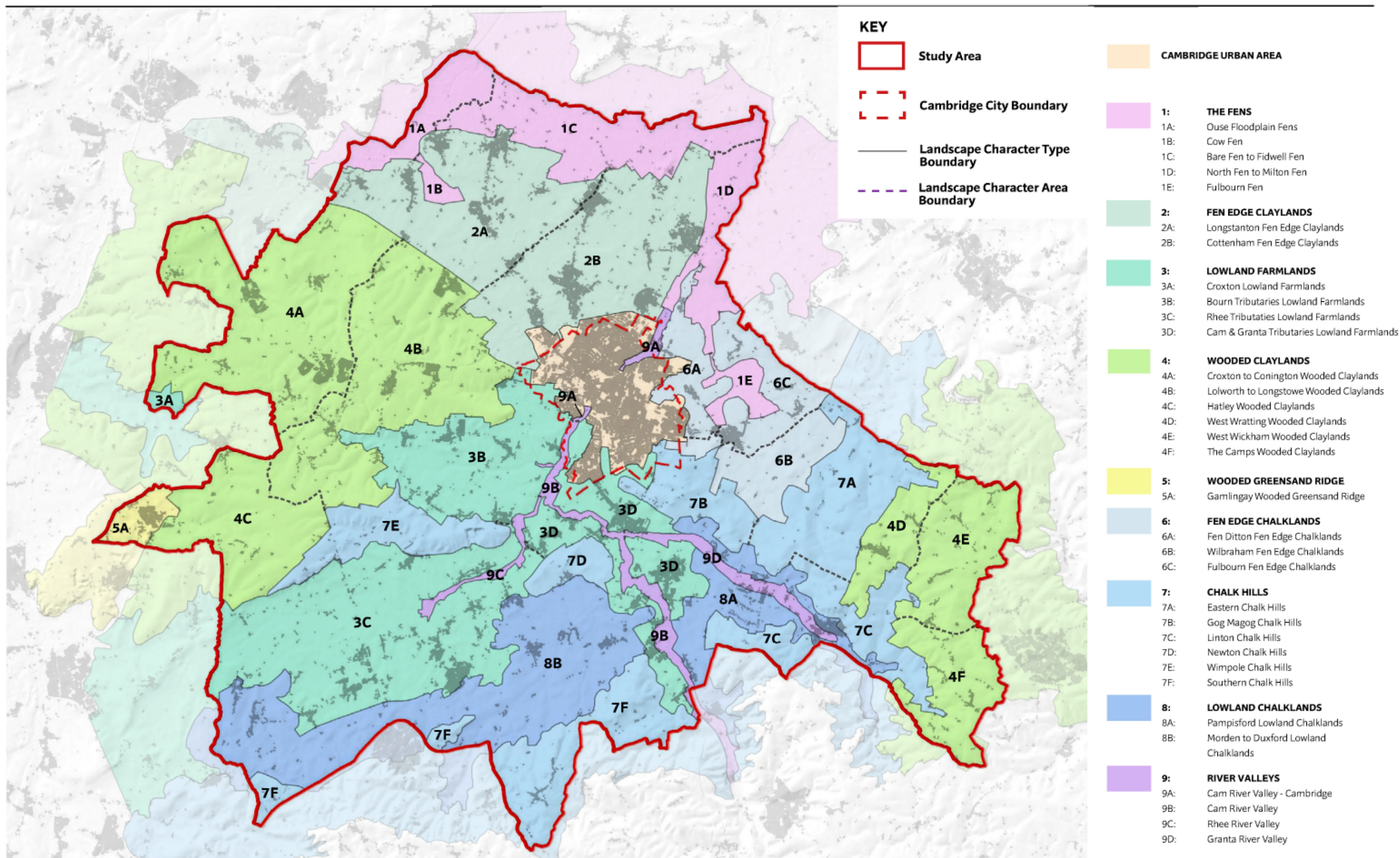




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3.2 LCT 1: The Fens Landscape Sensitivity Assessment

3.2.1 The current landscape character baseline is provided by the descriptions of the following Landscape Character Type and its constituent Landscape Character Areas defined by the 2021 Greater Cambridge Landscape Character Assessment¹²:

Landscape Character Type (LCT)	Landscape Character Areas (LCA)
1: The Fens	1A: Ouse Floodplain Fens 1B: Cow Fen 1C: Bare Fen to Fildwell Fen 1D: North Fen to Milton Fen 1E: Fulbourn Fen

3.2.2 There is currently one operational solar PV energy development within LCT 1: The Fens:

- Radical Farm – 52 ha solar farm located in LCA 1C: Bare Fen to Fildwell Fen (a large scale solar farm for the purposes of this assessment)

¹² See Figure 4.1 in Greater Cambridge Landscape Character Assessment (2021)

LCT 1: The Fens Landscape Sensitivity Assessment

Criteria	Susceptibility
Natural Factors	Natural factors that make the landscape less susceptible to the development scenario: • Flat, low lying fen landscape • Extensive, large scale landscape Natural factors that make the landscape more susceptible to the development scenario: • Pattern of regular, rectangular arable fields defined by a complex hierarchy of rivers, streams, lodes, drains and ditches, as well as tracks and droveways • Mosaic of wetland habitats including fens, reedbed, wet woodland and patches of grazing marsh • Distinctive pattern of lakes in LCA 1A: Ouse Floodplain Fens • Haphazard pattern of human scale features including scattered farms and agricultural buildings and occasional church spires within villages located in LCT 2: Fen Edge Claylands
Cultural Factors	Cultural factors that make the landscape more susceptible to the development scenario: • Complex landscape of drained fenland, with lodes recognised as historic monuments and an elaborate system of drains, tracks and droveways which give time depth to the landscape • Common land in LCA 1E: Fulbourn Fen includes Great Wilbraham Common
Perceptual & Aesthetic Factors	Perceptual & aesthetic factors that make the landscape less susceptible to the development scenario: • Strong sense of enclosure associated with restored wetlands in LCA 1A: Ouse Floodplain Fens • Ongoing mineral extraction in the north of LCA 1A: Ouse Floodplain Fens erodes the sense of tranquillity Perceptual & aesthetic factors that make the landscape more susceptible to the development scenario: • Strong sense of openness due to generally sparse tree cover and limited hedgerows • Generally strong rural character and sense of tranquillity associated with the expansive, low-lying landform and limited settlement

Criteria	Susceptibility
Landscape Value	Characteristics, features and qualities of landscape value that make the landscape more susceptible to the development scenario: • Strong landscape character associated with the distinctive hierarchy of drainage channels, regular field pattern and limited settlement with sparse tree cover • Lowland fens are generally limited to this LCT, and considered rare in Greater Cambridge • The hierarchy of rivers, lodes and drains are distinctive and valued as influencing the character of this LCT • Time depth associated with features such as historic droveways, lodes and drains • Natural value of Cam Washes SSSI, Stow-cum-Quy Fen SSSI, Wilbraham Fens SSSI, Wilbraham Common SSSI, the River Great Ouse County Wildlife Site (CWS), Fen Drayton Graven Pits CWS, Middle Fen CWS, River Cam CWS, Little Wilbraham River CWS, Chear Lode CWS and Engine Drain CWS, as well as a mosaic of wetland habitats • Recreational value of PROW including the Pathfinder long distance walk and National Cycle Network 51 in LCA 1A: Ouse Floodplain Fens and 1B: Cow Fen, the Fen Rivers Way long distance walk and National Cycle Network Routes 11 and 51, The Harcamlow Way long distance walk in LCA 1E: Fulbourn Fen, Cow Hollow Wood in LCA 1D: North Fen to Milton Fen, commons in LCA 1E: Fulbourn Fen and a small number of nature reserves with public access including Fen Drayton Lakes Nature Reserve and Mare Fen Nature Reserve in LCA 1A: Ouse Floodplain Fens • Distinctive landscape with a generally strong rural character and sense of tranquillity • Locally valued expansive, open views across the flat landscape with large, dramatic skies, towards church spires within villages set on higher ground in LCT 2: Fen Edge Claylands • Valued views from the Fen Rivers Way and Pathfinder Long distance paths
Mitigation Potential	There is potential to mitigate the type and scale of change associated with the development scenario in this area by following the relevant landscape guidelines set out in the Greater Cambridge Landscape Character Assessment (2021) where appropriate. There may be scope for strategic landscape mitigation measures to help integrate development into the landscape (such as careful location of solar PV energy development to

Criteria	Susceptibility
	avoid undeveloped prominent hills, ridges and skylines by using undulating topography, hedgerows and woodlands to reduce visibility). The management and enhancement of existing hedgerows, re-planting hedgerows where these have been lost/become fragmented and consideration of opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity and manage key views across the rural landscape would be beneficial for strengthening local landscape character.
Potential Cumulative Effects	This is an open landscape, which has potential for a greater likelihood of cumulative effects between solar PV energy developments. There are currently no proposed solar PV energy developments within LCT 1: The Fens that may give rise to cumulative effects in combination with existing solar PV energy developments in this LCT.

3.2.3 In summary, this LCT is a distinctive fen landscape. Key characteristics which are more susceptible to the development scenario include the openness of the low lying fens, the strong rural character and sense of tranquillity. Additionally, the network of watercourses and historic drainage channels provide valuable networks of wetland habitat, and there are locally valued expansive, open views. Key characteristics which are less susceptible to the solar PV energy development scenarios are the flat landform and large scale and generally simple arable field pattern. The overall landscape sensitivity of LCT 1: The Fens to solar PV energy development scenarios is assessed as follows:

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Small scale solar farm	Medium Key characteristics and valued attributes of the landscape have some susceptibility to the particular type and scale of change being assessed. Considerable care may be needed in locating and designing change within the landscape.	None

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Medium scale solar farm	Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.	None
Large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None
Very large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	

3.3 LCT 2: Fen Edge Claylands Landscape Sensitivity Assessment

Landscape Character Baseline

- 3.3.1 The current landscape character baseline is provided by the descriptions of the following Landscape Character Type and its constituent Landscape Character Areas defined by the 2021 Greater Cambridge Landscape Character Assessment¹³:

Landscape Character Type (LCT)	Landscape Character Areas (LCA)
2: Fen Edge Claylands	2A: Longstanton Fen Edge Claylands 2B: Cottenham Fen Edge Claylands

- 3.3.2 There are currently no operational solar PV energy developments within LCT 2 : Fen Edge Claylands:

¹³ See Figure 4.1 in Greater Cambridge Landscape Character Assessment (2021)

LCT 2: Fen Edge Claylands Landscape Sensitivity Assessment

Criteria	Susceptibility
Natural Factors	Natural factors that make the landscape less susceptible to the development scenario: • Low lying, gently undulating landform with historic villages on 'islands' of higher ground that gradually rises to the south from the edge of LCT 1: The Fens, and is drained by small, generally indistinct streams • Predominantly simple, arable landscape with little vegetation cover, limited to dispersed fragments of deciduous woodland, scattered traditional orchards and gappy hedgerows • Large scale, open field system defined by a hierarchy of drains, ditches and lodes Natural factors that make the landscape more susceptible to the development scenario: • Small scale pastoral field patterns around villages, with distinctive localised patterns of hedgerows, shelterbelts, orchards and small clumps of trees • Frequent human scale features including church spires, buildings, trees and gappy hedgerows
Cultural Factors	Cultural factors that make the landscape more susceptible to the development scenario: • Time depth associated with the network of historic ditches and dovecotes and occasional pockets of remnant parkland in LCA 2B: Cottenham Fen Edge Claylands
Perceptual & Aesthetic Factors	Perceptual & aesthetic factors that make the landscape less susceptible to the development scenario: • Generally limited sense of tranquillity in the well settled landscape north of Cambridge which includes the A14, A10, commuter settlements commercial/industrial sites and former RAF bases including landing strips and former buildings Perceptual & aesthetic factors that make the landscape more susceptible to the development scenario: • Strong sense of openness in the large scale arable landscape with sparse vegetation, with localised visual enclosure generally close to villages • Whilst the sense of tranquillity is generally limited, there are pockets in the north where there is a strong sense of tranquillity

Criteria	Susceptibility
Landscape Value	Characteristics, features and qualities of landscape value that make the landscape less susceptible to the development scenario: • Commonplace arable landscape with few distinguishing features and moderate strength of character • Limited geological, topographical or geomorphological value Characteristics, features and qualities of landscape value that make the landscape more susceptible to the development scenario: • Historic landscape patterns of drains and droveways are valued • Contribution made by the southern section of LCA 2B: Cottenham Fen Edge Claylands to the rural setting of Cambridge, part of the defining character of the city • Generally not an ecologically rich area, however natural value associated with several dispersed, generally small sites including Fen Drayton Gravel Pits County Wildlife Site (CWS), Swavesey Meadows CWS, Ashley Farm Orchard CWS, Landbeach Pits Willow Wood CWS, Beach Ditch and Engine Drain CWS, Cambridge Road Willow Pollards CWS and Madingley Brickpits CWS • Recreational value of PROW, including the Pathfinder Long Distance Walk and the National Cycle Network Route 51 which follows the route of the Cambridgeshire Guided Busway in LCA 2A: Longstanton Fen Edge Claylands, National Cycle Network Route 11 east of Milton, National Cycle Network Route 24 north of Girton and Milton Country Park • Strong open, rural character • Locally valued long, open views across arable farmland towards church spires within Fen Edge villages against large, dramatic skies • Locally valued views from the Pathfinder Long Distance Walk
Mitigation Potential	There is potential to mitigate the type and scale of change associated with the development scenario in this area by following the relevant landscape guidelines set out in the Greater Cambridge Landscape Character Assessment (2021) where appropriate. There may be scope for strategic landscape mitigation measures to help integrate development into the landscape (such as careful location of solar PV energy development to avoid undeveloped prominent hills, ridges and skylines by

Criteria	Susceptibility
	using undulating topography, hedgerows and woodlands to reduce visibility). The management and enhancement of existing hedgerows, re-planting hedgerows where these have been lost/become fragmented and consideration of opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity and manage key views across the rural landscape would be beneficial for strengthening local landscape character.
Potential Cumulative Effects	This is an open landscape, which has potential for a greater likelihood of cumulative effects between solar PV energy developments. There are currently two proposed solar PV energy developments within the LCT 2: Fen Edge Claylands (see Annex 2 of the Methodology in Appendix 1 for details): • 1 x medium-scale solar farm • 1 x small-scale solar farm

3.3.3 In summary, this is a large scale, arable landscape with a dispersed pattern of historic villages, farms and cottages on higher ground. Key characteristics which are more susceptible to the solar PV energy development scenarios include the small scale, pastoral field systems around villages and pattern of traditional orchards, pockets in the north where there is a strong sense of tranquillity, and strong sense of openness. There is localised higher susceptibility in the southern section of LCA 2B: Cottenham Fen Edge Claylands which contributes to the rural setting of Cambridge, part of the defining character of the city. Features which are less susceptible to the solar PV energy development scenarios include the gently undulating landform, the simple, arable landcover pattern, and generally limited sense of tranquillity. The landscape sensitivity of the Fen Edge Claylands to solar PV energy development scenarios is assessed as follows:

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Small scale solar farm	Low Key characteristics and valued attributes are less likely to be adversely affected by the particular type and scale of change being assessed. Change can potentially be accommodated without undue negative consequences.	None
Medium scale solar farm	Medium to low Key characteristics and valued attributes have limited susceptibility to the particular type and scale of change being assessed. Although change can potentially be accommodated, care would still be needed in location and designing such change within the landscape.	None
Large scale solar farm	Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.	None
Very large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None

3.4 LCT 3: Lowland Farmlands Landscape Sensitivity Assessment

Landscape Character Baseline

- 3.4.1 The current landscape character baseline is provided by the descriptions of the following Landscape Character Type and its constituent Landscape Character Areas defined by the 2021 Greater Cambridge Landscape Character Assessment¹⁴:

Landscape Character Type (LCT)	Landscape Character Areas (LCA)
3: Lowland Farmlands	3A: Croxton Lowland Farmlands 3B: Bourn Tributaries Lowland Farmlands 3C: Rhee Tributaries Lowland Farmlands 3D: Cam & Granta Tributaries Lowland Farmlands

- 3.4.2 There are currently four operational solar PV energy developments within LCT 3: Lowland Farmlands.

- Land to west of Cantelupe Road, Cantelupe Farm – 38ha solar farm located in LCA 3B: Bourn Tributaries Lowland Farmlands (a medium scale solar farm for the purposes of this assessment)
- Hoback Farmhouse, Wimpole – 32 ha solar farm located in LCA 3C: Rhee Tributaries Lowland Farmlands (a medium scale solar farm for the purposes of this assessment)
- Vine House, Vine Farm Shingay Cum Wendy – 83ha solar farm located in LCA 3C: Rhee Tributaries Lowland Farmlands (a large scale solar farm for the purposes of this assessment)
- Bury Lane Fruit Farm – 36ha solar farm located in LCA 3C: Rhee Tributaries Lowland Farmlands (a medium scale solar farm for the purposes of this assessment)

¹⁴ See Figure 4.1 in Greater Cambridge Landscape Character Assessment (2021)

LCT 3: Lowland Farmlands Landscape Sensitivity Assessment

Criteria	Susceptibility
Natural Factors	Natural factors that make the landscape less susceptible to the development scenario: • Low-lying, gently rolling topography crossed by river corridors and drained by small streams which are often visually indistinct • Intensively farmed, predominantly arable landcover pattern with some large and very large fields, sparse woodland and a fragmented network of hedgerows • Large scale landscape Natural factors that make the landscape more susceptible to the development scenario: • Tree cover is provided by distinctive treed watercourses and around settlements and farmsteads, including scattered woodland and occasional orchards • Human scale features include historic villages, farms and trees and occasional fragmented hedgerows • Landcover pattern in proximity to rivers and streams is diverse and includes pasture, wet woodland and grassland
Cultural Factors	Cultural factors that make the landscape less susceptible to the development scenario: • Generally an intensively farmed arable landscape with limited time depth Cultural factors that make the landscape more susceptible to the development scenario: • Time depth associated with occasional parkland, Ermine Street Roman Road, and medieval agricultural systems visible in the landscape through the survival of ridge and furrow in places
Perceptual & Aesthetic Factors	Perceptual & aesthetic factors that make the landscape less susceptible to the development scenario: • Localised, more intimate landscape at settlement edges due to woodland and tree cover, particularly in LCA 3D: Cam & Granta Tributaries Lowland Farmlands where settlement is denser, and the character is more visually enclosed than elsewhere in the LCT • Generally eroded sense of tranquillity due to this being a well settled landscape with a relatively dense rural settlement pattern of large and small villages, solar farms in LCAs 3B: Bourn Tributaries Lowland Farmlands and 3C: Rhee Tributaries Lowland Farmlands, and major

Criteria	Susceptibility
	transport routes including the M11, A10 and A1198 along the line of Ermine Street Roman Road Perceptual & aesthetic factors that make the landscape more susceptible to the development scenario: • Generally open character and extensive views
Landscape Value	Characteristics, features and qualities of landscape value that make the landscape less susceptible to the development scenario: • Moderate strength of character associated with the intensively farmed, often busy rural landscape with few distinguishing features • Generally limited geological, topographical and geomorphological value Characteristics, features and qualities of landscape value that make the landscape more susceptible to the development scenario: • Historic landscape value associated with occasional scattered parklands • The eastern part of LCA 3B: Bourn Tributaries Lowland Farmlands and the northern part of LCA 3D: Cam & Granta Tributaries contribute to the rural setting of Cambridge, part of the defining character of the city • Natural value associated with a handful of SSSI including Fowlmere Watercress Beds, and County Wildlife Sites, including the courses of the River Cam/Rhee and Bourn Brook and several tributary streams • Recreational value of a large number of PROW, including the Harcamlow Way long distance path, which link settlements, through parklands and across river valleys and National Cycle Network Route 11 • Recreational value of a small number of visitor sites and attractions within this LCT, including Coton Countryside Reserve in LCA 3B: Bourn Tributaries Lowland Farmlands, Fowlmere Nature Reserve in LCA 3C: Rhee Tributaries Lowland Farmlands and Trumpington Meadows Country Park on the southwest edge of Cambridge in LCA 3D: Cam & Granta Tributaries Lowland Farmlands • Recreational value of University sports grounds in LCA 3B: Bourn Tributaries Lowland Farmlands • Generally limited scenic value associated with the large scale arable farmlands, and solar farms in LCAs 3B: Bourn Tributaries Lowland Farmlands and 3C: Rhee Tributaries Lowland Farmlands • Generally locally valued open and expansive views across large arable fields, including into Huntingdonshire

Criteria	Susceptibility
	from LCA 3A: Croxton Lowland Farmlands, and towards the rising landform of the Chalk Hills from LCAs 3B: Bourn Tributaries Lowland Farmlands, 3C: Rhee Tributaries Lowland Farmlands and 3D: Cam & Granta Tributaries Lowland Farmlands Locally valued views towards the distinctive radio telescopes on the skyline in LCA 3B: Bourn Tributaries Lowland Farmlands
Mitigation Potential	There is potential to mitigate the type and scale of change associated with the development scenario in this area by following the relevant landscape guidelines set out in the Greater Cambridge Landscape Character Assessment (2021) where appropriate. There may be scope for strategic landscape mitigation measures to help integrate development into the landscape (such as careful location of solar PV energy development to avoid undeveloped prominent hills, ridges and skylines by using undulating topography, hedgerows and woodlands to reduce visibility). The management and enhancement of existing hedgerows, re-planting hedgerows where these have been lost/become fragmented and consideration of opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity and manage key views across the rural landscape would be beneficial for strengthening local landscape character.
Potential Cumulative Effects	This is a generally open landscape, which has potential for a greater likelihood of cumulative effects between solar PV energy developments. There is currently one proposed solar PV energy developments within the LCT 3: Lowland Farmlands (see Annex 2 of the Methodology in Appendix 1 for details): 1 x medium-scale solar farm

3.4.3 In summary, this is an intensively farmed, low lying, gently rolling rural landscape. Key characteristics which are more susceptible to the solar PV energy development scenarios include the generally open character, recreational value associated with the PROW network, including the Harcamlow Way, several Nature Reserves, and Trumpington Country Park. Finally, there is natural value associated with several SSSI, CWS, and small woodlands. There is localised higher susceptibility to the development

scenario in the western part of LCA 3B: Boum Tributaries Lowland Farmlands and in the northern part of LCA 3D: Cam & Granta Tributaries Lowland Farmlands, due to the contribution they make to the rural setting of Cambridge, part of the defining character of the city. Key characteristics which are less susceptible to the solar PV energy development scenarios include the gently rolling landform, the large scale, arable farmland, and eroded sense of tranquillity within the well settled landscape. The landscape sensitivity of the Lowland Farmlands to solar PV energy development scenarios is assessed as follows:

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Small scale solar farm	Low Key characteristics and valued attributes are less likely to be adversely affected by the particular type and scale of change being assessed. Change can potentially be accommodated without undue negative consequences.	None
Medium scale solar farm	Medium to low Key characteristics and valued attributes have limited susceptibility to the particular type and scale of change being assessed. Although change can potentially be accommodated, care would still be needed in location and designing such change within the landscape.	None
Large scale solar farm	Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable	None

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
	care would be needed in locating and designing change within the landscape.	
Very large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None

3.5 LCT 4: Wooded Claylands Landscape Sensitivity Assessment

Landscape Character Baseline

- 3.5.1 The current landscape character baseline is provided by the descriptions of the following Landscape Character Type and its constituent Landscape Character Areas defined by the 2021 Greater Cambridge Landscape Character Assessment¹⁵:

Landscape Character Type (LCT)	Landscape Character Areas (LCA)
4: Wooded Claylands	4A: Croxton to Conington Wooded Claylands 4B: Lolworth to Longstowe Wooded Claylands 4C: Hatley Wooded Claylands 4D: West Wratting Wooded Claylands 4E: West Wickham Wooded Claylands 4F: The Camps Wooded Claylands

- 3.5.2 There are currently no operational solar PV energy developments within LCT 4: Wooded Claylands.

¹⁵ See Figure 4.1 in Greater Cambridge Landscape Character Assessment (2021)

LCT 4: Wooded Claylands Landscape Sensitivity Assessment

Criteria	Susceptibility
Natural Factors	Natural factors that make the landscape less susceptible to the development scenario: - Intensively managed productive rural landscape that is predominantly arable farmland Natural factors that make the landscape more susceptible to the development scenario: - Generally gently rolling, elevated landscape - Minor streams that create shallow depressions or valleys that contribute to the undulating character of the landform - Skylines feature occasional human scale landmark features including windmills and church spires - Areas of naturalistic landcover including grassland, a number of parklands and substantial areas of deciduous and mixed woodland across the plateau - Varying scale and complexity with field sizes varying from small scale, sub-regular and sinuous fields to areas of planned geometric fields, with small scale field patterns being particularly noticeable in LCAs 4D: West Wrattling Wooded Claylands, 4E: West Wickham Wooded Claylands and 4F: The Camps Wooded Claylands - Village edges tend to have small scale fields, paddocks, orchards, woodlands and human scale clumps of trees at their edges
Cultural Factors	Cultural factors that make the landscape more susceptible to the development scenario: - Strong sense of time depth provided by the evidence of medieval settlement, moated sites and several designated sites including a number of historic parks and gardens - An historic, irregular field pattern, which is particularly distinctive in LCAs 4D: West Wrattling Wooded Claylands, 4E: West Wickham Wooded Claylands and 4F: The Camps Wooded Claylands, and the distinctive earth bank features associated with remnant hedge and field boundaries in LCA 4F: The Camps Wooded Claylands

Criteria	Susceptibility
Perceptual & Aesthetic Factors	Perceptual & aesthetic factors that make the landscape less susceptible to the development scenario: • Localised sense of enclosure provided by hedgerows and woodlands • Sense of tranquillity is weakened in places by the presence of dual carriageways, the planned settlement of Cambourne and occasional large agricultural buildings Perceptual & aesthetic factors that make the landscape more susceptible to the development scenario: • A relatively open landscape, with wooded horizons • Sense of openness created by removal of hedgerow boundaries have been removed and heavily trimmed in places, and fields are often open or bound by ditches and roadside verges contribute to the LCT feeling open • Settlement pattern of small vernacular villages and dispersed farms contributes to a generally strong sense of tranquillity away from major roads, which is particularly strong in LCAs 4D: West Wrating Wooded Claylands, 4E: West Wickham Wooded Claylands and 4F: The Camps Wooded Claylands
Landscape Value	Characteristics, features and qualities of landscape value that make the landscape less susceptible to the development scenario: • Occasional dual carriageways locally erode perceptions of tranquillity Characteristics, features and qualities of landscape value that make the landscape more susceptible to the development scenario: • Strong character associated with the undulating, elevated landform and woodland blocks including ancient woodland in generally good condition • Semi natural and ancient woodland and the presence of medieval settlement are relatively rare within Greater Cambridge • Topographical and geomorphological value of the gently undulating, elevated landform • Time depth associated with medieval settlements, particularly in the west, including earthworks, green lanes and moated sites, as well as a number of historic parks and gardens and an historic, irregular field pattern • Natural value associated with woodland cover and occasional hedgerow boundaries providing continuity of vegetation within the predominantly arable LCT • Natural value is indicated by a small number of woodlands which are designated Sites of Special Scientific Interest (SSSI), and a number of grass verges,

Criteria	Susceptibility
	woods and parkland designated as County Wildlife Sites (CWS) • Recreational value of several publicly accessible woodlands and nature reserves connected by the PROW network which includes the Harcamlow Way, Wimpole Way, Clopton Way and Pathfinder Long distance paths • Generally strong sense of tranquillity away from the highway network • Valued views towards the historic skyline of Cambridge from a high point at Coton Countryside Reserve in LCA 4B: Lolworth to Longstowe Wooded Claylands and from Madingley Wood in LCA 4A: Croxton to Conington Wooded Claylands are marked on OS mapping • Valued views from the American Cemetery in LCA 4A: Croxton to Conington Wooded Claylands into the gently undulating arable countryside • Valued long distance views towards Ely from LCA 4D: Hatley Wooded Claylands • Views occasionally feature historic church spires within a rural context, and there are views from the Harcamlow Way, Wimpole Way Clopton Way and Pathfinder Long distance paths
Mitigation Potential	There is potential to mitigate the type and scale of change associated with the development scenario in this area by following the relevant landscape guidelines set out in the Greater Cambridge Landscape Character Assessment (2021) where appropriate. There may be scope for strategic landscape mitigation measures to help integrate development into the landscape (such as careful location of solar PV energy development to avoid undeveloped prominent hills, ridges and skylines by using undulating topography, hedgerows and woodlands to reduce visibility). The management and enhancement of existing hedgerows, re-planting hedgerows where these have been lost/become fragmented and consideration of opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity and manage key views across the rural landscape would be beneficial for strengthening local landscape character.
Potential Cumulative Effects	This is a relatively open landscape, which has potential for a greater likelihood of cumulative effects between solar PV energy developments.

Criteria	Susceptibility
	There are currently two proposed solar PV energy developments within LCT 4: Wooded Claylands (see Annex 2 of the Methodology in Appendix 1 for details): • 1 x very large-scale solar farm • 1 x small-scale solar farm

3.5.3 Overall, the openness of the rural landscape, the strong sense of time depth, natural value and recreational value make LCT 4: Wooded Claylands more susceptible in landscape and visual terms to solar PV energy development scenarios. The strong sense of tranquillity and distinctive, small scale historic field pattern in LCAs 4D: West Wrating Wooded Claylands, 4E: West Wickham Wooded Claylands, 4F: The Camps Wooded Claylands increases the sensitivity in these areas to some development scenarios. The landscape sensitivity of the Wooded Claylands to solar PV energy development scenarios is assessed as follows:

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Small scale solar farm	Medium Key characteristics and valued attributes of the landscape have some susceptibility to the particular type and scale of change being assessed. Considerable care may be needed in locating and designing change within the landscape.	LCAs 4D: West Wrating Wooded Claylands, 4E: West Wickham Wooded Claylands, 4F: The Camps Wooded Claylands Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.
Medium scale solar farm	Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable	LCAs 4D: West Wrating Wooded Claylands, 4E: West Wickham Wooded Claylands, 4F: The Camps Wooded Claylands High

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
	care would be needed in locating and designing change within the landscape.	Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.
Large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None
Very large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None

3.6 LCT 5: Wooded Greensand Ridge Landscape Sensitivity Assessment

Landscape Character Baseline

- 3.6.1 The current landscape character baseline is provided by the descriptions of the following Landscape Character Type and its constituent Landscape Character Areas defined by the 2021 Greater Cambridge Landscape Character Assessment¹⁶:

Landscape Character Type (LCT)	Landscape Character Areas (LCA)
5: Wooded Greensand Ridge	5A: Gamlingay Wooded Greensand Ridge

- 3.6.2 There are currently no operational solar PV energy developments within LCT 5: Wooded Greensand Ridge.

¹⁶ See Figure 4.1 in Greater Cambridge Landscape Character Assessment (2021)

LCT 5: Wooded Greensand Ridge Landscape Sensitivity Assessment

Criteria	Susceptibility
Natural Factors	Natural factors that make the landscape more susceptible to the development scenario: • Prominent, narrow sandstone ridge rising from c. 35m AOD to c. 60m AOD that is drained by small streams • Prominent wooded ridgeline creating a distinctive skyline to the lower lying Wooded Claylands to the east • Diverse landcover pattern comprising woodland, including ancient woodland, meadow, mixed farmland and heathland • Small scale landscape, particularly in the west, where there are scattered human scale features associated with the village of Gamlingay including trees, hedgerows and buildings, and a strong sense of enclosure due to woodland and parkland
Cultural Factors	Cultural factors that make the landscape more susceptible to the development scenario: • Historic landscape character associated with remnant estate parkland landscapes including earthworks, woodland and parkland west of Gamlingay, linking west to Woodbury Park
Perceptual & Aesthetic Factors	Perceptual & aesthetic factors that make the landscape less susceptible to the development scenario: • The landscape is more open and larger scale in the northeast, with large fields and limited hedgerows Perceptual & aesthetic factors that make the landscape more susceptible to the development scenario: • Generally strong sense of enclosure due to woodland and parkland • Generally limited sense of tranquillity due to the presence of the village of Gamlingay, a number of hamlets, small clusters of properties and individual farms
Landscape Value	Characteristics, features and qualities of landscape value that make the landscape more susceptible to the development scenario: • Strong landscape character as a result of its distinct and recognisable settled, wooded ridgeline and strong sense of enclosure • The distinctive wooded ridgeline and strong sense of enclosure are rare in Greater Cambridge • High topographical value associated with the shape and scale of the distinctive ridgeline

Criteria	Susceptibility
	• Historic landscape value associated with remnant parkland and significant areas of ancient woodland • Recreational value of part of the Clopton Way long distance route, which links between Gamlingay and Wimpole Hall, as well as Gamlingay Cinques and Gamlingay Wood which are publicly accessibly, and a small number of PROW • High natural value associated with heathland, ancient woodland including Gamlingay Wood SSSI and County Wildlife Sites including Gamlingay Cinques, Gamlingay Heath Plantation and New Barn Grassland
Mitigation Potential	There is potential to mitigate the type and scale of change associated with the development scenario in this area by following the relevant landscape guidelines set out in the Greater Cambridge Landscape Character Assessment (2021) where appropriate. There may be scope for strategic landscape mitigation measures to help integrate development into the landscape (such as careful location of solar PV energy development to avoid undeveloped prominent hills, ridges and skylines by using undulating topography, hedgerows and woodlands to reduce visibility). The management and enhancement of existing hedgerows, re-planting hedgerows where these have been lost/become fragmented and consideration of opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity and manage key views across the rural landscape would be beneficial for strengthening local landscape character.
Potential Cumulative Effects	This a landscape which generally has a strong sense of enclosure, with limited potential for a greater likelihood of cumulative effects between solar PV energy developments. There are currently no proposed solar PV energy developments within LCT 5: Wooded Greensand Ridge that may give rise to cumulative effects in combination with existing solar PV energy developments in this LCT.

3.6.3 In summary, this LCT is a settled wooded ridgeline with a distinctive, wooded character. It is a relatively small area, which extends west into Central Bedfordshire. Key characteristics which are susceptible to the solar PV energy development scenarios include the distinctive wooded ridgeline visible from LCT 4: Wooded Claylands, the diverse landcover pattern, historic landscape

value associated with remnant parkland and high natural value associated with ancient woodland including at Gamlingay Woods and several County Wildlife Sites. Less susceptible to the development scenarios are the intimate landscape with a strong sense of enclosure due to woodland, and the limited sense of tranquillity in the well settled LCT. The landscape sensitivity of LCT 5: Wooded Greensand Ridge to solar PV energy development scenarios is assessed as follows:

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Small scale solar farm	Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.	None
Medium scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None
Large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Very large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None

3.7 LCT 6: Fen Edge Chalklands Landscape Sensitivity Assessment

Landscape Character Baseline

- 3.7.1 The current landscape character baseline is provided by the descriptions of the following Landscape Character Type and its constituent Landscape Character Areas defined by the 2021 Greater Cambridge Landscape Character Assessment¹⁷:

Landscape Character Type (LCT)	Landscape Character Areas (LCA)
6: Fen Edge Chalklands	6A: Fen Ditton Fen Edge Chalklands 6B: Wilbraham Fen Edge Chalklands 6C: Fulbourn Fen Edge Chalklands

- 3.7.2 There are currently no operational solar PV energy developments within LCT 6: Fen Edge Chalklands.

¹⁷ See Figure 4.1 in Greater Cambridge Landscape Character Assessment (2021)

LCT 6: Fen Edge Chalklands Landscape Sensitivity Assessment

Criteria	Susceptibility
Natural Factors	Natural factors that make the landscape less susceptible to the development scenario: • Low lying, gently undulating landform dissected by small streams • Simple, predominantly arable landcover pattern dominated by late enclosures interspersed with small woodlands and shelterbelts on higher land and low hedge or ditch boundaries • Large scale landscape Natural factors that make the landscape more susceptible to the development scenario: • Generally limited woodland cover, however vegetation comprises orchards, scattered woodland copses and shelterbelts across higher landform, and a concentration of woodland around settlements forming part of remnant parkland landscape • Human scale features include small villages, trees and hedges
Cultural Factors	Cultural factors that make the landscape more susceptible to the development scenario: • Generally limited time depth in the intensively managed arable land however there is historic landscape value associated with parkland landscapes in proximity to the historic villages, and Fleam Dyke Anglo-Saxon earthwork
Perceptual & Aesthetic Factors	Perceptual & aesthetic factors that make the landscape less susceptible to the development scenario: • Eroded sense of tranquillity in LCA 6A: Fen Ditton Fen Edge Chalklands in proximity to highways including the A14 and A1303, the large village of Fulbourn, Cambridge and Cambridge Airport Perceptual & aesthetic factors that make the landscape more susceptible to the development scenario: • Generally open landscape with long views across large fields • Generally strong sense of tranquillity in the rural landscape with small villages

Criteria	Susceptibility
Landscape Value	Characteristics, features and qualities of landscape value that make the landscape less susceptible to the development scenario: • Moderate strength of character associated with the commonplace rural arable landscape with few distinguishing features • Generally limited geological, topographical and geomorphological value Characteristics, features and qualities of landscape value that make the landscape more susceptible to the development scenario: • Generally limited time depth in the intensively managed arable land however there is historic landscape value of parkland and the Fleam Dyke earthwork • Generally limited ecological value, however there is natural value associated with scattered features including Fleam Dyke SSSI, Fulbourn Fen SSSI and a small number of County Wildlife Sites including grassland and hedges at Low Fen Drove, roadside verges along Airport Way in Teversham and Fleam Dyke Pumping Station • Recreational value of Fulbourn Fen Nature Reserve, PROW including the Harcamlow Way long distance path and National Cycle Network Route 51 • Locally valued long views across the open, arable landscape, including views towards Cambridge and panoramic views encompass the rising Chalk Hills to the south from LCA 6B: Wilbraham Fen Edge Chalklands • Valued views from the Harcamlow Way, which passes along Fleam Dyke
Mitigation Potential	There is potential to mitigate the type and scale of change associated with the development scenario in this area by following the relevant landscape guidelines set out in the Greater Cambridge Landscape Character Assessment (2021) where appropriate. There may be scope for strategic landscape mitigation measures to help integrate development into the landscape (such as careful location of solar PV energy development to avoid undeveloped prominent hills, ridges and skylines by using undulating topography, hedgerows and woodlands to reduce visibility). The management and enhancement of existing hedgerows, re-planting hedgerows where these have been lost/become fragmented and consideration of opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity and manage key views across the rural

Criteria	Susceptibility
	landscape would be beneficial for strengthening local landscape character.
Potential Cumulative Effects	This is a generally open landscape, which has potential for a greater likelihood of cumulative effects between solar PV energy developments. There are currently no proposed solar PV energy developments within LCT 6: Fen Edge Chalklands that may give rise to cumulative effects in combination with existing solar PV energy developments in this LCT.

3.7.3 In summary, this is an intensively managed, gently undulating landscape. Key characteristics which are more susceptible to the solar PV energy development scenarios include the sense of tranquillity, strong rural character and openness of the landscape, long open views, including views towards Cambridge, scattered features of historic and natural value including Fleam Dyke and small historic villages with parkland estates. There is localised higher susceptibility to the development scenario in the western parts of LCA 6A: Fen Ditton Fen Edge Chalklands and LCA 6C: Fulbourn Fen Edge Chalklands due to the contribution they make to the rural setting of Cambridge, part of the defining character of the city. Less susceptible is the undulating landform, the largely simple, large scale arable landcover pattern and locally eroded sense of tranquillity in proximity to settlement and highways. The landscape sensitivity of LCT 6: Fen Edge Chalklands to solar PV energy development scenarios is assessed as follows:

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Small scale solar farm	Low Key characteristics and valued attributes are less likely to be adversely affected by the particular type and scale of change being assessed. Change can potentially be accommodated without undue negative consequences.	None

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Medium scale solar farm	Medium to low Key characteristics and valued attributes have limited susceptibility to the particular type and scale of change being assessed. Although change can potentially be accommodated, care would still be needed in location and designing such change within the landscape.	None
Large scale solar farm	Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.	None
Very large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None

3.8 LCT 7: Chalk Hills Landscape Sensitivity Assessment

3.8.1 The current landscape character baseline is provided by the descriptions of the following Landscape Character Type and its constituent Landscape Character Areas defined by the 2021 Greater Cambridge Landscape Character Assessment¹⁸:

Landscape Character Type (LCT)	Landscape Character Areas (LCA)
7: Chalk Hills	7A: Eastern Chalk Hills 7B: Gog Magog Chalk Hills 7C: Linton Chalk Hills 7D: Newton Chalk Hills 7E: Wimpole Chalk Hills 7F: Southern Chalk Hills

3.8.2 There is currently one operational solar PV energy development within LCT 7: Chalk Hills:

- Mill Road, Great Wilbraham – 63 ha located within LCA 7A: Eastern Chalk Hills (a large scale solar farm for the purposes of this assessment)

¹⁸ See Figure 4.1 in Greater Cambridge Landscape Character Assessment (2021)

LCT 7: Chalk Hills Landscape Sensitivity Assessment

Criteria	Susceptibility
Natural Factors	Natural factors that make the landscape less susceptible to the development scenario: • Largely simple, large scale arable landcover pattern Natural factors that make the landscape more susceptible to the development scenario: • Locally distinctive hills, slopes and ridgelines with frequent dry valleys • Arable fields are supplemented by more complex landcover elements including broadly intact permanent pasture and woodland, including ancient semi natural woodland on steeper slopes • Pockets of varying scale and complexity within the landscape which encompasses varying field sizes from small scale, sub-regular and sinuous fields to areas of planned geometric fields • Scattered human scale features include buildings, trees and hedgerows • Pockets of varying scale and complexity within the landscape which includes small scale fields, paddocks, orchards, woodlands and clumps of trees at village edges
Cultural Factors	Cultural factors that make the landscape more susceptible to the development scenario: • Time depth associated with tracks, hillforts, distinctive linear dykes and the registered historic park and garden at Wimpole Hall in LCA 7E: Wimpole Chalk Hills
Perceptual & Aesthetic Factors	Perceptual & aesthetic factors that make the landscape less susceptible to the development scenario: • The A11, M11, a solar farm and Wadlow Windfarm both in LCA 7A: Eastern Chalk Hills reduce the sense of tranquillity Perceptual & aesthetic factors that make the landscape more susceptible to the development scenario: • A relatively open landscape with a medium to large scale, regular field pattern defined by hedgerows in places • Sparsely settled landscape with a generally strong sense of tranquillity away from the A11 and M11
Landscape Value	Characteristics, features and qualities of landscape value that make the landscape more susceptible to the development scenario: • A landscape of strong character and generally in good condition

Criteria	Susceptibility
	• The northern part of LCA 7B: Gog Magog Chalk Hills contributes to the rural setting of Cambridge, part of the defining character of the city • Locally prominent and distinctive landform is considered rare • Strong time depth • Natural value associated with pasture, woodland, including ancient semi natural beech, remnants chalk grassland, well defined hedgerow and tree boundaries, several Sites of Special Scientific Interest associated with linear Roman features, at former puts/quarries and significant areas of Chalk Grassland and several County Wildlife Sites • Recreational value of clusters of Public Rights of Way (PROW) associated with settlements and historic features including the E2 European Long Distance Route, the Icknield Way, Harcamlow Way, Clopton Way, Wimpole Way and Mare Way long distance paths • Recreational value of Wimpole Hall and Magog Down and Wandlebury Country Park within the Gog Magog Hills in LCA 7B: Gog Magog Chalk Hills • Distinctive landform and strong rural character combine to create scenic quality, alongside a strong sense of tranquillity away from the A11, M11 and Wadlow Windfarm • Valued views include long distance, panoramic views including views of significance to and from Cambridge from LCA 7B: Gog Magog Chalk Hills and more distant views from LCA 7D: Newton Chalk Hills, views towards Ely from LCA 7A: Eastern Chalk Hills, a view identified on the OS explorer map from Wandlebury Country Park towards Ely, also in LCA 7B: Gog Magog Chalk Hills and views from the Icknield Way and Harcamlow Way long distance path. • Locally valued long, open views across the Granta River Valley from LCAs 7C: Linton Chalk Hills and 7D: Newton Chalk Hills, and long, expansive views north from LCA 7F: Southern Chalk Hills
Mitigation Potential	There is potential to mitigate the type and scale of change associated with the development scenario in this area by following the relevant landscape guidelines set out in the Greater Cambridge Landscape Character Assessment (2021) where appropriate. There may be scope for strategic landscape mitigation measures to help integrate development into the landscape (such as careful location of solar PV energy development to avoid undeveloped prominent hills, ridges and skylines by

Criteria	Susceptibility
	using undulating topography, hedgerows and woodlands to reduce visibility). The management and enhancement of existing hedgerows, re-planting hedgerows where these have been lost/become fragmented and consideration of opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity and manage key views across the rural landscape would be beneficial for strengthening local landscape character.
Potential Cumulative Effects	This is a relatively open landscape, which has potential for a greater likelihood of cumulative effects between solar PV energy developments. There are currently no proposed solar PV energy developments within the LCT 7: Chalk Hills that may give rise to cumulative effects in combination with existing solar PV energy developments in this LCT.

3.8.3 Overall, this is a distinctive locally prominent, elevated landscape. Key characteristics which are more susceptible to the solar PV energy development scenarios include the strong rural character associated with the locally distinctive landform, the strong sense of time depth, the generally strong sense of relative tranquillity away from the A11 and M11, and valued long distance, panoramic views. Less susceptible are the large scale, simple arable field pattern, and a reduced sense of tranquillity in proximity to the A11, M11 and Wadlow Windfarm. LCA 7B: Gog Magog Chalk Hills is more susceptible than elsewhere in the LCT due to its high recreational, natural and historic landscape value, combined with its visual relationship with Cambridge, and the contribution it makes to the rural setting of the city, part of the defining character of Cambridge. Shelterbelts and rolling landform combine to make LCA 7A: Eastern Chalk Hills more enclosed and thus less susceptible than elsewhere in the LCT. The landscape sensitivity of LCT 7: Chalk Hills to solar PV energy development scenarios is assessed as follows:

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Small scale solar farm	Medium Key characteristics and valued attributes of the landscape have some susceptibility to the particular type and scale of change being assessed. Considerable care may be needed in locating and designing change within the landscape.	LCA 7A: Eastern Chalk Hills Medium to low Key characteristics and valued attributes have limited susceptibility to the particular type and scale of change being assessed. Although change can potentially be accommodated, care would still be needed in location and designing such change within the landscape. LCA 7B: Gog Magog Chalk Hills Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.
Medium scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	LCA 7A: Eastern Chalk Hills Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None
Very large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None

3.9 LCT 8: Lowland Chalklands Landscape Sensitivity Assessment

Landscape Character Baseline

- 3.9.1 The current landscape character baseline is provided by the descriptions of the following Landscape Character Type and its constituent Landscape Character Areas defined by the 2021 Greater Cambridge Landscape Character Assessment¹⁹:

Landscape Character Type (LCT)	Landscape Character Areas (LCA)
8: Lowland Chalklands	8A: Pampisford Lowland Chalklands 8B: Morden to Duxford Lowland Chalklands

- 3.9.2 There are currently three operational solar PV energy developments within LCT 8: Lowland Chalklands.

- Land adjacent to Highfield Farm, Bassingbourn – 22ha solar farm located in LCA 8B: Morden to Duxford Lowland Chalklands (a medium scale solar farm for the purposes of this assessment)
- Land between Railway and Sewage Disposal Works, Royston Road – 9ha solar farm located in LCA 8B: Morden to Duxford Lowland Chalklands (a small scale solar farm for the purposes of this assessment)
- Muncey's Farm – c. 49ha solar farm. Consented November 2014 located in LCA 8B: Morden to Duxford Lowland Chalklands (a medium scale solar farm for the purposes of this assessment)

¹⁹ See Figure 4.1 in Greater Cambridge Landscape Character Assessment (2021)

LCT 8: Lowland Chalklands Landscape Sensitivity Assessment

Criteria	Susceptibility
Natural Factors	Natural factors that make the landscape less susceptible to the development scenario: • Low lying, gently rolling foothills of the Chalk Hills with a number of streams that cut shallow valleys into the landscape • Simple landcover pattern of intensively farmed medium to large arable fields with sparse woodland linked by hedges Natural factors that make the landscape more susceptible to the development scenario: • Human scale features include dispersed historic villages, church spires which are prominent landmarks on the horizon in LCA 8B: Morden to Duxford Lowland Chalklands, scattered copses and shelterbelts • Mixture of horticultural enterprises, glasshouses and grazing southwest of Great Abington in LCA 8A: Pampisford Lowland Chalklands has a distinctive, small scale field pattern
Cultural Factors	Cultural factors that make the landscape less susceptible to the development scenario: • Late enclosure, intensively farmed arable fields Cultural factors that make the landscape more susceptible to the development scenario: • Time depth associated with ancient routes, earthworks such as Brent Ditch and Roman sites/features including Ermine Street Roman Road and Worstead Street Roman Road, as well as parkland in LCA 8A: Pampisford Lowland Chalklands
Perceptual & Aesthetic Factors	Perceptual & aesthetic factors that make the landscape less susceptible to the development scenario: • Generally strong sense of visual enclosure in LCA 8A: Pampisford Lowland Chalklands due to trees and woodland associated with the Cam and Granta River Valleys in LCAs 9B: Cam River Valley and 9D: Granta River Valley • Tranquillity locally eroded by major roads including the M11, A11, A505 and A1307, and a dense settlement pattern alongside science and technology parks in LCA 8A: Pampisford Lowland Chalklands along key routes into Cambridge

Criteria	Susceptibility
	Perceptual & aesthetic factors that make the landscape more susceptible to the development scenario: • Strong sense of openness in LCA 8B: Morden to Duxford Lowland Chalklands • Generally strong rural character and tranquil, often remote rural landscape away from major roadways and extended villages in LCA 8B: Morden to Duxford Lowland Chalklands
Landscape Value	Characteristics, features and qualities of landscape value that make the landscape less susceptible to the development scenario: • Moderate strength of character associated with the settled rural landscape comprising dispersed historic villages separated by open countryside and little tree cover • Commonplace, arable landcover • Limited geological topographical and geomorphological value Characteristics, features and qualities of landscape value that make the landscape more susceptible to the development scenario: • Historic landscape value associated with tracks, and green lanes, including the historic route of the Icknield Way, • Natural value is generally limited, but does include a small number of SSSI including pockets of wet woodland, meadow and hummocky fields containing nationally rare species, as well as a small number of County Wildlife Sites including chalk pit, stretches of disused railway and intact hedgerow boundaries • Recreational value of PROW including the parts of the Icknield Way and Harcamlow Way long distance paths and National Cycle Network Route 11 • Recreational value of the Imperial War Museum at Duxford • Strong character and sense of rural tranquillity in LCA 8B: Morden to Duxford Lowland Chalklands, but this is eroded close to major roads and where the settlement pattern is denser in LCA 8A: Pampisford Lowland Chalklands • Locally valued open, expansive views across arable fields towards the rising chalk hills to the north-east and south in LCA 8B: Morden to Duxford Lowland Chalklands, including from the Icknield Way
Mitigation Potential	There is potential to mitigate the type and scale of change associated with the development scenario in this area by

Criteria	Susceptibility
	following the relevant landscape guidelines set out in the Greater Cambridge Landscape Character Assessment (2021) where appropriate. There may be scope for strategic landscape mitigation measures to help integrate development into the landscape (such as careful location of solar PV energy development to avoid undeveloped prominent hills, ridges and skylines by using undulating topography, hedgerows and woodlands to reduce visibility). The management and enhancement of existing hedgerows, re-planting hedgerows where these have been lost/become fragmented and consideration of opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity and manage key views across the rural landscape would be beneficial for strengthening local landscape character.
Potential Cumulative Effects	LCA 8A generally has a strong sense of enclosure, with limited potential for a greater likelihood of cumulative effects between solar PV energy developments LCA 8B is a generally open landscape, which has potential for a greater likelihood of cumulative effects between solar PV energy developments. There are currently no proposed solar PV energy developments within LCT 8: Lowland Chalklands that may give rise to cumulative effects in combination with existing solar PV energy developments in this LCT.

3.9.3 In summary, this is a low-lying, gently rolling LCT with a landcover pattern of medium to large sized intensively managed arable fields. Key characteristics which are more susceptible to the solar PV energy development scenarios include the strong sense of openness in LCA 8B: Morden to Duxford Lowland Chalklands, strong sense of tranquillity and rural character, strong time depth associated with parkland, visible historic earthworks and routes. Key characteristics which are less susceptible to the solar PV energy development scenarios include the large scale, simple arable landcover pattern, generally limited natural value and the generally strong sense of visual enclosure in LCA 8A: Pampisford Lowland Chalklands. The landscape sensitivity of LCT 8: Lowland Chalklands to solar PV energy development scenarios is assessed as follows:

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Small scale solar farm	Low Key characteristics and valued attributes are less likely to be adversely affected by the particular type and scale of change being assessed. Change can potentially be accommodated without undue negative consequences.	None
Medium scale solar farm	Medium to low Key characteristics and valued attributes have limited susceptibility to the particular type and scale of change being assessed. Although change can potentially be accommodated, care would still be needed in location and designing such change within the landscape.	None
Large scale solar farm	Medium Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.	None
Very large scale solar farm	Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.	None

3.10 LCT 9: River Valleys Landscape Sensitivity Assessment

Landscape Character Baseline

- 3.10.1 The current landscape character baseline is provided by the descriptions of the following Landscape Character Type and its constituent Landscape Character Areas defined by the 2021 Greater Cambridge Landscape Character Assessment²⁰:

Landscape Character Type (LCT)	Landscape Character Areas (LCA)
9: River Valleys	9A: Cam River Valley – Cambridge 9B: Cam River Valley 9C: Rhee River Valley 9D: Granta River Valley

- 3.10.2 There are currently no operational solar PV energy developments within LCT 9.

²⁰ See Figure 4.1 in Greater Cambridge Landscape Character Assessment (2021)

LCT 9: River Valleys Landscape Sensitivity Assessment

Criteria	Susceptibility
Natural Factors	Natural factors that make the landscape less susceptible to the development scenario: • Flat, low lying valley floors • Occasional vertical elements interrupting the flat skyline include chimneys, pylons, poles and masts, notably in LCAs 9A: Cam River Valley – Cambridge and 9D: Granta River Valley Natural factors that make the landscape more susceptible to the development scenario: • Generally undeveloped, wooded skylines, with occasional landmark church spires, and the Rivey Hill Water tower a landmark feature which can be seen on the skyline from LCA 9D: Granta River Valley • Complex and intricate mosaic landcover pattern including riparian trees, parkland, woodland, meadows, semi improved grasslands, rivers and waterbodies, notably Byron's Pool in LCA 9B: Cam River Valley • Frequent human scale features including buildings, church spires, trees and hedgerows • Small scale, historic landscape pattern, influenced by the rivers, and enclosed over time into a mosaic of riverine meadows
Cultural Factors	Cultural factors that make the landscape more susceptible to the development scenario: • Generally strong time depth associated with small scale meadows, historic parklands, notably in LCA 9D: Granta River Valley and commons in LCA 9A: Cam River Valley – Cambridge
Perceptual & Aesthetic Factors	Perceptual & aesthetic factors that make the landscape less susceptible to the development scenario: • Generally a strong sense of enclosure due to vegetation including trees and woodland Perceptual & aesthetic factors that make the landscape more susceptible to the development scenario: • Small scale, enclosed landscape with distinctive field patterns • Generally a tranquil, rural landscape, crated by the presence of water through the unsettled meadowlands, however this is eroded by major roads including the M11, A11 and A14

Criteria	Susceptibility
Landscape Value	Characteristics, features and qualities of landscape value that make the landscape less susceptible to the development scenario: • Generally limited number of PROW within the River Valleys away from the River Cam in LCAs 9A: Cam River Valley – Cambridge and 9B: Cam River Valley • Trunk roads and some suburban edges of large settlements occasionally, locally detract from the rural, peaceful, small-scale landscape Characteristics, features and qualities of landscape value that make the landscape more susceptible to the development scenario: • Strong and positive character associated with the rivers, meadows and wooded river valley floors • Wooded and river valley landscapes are rare in Greater Cambridge • The River Cam, Granta and Rhee are valued geomorphological features which have influenced the distinctive character of this LCT • Time depth associated with parkland, small scale historic meadow enclosure patterns, and the River Granta's past (LCA 9D: Granta River Valley) as an historic route into Cambridge scattered with small, historic villages • The River Cam, river banks and towpath in LCA 9A: Cam River Valley – Cambridge have strong historical and cultural associations with University life • Significant literary importance associated with Byron, Rupert Brook, other poets and more recently Pink Floyd, who were inspired by the Cam Valley around Grantchester Meadows in LCA 9B: Cam River Valley • Natural value associated with a variety of habitats including floodplain grazing marsh, deciduous woodland, semi-improved grassland, pockets of lowland fens and lowland meadows • Natural value associated with the river channels of the River Rhee, River Cam and River Granta, and some of the tributary streams that feed into them which are all designated as County Wildlife Sites • High recreational value in LCAs 9A: Cam River Valley – Cambridge and 9B: Cam River Valley where the River Cam is a valued feature in University life, used for rowing and punting, and as the setting for walks including along the E2 European Long Distance Route, the Fen Rivers Way and Harcamlow Way long distance paths, and for cycling along National Cycle Route 11 – all of which follow the River Cam north east towards LCT 1: The Fens

Criteria	Susceptibility
	• Recreational value of the River Cam in LCA 9A: Cam River Valley – Cambridge and 9B: Cam River Valley as well as common land such as Stourbridge Common and several small Local Nature Reserves (LNR) including Byron's Pool LNR and Sheep's Green and Coe Fen LNR • Recreational value of Grantchester Meadows, and the footpath to the west of the River Cam in LCA 9B: Cam River Valley which is well used for picnicking, informal punting and bathing • High scenic value associated with the intimate river valley • Valued contribution to the setting of Cambridge through the historic relationship between the city and its river and visual relationship with the city, particularly in LCA 9A: Cam River Valley – Cambridge and the north of LCA 9B: Cam River Valley, including long, framed views towards landmark towers and spires within the city • Valued views from Grantchester Meadow which are particularly special and evocative of Cambridge, and are part of the defining character of the city
Mitigation Potential	There is potential to mitigate the type and scale of change associated with the development scenario in this area by following the relevant landscape guidelines set out in the Greater Cambridge Landscape Character Assessment (2021) where appropriate. There may be scope for strategic landscape mitigation measures to help integrate development into the landscape (such as careful location of solar PV energy development to avoid undeveloped prominent hills, ridges and skylines by using undulating topography, hedgerows and woodlands to reduce visibility). The management and enhancement of existing hedgerows, re-planting hedgerows where these have been lost/become fragmented and consideration of opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity and manage key views across the rural landscape would be beneficial for strengthening local landscape character.
Potential Cumulative Effects	This a landscape which generally has a strong sense of enclosure, with limited potential for a greater likelihood of cumulative effects between solar PV energy developments. There are currently no proposed solar PV energy developments within LCT 9: River Valleys that may give rise to cumulative effects in combination with existing solar PV energy developments in this LCT.

3.10.3 Overall, this LCT is a small scale, enclosed landscape with a rich mosaic of woodland, parkland, meadow and riparian trees. Key characteristics which are more susceptible to the solar PV energy development scenarios include time depth associated with parkland and the historic field pattern and the strong, generally tranquil rural character. High recreational value associated with long distance paths along the River Cam in LCAs 9A: Cam River Valley – Cambridge and 9B: Cam River Valley, and highly valued views towards Cambridge from Grantchester Meadows in LCA 9B: Cam River Valley make these LCA's more susceptible than elsewhere in the LCT. Less susceptible are the flat topography, occasional vertical features interrupting the skyline and strong sense of enclosure. The landscape sensitivity of LCT 9: River Valleys to solar PV energy development scenarios is assessed as follows:

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Small scale solar farm	Medium to high Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.	None
Medium scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None

Development Scenario	Overall Landscape Sensitivity	Spatial Variations in Landscape Sensitivity
Large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None
Very large scale solar farm	High Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.	None

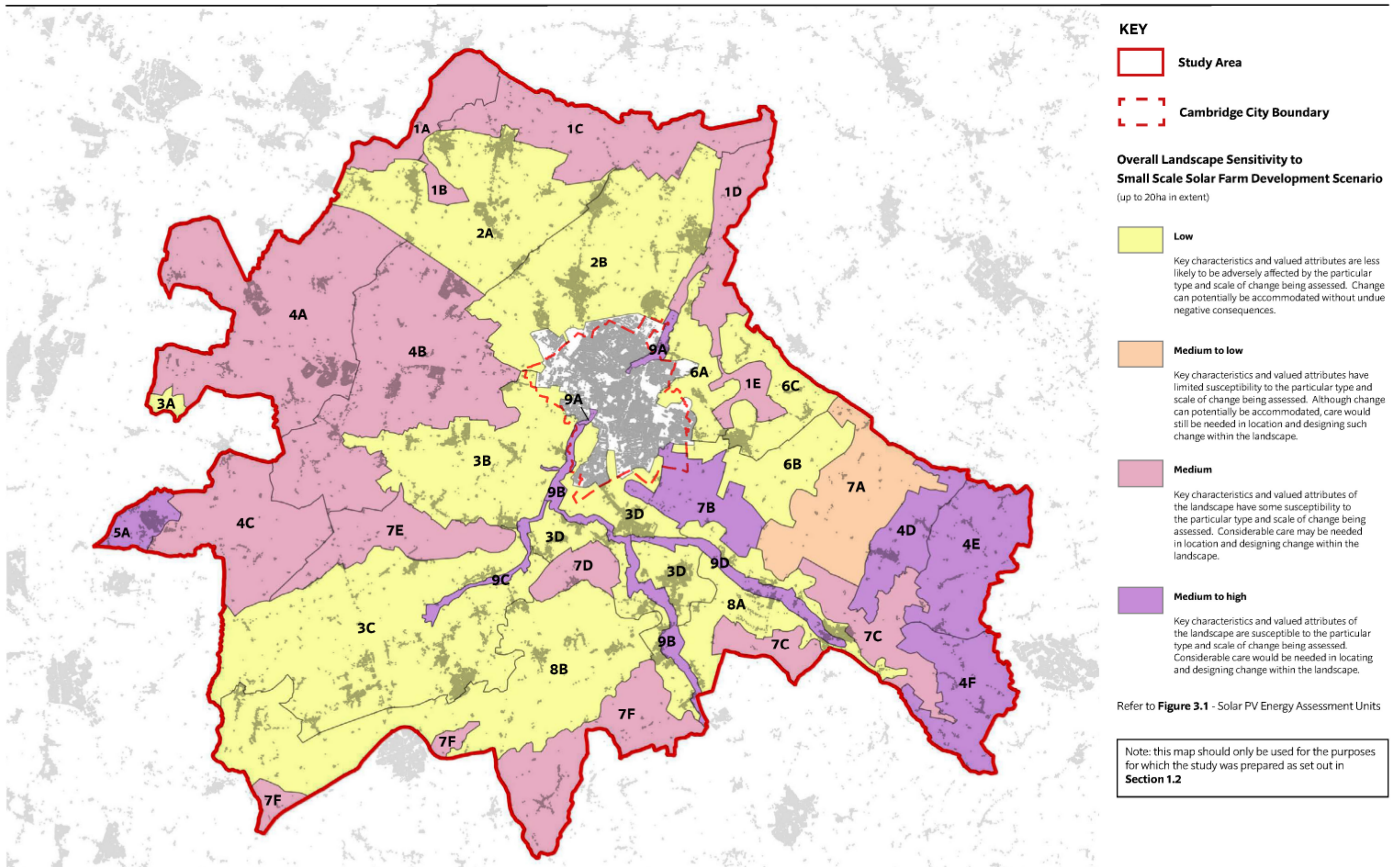
3.11 Summary of Key Findings

3.11.1 The key findings with respect to the relative landscape sensitivity of the Landscape Character Types in Greater Cambridge (as shown on **Figure 3.1**) to the solar PV energy development scenarios are summarised below on **Figures 3.2-3.5**.

Small-scale solar farms (up to 20ha in extent)

See **Figure 3.2**

LCT	Sensitivity	Spatial Variation
LCT 1: The Fens	Medium	None
LCT 2: Fen Edge Claylands	Low	None
LCT 3: Lowland Farmlands	Low	None
LCT 4: Wooded Claylands	Medium	- LCA 4D: West Wratting Wooded Claylands - Medium to high - LCA 4E: West Wickham Wooded Claylands - Medium to high - LCA 4F: The Camps Wooded Claylands - Medium to high
LCT 5: Wooded Greensand Ridge	Medium to high	None
LCT 6: Fen Edge Chalklands	Low	None
LCT 7: Chalk Hills	Medium	- LCA 7A: Eastern Chalk Hills - Medium to low - LCA 7B: Gog Magog Chalk Hills - Medium to high
LCT 8: Lowland Chalklands	Low	None
LCT 9: River Valleys	Medium to high	None

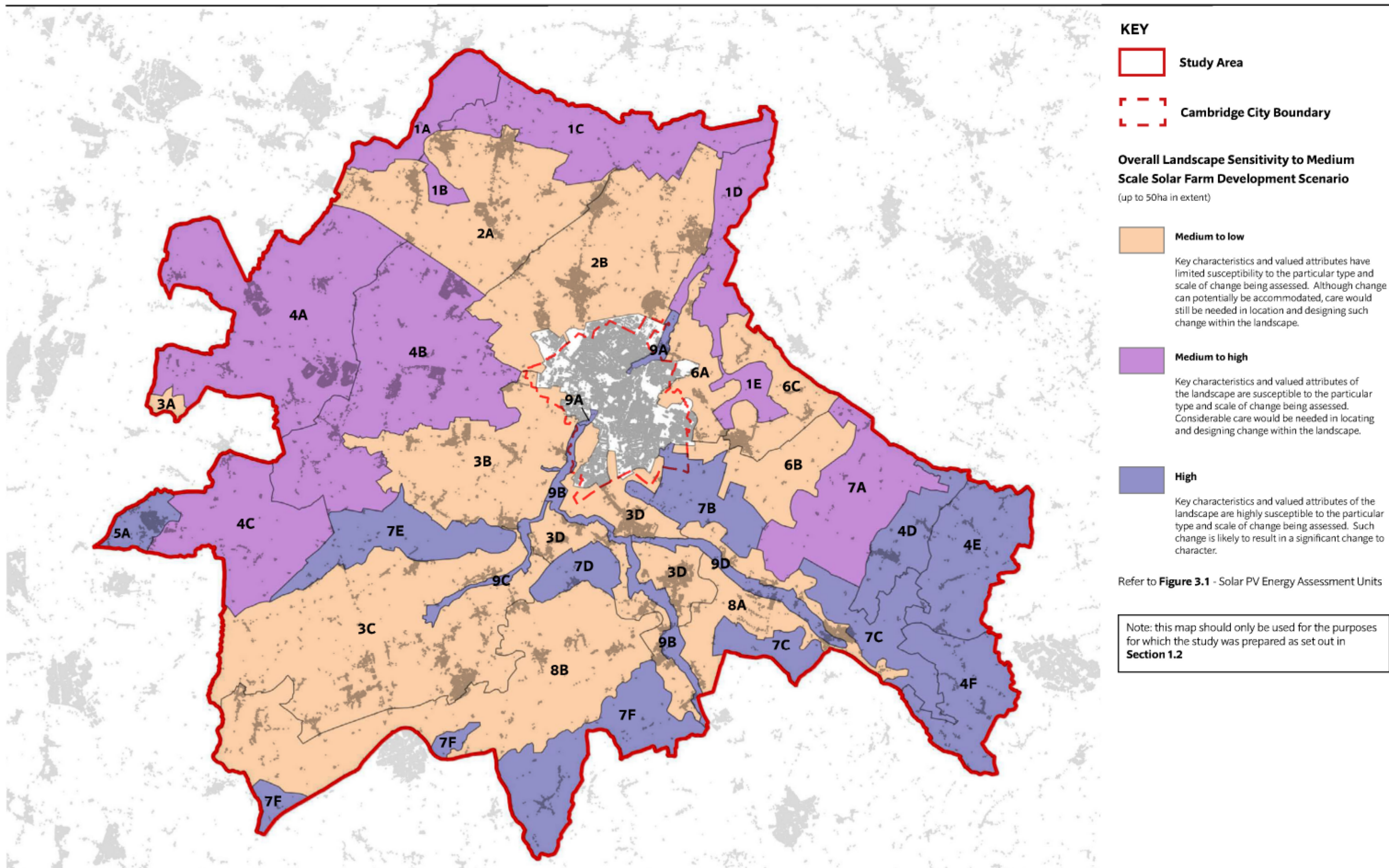


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Medium-scale solar farms (up to 50ha)

See **Figure 3.3**

LCT	Sensitivity	Spatial Variation
LCT 1: The Fens	Medium to high	None
LCT 2: Fen Edge Claylands	Medium to low	None
LCT 3: Lowland Farmlands	Medium to low	None
LCT 4: Wooded Claylands	Medium to high	• LCA 4D: West Wratting Wooded Claylands - High • LCA 4E: West Wickham Wooded Claylands - High • LCA 4F: The Camps Wooded Claylands - High
LCT 5: Wooded Greensand Ridge	High	None
LCT 6: Fen Edge Chalklands	Medium to low	None
LCT 7: Chalk Hills	High	• LCA 7A: Eastern Chalk Hills - Medium to high
LCT 8: Lowland Chalklands	Medium to low	None
LCT 9: River Valleys	High	None

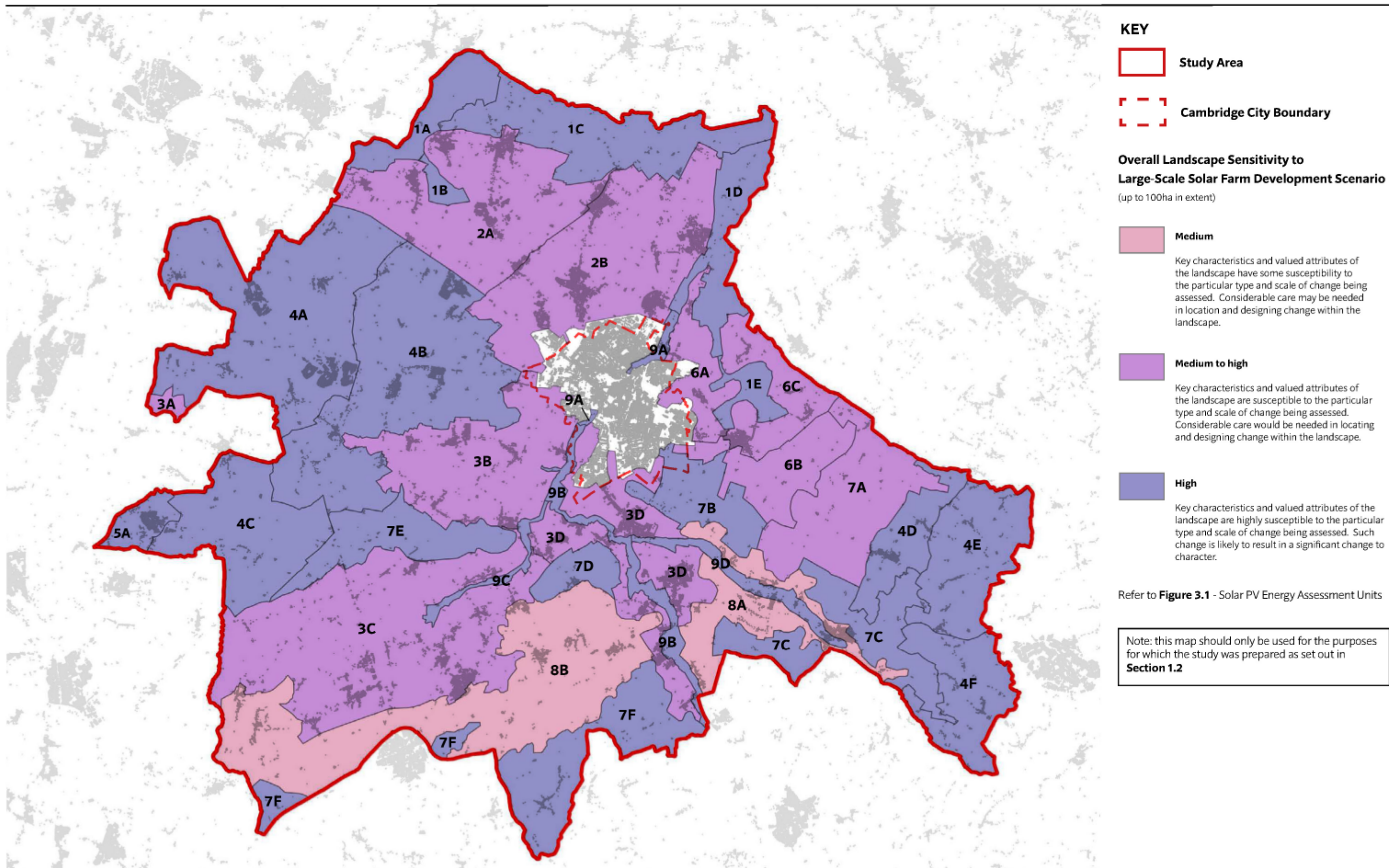


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Large-scale solar farms (up to 100ha)

See **Figure 3.4**

LCT	Sensitivity	Spatial Variation
LCT 1: The Fens	High	None
LCT 2: Fen Edge Claylands	Medium to high	None
LCT 3: Lowland Farmlands	Medium to high	None
LCT 4: Wooded Claylands	High	None
LCT 5: Wooded Greensand Ridge	High	None
LCT 6: Fen Edge Chalklands	Medium to high	None
LCT 7: Chalk Hills	High	None
LCT 8: Lowland Chalklands	Medium	None
LCT 9: River Valleys	High	None

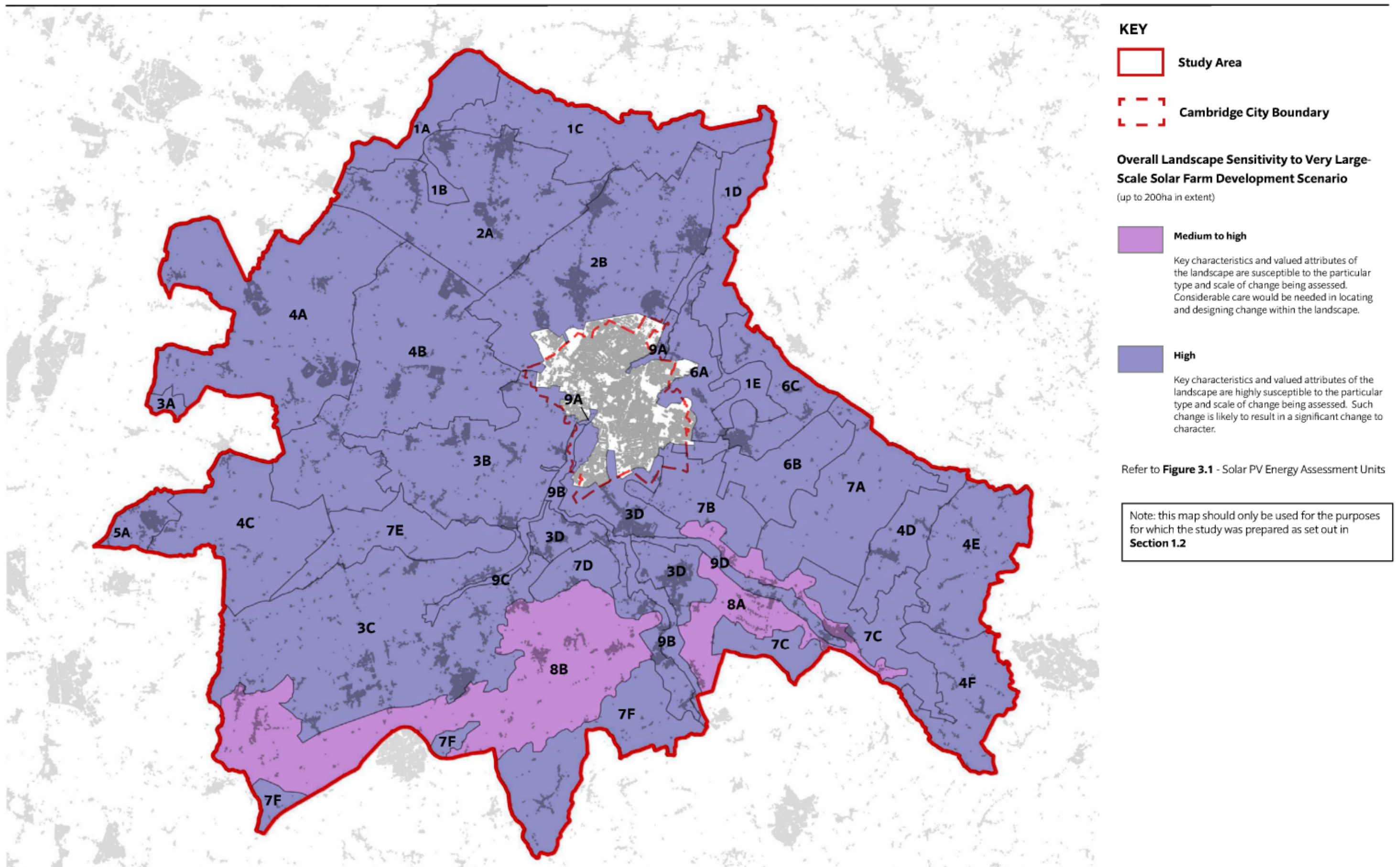


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Very large-scale solar farms (up to 200ha)

See **Figure 3.5**

LCT	Sensitivity	Spatial Variation
LCT 1: The Fens	High	None
LCT 2: Fen Edge Claylands	High	None
LCT 3: Lowland Farmlands	High	None
LCT 4: Wooded Claylands	High	None
LCT 5: Wooded Greensand Ridge	High	None
LCT 6: Fen Edge Chalklands	High	None
LCT 7: Chalk Hills	High	None
LCT 8: Lowland Chalklands	Medium to high	None
LCT 9: River Valleys	High	None



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Appendix A Methodology

Step 1 – Define the Purpose and Scope of the Assessment

Purpose

In line with the requirements of the National Planning Policy Framework and Planning Practice Guidance, the purpose of the Landscape Sensitivity Assessment is to support and be a part of the evidence base for the Greater Cambridge Local Plan and Sustainability Appraisal.

Together with the 2021 Greater Cambridge Landscape Character Assessment, the Greater Cambridge Landscape Sensitivity Assessment provides a comprehensive understanding of the distinctive features and qualities of the Greater Cambridge landscape and its sensitivity to future development and land use change.

The Landscape Sensitivity Assessment will be used by the Greater Cambridge Shared Planning (GCSP) to:

- Help in developing an appropriate spatial strategy in the Greater Cambridge Local Plan
- Assist with decision-making in the location of site allocations and broad locations for infrastructure
- Inform the review and drafting of suitable Local Plan policies to protect and enhance sensitive and valued landscapes susceptible to particular types of development
- Assist in developing design, place-making and sustainable development/climate change policies in the Local Plan
- Inform development management/decision-making on planning applications in relation to the location/landscape context, design and mitigation of different types of development
- Help in identifying opportunities for landscape restoration, enhancement and management
- Provide a baseline assessment of the current landscape's sensitivities, qualities and values as a tool for monitoring and managing landscape change to inform future decision-making
- Support other studies/guidance that forms part of the evidence base for the Local Plan (particularly the Green Belt Assessment and Green Infrastructure Opportunity Mapping)

The Landscape Sensitivity Assessment can also be used by applicants to inform the production of Landscape and Visual Impact Assessments for planning applications.

The objective of Part 2 of the Landscape Sensitivity Assessment is to assess, at a strategic level, the relative landscape sensitivity of different Landscape Character Types to two specific types of renewable energy infrastructure – wind turbines and field-scale solar photovoltaics (PV).

Scope

The scope for Part 2 of the Landscape Sensitivity Assessment comprises the following Landscape Character Types (LCTs) outside of the Cambridge Urban Area defined by the 2021 Greater Cambridge Landscape Character Assessment as shown on Figure 1.1:

- LCT 1 - The Fens
- LCT 2 - Fen Edge Claylands
- LCT 3 - Lowland Farmlands
- LCT 4 - Wooded Claylands
- LCT 5 - Wooded Greensand Ridge
- LCT 6 - Fen Edge Chalklands
- LCT 7 - Chalk Hills
- LCT 8 - Lowland Chalklands
- LCT 9 - River Valleys

The study area for the wind energy development assessment assumes wind speeds are suitable across the whole of Greater Cambridge for all scales of wind turbines. See the Cambridgeshire Renewables Infrastructure Framework (2012) for details on the technical potential for wind turbines.

Limitations

This study provides a strategic assessment of the relative landscape sensitivity of different Landscape Character Types to particular scales of wind and solar PV energy development based on the testing of indicative development scenarios. Care should be taken not to interpret the results as a definitive statement on the suitability of a specific site for development.

As with all criteria-based assessments, which are to a greater or lesser extent subjective, a degree of caution is required in its interpretation to avoid the suggestion that certain landscape features or qualities can be absolutely associated with certain sensitivities. In reality, landscape sensitivity is the result of a complex interplay of often unequally weighted variables based on professional judgement.

There may be some criteria which are more important to landscape character in a particular area when assessed at a strategic level. Where there are variations in relation to the sensitivity of individual landscape features within an overall assessment, these are highlighted in the assessment findings where appropriate.

This study does not provide an assessment of the landscape's capacity to accommodate a particular amount of wind or solar PV energy development. In line with Natural England's guidance, the Landscape Sensitivity Assessment can be used to influence where, and how much, wind or solar PV energy development might be located in areas of lower landscape sensitivity without undesirable impacts on landscape character and the visual resource. However, judgements on 'how much' development might be accommodated cannot be based on landscape sensitivity alone and the results of this study will need to be considered along with other constraints and wider policy considerations.

This study is not a substitute for detailed technical siting, design and landscape and visual impact assessments for specific developments, and all proposals will need to be assessed on their individual merits against suitable criteria based policies in the Local Plan addressing additional site-specific planning issues not covered by this study such as:

- Ecological issues
- Cultural heritage/archaeological issues
- Visual amenity issues
- Technical design/feasibility issues
- The impact of the associated infrastructure associated with wind energy and solar PV energy development sites i.e. connection to the grid

Step 2 – Gather Information to Inform the Assessment

Sources of landscape character and visual evidence

The following sources of evidence and guidance are used to inform the assessment where applicable:

- Greater Cambridge Landscape Character Assessment (February 2021)
 - Landscape Character Type and Landscape Character Area descriptions and guidelines (Chapter 4.0)
 - Character of the Cambridge Environs (Chapter 6.0)
- Greater Cambridge Strategic Heritage Impact Assessment (Draft, 2021)
- Greater Cambridge Green Infrastructure Opportunity Mapping Study (2021)
- 1:25k Ordnance Survey mapping (latest version downloaded April 2021)
- Aerial photography (latest Bing and Google Earth imagery accessed 2021)
- CPRE Intrusion Map: England (2007)
- CPRE England's Light Pollution and Dark Skies (2016)

Development Scenarios

Judgements concerning whether a landscape may be able to accommodate change are informed by the likely interactions between the landscape and visual susceptibility and value of the defined area, and the key attributes of the type and scale of development under consideration.

Wind Energy Development

Wind turbines are a relatively novel form of energy generation infrastructure within the Greater Cambridge landscape. Wind energy development typically takes the form of either single turbines (for domestic or commercial use) or clusters of turbines developed as commercial wind farms. Wind turbines typically comprise of three rotor blades mounted on a hub (aka the nacelle) at the top of a tower. As illustrated below, wind turbines heights can vary from small single turbines used for domestic supply to very large turbines used in commercial wind farms.

Typical types of potential landscape and visual effects associated with wind energy development can include:

- Large clusters of tall wind turbines in particular may be perceived as being out of scale with human-scale features in rural landscapes such as hedgerows, farmsteads and rural lanes
- Increased visual influence of infrastructure development in the landscape
- Loss of landscape features such as trees and hedgerows during construction of wind turbine developments
- Introduction of additional new features into the landscape such as ancillary transformer buildings, security fencing and site access tracks may increase the perception of human influence on the landscape and erode rural character
- Landscape character may be affected where turbines are seen against undeveloped skylines or prominent landmarks features such as church spires
- Upgrades to construction access routes may alter the character of rural lanes
- Sense of tranquillity may be affected by the movement of turbine blades, the speed of which is affected by turbine height (generally slower in larger wind turbines), and by light pollution where turbines have aviation safety lighting

In line with the purpose of this study, the following typologies for wind energy development that are likely to be brought forward within Greater Cambridge were agreed with the GCSP as development scenarios for testing through the assessment process:

- **Small single turbine** (up to 30m in height to blade tip) – e.g. the wind turbine at Meadow Road, Willingham
- **Large single turbine** (up to 120m in height to blade tip) – e.g. the community wind turbine at Castle Farm near Gamlingay
- **Small-scale wind farm** (up to 5 turbines/up to 30m in height to blade tip) – e.g. the cluster of wind turbines at Denny Lodge Business Park, near Waterbeach
- **Medium-scale wind farm** (up to 20 turbines/up to 120m in height to blade tip) – e.g. the Wadlow Wind Farm
- **Large-scale wind farm** (up to 40 turbines/up to 150m in height to blade tip)
- **Very large-scale wind farm** (up to 60 turbines/up to 150m in height to blade tip)

The first four scales of wind energy development reflect the scales of current operational and proposed wind energy developments in Greater Cambridge (see **Annex 1** for details). While there are currently no operational or proposed large or very large-scale wind farms in Greater Cambridge, these scales of wind energy development have also been considered for the purposes of this study.

Solar PV Energy Development

Commercial solar farms typically consist of field-scale arrays of PV panels around 3-4m in height mounted on aluminium/stainless steel frames. The panels are typically dark in colour mounted in linear racks generally organised in regular grid patterns, which can be located on uneven or flat topography. The panels typically face south, angled at 20-40 degrees from the horizon. Commercial solar farm developments typically also include on-site inverter buildings, CCTV cameras and security fencing.

Typical types of potential landscape and visual effects associated with solar PV energy development can include:

- Field-scale solar PV energy developments may be especially visible within open landscapes, on the upper slopes of hillsides and in areas which are overlooked from higher ground. Larger-scale developments will be more visible within the landscape.
- PV panels and associated infrastructure within the landscape may change land cover patterns within rural landscapes
- In small-scale landscapes with irregular field patterns, the regular form and pattern of PV panels may be particularly conspicuous
- PV panels typically reflect the colour of the sky creating a contrast with surrounding green fields

- Large solar PV energy developments can result in the loss of hedgerows, which may result in change to the scale of the landscape
- Landscape features such as trees and hedgerows may be lost during construction
- New features introduced into the landscape include ancillary buildings and security fencing, which may increase the perception of human influence on the landscape and erode rural character
- The height of the linear racks can feel out of scale with adjacent hedgerow field boundaries
- Mitigation planting to screen solar PV energy developments may change the sense of enclosure within a landscape.

In line with the purpose of this study, the following typologies for solar PV energy development that are likely to be brought forward within Greater Cambridge were agreed with the GCSP as development scenarios for testing through the assessment process:

- **Small-scale solar farms** (up to 20ha in extent) – e.g. Cambridge Waste Management Park, Landbeach (proposed)
- **Medium-scale solar farms** (up to 50ha) – e.g. Highfield Farm, Bassingbourn
- **Large-scale solar farms** (up to 100ha) – e.g. Mill Road, Great Wilbraham
- **Very large-scale solar farms** (up to 200ha) – e.g. Stargoose Solar Energy Farm, Childerley (proposed)

The above development typologies reflect the scales of operational and proposed solar PV energy developments in Greater Cambridge (see **Annex 2** for details).

Assessment Criteria and Susceptibility/Value Indicators

Refer to Natural England's definition of **Landscape Sensitivity**, **Landscape Susceptibility** and **Landscape Value** as set out in **Section 1.1**.

Taking into account the baseline character of the landscape as described in the Greater Cambridge Landscape Character Assessment, a bespoke set of assessment criteria and indicators used for assessing the susceptibility and value of the landscape to the wind and solar PV energy development scenarios is set out in **Table 1.1** and **Table 1.2** respectively.

With regards to consideration of wind and solar PV energy development, tranquillity is a key indicator of landscape susceptibility associated with the 'Perceptual and Aesthetic Factors' criterion. A 'sense of tranquillity' is generally synonymous with freedom from human activity and disturbance, and is commonly associated with a sense of 'naturalness' and 'remoteness'. Tranquillity cannot readily be measured as an 'absolute' characteristic of a landscape as human perceptions, as well as factual evidence, need to be considered. In the context of English landscapes, it is most relevant to consider the 'relative' sense of tranquillity between different landscapes.

For the purposes of this study, the relative sense of tranquillity between different landscapes within Greater Cambridge is assessed by considering together:

- The landscape professional's judgements as reflected in the Greater Cambridge Landscape Character Assessment 2021 and informed by the field survey work undertaken for this study
- The CPRE Intrusion Map of England 2007 and the CPRE England's Light Pollution and Dark Skies Mapping 2016, which provide evidence related to key factors that contribute to tranquillity and can be used as indicators for identifying general areas of tranquillity within different Landscape Character Types

Landscape Sensitivity Definitions

Taking into account the criteria and indicators for assessing the susceptibility and value of the landscape, the bespoke sensitivity levels used for assessing the overall sensitivity of the Greater Cambridge landscape to the wind and solar PV energy development scenarios is set out in **Table 1.3**.

Table 1.1– Assessment Criteria and Susceptibility/Value Indicators for Wind Energy Development

Sensitivity Criteria	Susceptibility/Value Indicators
Natural Factors	Landform and Skylines - Gently undulating lowland landscapes, flat and indistinct landforms, or large plateaux areas are likely to be less susceptible to a particular scale of wind energy development. Open, highly prominent and distinctive or intricate and complex landforms with sharp changes in level are likely to be more susceptible to a particular scale of wind energy development, as these landforms may need to be modified to accommodate wind turbines or development may obscure prominent landforms. Undeveloped, prominent or distinctive skylines are likely to be more susceptible to a particular scale of wind energy development because turbines may detract from or compete with these skylines as features in the landscape. Skylines which feature landmarks including historic features such as hilltop monuments, church towers/spires or historic villages are likely to be more susceptible to a particular scale of wind energy development.
	Landcover Pattern - Simple, regular landscapes with extensive areas of consistent landcover patterns, brownfield sites, existing hard surfaces or areas of commercial forestry are likely to be less susceptible to a particular scale of wind energy development. Small scale, complex and intricate landcover patterns including parkland, woodland, orchards, heathland, orchards, meadows, unimproved or semi-improved grasslands, streams/rivers and waterbodies, are likely to be more susceptible to a particular scale of wind energy development.
	Landscape Scale - Large scale landscapes and landscapes with limited human scale features (i.e. buildings including farms and church towers, trees and hedgerows) are likely to be less susceptible to a particular scale of wind energy development including large scale features such as wind turbines. Landscapes with more human scale features, or landscapes with small scale, complex and intricate landscape patterns are likely to be more susceptible to a particular scale of wind energy development, which could appear out of scale and incongruous in the landscape.
Cultural Factors	Historic Landscape Character - Parklands, commons, and pre-18th century field enclosure are likely to be more susceptible to the introduction of modern infrastructure such as wind turbines, due to the historic continuity and the time depth they give to the landscape.

Sensitivity Criteria	Susceptibility/Value Indicators
Perceptual and Aesthetic Factors	Sense of Openness and Enclosure - Landscapes with a strong sense of enclosure (i.e. a higher degree of visual containment due to landform or vegetation such as trees, tree belts or hedges) are likely to have higher potential to visually absorb wind turbines and associated structures and tend to be less susceptible to a particular scale of wind energy development. Landscapes with a strong sense of openness (i.e. an open and exposed character) are likely to be more susceptible to a particular scale of wind energy development. The absence of visual screening for wind turbines and associated structures means that wind turbines can be seen over very large distances. Open landscapes are also likely to result in a greater likelihood of cumulative effects between wind energy developments.
	Landscape Perception and Experience - Landscapes with a strong sense of relative tranquillity or that have a strong rural feel with freedom from human activity and disturbance tend to be more susceptible to a particular scale of wind energy development, compared to landscapes that have human activity and disturbance and/or modern built development/infrastructure.
Landscape Value	Strength of landscape character/quality and condition – Landscapes with a strong and positive character in good condition and with features worthy of conservation, are likely to be more susceptible to a particular scale of wind energy development because of the potential impact on their legibility and upon features and combinations of elements which may be difficult to replace.
	Rarity – Landscapes which are commonplace are less likely to be valued than landscapes that are unique or rare as these are often irreplaceable and are likely to be more susceptible to a particular scale of wind energy development
	Geological, topographical and geomorphological value – This considers the shape and scale of the land and the extent that there may be distinctive and valued geological, topographical or hydrological features, which are more susceptible to a particular scale of wind energy development. Such features may be distinctive in their own right or may have influenced the creation of areas of distinctive and valued landscape character.
	Historic landscape value – A landscape that displays historic continuity and time depth (as reflected in the presence of nationally designated historic landscape assets and/or is important to the setting/identity of

Sensitivity Criteria	Susceptibility/Value Indicators
	heritage assets), and/or is associated with significant artistic or literary references, and/or displays historic landscape patterns including field patterns or dykes are likely to be more susceptible to a particular scale of wind energy development. Natural value – Landscapes with a strong and positive character in good condition and with features worthy of conservation, are likely to be more susceptible to a particular scale of wind energy development because of the potential impact on their legibility and upon features and combinations of elements which may be difficult to replace. This applies to landscapes with semi-natural habitats and valued natural features such as woodland and hedgerows with good connectivity. Recreational value – Landscapes that make an important contribution to the recreational use and enjoyment of an area are likely to be more susceptible to a particular scale of wind energy development. Indicators include the presence of nature reserves, country parks, allotments, outdoor sports facilities, public rights of way, green corridors, scenic routes and promoted viewpoints. This also includes recognised scenic or promoted tourist routes on an Ordnance Survey map, tourist map or within guidebooks. Scenic and other aesthetic and perceptual and experiential qualities – Landscapes that are defined by the presence of distinctive, dramatic or striking patterns of landform or land cover, or by strong aesthetic response to qualities such as rural character (traditional land uses with few human influences), perceived naturalness, sense of tranquillity and dark skies, are likely to be more susceptible to a particular scale of wind energy development. Valued views – Views of heritage significance to and from the City of Cambridge, and views from promoted trails, viewpoints and outdoor destinations identified from an Ordnance Survey map, tourist map or guidebook are likely to be more susceptible to a particular scale of wind energy development. Views across the countryside towards historic villages with prominent church spires are also likely to be more susceptible to a particular scale of wind energy development.
Mitigation Potential	This section will provide guidance on the potential to mitigate the type and scale of change associated with the particular scale of wind energy development with reference to the Greater Cambridge Landscape Character Assessment's landscape guidelines, the scope for strategic landscape mitigation measures and opportunities for landscape enhancement/restoration where appropriate.

Sensitivity Criteria	Susceptibility/Value Indicators
Potential Cumulative Effects	Details of proposed wind energy developments within the relevant LCT, and wind energy developments in adjacent local authority areas that may give rise to cumulative effects in combination with existing wind energy developments.

Table 1.2 – Assessment Criteria and Susceptibility/Value Indicators for Solar PV Energy Development

Sensitivity Criteria	Susceptibility/Value Indicator
Natural Factors	Landform and Skylines – Gently undulating lowland landscapes, flat and indistinct landscapes or large plateaux areas are likely to be less susceptible to a particular scale of solar PV energy development. This is because field-scale solar PV energy development will be more visible on slopes, or where it is overlooked by higher ground, and less visible in flat landscapes. Open, highly prominent and distinctive or intricate and complex landforms with sharp changes in level are likely to be more susceptible to a particular scale of solar PV energy development. Solar PV panels are unlikely to form prominent features on the skyline due to their limited height, except when sited on ridgelines with limited features and subject to longer distance views.
	Landcover Pattern – Simple, regular landscapes with extensive areas of consistent landcover patterns, brownfield sites, existing hard surfaces or areas of commercial forestry are likely to be less susceptible to a particular scale of solar PV energy development. Small scale, complex and intricate landcover patterns including parkland, woodland, orchards, heathland, orchards, meadows, unimproved or semi-improved grasslands, streams/rivers and waterbodies, are likely to be more susceptible to a particular scale of solar PV energy development. Arable landcover common in Greater Cambridge is likely to be between the above two in terms of its susceptibility to field-scale solar PV energy development, depending on the interplay of other criteria i.e. scale.
	Landscape Scale - Large scale landscapes and landscapes with limited human scale features (i.e. buildings including farms and church towers, trees and hedgerows) are likely to be less susceptible to a particular scale of solar PV energy development. Landscapes with more human scale features or landscapes with small scale, complex and intricate landscape patterns (i.e. smaller and/or irregular field sizes) are likely to be more susceptible to a particular scale of solar PV energy development
Cultural Factors	Historic Landscape Character - Parklands, commons, and pre-18th century field enclosure are likely to be more susceptible to the introduction of modern such as solar PV energy development, due to the historic continuity and the time depth they give to the landscape.

Sensitivity Criteria	Susceptibility/Value Indicator
Perceptual and Aesthetic Factors	Sense of Openness and Enclosure - Landscapes with a strong sense of enclosure (i.e. a higher degree of visual containment due to landform or vegetation such as trees, tree belts or hedges) tend to be less susceptible to a particular scale of solar PV energy development than a landscape with a strong sense of openness (i.e. an open and exposed character) because the development will be less visible in an enclosed landscape, particularly from a distance. Whilst a strong sense of enclosure creates visual containment in relation to solar PV energy development, the structure of small scale, enclosed landscapes with distinctive field patterns may be potentially more susceptible to alteration from the footprints of such development. Landscapes with a strong sense of openness (i.e. an open and exposed character) are likely to be more susceptible to a particular scale of solar PV energy development. The absence of visual screening for solar PV panels and associated structures means that solar farms can be seen over large distances. Open landscapes are also likely to result in a greater likelihood of cumulative effects between solar PV energy developments.
	Landscape Perception and Experience - Landscapes with a strong sense of relative tranquillity or that have a strong rural feel with freedom from human activity and disturbance tend to be more susceptible to a particular scale of solar PV energy development, compared to landscapes that have human activity and disturbance and/or modern built development/infrastructure.
Landscape Value	Strength of landscape character/quality and condition – Landscapes with a strong and positive character in good condition and with features worthy of conservation, are likely to be more susceptible to a particular scale of solar PV energy development because of the potential impact on their legibility and upon features and combinations of elements which may be difficult to replace.
	Rarity – Landscapes which are commonplace are less likely to be valued than landscapes that are unique or rare as these are often irreplaceable and are likely to be more susceptible to a particular scale of solar PV energy development.
	Geological, topographical and geomorphological value – This considers the shape and scale of the land and the extent that there may be distinctive and valued geological, topographical or hydrological features, which are more susceptible to a particular scale of solar PV energy development. Such features

Sensitivity Criteria	Susceptibility/Value Indicator
	may be distinctive in their own right or may have influenced the creation of areas of distinctive and valued landscape character.
	Historic landscape value – A landscape that displays historic continuity and time depth (as reflected in the presence of nationally designated historic landscape assets and/or is important to the setting/identity of heritage assets), and/or is associated with significant artistic or literary references, and/or displays historic landscape patterns including field patterns or dykes are likely to be more susceptible to a particular scale of solar PV energy development.
	Natural value – Landscapes with a strong and positive character in good condition and with features worthy of conservation, are likely to be more susceptible to a particular scale of solar PV energy development because of the potential impact on their legibility and upon features and combinations of elements which may be difficult to replace. This applies to landscapes with semi-natural habitats and valued natural features such as woodland and hedgerows with good connectivity.
	Recreational value – Landscapes that make an important contribution to the recreational use and enjoyment of an area are likely to be more susceptible to a particular scale of solar PV energy development. Indicators include the presence of nature reserves, country parks, allotments, outdoor sports facilities, public rights of way, green corridors, scenic routes and promoted viewpoints. This also includes recognised scenic or promoted tourist routes on an Ordnance Survey map, tourist map or within guidebooks.
	Scenic and other aesthetic and perceptual and experiential qualities – Landscapes that are defined by the presence of distinctive, dramatic or striking patterns of landform or land cover, or by strong aesthetic response to qualities such as rural character (traditional land uses with few human influences), perceived naturalness, sense of tranquillity and dark skies, are likely to be more susceptible to a particular scale of solar PV energy development.
	Valued views – Views of heritage significance to and from the City of Cambridge, and views from promoted trails, viewpoints and outdoor destinations identified from an Ordnance Survey map, tourist map or guidebook are likely to be more susceptible to a particular development scenario. Views across the

Sensitivity Criteria	Susceptibility/Value Indicator
	countryside towards historic villages with prominent church spires are also likely to be more susceptible to a particular scale of solar PV energy development.
Mitigation Potential	This section will provide guidance on the potential to mitigate the type and scale of change associated with the particular scale of solar PV energy development with reference to the Greater Cambridge Landscape Character Assessment's landscape guidelines, the scope for strategic landscape mitigation measures and opportunities for landscape enhancement/restoration where appropriate.
Potential Cumulative Effects	Details of proposed solar PV energy developments within the relevant LCT which may give rise to cumulative effects in combination with existing solar PV energy developments.

Table 1.3 – Overall Landscape Sensitivity Definitions

Sensitivity Level	Definition
High	Key characteristics and valued attributes of the landscape are highly susceptible to the particular type and scale of change being assessed. Such change is likely to result in a significant change to character.
Medium to high	Key characteristics and valued attributes of the landscape are susceptible to the particular type and scale of change being assessed. Considerable care would be needed in locating and designing change within the landscape.
Medium	Key characteristics and valued attributes of the landscape have some susceptibility to the particular type and scale of change being assessed. Considerable care may be needed in locating and designing change within the landscape.
Medium to low	Key characteristics and valued attributes have limited susceptibility to the particular type and scale of change being assessed. Although change can potentially be accommodated, care would still be needed in locating and designing such change within the landscape.
Low	Key characteristics and valued attributes are less likely to be adversely affected by the particular type and scale of change being assessed. Change can potentially be accommodated without undue negative consequences.

Step 3 – Assess Landscape Sensitivity

In line with the purposes and scope of the study set out in Step 1, assessments of the sensitivity of the Landscape Character Types defined by the 2021 Greater Cambridge Landscape Character Assessment²¹ to wind and solar PV energy development are provided at a strategic level.

Based on the information and development scenarios set out in Step 2, and supplemented by field surveys as appropriate, assessments are undertaken for each Landscape Character Type using the relevant Assessment Criteria and Susceptibility/Value Indicators set out in **Table 1.1** (Wind Energy Development) and **Table 1.2** (Solar PV Energy Development), and the Overall Landscape Sensitivity Definitions set out in **Table 1.3**.

The sensitivity judgements represent the typical level of sensitivity across the entire Landscape Character Type being assessed, and are specific to the particular landscapes of Greater Cambridge. Variations in the distribution of distinctive characteristics and valued attributes identified in the Greater Cambridge Landscape Character Assessment

The field surveys are undertaken from publicly accessible places (roads, public rights of way etc) between April and July 2021 when trees and other vegetation are in leaf.

Step 4 – Reporting

The findings of the Landscape Sensitivity Assessment for wind energy development are reported as follows:

- **Landscape Character Type No/Name**
- **Constituent Landscape Character Areas**
- **Landscape Sensitivity Assessment** – a standard assessment proforma for each Landscape Character Type structured around the assessment criteria supported by an overall assessment of its level of landscape sensitivity to the wind energy development scenarios taking into consideration the potential for cumulative landscape effects with proposed schemes (as detailed in Annex 1) where applicable
- **Summary of Key Findings** - the key findings of the Landscape Sensitivity Assessment for wind energy development summarised in a series of maps.

²¹ See Figure 4.1 in the Greater Cambridge Landscape Character Assessment (2021)

These maps illustrate the relative landscape sensitivity of the Landscape Character Types in Greater Cambridge to the particular scales of wind energy development considered in this study

The findings of the Landscape Sensitivity Assessment for solar PV energy development are reported as follows:

- **Landscape Character Type No/Name**
- **Constituent Landscape Character Areas**
- **Landscape Sensitivity Assessment** – a standard assessment proforma for each Landscape Character Type structured around the assessment criteria supported by an overall assessment of its level of landscape sensitivity to the solar PV energy development scenarios taking into consideration the potential for cumulative landscape effects with proposed schemes (as detailed in Annex 2) where applicable
- **Summary of Key Findings** - the key findings of the Landscape Sensitivity Assessment for solar PV energy development summarised in a series of maps. These maps illustrate the relative landscape sensitivity of the Landscape Character Types in Greater Cambridge to the particular scales of solar PV energy development considered in this study

Annex 1
Wind Energy Development in Greater Cambridge

Landscape Character Type	Operational	Proposed (consented/current planning application/pre-application scheme)	Adjacent Local Authority Area (development likely to have significant inter-visibility with the LCT by virtue of their location and scale)	
			Operational	Proposed
1 - The Fens	- Meadow Road Willingham (S/1653/12/FL) – single 20kW turbine, 27m high to blade tip (20.5m hub height). Consented August 2012 - Fen End Farmhouse Cottenham (S/0205/09/F) – single 6kW turbine, 18m high to blade tip (15m hub height). Consented April 2009	None	None	None
2 - Fen Edge Claylands	Denny Lodge Business Park (S/0996/10/F) – 3 turbines, 25m high to blade tip (15m hub height). Consented January 2012	None	Huntingdonshire District Council Cotton Farm Windfarm (0802296FUL) – 8 turbines, 125m high to blade tip (80m hub height). Consented November 2009	None

Landscape Character Type	Operational	Proposed (consented/current planning application/pre-application scheme)	Adjacent Local Authority Area (development likely to have significant inter-visibility with the LCT by virtue of their location and scale)	
			Operational	Proposed
			• Kingsbush Farm (8601848FUL) – 1 x turbine. Height unknown. Consented May 1987. • Littlebury Farm (1301361S73) 1 x turbine, 46.3m high to blade tip (36.6m hub height) Consented March 2014. • Land east of Cardinal Business Park and North of Kings Bush Farm (1301687FUL) 1 x turbine, 100m high to blade tip (73m hub height) Consented September 2014	

Landscape Character Type	Operational	Proposed (consented/current planning application/pre-application scheme)	Adjacent Local Authority Area (development likely to have significant inter-visibility with the LCT by virtue of their location and scale)	
			Operational	Proposed
3 - Lowland Farmlands	- Bassingbourn Community Primary School (S/1158/08/F) – single 5kW turbine, 18m high to blade tip (15m hub height). Consented January 2009) - Brook Barn, Barrington (S/0836/11) – single 330kW turbine, 8.5m high to blade tip (7.5m to hub height). Consented May 2012 - Dales Manor Business Park, Sawston (S/1598/08/F) – single turbine, 14m hub height. Consented May 2014	None	None	None
4 -Wooded Claylands	- Hill Farm, Castle Camps (S/2589/12/FL) – 3 x 5kW turbines, 20.5m high to blade tip (15m hub height). Consented March 2013 - Back Lane, Cambourne (S/1155/14/FL) – single 15kW turbine, 20m high to blade tip (15m hub height). Consented May 2014		Huntingdonshire District Council Cotton Farm Windfarm (0802296FUL) – 8 turbines, 125m high to blade tip (80m hub height). Consented November 2009	None

Landscape Character Type	Operational	Proposed (consented/current planning application/pre-application scheme)	Adjacent Local Authority Area (development likely to have significant inter-visibility with the LCT by virtue of their location and scale)	
			Operational	Proposed
	- Castle Farm, Gamlingay (S/2564/11) – single 330kW turbine, 53.5m high to blade tip (37m hub height). Consented May 2012 - High Street Graveley (S/0209/08/F) – single turbine. Consented July 2008		- Kingsbush Farm (8601848FUL) – 1 x turbine. Height unknown. Consented May 1987. - Littlebury Farm (1301361S73) 1 x turbine, 46.3m high to blade tip (36.6m hub height) Consented March 2014. - Lane east of Cardinal Business Park and North of Kings Bush Farm (1301687FUL) 1 x turbine, 100m high to blade tip (73m hub height) Consented September 2014	

Landscape Character Type	Operational	Proposed (consented/current planning application/pre-application scheme)	Adjacent Local Authority Area (development likely to have significant inter-visibility with the LCT by virtue of their location and scale)	
			Operational	Proposed
5 - Wooded Greensand Ridge	None	None	None	None
6 - Fen Edge Chalklands	None	None	None	None
7 - Chalk Hills	Wadlow Wind Farm (S/1018/06/F) – 13 x 2MW turbines, 120m high to blade tip. Consented November 2009	None	None	None
8 - Lowland Chalklands	None	None	None	None
9 - River Valleys	None	None	None	None

Analysis

- 9 operational single turbines (ranging from 20m to 53.5m in height to blade tip) within Greater Cambridge
- 2 operational wind farms (3 turbines of 24.6m in height to blade tip; and 13 turbines of 120m in height to blade tip) within Greater Cambridge
- 3 operational single turbines (ranging from 46.3m to 100m in height to blade tip) within adjacent Local Authority Areas that are likely to have significant inter-visibility with the Greater Cambridge landscape by virtue of their location and scale
- 1 operational wind farm (8 turbines of 125m in height blade tip) within adjacent Local Authority Areas that are likely to have significant inter-visibility with the Greater Cambridge landscape by virtue of their location and scale
- There are no proposed wind energy developments within adjacent Local Authority Areas that are likely to have significant inter-visibility with the Greater Cambridge landscape by virtue of their location and scale

Annex 2
Solar PV Energy Development in Greater Cambridge

Landscape Character Type	Operational	Proposed (consented/current planning application/pre-application scheme)
1 - The Fens	Radical Farm (S/1331/14/FL) – 52 ha solar farm. Consented June 2015	None
2 - Fen Edge Claylands	None	- Cambridge Waste Management Park, Landbeach (S/4028/19/FL) – 2ha solar farm. Consented July 2020 - Land at Wilson's Road, Longstanton (20/02966/SCRE) – c. 44ha solar farm. To be determined as of April 2021.
3 - Lowland Farmlands	- Land to west of Cantelupe Road, Cantelupe Farm (S/0154/11) – 39ha solar farm. Consented April 2011 - Hoback Farmhouse, Wimpole (S/3020/14/VC) – 32ha solar farm. Consented April 2015 - Vine House, Vine Farm Shingay Cum Wendy (S/1067/14/FL) – 83ha solar farm. Consented September 2014. - Bury Lane Fruit Farm (S/2616/13/FL) - 36ha solar farm. Consented May 2014.	Land East of Lords Bridge Cambridge Road Harlton (21/01773/SCRE) – 36 ha solar farm. To be determined as of April 2021.

Landscape Character Type	Operational	Proposed (consented/current planning application/pre-application scheme)
4 -Wooded Claylands	None	- Land to the north of Childerley Farm, Childerley - aka Stargoose Solar Energy Farm - (20/04419/SCRE) – c. 165ha solar farm. To be determined as of April 2021. - Land to the South East of Burton End West Wickham (20/01564/FUL) – 1.8ha solar farm. To be determined as of April 2021.
5 - Wooded Greensand Ridge	None	None
6 - Fen Edge Chalklands	None	None
7 - Chalk Hills	Mill Road, Great Wilbraham (S/2763/13/FL) – 63ha solar farm. Consented July 2014	None
8 - Lowland Chalklands	- Land adjacent to Highfield Farm, Bassingbourn (S/1765/13/E1) – 22ha solar farm. Consented August 2020 - Land between Railway and Sewage Disposal Works, Royston Road (S/1517/13/E1) – 9ha solar farm. Consented August 2020 - Muncey's Farm (S/1898/14/FL). c. 49ha solar farm. Consented November 2014	None
9 - River Valleys	None	None

Analysis

- 9 operational solar farms (ranging from 9ha to 83ha in extent)
- 5 proposed solar farms (ranging from 1.8ha to 165ha in extent)

Appendix B

Glossary of Terms

Glossary of Terms²²

Ancient woodland Woods that are believed to have been continuous woodland cover since at least 1600 AD.

Assessment unit Assessment units are reporting units which may be Landscape Character Areas or Landscape Character Types, or subdivisions of either, depending upon the scale and purpose of the Landscape sensitivity assessment. These may also be referred to as land parcels or sensitivity parcels. They may be informed by desk and field study and will be areas of broadly similar characteristics.

County Wildlife Sites Non-statutory areas of local importance for nature conservation that complement nationally and internationally designated geological and wildlife sites.

Elements Individual parts which make up the landscape, such as, for example, trees, hedges and buildings.*

Feature Particularly prominent or eye-catching elements in the landscape, such as tree clumps, church towers or wooded skylines OR a particular aspect of the project proposal.*

Green corridor A strip of green land that connects green areas or hubs and allows the movement and dispersal of wildlife, usually through urban landscapes. Green corridors can also be used to link housing areas to, for example, cycle networks, places of employment, town centres and community facilities, thus promoting walking and cycling.

Key characteristics Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.*

Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors **

Landscape character A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.*

Landscape Character Areas (LCAs) These are single unique areas which are the discrete geographical areas of a particular landscape type.*

Landscape Character Assessment (LCA) The process of identifying and describing variation in the character of the landscape, and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape Character Assessment.*

Landscape Character Types (LCTs) These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature

²² Adapted from Natural England's 'An Approach to Landscape Sensitivity Assessment' (2019)

in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation, and historical land use and settlement pattern, and perceptual and aesthetic attributes. *

Landscape Sensitivity Within the context of spatial planning and land management, landscape sensitivity is a term applied to landscape character and the associated visual resource, combining judgements of their susceptibility to the specific development type / development scenario or other change being considered together with the value(s) related to that landscape and visual resource. Landscape sensitivity may be regarded as a measure of the resilience, or robustness, of a landscape to withstand specified change arising from development types or land management practices, without undue negative effects on the landscape and visual baseline and their value.

Landscape Susceptibility Within the context of spatial planning and land management, landscape susceptibility is the degree to which a defined landscape and its associated visual qualities and attributes might respond to the specific development type / development scenario or other change without undue negative effects on landscape character and the visual resource.

Landscape value The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.*

Local Nature Reserves Accessible sites with wildlife or geological features that are of special interest locally, which offer people opportunities to study or learn about nature or simply to enjoy it.

Lodes Navigable channels used to transport goods across the fen

Overall sensitivity A term applied when landscape sensitivity reporting is generalised across the assessment unit (even though it must be accepted that such sensitivity to particular developments is likely to vary within the assessment unit).

PROW Public Rights of Way including footpaths, bridleways, byways open to all traffic and restricted byways.

Sensitive Quick to detect, respond to, or be affected by slight changes or influences

Sites of Special Scientific Interest Sites designated under the Wildlife and Conservation Act 1981 (as amended) for their outstanding interest in respect of flora, fauna, geology and or limnology (inland aquatic ecosystems).

Susceptible – likely to be influenced or harmed by a particular thing ***

Special Qualities A term often used in relation to National Parks and Areas of Outstanding Natural Beauty taken to mean qualities relating to wildlife and cultural heritage, in addition to qualities relating to natural beauty. Usually defined in the management plan for the area.

‘Tranquillity’ Tranquillity is defined by GLVIA3 as ‘a state of calm and quietude associated with peace, considered to be a significant asset of landscape’. The term can also be synonymous with freedom from human activity and disturbance and is commonly associated with sense of wildness and remoteness. Tranquillity cannot readily be defined as an absolute environmental characteristic as human perceptions, as well as factual evidence, need to be considered. In the context of this study, it is most relevant to consider the relative sense of tranquillity between different landscapes taking into account the assessors’ perceptions (as reflected in the Greater Cambridge Landscape Character Assessment 2021 and field survey work for this study).

SOURCES:

* Landscape Institute and Institute of Environmental Management and Assessment (2013), Guidelines for Landscape and Visual Impact Assessment Third Edition, Routledge.

** Council of Europe (2000), European Landscape Convention, Council of Europe, Florence, Oct 2000.

*** Oxford University Press (2005), Compact Oxford English Dictionary.

