopes and Lower Plateau

- 3.1.4 A narrow belt of hill slopes rise sharply from the Wig Open Lowland Farmland on north westerly facing slopes rising from 30 – 200m AOD. The steeper slopes and more variable landform results in less intensive management, confined primarily to sheep grazing with greater occurrence of woodland and smaller plantations. The field pattern is ill-defined, irregular and frequently disrupted by streams, rocky outcrops and tracks, these becoming more frequent on the higher slopes. Field boundaries are mainly earth banks with hedgerows, although gappy and reinforced by fencelines, infrequent stone walls bound some of the local roads. The majority of landscape features with the exception of some of the older hedgerow and field trees could be substituted in the medium term, the trees being a feature replaced in the long term. The scarp slopes are shown in context on Existing Viewpoints 7, 8 and 9 on Figures 5.3.4 and 5.3.5, Volume 1a.
- 3.1.5 In common with the wider area the settlement pattern is one of sparse dwellings and farmsteads, the orientation of these is typically to the north and west as a result of the expansive views and strong visual links that exist with the lower slopes, coastal plain and Menai Strait. The southern edge of Anglesey is visible to the horizon.
- 3.1.6 The area is considered to be of good quality with the landscape being typical of the upland fringe landscapes frequently found in north Wales. The landscape is more heavily wooded in its appearance and its elevated position makes it visible from the plateau to the north making the area of **moderate sensitivity** to change.

LCA 2 - Wig, Open Lowland Farmland

- 3.1.7 A narrow strip of open farmland extends along the north Wales coast at this point. It is settled throughout with larger farms and dwellings and is typified by a medium sized, rectilinear field pattern, bounded by hedgerows with frequent mature hedgerow trees. Copses of trees and small pockets of remnant woodland remain giving the area an almost wooded appearance. The landscape management is given over to mainly grazing with infrequent arable land uses. The majority of landscape features with the exception of some of the older hedgerow and field trees could be substituted in the medium term, the trees being a feature replaced in the long term.
- 3.1.8 There are strong visual links to the hills that form adjacent character areas to the south and from the northern edge of the character area the higher slopes of these hills are revealed and a marked sense of openness and remoteness is felt. This sense of remoteness is one of the key features that contributes towards a sense of place, reinforced by the views of the Menai Strait and the hills to the south. The farmland character is shown in context on Existing Viewpoints 1, 2, 3, 4 and 6 on Figures 5.3.2 and 5.3.3, Volume 1a.
- 3.1.9 The area is crossed by the existing A55(T) and the Chester to Holyhead railway line, both of which are existing visual detractors within the landscape, in particular the A55(T) with its frequent traffic movements being visible within the wider character area. Despite the presence of the A55(T) this is a landscape that is fairly inaccessible, footpaths lack connectivity and farms and other property is accessed from private lanes directly from the main road. The A55(T) also marks the start of the transition to the adjacent hill slopes as the topography starts to rise to the south.
- 3.1.10 The area is considered to be of good quality with the landscape demonstrating a strong landscape framework interrupted only by the existing transport links. The landscape, although broadly flat and at a low elevation, forms the fringes to the Snowdonia National Park and represents the transition from hill form to coastal plain. The area is visible from higher ground to the south and would therefore be considered to be of **moderate sensitivity** to change.

LCA 3 - Moel Wnion Upland Grazing

- 3.1.11 This character area is formed by the rugged lower slopes of Moel Wnion as it rises to the south of the study area, eventually leading to the summits of the Carneddau which lie approx. 6km to the south. These upland slopes lack a sense of containment and are used primarily for sheep grazing. There is a lack of significant vegetation with grass, bracken and rocky outcrops prevailing. The scrubby vegetation

is substitutable in the short to medium term. Areas of heather moorland are more difficult to substitute and are likely to only be substituted in the medium to long term.

- 3.1.12 Landform gradually slackens as an open plateau is reached, this permits open and expansive views to the north, across the Wig Lowland Farmland to the Menai Straits and Anglesey stretching out beyond. These expansive views are impressive and contribute to a greater sense of elevation and remoteness.
- 3.1.13 The area is considered to be of good quality forming the northern fringes of the Snowdonia National Park and representing a mountainous landscape that is conspicuous to the surrounding landscape. The landscape is also considered to be **highly sensitive** to change due to its elevated position and exposed nature from a lack of coherent landscape framework.

LCA 4 - Traeth Lafan, Shallow Tidal Waters

- 3.1.14 The coastline varies from being approximately 600m – 1km to the north of the A55(T) and the gently sloping narrow beach/coastal fringe that gives direct access to intertidal coastal waters at high tide. The character changes as the tide recedes revealing the wide, open mud flats of Traeth Lafan/Lafan Sands, with SAC, SPA & SSSI designations. The footpath that runs along the length provides access throughout the character area and affords longer distance views to the hills to the south and Anglesey to the north and west. With its improved coastal footpath, this somewhat isolated coastal fringe presents attractions to ramblers, birdwatchers and other naturalists. The coastal fringe is shown in context on Existing Viewpoints 1-3 and 10 on Figures 5.3.2 and 5.3.5, Volume 1a.
- 3.1.15 The area is considered to be of very good quality and, although demonstrating little in the way of landscape structure, through its expanses of tidal mudflats it does contribute to the formation of a distinctive character. The area's promotion as a chain of nature conservation areas and recreational resource would suggest that the landscape has value at a regional level. The area is considered to have a **moderate sensitivity** to change.

LCA 5 - Abergwyngregyn

- 3.1.16 Although outside the study area, Abergwyngregyn is the only settlement of note in the immediate area. The centre of the village is a designated conservation area with a number of historical buildings and archaeological sites. However the A55(T) is not visible from any existing properties within the village. This is due to the elevation of the village, which is generally set below the A55(T) and the combined screening effects of the landform and vegetation associated with the roadside and adjacent property. As a result of this no further landscape appraisal of this area has been carried out.

Summary of Baseline Conditions - Landscape Character

Landscape Character Areas	Quality	Sensitivity to change
LCA 1 - Abergwyngregyn, Scarp slopes and Lower Plateau	Good	Moderate
LCA 2 - Wig, Open Lowland Farmland	Good	Moderate
LCA 3 - Moel Wnion Upland Grazing	Good	High
LCA 4 - Traeth Lafan, Shallow Tidal Waters	Very Good	Moderate

- 3.1.17 The landscape is a varied one; it is locally distinctive and clearly defined by the coastline to the north and prominent hillsides rising to the south. Land management techniques contribute to the nature of the landscape, defined by the rising landform forcing a change from the lowland plateau and dairy production to the north and the steep slopes and sheep grazing to the south.
- 3.1.18 Woodland forms a strong distinctive feature within the landscape, but does little to contain views due mainly to the rising landform. Managed hedgerows with mature trees form a strong landscape framework within which the existing A55(T) and railway are contained, although visually prominent in places.

- 3.1.19 From anywhere within the study area the landscape remains dominated by the moorland hillsides as they rise to the south, forming a very broad sense of enclosure and reinforcing the sense of the open coastal plain to the north.

3.2 Baseline Conditions - Visual Context

General Context

- 3.2.1 The context within which the scheme would take place has been fully described in Section 3.1 covering landscape character. This describes the nature and context of the proposed scheme and the structure and relationships between the varying features which comprise the baseline environment.

Broad Visual Context

- 3.2.2 The broad visual context has been identified initially through desk based review of information outlined in previous studies, and site survey work (refer to Figure 5.3.6, Volume 1a). The following sections describe the main locations and features identified through desk and site-based interrogation. Reference should be made to supporting panoramic photographs indicated on Figures 5.3.2 – 5.3.5, Volume 1a which depict the broad visual context of the study area.

Principal Topographical Viewpoints

- 3.2.3 The landscape is typified by a distinct change in topography as outlined in Section 3.1 Landscape Character. As a result there are a number of clearly identifiable topographical viewpoints from which the study area forms a distinctive component. In the context of the study area these are mainly distant views from elevated moorland to the south.

Principal Rights of Way and Public Highway Viewpoints

- 3.2.4 Principal rights of way and public highway viewpoints have been identified as lengths of pathway, track, bridleway and local highway which offer views of the study corridor to user groups. These are:
- The coastal path extending to the north;
 - Rights of way on higher ground to the south; and
 - Several locations along Roman Road

Further information on the location, extent and effects on footpaths can be found in Chapter 5.8 – Effects on All Travellers (ES, Volume 1).

Principal Visual Receptors

- 3.2.5 The following sections identify principal receptor locations neighbouring the proposed development site, from where views could potentially be attained. It also identifies prominent viewpoint locations which, from varying distances, would contain the proposed development in the overall outlook. The broad visual context is described for each, with particular reference to locations where there are groupings of visual receptors.
- 3.2.6 The generally sparse settlement pattern of the area results in a total of 20 property groupings with a visual appreciation of the proposed changes within the existing road corridor.

Public Rights of Way

- 3.2.7 There is a small network of footpaths scattered throughout the study area. Typically, to the north of the A55(T) corridor the footpaths follow field boundaries and tend to provide direct links to the coastline. On higher ground to the south the footpaths tend to be more sinuous following contours and shallow valleys and providing links to the moorland and mountains to the south.

Summary of Baseline Conditions - Visual Context

- 3.2.8 The study corridor is dominated by agricultural land uses and settlement patterns tend to be sparse and limited to isolated farmsteads and residential properties. The local landform rising to the south contains a number of these scattered receptors along with several footpaths with a visual appreciation of the study area. In contrast the coastal plain to the north features numerous hedgerows and trees that restrict views of the study corridor.
- 3.2.9 Overall, visual receptors are scattered throughout the study corridor reflecting the sparse settlement pattern typical of the area. Receptors vary in their sensitivity and are frequently dominated by existing views of the A55(T) corridor. A number of footpaths exist in the study corridor which have views of the existing road corridor.

Conclusions

Landscape Character

- 3.2.10 Overall the study corridor is formed by a coastal plain which forms a distinct change in landform as the slopes rise to the south and gives way from a defined landscape framework to a landscape that is more reflective of the steeply rising contours. This is further reflected in the change from intensive dairy production on the coastal plain to the rough grazing land on the more steeply sloping landform and moorland.

Visual Impact

- 3.2.11 Visual receptors are scattered throughout the study corridor reflecting the sparse settlement pattern typical of the area. Receptors vary in their sensitivity and are frequently dominated by existing views of the A55(T) corridor.
- 3.2.12 A number of footpaths exist in the study corridor and have a visual appreciation of the existing road corridor.

4 Description of Effects

- 4.0.1 The potential for significant effects to occur on the identified LCAs and visually sensitive locations varies within the study area. The significance of effect potentially resulting from the Proposed Improvement has been assessed using the defined significance criteria outlined in Section 2 - Stages in the Assessment Process, the results of which are described in detail below.

Key Issues

- 4.0.2 Key issues taken account of in the assessment of effects on landscape character and the degree of visual change, potentially both adverse and beneficial, comprise the following.

- Vehicular activity and movement;
- Horizontal and vertical alignment;
- Size, scale and appearance of earthworks;
- Degree of loss of existing components of the landscape; and
- Scope for mitigation strategies.

4.1 Assessment of Effects

- 4.1.1 The identification and evaluation of effects has been undertaken utilising the engineering description and layout configuration summarised in Chapter 2.0 - The Proposed Improvement., and as illustrated on Plans 2.2 to 2.7, Volume 1a.
- 4.1.2 The findings of the assessment are split into two sections – the effects on Landscape Character and Visual Effects. The assessment of the effects on the former relate to the predicted changes in fabric, character and overall quality as a result of proposal construction. The latter relate solely to predicted changes in outlook composition from locations afforded views of the existing landscape and the effects on identified receptors resulting from proposal construction.
- 4.1.3 The proposals would be finished to a high standard of design, using quality materials, and would be integrated into the surrounding environment through the adoption of a robust, sustainable mitigation planting strategy.
- 4.1.4 As the primary form of mitigation comprises the planting of new hedgerows and trees/shrubs the assessment undertaken for the winter in the year of opening also represents an assessment of effects, pre-mitigation. This is in accordance with the guidance (IAN 135/10 (W)), which requires the consideration of effects before mitigation measures have been implemented, the assessment of potential effects having effectively been undertaken pre-mitigation establishment.
- 4.1.5 For landscape, consideration is given to the change in the effects arising over time as mitigation strategies mature. Effects post construction have therefore been assessed assuming outline mitigation strategies described in Section 5 – Mitigation, are instigated during construction and fulfil their intended environmental function by Year 15 - The Design Year.
- 4.1.6 Mitigation strategies encompassing ecological-based design measures and measures to address flooding and water quality are shown in Figures 5.3.7 – 5.3.9, Volume 1a, refer to Chapters 5.4 – Nature Conservation and 5.10 – Road Drainage and the Water Environment (ES, Volume 1).
- 4.1.7 The cumulative effects of route construction and mitigation have also been considered, in terms of how they would merge into the surrounding landscape, and any benefits or disbenefits they would present to the ongoing development and evolution of the locality.

- 4.1.8 In undertaking the assessment of visual effects, impacts have been identified and quantified against four key phases in the overall project development and operation process. These phases also take account of outline mitigation and the overall change in outlook from affected receptor locations over time.

- During construction;
- Winter year of opening;
- Winter 15 years post opening; and
- Summer 15 years post opening.

4.2 Assessment of Effects - Landscape Character

- 4.2.1 The following provides a summary of the anticipated effects and resulting ratings on identified LCAs, describing the broad implications for character areas identified in Section 3.1 - Baseline Conditions.

LCA 1 - Abergwyngregyn, Scarp slopes and Lower Plateau

- 4.2.2 This rising landscape character has a wide appreciation of the surrounding landscape to the north, and is considered to be of good quality and of moderate sensitivity to change; views from this area are expansive with the existing A55(T) corridor featuring as just one element within the wider view. Proposed changes would occur on the fringes of the character area but would include some local improvements to access along Roman Road. The widening of Roman Road would require the translocation of an existing hedge and removal of a number of associated trees. However, considered in context with the slopes to the north and south and the remaining mature, deciduous trees this is not considered to be significant. Changes within this corridor as a result of the proposals would therefore not appear as readily perceptible changes and, as the proposed changes would occur to the fringes of the character area and within the context of the existing A55(T) corridor impacts are considered to be in the order of **negligible** in the winter year of opening and would reduce to **no change** into the winter and summer in year 15.

- 4.2.3 The overall effect on this landscape character area is considered **slight adverse** but this is anticipated to reduce to **neutral** in the design year as mitigation measures establish.

LCA 2 - Wig, Open Lowland Farmland

- 4.2.4 Changes to the existing landscape character, considered to be of good quality, are anticipated to be low in number. The formation of a new County road and access to Wig Farm would see the existing hedge retained from Junction 12 east to the western extent of carriageway improvements west of Tai'r Meibion farm, this hedgerow is currently heavily managed and has limited capacity to screen broader views to the north. East of this point, mitigation measures would seek to reinstate the edge of the existing woodland to the north and a new roadside hedge feature to the east to integrate the new agricultural access track into the local landscape framework, this would include a number of roadside trees to the eastern end of the scheme, opposite Bryn Meddyg cottages. In addition a new hedge would be planted to the north of the County road as far east as the Wig Crossing cottages. The inclusion of a new hedge would recommence at the access to Wig Farm and extend to the boundary of the University College Farm that marks the eastern limit of the scheme. Some minor impacts would occur during the construction period whilst disruption to the existing landscape framework occurs. The landscape character is considered to be of moderate sensitivity to change and post construction the overall impact on the local landscape character is therefore anticipated to be **negligible** in the winter year of opening and would reduce to **no change** into the winter and summer in year 15.

- 4.2.5 The overall effect on this landscape character area is considered **slight adverse** but this is anticipated to reduce to **neutral** in the design year as mitigation measures establish.

LCA 3 - Moel Wnion Upland Grazing

- 4.2.6 This elevated landscape character area, considered to be of good quality and highly sensitive to change, has some visual appreciation of the proposed changes within the existing A55(T) corridor to the north although no direct impacts on the landscape character area would occur. Perceived changes as a result

of the proposals would be very low from these areas and as such there is anticipated to be **no change** to the existing landscape character in the winter year of opening and would remain as such into the winter and summer in year 15.

- 4.2.7 The overall effect on this landscape character area is considered **neutral** and this would remain as such into the winter and summer in year 15.

LCA 4 - Traeth Lafan, Shallow Tidal Waters

- 4.2.8 The coastal fringe character area to the north of the existing A55(T) corridor is considered to be of very good quality and of moderate sensitivity to change. There would not be any direct impacts upon the landscape character area by the proposed changes. In addition changes within the existing corridor of the A55(T) would not be readily perceptible post construction and the resulting magnitude of impact would be no change. Therefore there is anticipated to be **no change** to the existing landscape character of this area in the winter year of opening and would remain as such into the winter and summer in year 15.

- 4.2.9 The overall effect on this landscape character area is considered **neutral** and this would remain as such into the winter and summer in year 15.

4.3 *Assessment of Visual Effects*

- 4.3.1 Visual appreciation of the proposed development associated with receptors and locations afforded distant views over 1km has not been assessed, as any material change in outlook would not be readily perceived from these distances.

- 4.3.2 The following provides a summary of the anticipated effects and associated ratings on identified visual receptors and describes the broad implications for receptors based on the locations identified in Section 3.2 - Baseline Conditions at a local level.

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
1	Ty'n - yr - Hendre Farm	1	Low	200m	<p>Ty'n-yr-Hendre Farm is located at the junction of two minor roads leading to the Tal-y-Bont Interchange whose buildings span between 75m to 200m from the centreline of the A55(T). The southern part of the farm is organised around a quadrant whose northeast lying side (that closest to the A55(T)) is separated from the minor road by a road side hedgerow. This southernmost part of the farm does contain small windows which look towards the A55(T) but the use of this building is not residential. Located 10m higher and 125m further south is a property likely to be the main residence, whose windows also look towards the A55(T). A block of trees are situated between the minor road and the A55(T) together with a large block of woodland above the property to the southeast.</p>	<p>Visual impacts. The proposed improvement at this point only relates to the provision of a County road/NMU/PMA which will run parallel, north of the existing A55(T) road, behind the existing hedgerow which will be retained. As a result, the block of woodland which lies to the south of the A55(T), between itself and the minor road will remain. There is the potential for a slight visual awareness of construction activities set beyond the edge of the existing woodland and hedgerows.</p> <p>Proposed Mitigation Measures. None required. It is the intention to establish a hedgerow on the northern side of the County Road/NMU/PMA.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
2	Tan – yr – allt Cottages	4	Low/Medium	100m	These cottages are located on the minor road which runs parallel to the southern side of the A55(T). The windows of these properties overlook the existing A55(T). Isolated trees and existing hedgerows provide some level of screening against the main road. A footpath runs to the left of these properties in a south-eastwards direction complementing a footpath which runs in a north-westwards direction on the northern side of the A55(T) road, almost opposite the cottages. A block of woodland lies immediately east of this footpath (County No.43).	<p>Visual impacts. The proposed improvement at this point only relates to the provision of a new footway along the access road immediately in front of the properties and to the provision of an NMU/PMA/County route which will run parallel, north of the existing A55(T), behind the existing hedgerow which will be largely retained. The land falls away behind the raised level of the northern side of the A55(T) opposite the cottages. This is particularly marked at and close to the woodland block. The raised level of the road here (in particular with the retention of the trees on the raised false cutting which are separate from the block of woodland itself) and the retention of the existing hedgerows will minimise any views, resulting in a slight adverse to negligible change in the views. The dominant feature of the view is the existing A55(T), which will remain in the foreground and more intrusive than the proposed NMU/PMA/County route.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
3	Tan – yr – Alt and Barn conversion	2	Medium	354m	The farm house of Tan-yr-Allt has front elevation views from both floors facing north overlooking the adjacent farm buildings and extending to the north overlooking the coastal farmland and the Menai Strait. Also present within the group is a recent conversion of former farm buildings to a residential dwelling, set on the rising land form above Tan-yr-Allt cottages. The end gable windows overlook the access track and the rear of the cottages, beyond which are direct views towards the A55 (T). Beyond the main road are extended views towards the Menai Strait and Anglesey in the distance.	<p>Visual Impacts. Within the limited views from the property are direct views towards the A55 (T) within which some awareness of construction activity and clearance of vegetation is likely to be perceptible. The new concrete barrier would highlight the central reserve within the view highlighting the horizontal nature of the road corridor. Post construction the elements of the view would not have substantially changed. The new NMU/PMA/County road would be barely perceptible beyond the existing corridor.</p> <p>Proposed mitigation measures. Replacement and new hedges would in the medium term effectively replace the existing features of the view.</p> <p>As a result and as such the magnitude of change would be negligible.</p>	Slight adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
4	Fedw/Hillcrest	2	High	697m	Two small cottages set high on the scarp slope with expansive views from the front elevation overlooking the north Wales coastal belt - distant views of Anglesey and Great Orme's Head. The A55(T) is a discernible feature within the view but is not a dominant one given the extended views. The front elevations have relatively small windows and external space is limited.	<p>Visual Impacts. Proposed work to construct the new NMU/PMA/County road would be perceptible within the wider and expansive views although vegetation clearance is unlikely to represent a significant modification to the elements within the views. Post construction the road is unlikely to be readily perceptible and this would continue as the replacement hedges mature to restore the existing views.</p> <p>Proposed mitigation measures. Replacement and new hedges would in the medium term effectively replace the existing features of the view.</p> <p>The magnitude of change would be no change.</p>	Slight adverse	Neutral	Neutral	Neutral
5	Ty'n Lon/Ty'n Lon Bam	2	Medium	377m	A detached house and adjacent bungalow have direct views to the north overlooking Tan-yr-Allt cottages beyond which are views of Tai'r Meibion and the A55(T). There are more distant views to the north towards the Menai Strait beyond the gently falling landform of the coastal farmland.	<p>Visual Impacts. The front elevation of both properties and in particular the detached house would have some awareness of construction activity occurring within the A55(T) corridor. Some awareness of the construction activity to Roman Road may also be apparent from the side elevation. Post construction there would not be a significant modification to the components of the view that are likely to give rise to significant effects.</p> <p>Proposed mitigation measures. Replacement and new hedges would in the medium term effectively replace the existing features of the view.</p> <p>The magnitude of impact would be negligible.</p>	Slight adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
6	Capel Gilfach	1	Medium	220m	A converted chapel – the property has skylights within its roof and the north facing elevation has been converted to have extensive windows facing out to benefit from the views of the Menai Strait and adjoining farmland. Traffic is visible moving on the A55(T) although the road surface is generally well screened by existing intervening hedges and hedgerow trees.	<p>Visual Impact. Some awareness of the construction activity is likely in the mid distance as works are undertaken to construct the NMU/PMA/County Road. However this would be occurring beyond the existing A55 (T) corridor and generally would not represent a significant modification to the existing components of the view. Post construction the components of the view would generally be unchanged.</p> <p>Proposed mitigation measures. Replacement and new hedges would in the medium term effectively replace the existing features of the view.</p> <p>The magnitude of impact will be low.</p>	Slight adverse	Neutral	Neutral	Neutral
7	Tai'r Meibion.	1	Low	27m	The property already suffers a high level of visual intrusion from the A55(T). The existing hawthorn hedge bordering the A55(T) is reinforced by an adjacent mature cherry laurel hedge, although the property suffers from not having any trees to the frontage. Large sycamores and beeches to the east and west of the farmhouse give a good degree of screening in summer, but leave it exposed in winter.	<p>Visual impacts. In view of the already exposed nature of the property, the road widening, central barrier, improvements to the existing layby and the extension of the accommodation subway would constitute moderate visual intrusion. Post construction the components of the view would generally be unchanged.</p> <p>Proposed Mitigation Measures. Replacement and/or translocation of hedges, with new woodland would in the medium term effectively replace the existing features of the view. The magnitude of change will be low.</p>	Moderate Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
8	Gilfach	1	Medium	400m	The property has a north-western aspect, resulting in views which are directed towards and over the A55(T). However, the existing hedgerows along the A55(T) screen much of the view and form one element in a wide sweeping view which stretches across Traeth Lafan/Lavan Sands to Anglesey.	<p>Visual impacts. Although the improvements to the A55(T) may result in a greater degree of vehicle roofs being discernible, this would be negligible in light of the replanting of the hedgerows. There will be some perception of the changes to Roman Road immediately to the front of the property during construction, although impacts are considered not to be significant. A combination of the aspect of the property, adjacent buildings and intervening vegetation would limit visibility of the proposed agricultural access track and any changes to the east of the property.</p> <p>Proposed Mitigation Measures. Replacement and/or translocation of hedges alongside the new A55(T) boundary would restore existing features of the view.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
9	Rallt-uchaf	1	High	310m	Cottages set high on the scarp slope with expansive views from the front elevation overlooking the north Wales coastal belt - distant views of Anglesey and Great Orme's Head. The A55(T) is a discernible feature within the view but is not a dominant one given the extended views. The front elevations have relatively small windows and external space is limited.	<p>Visual Impacts. Proposed work to construct the new NMU/PMA/County road would be perceptible within the wider and expansive views although vegetation clearance is unlikely to represent a significant modification to the elements within the views. Post construction the new road is unlikely to be readily perceptible and this would continue as the replacement hedges mature to restore the existing views.</p> <p>Proposed mitigation measures. Replacement and/or translocation of hedges would in the medium term effectively replace the existing features of the view.</p> <p>The magnitude of change would be no change.</p>	Slight adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
10	Crymlyn Farm	1	Medium	450m	<p>The enclosure of the farm buildings and the location of the intervening woodland are such that the only views of the A55(T) are through a fairly narrow window directly to the north. The distance to the A55(T) within this view is around 550m, and with the influence of middle distance hedgerows <i>etc.</i>, the visual intrusion caused by traffic on the A55(T) is currently insignificant. A rough tractor path marks its way through the field immediately in front of the property linking with the Wig Farm subway and access track.</p>	<p>Visual impacts The main impacts of the proposals would be the addition of the proposed farm access track link from Roman Road to Wig Farm underpass. This track would cut through the fields immediately in front of and to the sides of the property and partly follow an existing track. Currently these fields are used as pastoral agricultural land. The track would cross in front of the block of woodland which currently screens much of the views onto the A55(T). The track passes approximately 200m from the property at its closest point, and given the close proximity this will result in a significant degree of visual intrusion. However, as it will follow the well-worn existing tractor path it would minimise the impact slightly. Views of the track east of the property would be screened by mature trees. Changes to Roman Road would be screened by a combination of landform and intervening vegetation.</p> <p>Proposed Mitigation Measures. Any intrusion of the widened A55(T) would be compensated by re-planting and/or translocation of the roadside hedgerow.</p> <p>The magnitude of change will be low.</p>	Moderate Adverse	Slight Adverse	Slight Adverse	Slight Adverse

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
11	Wig Crossing Cottages	4	Low	350m	The front windows of the cottages face south-westwards along the same line, but to the west, of the A55(T), ensuring that any potential views of the A55(T) and proposed County road would be oblique. The presence of mature trees and hedgerows in the intervening landscape as well as the landform, effectively screen views towards the A55(T).	<p>Visual Impacts. The intrusion from the improvements to the A55(T) would be minor adverse as a result of the presence of site vehicles during the construction period. Residents would be able to gain oblique partial views of the proposed NMU/PMA/ County road, but in the long-term, once the northern hedgerow has been established, the impact of this track on views would be reduced.</p> <p>Proposed Mitigation Measures. No specific mitigation measures are required.</p> <p>The magnitude of change will be no change.</p>	Slight Adverse	Neutral	Neutral	Neutral
12	Wig Farm	1	Low/ Medium	110m	A high hedgerow and woodland belt effectively screen southern and western views towards the A55(T). There is also a line of existing mature trees to the south-east of the house, with 2 large horse chestnut trees in the field to the front. Although providing a good foil in summer, traffic can be seen to the south-east under these large tree canopies. The absence of a hedgerow adjacent to the A55(T) means that this exposure is more marked in winter allowing partial views towards the A55(T).	<p>Visual impacts. The main impacts of the proposals would be views of the elevated NMU/PMA adjacent to the A55(T). However, the distance from the NMU/PMA, the presence of intervening trees and vegetation, and the lack of a hedgerow at present combine to reduce the magnitude of what would otherwise be a moderate adverse impact.</p> <p>Proposed Mitigation Measures. The planting of a hedge to the boundary would reduce the magnitude of the impact.</p> <p>The magnitude of change will be low to no change.</p>	Moderate Adverse	Slight Adverse	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
13	Y Glyn Farm	1	Medium	360m	The farmhouse has a north-western aspect overlooking the road, but the A55(T) is only one feature in a wide, open panorama stretching across to Penrhyn Castle and over Traeth Lafan/Lafan Sands towards Anglesey. A number of mature trees in the foreground hedgerow help to break up the view, but the visual intrusion of the A55(T) is minor.	<p>Visual impacts. The addition of the junction and access track onto the A55(T) for use by this farm and the properties at Bryn Meddyg would result in a potential visual impact for upper storey views from Y Glyn Farm.. However, the convex nature of the landform in the intervening field projects views over and beyond the A55(T) from lower level views so the visual impact of the Proposed Improvement would be minor adverse.</p> <p>Proposed Mitigation Measures. A woodland and scrub mix would be planted at the new westbound access track. The planting of new hedgerows adjacent to the carriageways and new hedgerows/planting at the Bryn Meddyg access track would reduce visual impacts further.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Slight Adverse	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
14	No. 2 Bryn Meddyg	1	Low	20m	This is one half of the closest of any property to the westbound carriageway and, although separated by a garden wall and mature roadside hedge, suffers severe exposure to traffic passing directly in front. It is partially shielded to the east by the neighbouring property (No. 1) and a mixture of vegetation such as fir trees and rose bushes. To the west a line of mature trees on the boundary is a good foil to the effects of traffic in both directions, although this is less effective in winter.	<p>Visual impacts:</p> <p>1) Loss of trees: The partial loss of trees to the west as a result of construction of the access track would increase the degree of visual intrusion from the west. Intermittent existing vegetation would assist in minimising this impact and the views most affected would be frontal resulting in a minor magnitude of change.</p> <p>2) Changes within the existing A55(T) corridor including the addition of a concrete central barrier would be noticeable. However, given the existing presence of the A55(T) the magnitude of this impact is judged to be minor and resulting effects as slight/moderate adverse.</p> <p>Proposed Mitigation Measures. A combination of a screen fence and the planting of scrub and trees would limit visibility to the west and reduce the visual intrusion of the road. Important views beyond the A55(T) would not be substantially affected.</p> <p>The magnitude of change will be low to medium.</p>	Moderate Adverse	Slight Adverse	Slight Adverse	Slight Adverse

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
15	No. 1 Bryn Meddyg.	1	Low	20m	The house is shielded from the road to the west by No.2 Bryn Meddyg and to the east by dense, well-established woodland. The planting directly in front of the property next to the garden wall is not as well established as that of No. 2.	<p>Visual impacts. The Proposed Improvement would not affect the trees to the east and therefore would not cause a loss of screening. Changes within the existing A55(T) corridor including extending the width of the road and a concrete central barrier would have similar effects to those for No. 2 Bryn Meddyg and again, the already exposed nature of the frontage renders the magnitude of this as minor and resulting effects as slight/moderate adverse.</p> <p>Proposed Mitigation Measures. A combination of a screen fence and the planting of scrub and trees would limit visibility within acute views from the front of the property and marginally reduce the visual intrusion of the road. Important views beyond the A55(T) would not be affected.</p> <p>The magnitude of change will be low to medium.</p>	Moderate Adverse	Slight Adverse	Slight Adverse	Slight Adverse

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
16	Cwrtiau	1	High	564m	A single isolated dwelling positioned on the edge of the Menai Strait. The property has side elevation windows that have oblique views to the west that look across the Chester to Holyhead railway line. Beyond which are views of traffic moving along the A55(T). The landform quickly rises beyond this with pockets of woodland within the irregular field pattern giving way to the rounded landform of the summit of Moel Wnion.	<p>Visual Impacts. Construction of the NMU would be perceptible in the medium distance. It would however not be a significant change in the components of the view. Post construction the elements of the view would be largely unchanged with the NMU perceptible until mitigation measures mature and the concrete central barrier defining the linear nature of the road in the landscape is reduced.</p> <p>Proposed Mitigation Measures. The proposed hedge in combination with tree planting would filter/screen views of traffic on the A55(T).</p> <p>The magnitude of impact will be negligible</p>	Slight Adverse	Slight Adverse	Neutral	Neutral
17	Morfa Aber Car Park	1	Medium	592m	The small car park facilitates access to the nature reserve and footpath that extends along the coastline. Whilst views of the A55(T) exist the contrast between hill form of Moel Wnion and the expanse of the Menai Strait to the north is the dominant feature. The A55(T) and railway line are relatively minor elements within these views.	<p>Visual Impacts. The modifications to the components associated with the A55(T) would be relatively minor and whilst more readily perceptible during the construction phase the changes post construction would be barely perceptible. The presence of the NMU route and concrete barrier would slightly increase the awareness of the linear nature of the road within the landscape.</p> <p>Proposed Mitigation Measures. The proposed hedge in combination with tree planting would filter/screen views of traffic on the A55(T).</p> <p>The magnitude of impact will be negligible.</p>	Slight Adverse	Slight Adverse	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
18	The Old School	1	Low	33m	It is separated from the A55 by a fast-establishing planting belt on an embankment which completely screens the section of road to be improved.	<p>Visual Impacts. There is the potential for slight awareness of construction activities. However, post construction the inclusion of the concrete central barrier, and new NMU beyond the road would not result in significant visual impacts.</p> <p>Proposed Mitigation Measures. No mitigation measures are required.</p> <p>The magnitude of change will be no change.</p>	Slight Adverse	Neutral	Neutral	Neutral
19	Rhiwlas Henffordd	2	Medium	350m	Henffordd Cottage is the most northern of this cluster of four properties, two of which have views across the landscape, directed in a north westerly aspect towards the A55(T) Improvement section. Existing vegetation in the intervening landscape screens the A55(T). In particular, the interconnecting minor road, which also serves as a footpath, is heavily tree-lined on both sides and within cutting. This effectively screens views towards the section of the A55(T) to be improved for at least one of the properties.	<p>Visual Impacts. Of the three properties, Henffordd Cottage is likely to be exposed to the greatest impact due to its elevated position west of the heavily vegetated interconnecting access track to the property itself. However this impact would be negligible due to the existing vegetation in the landscape and the A55(T) forming just one element in the view.</p> <p>Proposed Mitigation Measures. None proposed.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
20	1-3 Station Road and Ty-Bricks	4	High	350m	A single isolated dwelling and cluster of three houses located on Station Road leading north west to the nature reserve car park. The dwellings have an awareness of the open countryside to the south and west and within these views are glimpses of traffic on the A55(T). The landform quickly rises beyond this with pockets of woodland within the irregular field pattern gives way to the rounded landform of the summit of Moel Wnion.	<p>Visual Impacts. Construction of the NMU would not be a significant change in the components of the view. The proposed central barrier would slightly increase the linear nature of the A55 in existing views. Post construction the traffic and the central barrier would remain visible and the NMU may be perceptible until mitigation measures mature.</p> <p>Proposed Mitigation Measures. The proposed hedge in combination with intermittent tree planting would filter/screen views of traffic on the A55(T).</p> <p>The magnitude of impact will be negligible</p>	Slight Adverse	Slight Adverse	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
A	North-west from the A55(T) opposite Tan-yr-allt cottages (County Footpath: Llanllechid No.43)	1	Medium	250-0m	This section of footpath runs south-east from the railway to the A55(T). A well-established woodland flanks the footpath to the north-east effectively screening views in this direction. An existing hedgerow lines the already improved section of the A55(T) where this footpath meets the dual carriageway.	<p>Visual impacts. The addition of the County road would mean that the small section of footpath adjacent to the A55(T) would be removed and replaced by the County road, with the intention that the footpath would then be diverted along the road and NMU/PMA. During construction and after, in the short-term, this would result in a moderate adverse impact on views to the south. Changes within the central reservation would be perceptible but would not be significant. However, once the new hedgerow on the northern side of the County road and replacement woodland planting within the verge is established, the impacts to the views would be reduced.</p> <p>Proposed mitigation measures. Establishing a new hedgerow on the northern side of the County road and replacement woodland planting.</p> <p>The magnitude of change will be low</p>	Moderate Adverse	Slight Adverse	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
B	South from Tan-yr-Alit Cottages to Tan-yr-Alit and Crymlyn (County Footpath: Llanllechid No. 50)	1	Medium	96-565m	Rising to the south the footpath follows the access drive to several properties before linking with a local track that joins the local road on the upper slopes to the south of the study area. As elevation rises there is an increased extent of view affording views across the coastal strip towards Anglesey in the distance.	<p>Visual Impacts – The northern end of the footpath would have some awareness of construction activity within the existing A55(T) corridor, this would diminish as distance increases only to be replaced by a greater field of view within which activities would remain perceptible. On the upper slopes and post construction the extent of the proposed changes would be very limited with few noticeable differences in the scale of the perceptible changes.</p> <p>Proposed Mitigation Measures – Proposals to retain as much of the existing vegetation in situ and/or replace sections of hedgerow would reduce the perception of change within the view.</p> <p>The magnitude of impact will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral
C	Ty'n Lon – Roman Road via Gilfach (County Footpath: Llanllechid No. 42)	1	Medium	322-384m	Broadly following the contours the footpath links Ty'n Lon with the Roman Road. It has far reaching and extensive views overlooking the coastal strip and Menai Strait within which the A55(T) is a noticeable and distinct feature.	<p>Visual Impact – The proposed changes and construction activity would be a perceptible feature although within the broader extent of view the potential significance of effect is somewhat limited.</p> <p>Proposed Mitigation Measures – Proposals to retain as much of the existing vegetation in situ and/or replace sections of hedgerow would reduce the perception of change within the view.</p> <p>The magnitude of impact will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
D	North to Tai'r Meibion (County Footpath: Llanllechid No. 42)	1	Low	350-0m	This footpath is shown as extending north down from Roman road towards Tai'r Meibion farm. Views extend across the local pastoral landscape to include the Menai Straits. In a northerly direction users of the footpath would be increasingly aware of the A55(T) extending to the east as they near the farm buildings. Vehicles are visible beyond the intervening hedgerow. The buildings associated with the farm would limit views to the west until north of the A55(T) to link with the footpath continuing to the west adjacent to the main alignment.	<p>Visual impacts. Overall awareness of the A55(T) does not significantly increase, but changes to the underpass and construction of the new County road would be noticeable. However, post construction the footpath would link to the new local County road via the underpass and impacts are considered to be slight. In addition, changes to facilitate the widening of Roman Road and provision of the agricultural access track would be locally significant to views to the south and east during construction.</p> <p>Proposed Mitigation Measures. The planting or translocation of hedgerows would result in only very slight changes to the views and only at a very local level immediately adjacent to the road.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral
E	Chester to Holyhead Railway	1	Low	325-450m	Running on alternating embankments and cuttings, the majority of which are vegetated by pioneer species, travellers are afforded some intermittent views of traffic moving along the A55(T) corridor.	<p>Visual impact. Fleeting views of construction activities and remaining traffic movements post construction, likely to be little awareness of the NMU/PMA/County road due to scale of changes. Post construction impacts are not considered to be significant.</p> <p>Proposed mitigation measures. Mitigation measures are not considered necessary.</p> <p>The magnitude of change will be low/no change.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
F	County Road South from Wig Crossing to A55(T)	1	Low	400 - 0m	Enclosed local road bounded by hedgerows and rising land form to the west is afforded only glimpsed views of moving traffic along the existing A55(T).	<p>Visual Impacts. Construction of new local access road would result in some impacts at a local level remaining enclosed by the existing hedgerows. Post construction local impacts would remain due to new local road and slight widening of the existing A55(T) although not considered to be significant within the context of the existing road corridor.</p> <p>Proposed mitigation measures. Replacement of existing hedgerows to the north of the County road would provide some relief to local road users and partially screen low level traffic.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Slight Adverse	Neutral	Neutral
G	North from Crymlyn Farm (County Footpath: Aber No. 1)	1	Low /Medium	500-0m	The higher section of this footpath has partial and restricted views north towards the A55(T), but the lower 200m have open vistas north and west over both carriageways. Views exist beyond the A55(T) towards Wig Farm with filtered views of the Menai Straits beyond.	<p>Visual impacts. The proposals would in part utilize the new access track to Wig Farm Changes within the existing highway boundary such as the new concrete barrier and widened carriageway would not feature significantly in the overall views. There would be greater access afforded to the footpath network to the north.</p> <p>Proposed Mitigation Measures. Re-planting and/or translocation of hedgerows to form the new highway boundary would maintain the overall landscape framework and screen views of the road.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
H	Roman Bethesda Crymlyn Road: to	1	Medium	700 - 550m	The majority of this road is enclosed within hedgerows with little appreciation for the wider landscape. A local focused view is afforded in the vicinity of Rallt-uchaf on a short steep hill, however due to elevated views and distance the A55(T) does not form a significant element within the view. There remains some appreciation of Roman Road although set down within the landscape and partially obscured by the existing roadside hedgerow and several mature trees.	<p>Visual Impacts. Majority of views are enclosed by the existing roadside hedgerows. A short section with broad views across the landscape to the north and focused on the Menai Strait and coastline to the north-west horizon would afford limited opportunity for views of changes within the A55(T) and localized changes to Roman Road and the inclusion of the agricultural access track, although all set within a very broad visual context. Impacts are not anticipated to be significant. Potential for slight awareness of additional traffic movements during construction phase, but distance would render these impacts barely perceptible.</p> <p>Proposed mitigation measures. Where feasible the existing hedgerow along Roman Road would be translocated to facilitate the widening with the hedgerow replanted elsewhere to restore local connectivity. In addition further planting to field boundaries would replace trees removed by local widening operations.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
I	Unclassified Road linking Crymlyn to Rachub (Includes part of the North Wales Path)	1	Medium	645m	This local road rises steeply to the south and west from Crymlyn, as it does so increasingly expansive views are revealed, partially obscured by existing roadside hedges and hedge banks the views open up where stone walls are reached and views along and across the coastal strip are afforded. This road forms part of the northern boundary to the Snowdonia National Park. The existing A55(T) represents a relatively distinctive linear feature running parallel with the Chester to Holyhead railway line.	<p>Visual Impacts – The construction activity within the existing A55(T) corridor would be perceptible for a short period although these views would be in the context of much broader views of the coastal strip and therefore are not anticipated to be significantly affected. Post construction the changes would be barely perceptible within the wider context.</p> <p>Proposed Mitigation Measures – The retention of existing vegetation and reinstatement of hedges where required would not substantially influence the perception of the existing road corridor within the broader views.</p> <p>The magnitude of impact will be negligible.</p>	Slight Adverse	Neutral	Neutral	Neutral
J	Roman Road: Abergwyngregyn to Crymlyn	1	Low	125 - 600m	Narrow road bounded by hedgerow with occasional gaps largely encloses the majority of views to the north of the A55(T) and beyond. This road forms part of the northern boundary to the Snowdonia National Park.	<p>Visual Impacts. The majority of views are enclosed by existing hedgerow bounding the local road therefore views of changes within the existing A55(T) corridor would be largely imperceptible with no significant impacts. Potential for some slight awareness of additional traffic movements during construction phase including construction of new farm access track.</p> <p>Proposed Mitigation Measures. Mitigation measures are not considered necessary.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
K	South from Bryn Gwylan (County Footpath: Aber No. 2)	1	Medium	375-0m	This footpath runs south from the railway to the A55(T). A narrow opportunity for a view exists south between the track and woodland adjacent to the former location of Wig Bach. The view then opens up eastwards over gently rising ground towards the A55(T). It is proposed to stop access to the A55(T) and instead link this footpath with the proposed NMU and so provide access to a greater area.	<p>Visual impacts. The retention of the existing hedgerows would minimise substantially any impacts caused by the A55(T) improvements. Changes within the central reservation would be perceptible but would not be significant. In the short term, the proposed NMU would result in a slight adverse impact which would in the long term, once the northern hedgerow was established, be significantly reduced.</p> <p>Proposed Mitigation Measures. Re-planting of hedgerows to form the new highway boundaries in combination with additional tree planting will limit broader awareness in the medium to long term.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Slight Adverse	Neutral	Neutral
L	Footpath between Henffordd and Y Glyn Farm (County Footpath: Aber No. 3)	1	Medium	550-375m	This footpath runs along the contour line from Plas Nant to the cluster of cottages, which includes Henffordd, passing south of Y Glyn Farm. It also connects with the unclassified Roman road, along a heavily vegetated interconnecting minor road emanating from Henffordd cottage. Open views are obtained looking over the A55(T) and out towards Anglesey. The Roman road, with its associated trees and hedges, forms an intermediate foreground feature of interest.	<p>Visual impacts. The distance from the A55(T) and the competing elements in the field of view would ensure that the Proposed Improvement would have little significance on the current level of visual intrusion. Photograph 1 on Figure 5.3.2, Volume 1a, although taken from slightly higher on the slope, illustrates that even with the existing hedge on the landward side, traffic is still visible at present.</p> <p>Proposed Mitigation Measures. None specifically proposed.</p> <p>The magnitude of change will be low.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
M	Coastal footpath (County Footpaths: Aber No's. 2 and 13, including the North Wales Path)	1	High	670-800m	The views from this footpath are full of contrasts – to the north are open views across the Menai Strait and distant views to Anglesey. To the south the landform of the coastal strip rapidly rises to the lower slopes of Moel Wnion with the rounded hill form forming a distinctive and visually prominent feature. The existing A55(T) represents a relatively discreet feature along which there are perceptible traffic movements that distract within the wider view.	<p>Visual Impacts: During construction modifications to the carriageway would not be readily perceived, however associated construction traffic movements would represent a perceptible change to the view. Post construction the visual intrusion of the road would not be substantially modified although the loss in part of the roadside vegetation and distant awareness of the new central barrier would be likely to slightly increase the perception of the highway itself.</p> <p>Proposed Mitigation Measures: Re-planting of hedgerows to form the new highway boundary, in combination with additional tree planting will limit broader awareness in the medium to long term.</p>	Slight Adverse	Neutral	Neutral	Neutral

Receptor Ref Code (See Figure 5.3.6, Volume 1a)	Receptor Details	Receptor Quantity	Sensitivity	Proximity to Proposals (metres)	Existing Visual Outlook	Views Relative to Development and Magnitude of Change	Visual Impact Rating			
							Views During Construction	Winter Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
N	Elevated footpaths associated with Moel Wnion including the North Wales Path and local links (County Footpaths: Aber No's 3 and 7, Llanllechid No. 7)	1	Medium	<500m	A number of footpaths associated with the elevated northern slopes of Moel Wnion (between 200 and 280m AOD) are afforded varying views depending on orientation across the plateau to the north, extending across the expanse of the Menai Straits, the mudflats forming the SSSI and the south eastern edges of Anglesey that form the significant horizon line. Views of the A55(T) interrupted by intervening vegetation, and filtered by roadside hedgerows are afforded at a distance. Although the alignment is perceptible in the view running broadly parallel with the equally visible railway line, detail of the road corridor is generally not considered to be significant. The awareness of the road gradually diminishes as the elevation of the viewing location increases, the broadening views of the Menai Strait commanding the onlooker's attention.	<p>Visual Impacts: During the construction phase views of activity within the highway boundary is considered to be visible when considered within the wider views. Post construction the slightly wider footprint of the road corridor and inclusion of the NMU/PMA/ County road to the north would be perceptible. The inclusion of a concrete central barrier would potentially contribute to defining the centre of the road and draw attention to the overall corridor, although the overall change to the view would be considered to be low.</p> <p>Proposed mitigation measures: The re-planting and/or translocation of the existing hedgerows and inclusion of scattered roadside trees would not only maintain the overall landscape framework but would also break views of moving traffic and interrupt any remaining views of the central barrier, diminishing its impact.</p> <p>The magnitude of change would be low.</p>	Slight Adverse	Neutral	Neutral	Neutral

4.4 *Representative Viewpoints*

- 4.4.1 A selection of panoramic photographs has been provided on Figures 5.3.2 – 5.3.5, Volume 1a representing typical views of the corridor. In consultation with key stakeholders including the Planning Officer at the Snowdonia National Park Authority several of these have been identified as representative viewpoints. A summary of the likely changes arising within these viewpoints, with mitigation in place and assuming approximately 15 years growth has been provided below:

Viewpoint 1

- 4.4.2 This viewpoint is taken from Roman Road to the west of Abergwyngregyn, and is looking north west towards the A55(T). This road marks the northern boundary to the Snowdonia National Park. The view is a relatively static one and the existing road corridor represents one of the few visual detractors, the existing traffic adding movement to the view highlighting the presence of the road.
- 4.4.3 Changes in the view arising from the proposed improvement would include the removal of the hedges bounding the existing road and operations within the context of the existing corridor to widen the carriageway and create the NMU to the north of the carriageway. Whilst the removal of the hedges is likely to slightly increase the awareness of the carriageway, these would be re-established along similar alignments and in the medium to long term the elements of the view would be largely unchanged and no significant effects are anticipated.

Viewpoint 2

- 4.4.4 This viewpoint is taken to the south of the proposed improvement on a local unclassified road that links Crymlyn with Rachub to the south west. This road marks the northern boundary to the Snowdonia National Park. This elevated view affords expansive views across the north Wales coastal strip, extending to Anglesey and Penrhyn Castle. The A55(T) extends across the entirety of the view, the moving traffic representing one of the few visual detractors.
- 4.4.5 Proposals to remove and re-plant hedges either side of the carriageway and the County road to the north would result in a slight increase in awareness of the corridor although once re-established the elements within the view are not anticipated to substantially change and no significant effects are anticipated on this view in the long term.

Viewpoint 3

- 4.4.6 Taken from a public footpath (Number 3) that traverses the scarp slope to the south of Glyn Farm, the view overlooks Roman Road, this forms the northern limit of the Snowdonia National Park at this point. The view is interrupted by several existing mature oak trees, beyond which the landform descends steadily to the A55(T). The road itself is a relatively discreet element within the view, partially obscured by roadside hedges, however traffic movements within the landscape highlight the presence of the road and represent the only significant visual detractor within the view.
- 4.4.7 Proposed changes would require the removal of the roadside hedges and their re-planting within a slightly wider road corridor, whilst the removal of the hedges in the short term is likely to marginally increase the awareness of traffic it is not anticipated that this would represent a significant view. The proposed construction of the NMU to the north of the widened carriageway would be beyond the road and set down within the landscape. Re-planting of the roadside hedges would restore the existing elements within the view and as a result no significant effects are anticipated to arise.

Viewpoint 8

- 4.4.8 This view, taken from adjacent to Wig Crossing cottages looks south west towards the A55(T) and the rising scarp slope forming the lower slopes to Moel Wnion. The existing road is largely screened by a gentle rise in the intervening landform and numerous mature hedgerow trees that occur around Wig Farm to the south east. In summer views of moving traffic are largely screened by this combination of landform and vegetation, however in winter and in the absence of foliage these views are anticipated to be more noticeable.

- 4.4.9 Proposed changes would require the removal of the existing roadside hedge and its reinstatement to the north along with the construction of the County road in the intervening space. Whilst there is unlikely to be a significant change in the view during the summer months it is possible that during the winter there would be a marginal increase in the awareness of the modified corridor, particularly to the south. This view is likely to be marginally changed it is not anticipated that this would represent a significant effect.

Viewpoint 9

- 4.4.10 This view is taken from the footpath (Number 2, part of the Wales Coast Path) that runs along the coast and faces south to include the summit of Moel Wnion, its lower slopes and the coastal strip that forms the fringes of the Snowdonia National Park. The view demonstrates how the heavily cultivated coastal land quickly becomes more wooded along the scarp slope before the open moorland is reached closer to the summit. The A55(T) represents a relatively discreet element within these views, with traffic moving through the landscape visible but at some distance (approximately 650m). Isolated farms dotted across the slope combine with some extensive areas of woodland and plantations to break up the slope above the road corridor and create interest to the observer.
- 4.4.11 Proposed changes would require the removal of the existing roadside hedge and its re-planting to the north along with the construction of the NMU in the intervening space. Whilst there is anticipated to be a slightly increased awareness of the corridor and in particular the elements of moving traffic this is not likely to represent a significant effect. Upon re-establishment of the roadside hedges the combination of the NMU and road corridor is not anticipated to markedly modify the elements of the view and significant effects are not anticipated.

4.5 Summary of Effects

Landscape Character

- 4.5.1 Of the four landscape character areas identified as part of the assessment two would be directly affected as a result of the proposed improvement, LCA 1 Abergwyngregyn Scarp slope and LCA 2 Wig Open Farmland. The majority of changes occurring along the boundary of these two areas are marked by the presence of the existing A55(T). Impacts on LCA 2 Wig Open Farmland are limited to the formation of the new County road, PMA and NMU, and whilst this would require the removal and re-planting of adjacent hedges, the core of the landscape character area would be unchanged and therefore no significant effects are anticipated. LCA 1 would be impacted upon by operations to widen the existing carriageway in addition to modifications to improve access along Roman Road and the formation of a new access track linking Roman Road with the Wig Farm underpass. Whilst some of the changes would be noticeable at a very local level the changes are not anticipated to significantly modify the way in which the wooded scarp slopes are perceived within the wider landscape and no significant effects are anticipated.
- 4.5.2 The other identified Landscape Character Areas are not anticipated to receive any direct impacts as a result of the proposed changes, although some visual appreciation would occur as the elevation to the south gradually rises. These changes have to be considered within the broadening views as the character areas expand and rise to the south and changes within the existing A55(T) corridor are generally considered to have an insignificant impact. Impacts are therefore considered to be neutral.

Visual Effects

- 4.5.3 The following table summarises the impact on identified visual receptors with an appreciation of the proposed improvement including the effects of the proposed mitigation strategy as outlined in Section 5.

	Construction	Year of Opening	Winter 15 Years after Opening	Summer 15 Years after Opening
Neutral	0 Receptors	22 Receptors	30 Receptors	30 Receptors
Slight Adverse	28 Receptors	11 Receptors	3 Receptors	3 Receptors
Moderate Adverse	5 Receptors	0 Receptors	0 Receptors	0 Receptors

Table 1 - Summary of Impacts on Visual Receptors

	Construction	Year of Opening	Winter 15 Years	Summer 15 Years
Neutral	0 Receptors	11 Receptors	14 Receptors	14 Receptors
Slight Adverse	13 Receptors	3 Receptors	0 Receptors	0 Receptors
Moderate Adverse	1 Receptors	0 Receptors	0 Receptors	0 Receptors
Large Adverse	0 Receptors	0 Receptors	0 Receptors	0 Receptors

Table 3 - Summary of Impacts on Footpaths, local roads and railway

- 4.5.4 The assessment of visual impact on affected receptors across the study area has demonstrated that the magnitude of impact is generally low, whilst receptors themselves are of variable sensitivity to change.
- 4.5.5 The nature of the scheme and proposal to include a new County Road/PMA/NMU to properties, widening of Roman Road and provision of a new footway, along with changes to the central reservation represent small scale changes to the existing views on the whole. The exceptions to this are isolated properties immediately to the north of the existing A55(T), that are likely to be afforded views of the new PMA and NMU in relatively close proximity and updates to the central reservation to include a solid restraint system. These changes are considered in the context of the existing effects of the A55(T), but with the potential for an increased awareness of the road corridor.
- 4.5.6 Other properties on rising ground to the south of the A55(T) have a varied outlook, depending on orientation, vegetation and elevation. The rise in elevation generally affords properties wider views and several have expansive views across the local landscape to the north and the coastline beyond. Within these views the A55(T) constitutes a small component and changes within this corridor are generally considered to be of a low magnitude. Mitigation measures to retain existing vegetation where possible would reduce the overall impact on views to neutral for the majority of these receptors.
- 4.5.7 Public rights of way with views of the study area and proposed changes are of medium sensitivity to change on the whole. Views of the existing A55(T) detract from views from footpaths immediately adjacent to the A55(T) whilst elevated views have the potential to view the A55(T) and changes as a component within the wider views comprising the Menai Straits and Anglesey forming a significant horizon line.
- 4.5.8 Construction activities would be visible from several of the footpaths as they interface with one another resulting in impacts that range between slight and large adverse. However, post construction and with the proposed mitigation measures in place these are likely to be reduced significantly to neutral.
- 4.5.9 The majority of local roads are enclosed by existing hedgerows with limited opportunity for broader views of the local landscape including the A55(T). The exception to this will be Roman Road with localised widening resulting in moderate adverse impacts during the construction phase, reducing to neutral/slight adverse during the operational phase. A minor road to the Wig Crossing Cottages the north of the A55(T), referenced as F on Figure 5.3.6, Volume 1a, would have the potential for user's increased awareness of the construction activities to form the proposed NMU/County road but impacts are not considered significant.

5 Mitigation

5.0.1 Mitigation measures form an integral part of the overall road design proposals. They comprise a combination of earthworks, fencing, planting, grassland measures and other specific habitat creation measures (refer to Chapter 5.4 – Nature Conservation, ES, Volume 1), based on two broad objectives. These are:

- Successful integration of the new route into the existing local landscape structure. This may include enhancement of the local landscape or specific features where appropriate; and
- Mitigation of localised landscape character and visual impacts identified during the undertaking of the environmental assessment by the creation of a strong, ecologically-based landscape framework, developed to integrate with the local retained landscape features.

5.0.2 The following section describes the principles that underscore the specific proposals for the proposed route and the components that would be adopted to establish an appropriate landscape structure as part of the scheme. This is followed by a description of the intended environmental functions, their objectives and the key features proposed throughout the length of the scheme.

5.1 *Mitigation Approach*

5.1.1 The key issues surrounding the proposed design and engineering which have shaped the approach to mitigation for Landscape Effects are as follows.

- Direct loss of existing hedgerows, woodland and scrub planting as a result of changes within the existing road corridor; and
- Loss of existing viable agricultural land as a result of the new County Road/PMA/NMU.

Design Principles

Outline Mitigation Measures

5.1.2 The following forms of outline mitigation measures have been utilised as part of the overall mitigation strategy:

- Planting;
- Restoration/retention of hedgerow patterns through new planting and in selected locations the translocation of existing hedgerows; and
- Creation of ecological diversity and interest.

Landscape Design Principles

5.1.3 The landscape proposals have been developed with reference to DMRB Volume 10 - Environmental Design (The Good Roads Guide)⁵. The following principles have guided the overall landscape design approach adopted in the assessment:

- To ensure that the proposed changes to the road alignment achieves best fit with local landform and respects existing landscape character;
- To conserve existing planting as far as is possible and enhance the existing planting structure, where appropriate;
- To optimise protection for residents and users of recreational features through the use of earthworks and planting; and

⁵ Design Manual for Roads and Bridges: Volume 10 – Environmental Design (The Good Roads Guide) (1993-2006), published by HMSO.

- To minimise loss or damage to sites of ecological interest and enhance local diversity, where appropriate.

Earthworks Principles

- The design of the road corridor profile has been undertaken to safeguard locally important vegetation with screening capacity.

Planting Principles

5.1.4 The following principles have guided the overall planting design approach adopted in the assessment:

- Retention of existing trees, hedgerows and vegetation as far as is practical, augmented by the introduction of new hedgerows to restore linkages between severed hedgerows;
- Where appropriate and where the condition of hedge is suitable, the relocation of existing hedgerows to preserve both local vegetation characteristics and ecological resources;
- Avoidance of planting across open tracts of land other than where planting is required for essential screening purposes;
- Use of visually interesting soft landscape elements to establish local identity and benefit the user's experience of the scheme; and
- Utilisation of ecological principles in developing the planting proposals to address screening / integration and biodiversity issues, refer to Chapter 5.4 – Nature Conservation (Volume 1, ES).

Environmental Functions

5.1.5 Environmental functions are ascribed to specific hard and soft elements to reflect their intended function within the overall mitigation strategy. They also serve to inform a proposal's design and may influence any future maintenance techniques over the longer term.

5.1.6 The detailed proposals accord with the following environmental functions and references described in DMRB Volume 10: Section 0, Part 2 (HA87/01):

- Visual Screening (EFA);
- Landscape Integration (EFB);
- Nature Conservation and Biodiversity (EFD); and
- Visual Amenity (EFE).

5.1.7 It is important to note that specific elements within the mitigation strategy can have both a primary and secondary function, e.g. planting which is proposed primarily to serve as a visual screen (EFA) can also have secondary landscape integration (EFB) functions. The fulfilment of an environmental function is also not restricted to one type of feature or element - it may involve a combination of several types, e.g. planting with earthworks. As stated above, all of the mitigation elements developed for the scheme have also taken cognizance of ecological principles and functions during design development.

Landscape Elements

5.1.8 Landscape elements are divided into broad classification types which are then sub-divided into detailed design elements based upon their stated function. The following sections describe the proposed landscape types which have been adopted as part of the mitigation strategy to fulfil environmental functions.

Planting Types

- 5.1.9 A number of planting and seeding forms have been adopted to reflect the identified landscape character found throughout the length of the road corridor. These are based on landscape elements as described in DMRB Volume 10, Section 0, Part 3 (HA88/01), as indicated below.

Grassland (LE1)

- 5.1.10 Two types of grassland mix are proposed:

- Species Rich Grassland (LE1.3) - This would take the form of specifically selected 'wildflower mixes' appropriate to the location and applied across the verge on nutrient poor subsoils. The composition of the mixes would include species that would make a positive contribution to The Action Plan for Pollinators in Wales, published by the Welsh Assembly Government in 2013. The composition of the wildflower mix to deliver LE 1.3 would be identified at the detailed design stage;; and;
- Open Grassland (LE1.6) - This would typically be a standard mix used for the areas to be returned to agriculture.

Native Planting (LE2)

- 5.1.11 Four types of native planting are proposed:

- Woodland (LE2.1) - Planting comprising a mix of transplants, whips and feathered trees using climax tree species and under-storey where appropriate to establish multi-layered woodland with a mix of native species dominated by oak. This mix is proposed to form a landscape framework along the route and at integral locations. It would be used to create robust planting in keeping with the surrounding native woodland and vegetation that would have been the visually dominant habitat type prior to the establishment of successful pastoral activity;
- Shrubs (LE2.6) - Planting comprising native, lower growing shrub species common in the locality. This mix is proposed where taller tree species growth is not deemed necessary or where areas containing built form require softening. It is also applicable in areas proposed to provide some ecological diversity or foraging habitat for wildlife; and
- Scattered Trees (LE2.7) - Planting comprising a mixture of transplants, whips and feathered native deciduous tree species, forming or capable of forming small scattered groupings. This type is proposed at interface locations such as hedgerows and along cutting slopes where dense planting is not deemed appropriate. Scattered trees are also proposed to augment lower growing shrub species, where appropriate.
- Native Hedgerow with Trees (LE4.4) - Planting comprising mixed hedgerows containing common individual hedgerow trees. This planting is proposed where linkages to existing field patterns are to be restored, and in locations where the route severs existing fields and boundaries. It would also be used to strengthen a pattern that has diminished in recent years, or where woodland planting would appear uncharacteristic with the open agricultural landscape that surrounds the road corridor. Mixed species hedgerows with hedgerow trees are also proposed to support the interests of landscape and ecological diversity.

5.2 Detailed Mitigation Proposals

- 5.2.1 Mitigation measures for the proposed improvement have been developed as part of an iterative process informed by the results of surveys for landscape character, visual impacts and ecological impacts all complementing the engineering requirements of the scheme. In developing specific mitigation proposals broad principles have been applied to landscape elements, these are:

Hedgerows

- Where feasible it is proposed to translocate (move back) an existing hedge along approximately 870m length of the widened Roman Road. Where this is not considered feasible hedgerows would be replanted using existing locally occurring species. Existing gaps in the hedgerows will also be in-filled with species in keeping with the adjacent hedgerow;

- Hawthorn is the dominant hedge species and would remain as such, whilst other species, including Elder (*Sambucus nigra*), Dog-rose (*Rosa canina*), Hazel (*Corylus avellana*), Holly (*Ilex aquifolium*) and Sessile oak (*Quercus petraea*) planted as a hedgerow tree, may be included to enrich the species diversity. Other species such as honeysuckle (*Lonicera periclymenum*), field rose (*Rosa avensis*), Field maple (*Acer campestre*), Wild privet (*Ligustrum vulgare*) and Crab apple (*Malus sylvestris*) may also be included within hedgerow mixes although at much lower proportions;
- Ash (*Fraxinus excelsior*), Ivy (*Hedera helix*), Blackthorn (*Prunus spinosa*) and Blackberry (*Rubus fruticosus*) would not be introduced, although it is recognised that these may well establish naturally over time;
- Sessile oak would also be planted and managed as hedgerow trees in some hedgerows to reflect typical hedgerow structure and local occurrence in the wider hedgerow network; and
- Planting density: two offset rows of plants are proposed, with 200 – 300mm between rows and plants at 330mm centres along the rows, yielding a planting density of 6 plants per metre run.

Woodland

- Woodland planting would be based on existing locally occurring species, based on a survey of locally occurring adjacent woodland.

Tree Groups

- Occasional individual specimens of Oak and Ash exist on both sides of the road and would be lost to the scheme. It is not proposed to replicate these but to introduce small groups of trees within the hedgerow mix and maintain to promote the establishment of these as hedgerow trees; and
- Larger numbers of trees, comprising replacement Oak (Sessile), Rowan (*Sorbus aucuparia*) and Field maple are proposed adjacent to the west of No's 1 and 2 Bryn Meddyg to reflect the existing occurrence of Oak and Ash that is present along the current cutting slope, which would also add interest and diversity to the views from the A55(T).

- 5.2.2 In translocating/replanting the hedgerow along Roman Road a number of mature trees would require removal. These would be replaced using feathered stock appropriate to the location in order that they can be easily recognised as such during routine hedgerow trimming operations.
- 5.2.3 The generally small scale nature of the Proposed Improvement requires a subtle approach to the mitigation. As a result of this the main strategy in the development of the landscape mitigation proposals has been the retention where possible of the existing hedgerow features that contribute significantly to the local landscape character. Where this is not feasible replacement hedgerows are proposed.
- 5.2.4 Along significant lengths of the scheme the new County road/PMA/NMU will be placed immediately adjacent to the main alignment. The re-planting of the hedgerows will therefore move the hedgerow away from the existing carriageway by up to 10 metres to allow sufficient space for the new hard strips and verges to be constructed. This would retain important landscape and ecological features and provide future screening and opportunities for wild flower seeding where appropriate.
- 5.2.5 Notable new areas of planting include a belt of shrub and woodland planting proposed between the existing A55(T) and the new local access lane leading to No's 1 and 2 Bryn Meddyg. This belt of planting supplemented by scattered individual trees would, given a period of time, soften the appearance of the proposed screen fence and provide a visual screen to the local access road, the A55(T) and the wider landscape. It would also provide a link with a small piece of woodland that extends to the back of the properties.
- 5.2.6 Improvements to the existing layby west of Tai'r Meibion will require the clearance of existing scrub and the widening of the existing embankment. Mitigation measures will comprise a new small block of woodland that will tie into the larger existing block that exists to the north.

- 5.2.7 A number of scattered trees are proposed elsewhere along the scheme to the north and south of the A55(T), west of the properties at Bryn Meddyg and in field boundaries on higher ground to the south. These would seek to replace trees removed by the Proposed Improvement and provide some integration of the scheme into the local landscape, whilst providing some interruption to views of the A55(T) from higher ground and receptors to the south.
- 5.2.8 All planting would be subject to a three year establishment period, during which the planting would be monitored and additional or replacement planting would be provided where planting has failed to establish successfully.

Residual Impacts

- 5.2.9 Residual impacts are those that remain despite a mitigation strategy and measures aimed at alleviating identified impacts. The landscape and visual impact assessment and tables identify impacts in the Design Year for winter and summer; these impacts constitute the residual impact.

We have used our reasonable endeavours to provide information that is correct and accurate and have discussed above the reasonable conclusions that can be reached on the basis of the information available.

6 References

Introduction

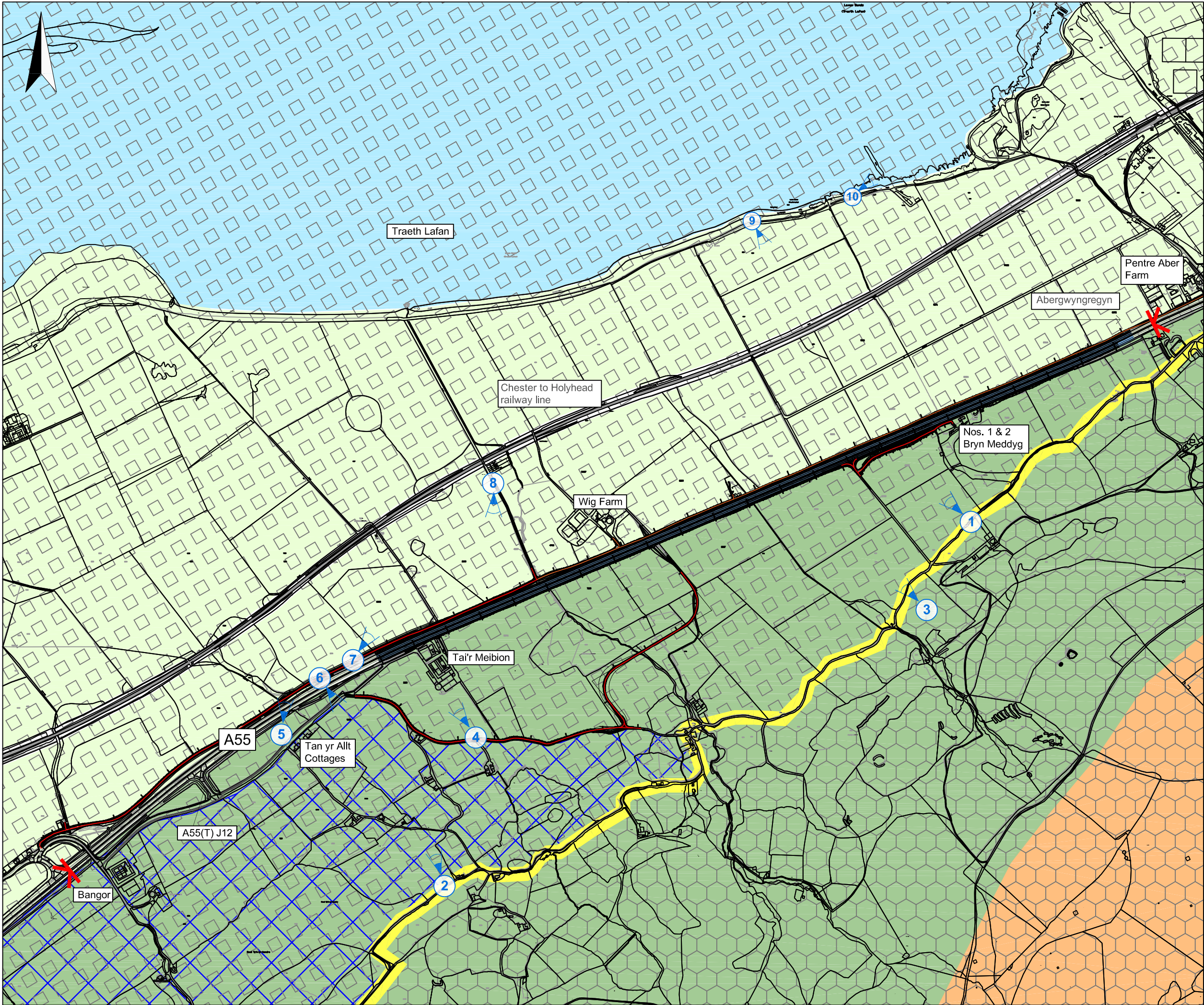
6.0.1 The following is a comprehensive summary of references and material used to assist in the completion of this section of the assessment.

- Interim Advice Note 135/10(W) – Welsh Government – April 2014
- Design Manual for Roads and Bridges - Volume 10, published by Her Majesty's Stationary Office (HMSO) (1993 - 2005).
- Design Manual for Roads and Bridges - Volume 11, published by Her Majesty's Stationary Office (HMSO) (1993 - 2005).
- Guidelines for Landscape and Visual Impact Assessment (Third Edition), published by the Landscape Institute and the IEMA (2013).
- Landscape Character Assessment: Guidance for England and Scotland published by Scottish Natural Heritage and the Countryside Agency (2002) (now Natural England).
- Planning Policy Wales – Welsh Government (July 2014)
- Welsh Transport Analysis Guidance (WeITAG), published by the Welsh Government (2014).
- Gwynedd Unitary Development Plan (2001 – 2016) – Gwynedd Council
- Emerging Joint Local Development Plan – Gwynedd Council and Isle of Anglesey County Council

6.0.2 The following UK legislation (published by HMSO) and planning guidance (published by the Office of the Deputy Prime Minister (ODPM)) was also used to assist in the completion of this section of the assessment.

- Countryside and Rights of Way Act 2000.
- Countryside Act 1968.
- Environment Act 1995.
- Hedgerows Regulations 1997.
- National Parks and Access to the Countryside Act 1949.
- Town and Country Planning Act 1990.
- Wildlife and Countryside Act 1981.
- Technical Advice Note 5 – Nature Conservation and Planning
- Technical Advice Note 18 – Transport 1998

6.1 ***Support Material***
Figures



KEY LOCAL LANDSCAPE CHARACTER AREAS

- Snowdonia National Park boundary
- Extent of proposed improvement
- Photograph locations
Refer to figures 11-16 for photographs
- Gwynedd Landscape Character Area: 'Bangor Coastal Plain'
- Snowdonia Landscape Character Area: 'Ucheldir Y Gogledd'
- Gwynedd Special Landscape Area

Areas taken from LANDMAP; <http://landmap.ccw.gov.uk>

- LCA 1 - Abergwyngregyn Scarp Slopes and Lower Plateau
- LCA 2- Wig, Open Farmland
- LCA 3 - Moel Union, Upland Grazing
- LCA 4 - Traeth Lafan, Inter Tidal Estuary

Sellwyd ar fap yr Arolwg Ordnans gyda chaniellod Rheolwr Gwasg y Mawrthys.
Cadw'r Hawffraint y Goron.
Mae atgynhyrchu heb awdurdod yn torri hawffraint y Goron a gall arwain at erlyniad neu achos ailfil.
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SCALE: 1/10000

FIGURE 5.3.1
LANDSCAPE CHARACTER AREAS,
DESIGNATIONS & VIEWPOINT
LOCATIONS

VIEWPOINT 1 - Existing view North West from Glyn @ approx 70m AOD



VIEWPOINT 2 - Existing view North from Coed Ty'n-yr-hendre @ approx 120m AOD



VIEWPOINT 3 - Existing view North from footpath adjacent to Crymlyn Oaks @ approx 90m AOD



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Tai'r Meibion Improvement

NOT TO SCALE

FIGURE 5.3.2
EXISTING VIEWPOINTS

VIEWPOINT 4 - Existing view North West from Gilfach, with Tai'r Meibion in the foreground @ approx 50m AOD



VIEWPOINT 5 - Existing view North from footpath adjacent to and overlooking A55 @ approx 35m AOD



VIEWPOINT 6 - Existing view South East from northern edge of A55 carriageway looking towards Snowdonia National Park @ approx 30m AOD



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Tai'r Meibion Improvement

NOT TO SCALE

FIGURE 5.3.3
EXISTING VIEWPOINTS

VIEWPOINT 7 - Existing view North West from farm access track adjacent to A55 @ approx 30m AOD



VIEWPOINT 8 - Existing view North East from Wig Crossing Cottages looking towards the National Park @ approx 20m AOD



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FIGURE 5.3.4
EXISTING VIEWPOINTS

VIEWPOINT 9 - Existing view South East from coastal footpath looking towards National Park @ approx 5m AOD



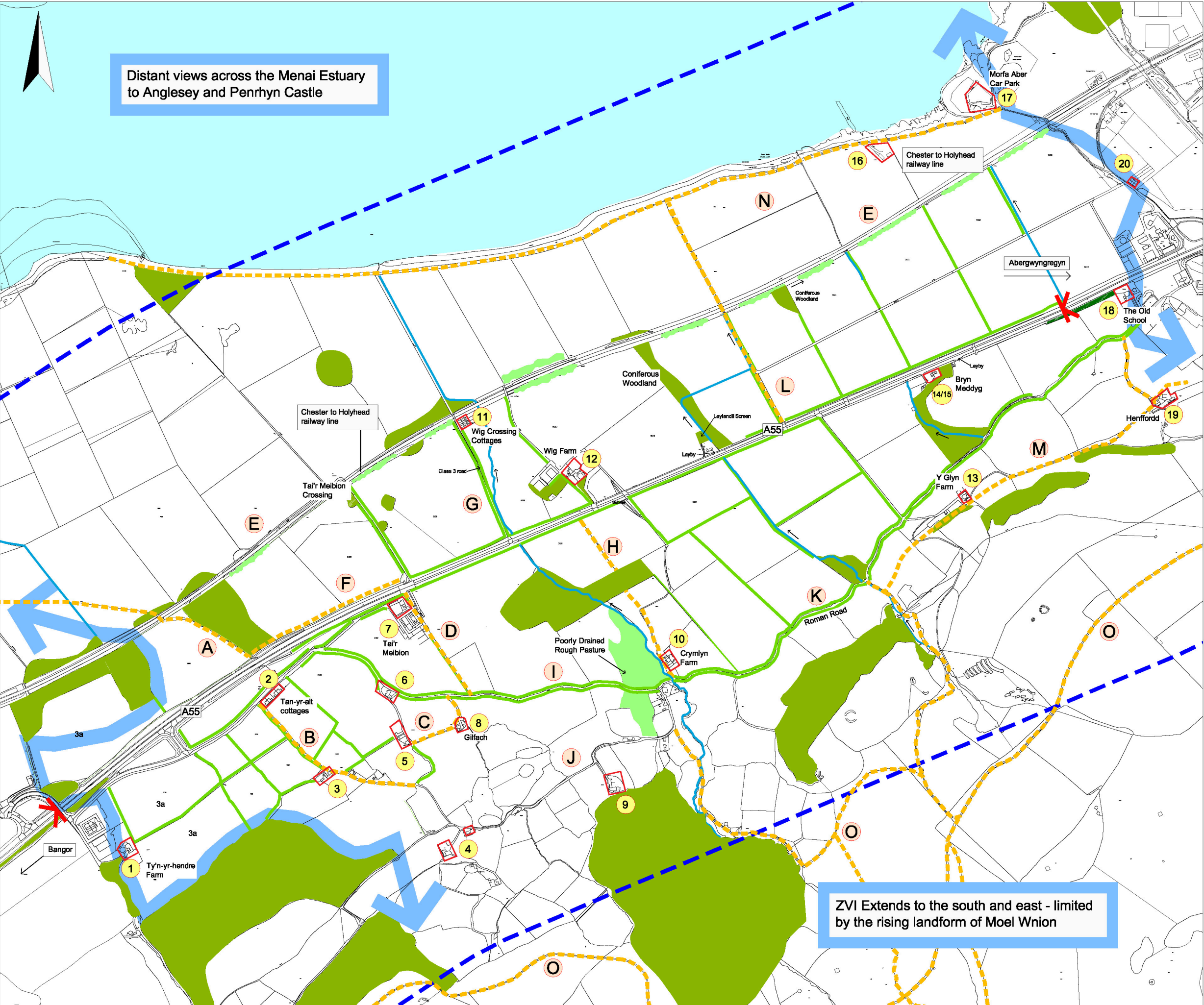
VIEWPOINT 10 - Existing view North East from coastal footpath looking across the Lafan Sands @ approx 5m AOD



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FIGURE 5.3.5
EXISTING VIEWPOINTS



KEY

LANDSCAPE ANALYSIS

- Study Area (1km Buffer)
- Extent of Proposed Improvement
- Residential Visual Receptors
- Highway Receptor References
- ZVI (Zone of Visual Influence)
- Mixed woodland (Coniferous where indicated)
- Scrubland and scattered trees
- Mature hedgerows
- Water courses with direction of flow
- Footpaths

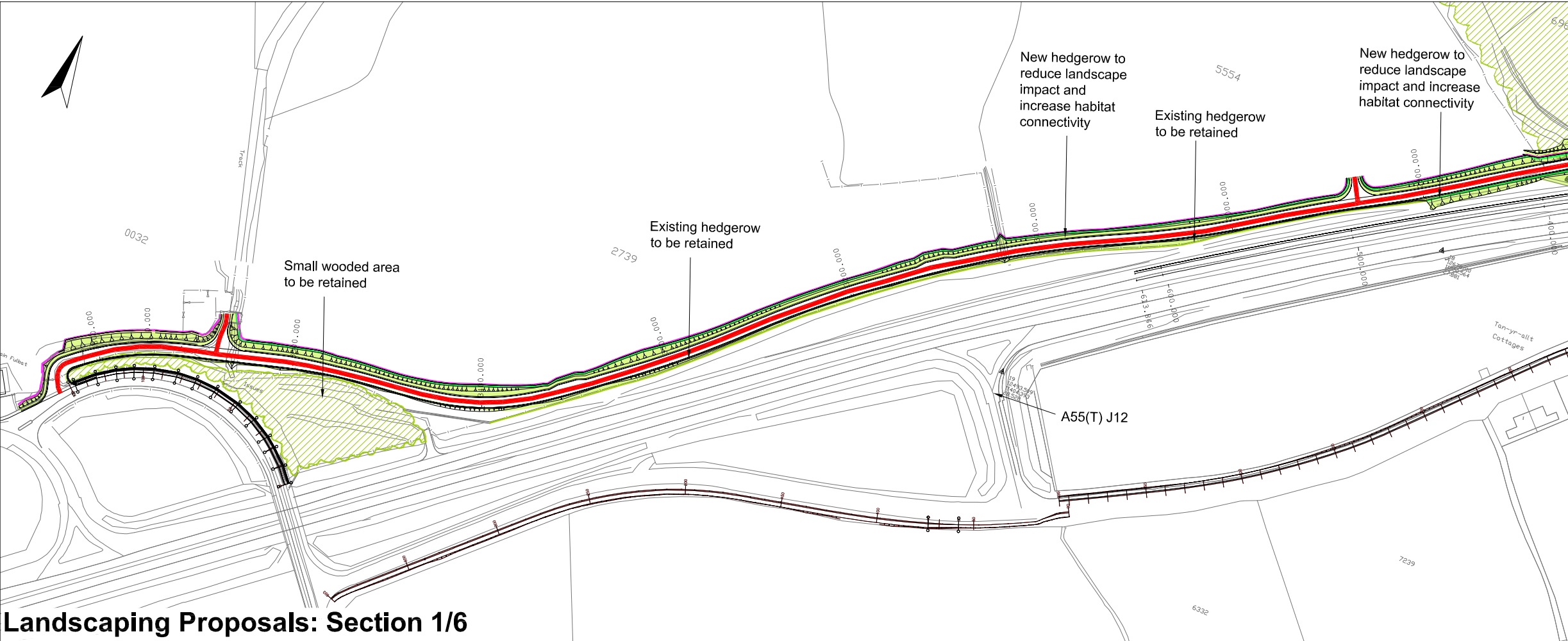
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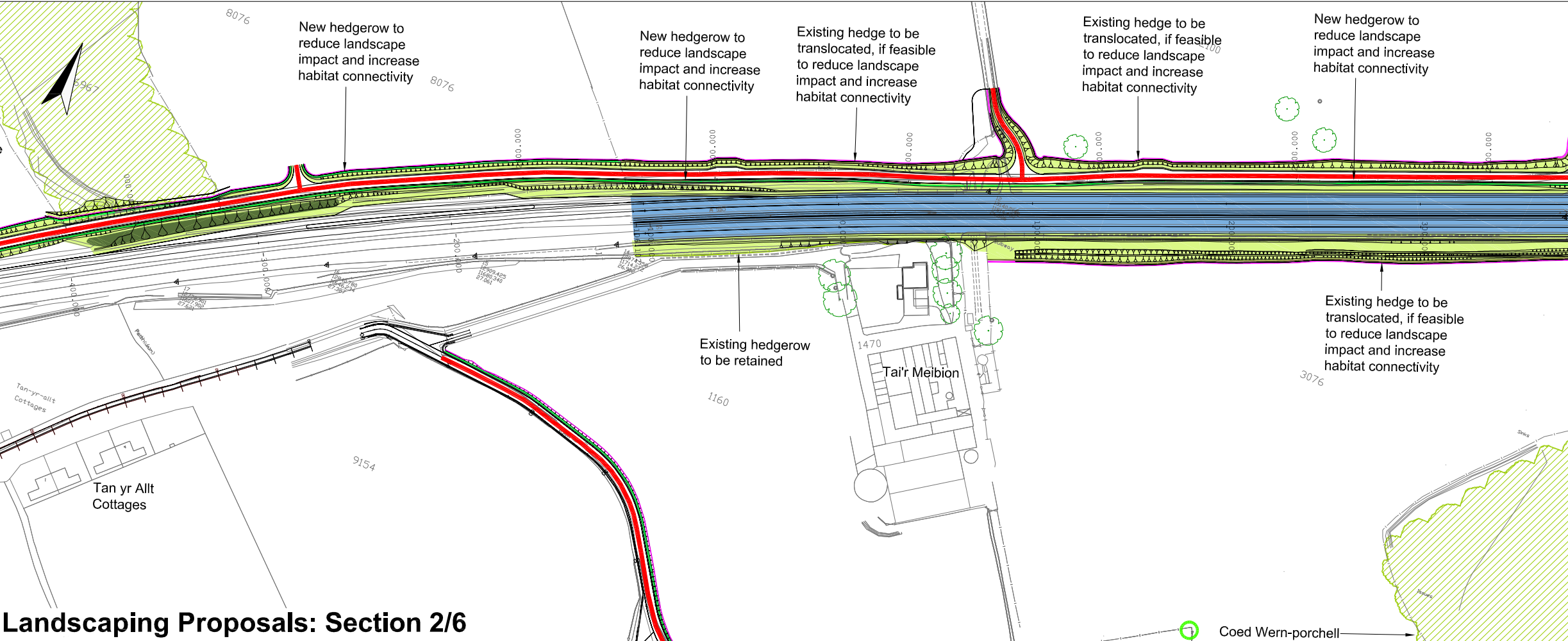
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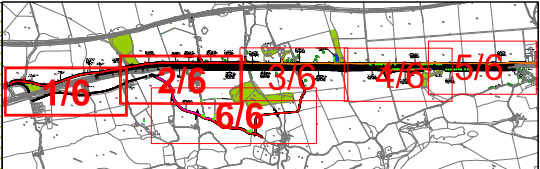
FIGURE 5.3.6
LANDSCAPE CONSTRAINTS & VISUAL RECEPTORS



Landscaping Proposals: Section 1/6



Landscaping Proposals: Section 2/6



Location Plan

Key

- Proposed PMA/NMU Route
- Proposed New/Upgraded Access Road
- Extent of Proposed Local Widening
- Existing Buildings Adjacent to A55(T)
- Existing Individual Tree
- Existing Woodland
- Existing Hedgerows
- Proposed Native Hedgerows / Fences
- Proposed translocated hedge
- Proposed Native Individual Trees
- Proposed Woodland
- Proposed Scrub Planting
- Proposed Grass and Wildflowers
- Proposed Fence
- Proposed Close Board Fence

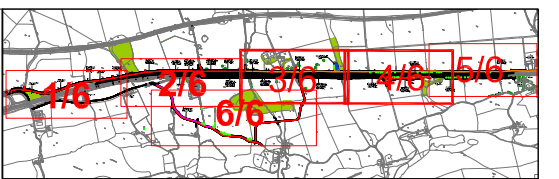
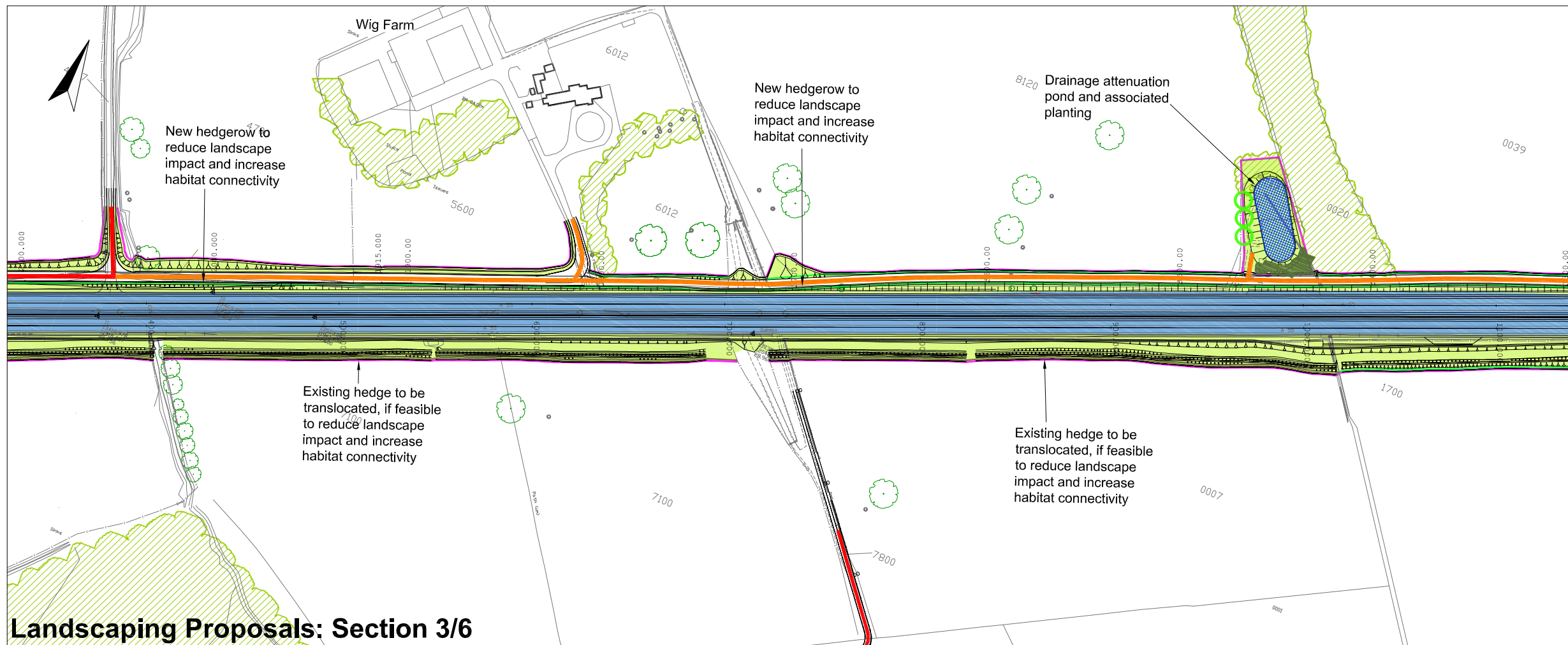


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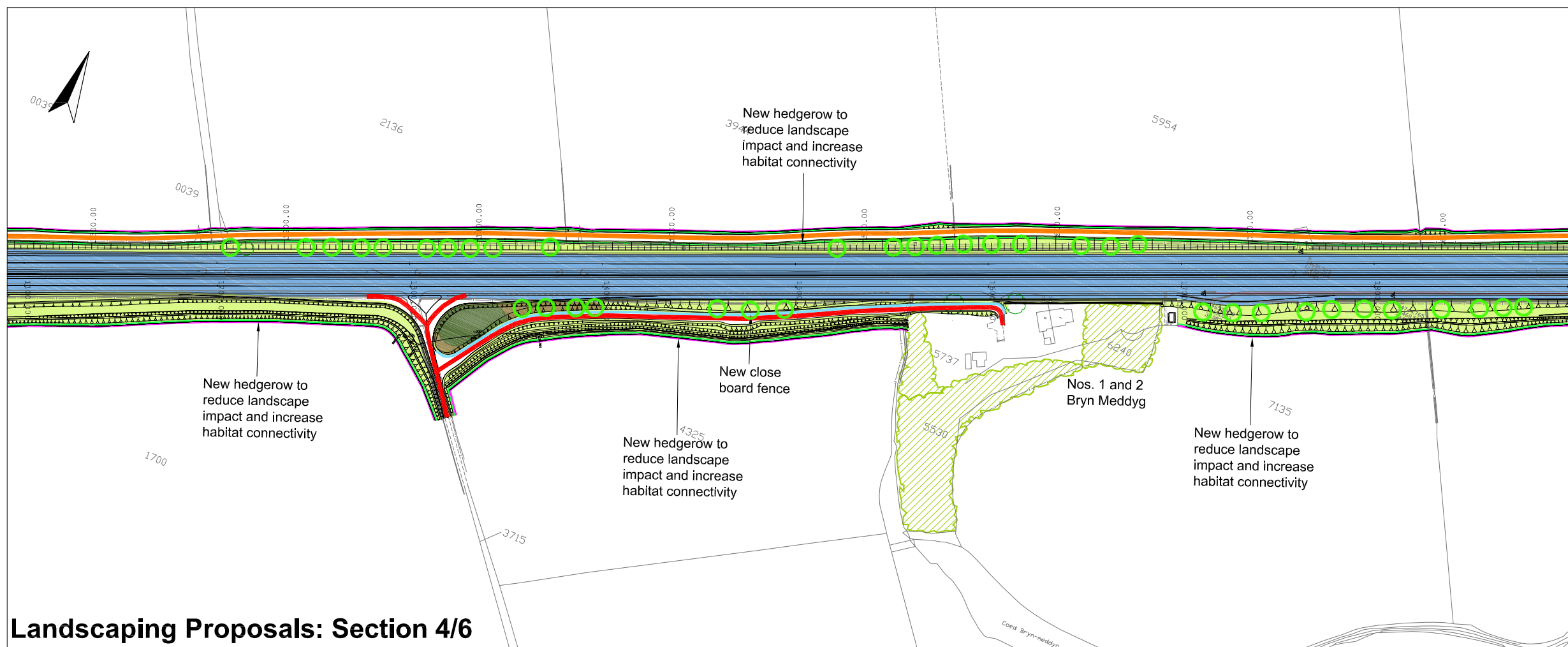
FIGURE 5.3.7
LANDSCAPING
PROPOSALS



Location Plan

Key

- Proposed PMA/NMU Route
- Proposed New/Upgraded Access Road
- Extent of Proposed Local Widening
- Existing Buildings Adjacent to A55(T)
- Existing Individual Tree
- Existing Woodland
- Existing Hedgerows
- Proposed Native Hedgerows / Fences
- Proposed translocated hedge
- Proposed Native Individual Trees
- Proposed Woodland
- Proposed Scrub Planting
- Proposed Grass and Wildflowers
- Proposed Fence
- Proposed Close Board Fence

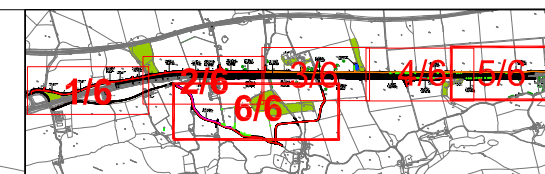
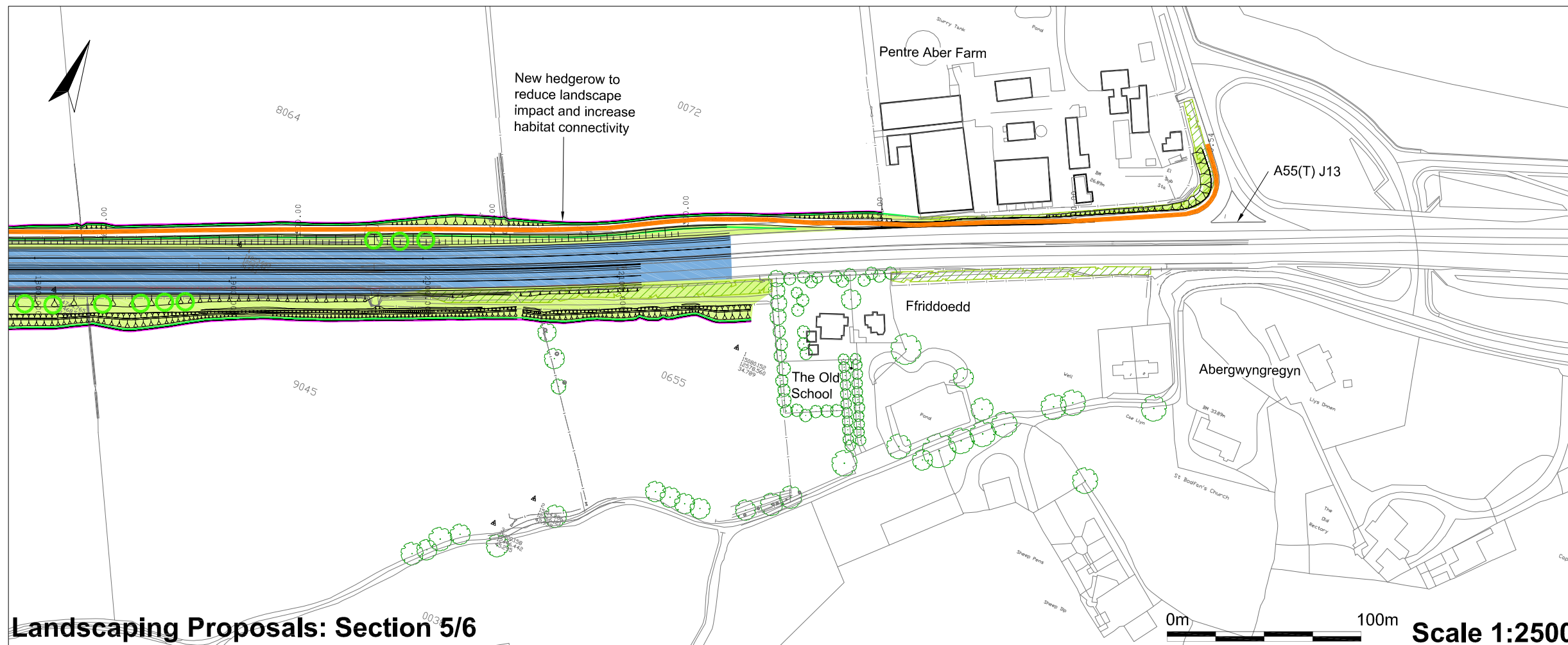


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chaniadau Rheolwr Gwasg ei Mawrthys.
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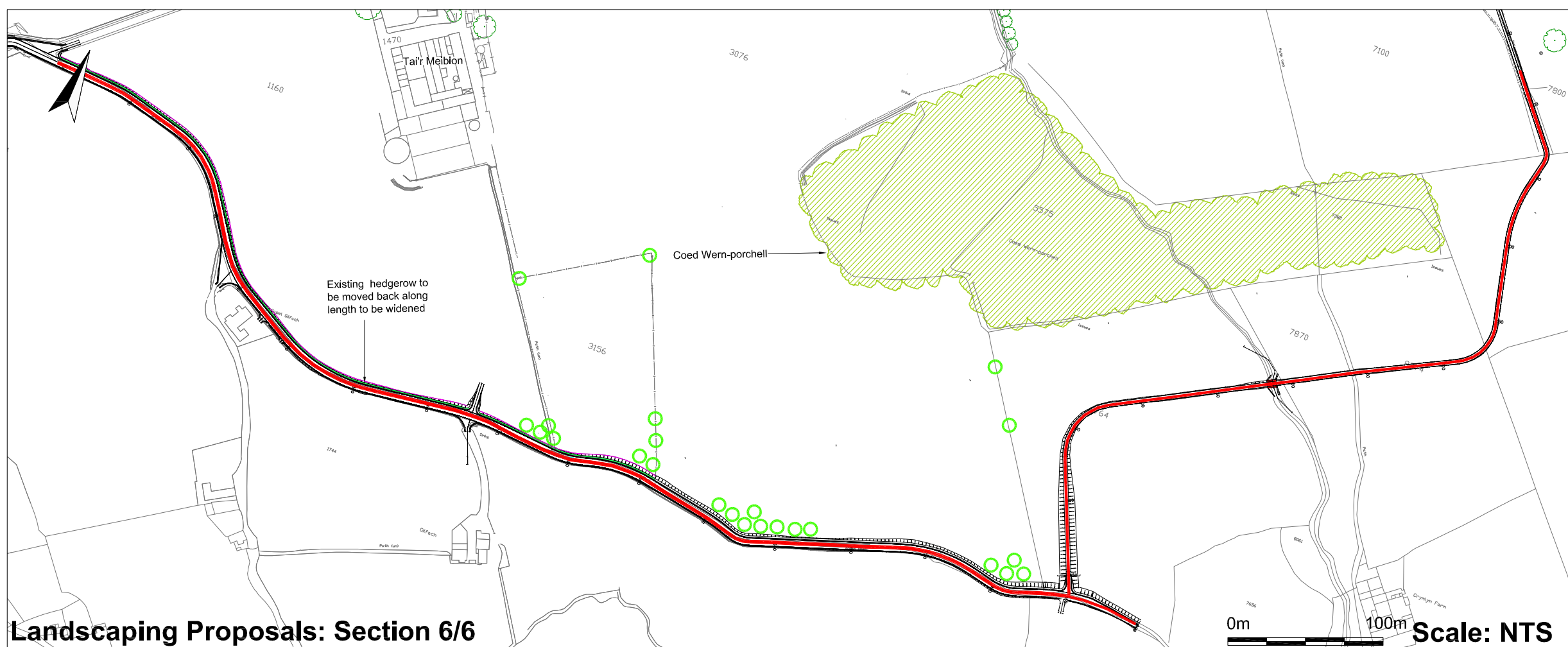
FIGURE 5.3.8 LANDSCAPING PROPOSALS



Location Plan

Key

- Proposed PMA/NMU Route
- Proposed New/Upgraded Access Road
- Extent of Proposed Local Widening
- Existing Buildings Adjacent to A55(T)
- Existing Individual Tree
- Existing Woodland
- Existing Hedgerows
- nH1a Proposed Native Hedgerows / Fences
- Proposed translocated hedge
- Proposed Native Individual Trees
- Proposed Woodland
- Proposed Scrub Planting
- Proposed Grass and Wildflowers
- Proposed Fence
- Proposed Close Board Fence



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FIGURE 5.3.9 LANDSCAPING PROPOSALS