Preliminary Environmental Information Report

Appendix 11I: Assessment of Landscape Effects: Landscape/Marine Character Areas and Designated Landscapes

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Contents

1.1 Introduction

1.1.1 This appendix provides a detailed assessment of effects on the Landscape Character Areas (LCAs) and Special Landscape Area (SLA) designation within the Study Area. The assessment has been conducted for those LCAs which fall within the ZTV as shown in **Figure 11-6** and subsequently scoped in for further assessment as outlined in **Section 11.5** of **Chapter 11 Landscape and Visual Amenity**. These are as follows:

- LCA A2: Caldicot Level;
- LCA B1 Severn Estuary; and
- The Caldicot Level Special Landscape Area (SPA).

1.1.2 LCA2: Caldicot Level and the Caldicot Level SPA, which covers a significant area of LCA 2: Caldicot Level, would be directly affected by the Proposed Development as the proposed PV Arrays, cabling and substation/inverters would be located within them.

1.1.3 LCA1: Severn Estuary would not be directly affected as the Proposed Development as it is not located within it, and there would be no change to their physical characteristics. Potential effects on this landscape would be limited to potential indirect effects on the key visual or perceptual characteristics of the landscape, resulting from views of PV Arrays and substations/inverters.

1.1.4 The assessment considers the likely change to landscape character and as such it is different from the visual assessment of particular views, as experienced by people.

1.2 Assessment of landscape effects

Landscape Character: Caldicot Level

Table 11I-1- Assessment of effects: LCA A2: Caldicot Level

LCA A2: Caldicot Level	LVIA viewpoint locations within the LCA: All Viewpoints
Key characteristics/ qualities	Characteristics • *"A flat, open and exposed historic landscape of reclaimed pasture;* • *Variety of field patterns and drainage channels/reens;* • *Field enclosures generally regular and neat;* • *More piecemeal field patterns south of Undy and Magor Pill;* • *Extensive mature overgown trees/hedgerows;* • *The historic reens, hedgerows and tree lines including pollarded willows are mostly intact;* • *Part of the M4 corridor, lines of pylons/powerlines and views of the Second Severn Crossing are visually dominant;* • *Settlement pattern largely confined to linear residential development along the reenside roads and scattered farmsteads; and* • *Predominantly detached/cottage housing - rendered/painted rubblestone with tiled/slate roofs."* Key Qualities • *"The low horizon, level topography and broad skies, often augmented by dramatic cloudscapes, sunsets and sunrises.* • *Strong linearity and distinctive geometric pattern of enclosure, drainage, watercourses, lanes and historic route-ways.* • *Distinctive drainage pattern of canalised rivers, drains, reens and ditches, accentuated by lines of pollard willows.* • *The sea wall, and banks carrying roads/droveways between farmsteads and villages, often form the only upstanding landscape features in some places.* • *The large assemblages of waterfowl and waders that visit the coastal mudflats and wetlands, and the vast flocks - murmurations- of starlings gathering on the Levels in autumn and winter forming mesmeric and dramatic aerial displays.*

LCA A2: Caldicot Level	LVIA viewpoint locations within the LCA: All Viewpoints
	• *A sparse settlement pattern related to subtle topographical variations, the simple and utilitarian style of buildings often reflecting the functional nature of the landscape.* • *In summer, a verdant and fertile landscape with lush vegetation across meadows and along watercourses; this contrasts with the often wild, bleak and sense of remoteness experienced on the Levels in winter.* *Vibrant cities and towns around the edge of the Levels reinforce its strong sense of tranquillity, remoteness and wildness away from human occupation in many places."*[1]
Sensitivity	The Caldicot Levels form an extensive tract of low-lying landform, bordered to the south by the sea defences that form a clear definition with the Severn Estuary Regional Character Area to the south. Geographically, the character area extends from the urban development associated with the River Usk estuary in the west, to the western fringes of Caldicot to the east. The northern boundaries are formed by the Llanwern Steel Works and increasingly urbanised elements such as the M4 and the settlement of Magor. The Gwent Levels is a Registered Historic Landscape of international importance and significance. Also partially located within the LCA is the locally identified Caldicot Level Special Landscape Area where it falls under the Newport City Council administrative boundary. The landscape is considered a rare and supreme example of a hand-crafted levels landscape reclaimed from the Severn Estuary consisting of a distinctive network of enclosure and drainage systems. The key characteristic of the character area is the flat, low-lying landform that contributes to experiencing large skies and long distance views of higher ground to the north, most notably Wentwood Forest that forms a distant horizon to the north. Vertical elements include the steel works, several wind turbines and some of the taller built form, including the silos at the Magor Waste Water Treatment works, these are all the more pronounced as a result of the flat landform and limited extent of woodland. Nevertheless, the pattern of hedgerows, some of which are out-grown, limit broader appreciation of the landscape, and as a result the landscape is commonly experienced in contained views. The predominant land-use is agricultural pasture where landscape features have been maintained as part of that use so are in moderate condition. The pattern of hedgerows transitions through the landscape. To the west of the study area the field patterns are rectilinear, frequently narrow, and of medium size, this contrasts with the increasingly irregular fields patterns to the south and east of Redwick, a pattern that continues to the east, extending to the south of Undy, where the field pattern is increasingly irregular and field sizes are typically smaller than those found elsewhere within the Study Area. Throughout the Study Area, the low lying landform is interlaced by a series of wide, water filled ditches that are locally referred to as 'reens'. These man-made features are managed through a series of sluices and pumping stations to reduce flooding by the estuary to the south. Hedgerow management varies throughout the Study Area, and depends upon the field uses, grazing areas typically have trimmed hedgerows which exposes the width of some hedgerows, being several metres wide. Elsewhere, hedgerow management is less regular or non-existent leading to the outgrown nature of many hedgerows, which combine to filter or screen views. Whilst woodland levels are sparse and limited to the fringes of the levels, pollarded willows and rows of poplars form distinctive vegetation through the landscape.

[1] Chris Blandford Associates. (2017). Gwent Levels Landscape Character Assessment. (Online). Available at Appendix+1+Landscape+Character+Assessment.pdf. (Accessed November 2024).

LCA A2: Caldicot Level	LVIA viewpoint locations within the LCA: All Viewpoints
	Settlement patterns, with the exception of the nucleated hamlet at Redwick are sparse, frequently occurring along the pattern of straight but narrow lanes and local roads, contributing further to the sense of a regular and man-made landscape pattern. Outlying farms are present, set out within the open countryside, and accessed from farm tracks and unmetalled roads. There is a sparse network of PRoW being primarily local roads and footpaths including NCN Route 4 and the Wales Coast Path (WCP) which also forms part of the locally promoted Redwick Circular Walk. While local roads and NCN Route 4 passes through the landscape the main opportunity for recreation and for people to experience and appreciate this LCA is from the WCP which follows the top of the 5m high sea wall that runs along the southern boundary and separates the Levels landscape from the estuary to the south. Located within the western area of the Study Area are several existing solar farms, each occupying clusters of fields, they are typically located away from roads and footpaths, and where they arise, the existing boundary hedgerows effectively screen these visually detracting elements from sight. Notable however, are the frequent overhead power lines that cross the landscape in a broadly east – west direction, occupying the northern margins of the Study Area. The Caldicot Level LCA has been subsequently subdivided into a further 13 sub-areas. These reflect subtle transitions through the landscape, which reflect the timeline in which the areas have been drained, managed, and set out. This is most evident through the difference in the layout, form, scale, and boundary treatments associated with the field patterns. These areas offer a highly granulated level of landscape analysis, however due to the geographic extent of the Proposed Development, assessment against individual sub-areas are unlikely to reflect the broader effects on the perception of landscape character within the LCA. At this time no further assessment has been undertaken and the Proposed Development will be assessed against the broader Caldicot Levels LCA. The value of the landscape character area is considered to be **High**. A flat, low-lying landscape of small to medium scale regular and irregular agricultural fields defined by reens and hedges with some trees. The combination of flat landform and boundary vegetation limits intervisibility from publicly accessible locations at ground level, although there are some Public Rights of Way (PRoW) that pass through the site. Existing individual wind turbines and pylons contained within the LCA form notable detracting features within the landscape as well as the existing Whitson Substation in the adjacent. These features as well as buildings at the former steel works within the adjacent LCA influence the perception of the open countryside. The locally distinctive St Thomas Church tower is also a visible feature within its locality including from the WCP. There is a distinctive sense of place with moderate levels of remoteness and tranquillity and infrequent access although this is interrupted by agricultural activities and the presence of man-made features. There is a visual connection when walking along the WCP due to sequential views of the landscape and the subtle changes within it, but intervisibility at ground level is restricted due to the flat topography in combination with boundary vegetation. There is also a strong visual connection to LCA B1 Severn Estuary – B1.1 The Welsh Grounds from the WCP, although this is restricted from inland due to the landform. These factors combine to give rise to a susceptibility to change of the type proposed, which is assessed as **Medium**. The overall sensitivity is assessed as **Medium**.
Magnitude of	The Proposed Development would expand on existing urbanising features within the landscape. The extent to which existing PV Arrays are present within the western areas of the character area would be extended into areas that are currently limited to open countryside. This would represent a change to the perception of landscape character from one that is

LCA A2: Caldicot Level	LVIA viewpoint locations within the LCA: All Viewpoints
Change	predominantly rural to one that would be focused on energy production, with numerous PV Arrays, fencing, access tracks and entrance gates from highways. With the planned removal of some hedgerows to promote the sustained management of the reens and the preservation of others, and retained small copses and hedgerow trees the perception would be that the impacts would represent a **medium** scale of change**.** However, the impacts are repeated over a large area and such the geographic extent of the impacts would be **high** and are considered **permanent**. As a result, the level of magnitude of change would be **high**. It is not anticipated that the PV Arrays and the associated infrastructure will be lit at night, with the exception of any maintenance lighting required to operate the Site safely, the impacts during the nighttime would be limited and no new forms of lighting would be introduced. A buffer of 7m has been employed from Site boundaries, internal hedgerows, reens/ditches and veteran trees. This will ensure that these distinctive features and their contribution to the character of the area are retained, as well as their ability to contain the DCO Proposed Development. However, substantial vegetation removal will be required within and throughout the Site to accommodate cable trenches/bridges and access tracks. Each section of vegetation removal for a trench/bridge crossing would have an average length of 5-6m requiring an overall length of 2040m to be removed. Each section of vegetation removal for an access track would have an average length of 16-17m requiring an overall length of 2610m. Therefore, the total overall amount of vegetation removal required would be 4650m. In most cases this removal would be in individual locations although there are some instances of more extensive removal of up to 100-200m of vegetation. This will be replaced where possible after construction is complete however much of it will be permanent removal to allow for ongoing access and maintenance during operation. It is also proposed to reduce/remove vegetation from the southern side of reens where there are double hedges to improve the condition of the reen habitat. The specific extent and location of this removal is not currently known, but in most cases would leave a hedgerow in place on one side. This would be over and above the removal required for cable trench/bridge and access tracks but may coincide in places. There are opportunities to mitigate through planting of new hedgerows on perimeter boundaries of the Site that are currently open and on the northern side of reens where this would not conflict with operational or ecological requirements. In addition, a change in the proposed management to allow existing perimeter hedgerows and hedgerows throughout the Site to grow out, where they are retained and/or replanted. Where hedgerows have been allowed to grow out and have been unmanaged, the capacity to screen the PV Arrays, fencing and inverters is highly effective. Where hedgerows have historically been managed through trimming, the impacts of new features would be noticeable and potentially extensive. Changes to the management regimes and allowing the existing and retained hedgerows to grow out would in several years provide a robust screen to new infrastructure and therefore the effects on landscape character would be partially mitigated. During operation the high magnitude of change on a landscape that is of medium sensitivity would result in an effect that is **moderate adverse (Significant).** Mitigation measures in the form of additional hedge planting and changes to the management regime would result in hedgerows being allowed to grow out, and this is likely to take several years to achieve an effective screening effect. At year 15, and with the establishment of any additional planting and hedgerows filled out, the scale of the changes would be slightly reduced and would be medium, however these would remain over a large geographic extent within the character area and the effects would remain permanent. As a result, the effect on landscape character at year 15 would remain **moderate adverse (Significant).** During construction, temporary compounds set up to store materials would be limited in their scale and geographic extent. Construction activity to erect fencing, lay down access roads and erect the solar panels are activities arising at ground level and only the addition of vehicle movements would have a negative impact on landscape character. As

LCA A2: Caldicot Level	LVIA viewpoint locations within the LCA: All Viewpoints
	described above, substantial vegetation removal would be required across the DCO Proposed Development site during construction. In the main this would be in individual locations and the overall structure and pattern would remain, particularly through the retention and enhancement of the distinctive reens. Impacts are anticipated to be medium in their scale and geographic extent as construction activity shifts through the landscape across the DCO Proposed Development site where evidence would remain as it moved along, but in the main are temporary in duration, therefore effects are initially low in their magnitude of change. During construction, the low magnitude of change on a landscape that is of medium sensitivity would result in an effect that is **minor adverse (Not Significant).** However, this is likely to increase as the geographical extent continues to broaden as construction is completed and areas of the character area are established with PV Arrays, fencing, invertors and access roads. Towards the end of the construction period, the temporary and therefore low duration of the construction activities, medium scale of change combined with an expanded geographical extent considered to be medium**,** such that the magnitude of change would increase to high, which on a medium sensitivity landscape would result in **moderate adverse (Significant)** effect. The activities would be similar during the decommissioning phase although would not require any further vegetation removal and would be for a shorter duration so effects would be **minor (Not Significant)**.

Marine Character: Severn Estuary

Table 11I-2- Assessment of effects: LCA B1 Severn Estuary (incorporating B1.1: The Welsh Grounds and MCA 29: Severn Estuary (Wales)

LCA B1: Severn Estuary - B1.1: The Welsh Grounds and MCA 29: Severn Estuary (Wales)	**LVIA viewpoint locations within the LCA:** **Viewpoints 1 to 3 and WCP sequential viewpoints**
Landscape characteristics	LCA B1 Severn Estuary – B1.1: The Welsh Grounds • *"Open character of the seascape affording strong intervisibility with the coastline in England.* • *Strong associations with long history of coastal reclamation, embankments and ditches on the adjacent Gwent Levels.* • *Views overlooking the estuary/Gwent Levels from the road bridges provide a charismatic maritime gateway to Wales.* • *Views of coastal development and road bridges contrast with the open, vast vistas of the Estuary/adjacent Gwent Levels.* • *Strong visual connection with the Gwent Levels to the north.* • *Highly distinctive seascape rare in South Wales with strong sense of place, isolation, solitude and wildness.* • *Dramatic, open, exposed seascape in stark contrast with the more typically rural agricultural landscapes of the Gwent Levels* • *A dynamic and distinctive seascape defined by its simplicity, exposure and remoteness.* • *Dominated by the waters of the estuary and open, exposed coastal flats.* • *Flat coastline and open character afford expansive long distance views across the Estuary to the English coastline, including the Quantock Hills and Exmoor.* • *Viewed from the Somerset coast, the South Wales uplands and the Brecon Beacons provide a dramatic backdrop rising above the low-lying Gwent-Levels coastline and open water.."*[2] MCA 29: Severn Estuary (Wales) • *"Expansive funnel-shaped Severn Estuary, sitting at the mouth of four major rivers (the Severn, Wye, Usk and Avon).* • *The immense tidal range of the estuary is second only to the Bay of Fundy in Canada. The status of the tide has a significant bearing on perceived character.* • *Soft Triassic and Jurassic rocks exposed along the shore, creating a wide rocky intertidal area. Elsewhere the shore is defined by extensive tidal flats.* • *Mud, sand and gravel sediments deposited in the Holocene period producing a varied sea bed of flats and bars, with associated shallow waters and numerous shoals presenting hazards to navigation.* • *Flat Holm island (SSSI and LNR) forms a gateway feature in the west – an outcrop of harder limestone rising out of the surrounding sediments. Steep Holm forms a similar 'twin' feature in English waters to the south.*

[2] Chris Blandford Associates. (2017). Gwent Levels Landscape Character Assessment. (Online). Available at Appendix+1+Landscape+Character+Assessment.pdf. (Accessed November 2024).

LCA B1: Severn Estuary - B1.1: The Welsh Grounds and MCA 29: Severn Estuary (Wales)	LVIA viewpoint locations within the LCA: **Viewpoints 1 to 3 and WCP sequential viewpoints**
	• *Estuary important for the interpretation of coastline dynamics and land-forms, and also past changes in sea level, sediment supply, climate and river flow.* • *Strong tidal streams and turbidity producing biological communities characteristic of the extreme physical conditions of liquid mud and tide-swept sand and rock.* • *Tidal flats, saltmarshes and the extensive wet grasslands are of international importance for wintering waterfowl and migratory birds.* • *Some of the richest and most diverse populations of non-exploited fish in the UK –sea lamprey and twaite shad populations considered to be larger than in any other estuary.* • *MCA's rich natural resources exploited by humans for millennia, with evidence dating back to the earliest hunter-gatherers roaming what was previously a much larger coastal plain (prior to sea level rise around 6,000 BC).* • *Long history of coastal reclamation, embankments and diches, notably the extensive Gwent and Wentlooge levels* • *Long-standing strategic importance for international trade and maritime navigation, particularly as ports on both sides of the Bristol Channel expanded from the medieval period onwards. Cardiff, Newport and Barry still retain important port functions.* • *Numerous ship wrecks found on the sea floor, particularly in the west – including examples mined and sunk during WWII.* • *Local trawlers catch plaice, turbot, whiting and rays from the MCA's sandbanks. Recreational charters and beach-based fishing are important economic activities.* • *Salmon, eels and trout fished commercially and recreationally in the rivers feeding the estuary, including through the traditional method of putcher fishing (medieval intertidal fishtraps are located at Goldcliff, West Pill and Caldicott).* • *Flat coastline backed by the Wales Coastal Path, affording long views into the Bristol Channel. Cars travelling along the M4 via the Severn Bridge also overlook the area. Views to major commercial, port and industrial development at Cardiff and Avonmouth, as well as the two road bridges, contrasting with the open, empty vistas characterising the Gwent Levels* • *Seascape's open character affording strong intervisibility with the Somerset coastline, including Portishead, Clevedon and Weston-super-Mare. The higher hill summits of the Quantock Hills AONB and Exmoor National Park form a distinctive upland backdrop.* *Estuary's classic funnel shape and south-west orientation make it susceptible to extreme weather conditions (including storm surges) sweeping in from the east Atlantic."*[3]

[3] LUC. (2015). MCA 29 – Severn Estuary, National Seascape Assessment for Wales. (Online). Available at Marine Character Areas 29. (Accessed September 2025).

LCA B1: Severn Estuary - B1.1: The Welsh Grounds and MCA 29: Severn Estuary (Wales)	LVIA viewpoint locations within the LCA: **Viewpoints 1 to 3 and WCP sequential viewpoints**
Sensitivity	This LCA comprises the areas within the Severn Estuary that are above the mean low water mark, forming a series of mudflats, channels and saltmarshes. It also forms part of the much broader National Marine Character Area 29 Severn Estuary (Wales). It is included, in part, within the locally identified Caldicot Level Special Landscape Area where it falls under the Newport City Council administrative boundary and forms part of the southern margins of the Gwent Levels, a Registered Historic Landscape of international importance and significance. The character area is characterised by an extensive area of mudflats and saltmarshes within the intertidal zone on the seaward side of the seawall which is exposed at low tide as well as the shallow waters of the estuary. The area can only be safely accessed by boat, however the sea wall that forms the sea defences to the Caldicot Levels to the north provides a vantage point from where the vastness of the estuary can be experienced. This allows for distant views across the estuary of development at Avonmouth and Portishead and the coastline of North Somerset, as well as the Severn Bridge further to the north east. As a result of the cultural associations with the Severn Estuary, and its relationship with the Caldicot Levels to the north, in addition to the designations applied to it, the Severn Estuary LCA is considered to be of **high** value. The character area has a low capacity to accommodate change due to its exposed nature, and degree to which the views across the estuary are important to appreciating its vastness. The existing sea wall defines the boundary, but there is a strong intervisibility with the surrounding landscape, including areas of the Caldicot Levels which despite the 5m high sea wall, is appreciated in part. It is the relationship between the two, and the degree to which there is such a strong contrast between them which emphasises the uniqueness of the locality. The exposed nature of the character area, the sense of remoteness and scale means that its susceptibility to the type of development being proposed is assessed as **high**. The overall sensitivity is therefore **High**.
Magnitude of Change (Proposed Development only)	There would be no direct changes to the character area as a result of the Proposed Development. The PV Arrays would be set back from the northern margins of the Severn Estuary LCA such that intervisibility between the two would be separated. As a result of the sea wall defences and the capacity of the landscape of the Caldicot Levels to in part accommodate the nature of the development proposed, there would be little to no indirect effects on this landscape. During operation, the negligible scale of change and geographic extent, combined with the permanent nature of effects would give rise to a negligible magnitude of change, which on a landscape that is of high sensitivity would result in an effect that is **negligible (Not Significant).** No additional mitigation measures are proposed, however management of the hedgerows to allow existing hedgerows to grow out and further screen the PV Arrays would only go to further reduce any perception of the Arrays, fencing, invertors or lights. There would be no material change in the perception of the Proposed Development and in year 15, the effects would remain **negligible (Not Significant).** During construction, the screening effects of the sea wall defences and filtering effects of the retained vegetation within the adjacent Caldicot Levels LCA would result in any indirect effects on the Severn Estuary LCA being substantially screened from the northern margins of the adjacent estuary. Construction activities would involve

LCA B1: Severn Estuary - B1.1: The Welsh Grounds and MCA 29: Severn Estuary (Wales)	LVIA viewpoint locations within the LCA: **Viewpoints 1 to 3 and WCP sequential viewpoints**
	the use of tall elements including a crane and a piling rig that could be apparent from within the LCA. These would be experienced in individual localised positions as they move across the landscape although would only have any meaningful influence on the LCA within the southernmost edge of the Site so would not be experienced for the entire construction phase. The magnitude of change would be no greater than negligible for a short-term (temporary), such that effects on a landscape of high sensitivity would be no greater than **minor adverse (Not Significant)**. The activities would be similar during the decommissioning phase albeit for a shorter duration so effects would be **negligible (Not Significant)**.

Landscape Designation: The Caldicot Level Special Landscape Area (SLA)

Table 11I-3- Assessment of effects: The Caldicot Level SLA 5

The Caldicot Level SLA 5	LVIA viewpoint locations within the LCA: Viewpoints 1, 2, 6, 7, 8, 9, 10, 11, 12 and 13
Landscape characteristics	*"Extensive area of reclaimed marsh and wetlands that extends from Cardiff to Chepstow.* *Characterised by its network of drainage ditches (reens) which vary in form and character. The eastern edge of the SLA is characterised by a regular, rectilinear pattern, whereas around Whiston and Caldicot the pattern is more sinuous.* *The vegetation pattern reflects the differing period of enclosure. The main lines of vegetation follow the drainage ditches and these vary from no vegetation through the reeds and scrub to strong lines of trees, primarily willows and oak.* *The main visual detractors to the SLA are the interface with the Llanwern Steelworks site on its northern boundary and the cluster of overhead power lines that focus upon Uskmouth power station.* *The SLA also covers the intertidal zone on the seaward side of the sea wall. This includes the Welsh Grounds an extensive area of mudflats exposed at low tide. The interrelationship of the intertidal zone to the inland area is focused upon the protective sea wall."*[4]
Sensitivity	The designation has been defined by Newport City Council to identify and preserve the uniqueness of the landscape. The SLA Background Paper identifies the special landscape as extending east from Newport to the boundary with Monmouthshire County Council administrative boundary. It follows the boundaries of the Caldicot Levels LCA up to the administrative boundary in the east and includes a significant area of the B1: Severn Estuary LCA. The qualities associated with the landscape are aligned with those outlined above in relation to the Caldicot Levels LCA and are not repeated here. Analysis using LandMAP data has identified that the majority of the area is of outstanding or high value in relation to landscape habitats, visual and sensory, historical landscapes, and cultural aspects. In recognising the uniqueness associated with the landscape in the study area, the Caldicot Levels Special Landscape Area contributes to the **high** value assigned to the character area.

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[4] Newport City Council. (2013). Special Landscape Areas Background Paper Revised Deposit Plan. (Online). Available at Special-Landscape-Area-June-2013. (Accessed November 2024).

The Caldicot Level SLA 5	LVIA viewpoint locations within the LCA: Viewpoints 1, 2, 6, 7, 8, 9, 10, 11, 12 and 13
	A combination of the low lying nature of the landscape, the presence of existing visual detractors in the form of the Llanwern steelworks, wind turbines, pylons and existing solar farm development, and the strong landscape pattern of fields bounded by hedgerows would result in a landscape that is of **medium** susceptibility to the type of development being proposed. The overall sensitivity is therefore **Medium**.
Magnitude of Change (Proposed Development only)	The Proposed Development would expand on existing urbanising features within the landscape. The extent to which existing PV Arrays are present within the designation would be extended into areas that are currently characterised by open countryside. This would represent a change to the perception of landscape character associated with the designation, from one that is predominantly rural to one that would be dominated by energy production, with numerous PV Arrays, fencing, access tracks and entrance gates from highways. With the presence of numerous hedgerows, small copses and hedgerow trees the perception would be that the impacts are limited to the immediate environment and the scale of the change would **medium**. Due to the extensive geographic extent of the Proposed Development, extending to approximately a quarter of the designation the impacts would be **high** and are considered permanent. As a result, the level of magnitude of change would be **high**. It is not anticipated that the PV Arrays and the associated infrastructure will be lit at night, with the exception of any maintenance lighting required to operate the site safely, there impacts during the nighttime would be limited and no new forms of lighting would be introduced. A buffer of 7m has been employed from all site boundaries, internal hedgerows, reens/ditches and veteran trees. This will ensure that these distinctive features and their contribution to the character of the area are retained, as well as their ability to contain the Proposed Development. However, vegetation removal will be required within and throughout the Site to accommodate cable trenches/bridges and access tracks. This typically extends to between 5 – 17m to facilitate access, but some longer lengths (up to 200m) are identified for removal. Opportunities to mitigate exist through a change in the proposed management of perimeter hedgerows, which would be retained within the area where they do not conflict with operational and ecological objectives of the scheme, limiting direct impacts on existing landscape features. Where hedgerows have been allowed to grow out and have been unmanaged, the capacity to screen the PV Arrays, fencing and invertors is highly effective. Where hedgerows have historically been managed through trimming, the impacts of new features would noticeable and potentially extensive. Changes to the management regimes and allowing the hedgerows to grow out would in several years provide a robust screen to new infrastructure and therefore the effects on landscape character within the designation would be partially mitigated.

The Caldicot Level SLA 5	LVIA viewpoint locations within the LCA: Viewpoints 1, 2, 6, 7, 8, 9, 10, 11, 12 and 13
	During operation the high magnitude of change on the landscape associated with the designation that is of medium sensitivity would result in an effect that is **major adverse (Significant)**. Mitigation measures in the form of changes to the management regime would result in hedgerows being allowed to grow out, and this is likely to take several years to achieve an effective screening effect, and would in terms change features within the landscape. At year 15, and with the establishment of any additional planting and hedgerows filled out, the scale of the changes would be slightly reduced and would be medium, however these would arise over a large geographic extent within the designation and the effects would remain permanent. As a result, the effect on character associated with the designation at year 15 would reduce to **moderate adverse (Significant).** During construction, temporary compounds set up to store materials would be limited in their scale and geographic extent. Construction activity to erect fencing, lay down access roads and erect the solar panels are activities arising at ground level and only the addition of vehicle movements would have a negative impact on landscape character. The removal of existing landscape features to allow localised widening of entrances to fields and facilitate access would give rise to changes to the landscape pattern. Impacts are anticipated to be low in their scale and geographic extent as construction activity shifts through the landscape, and are temporary in duration, therefore effects are initially negligible in their magnitude of change. During construction, the low magnitude of change on a landscape that is of high sensitivity would result in an effect that is **minor adverse (Not Significant).** However, this is likely to increase as the geographical extent continues to broaden as construction is completed and areas of the character area are established with PV Arrays, fencing, invertors and access roads. Towards the end of the construction period, the temporary and therefore negligible duration of the construction activities, medium scale of change combined with an expanded geographical extent considered to be high, such that the magnitude of change would increase to medium, which on a high sensitivity landscape would result in **major adverse (Significant)** effect.