

Technical Appendix 5.4

Preliminary Assessment of Designated Sites and LCTs

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1 Appendix 5.4 Preliminary Assessment of Designated Sites and LCTs

1.1 Introduction

- 1.1.1 This technical appendix presents a preliminary assessment of landscape designations and landscape character types (LCTs). Landscape designations within the detailed 20 km LVIA study area are illustrated at **Figure 5.13** and overlaid with the combined development ZTV at **Figure 5.14**. Landscape Character Types (LCTs) within the detailed 20 km LVIA study area are illustrated at **Figure 5.15** and overlaid with the combined development ZTV at **Figure 5.16**.
- 1.1.2 This preliminary assessment has been undertaken to determine which designations and LCTs would have the potential to experience significant effects and would therefore require detailed consideration in this LVIA. The intention has been to ensure that the level of attention given to each designation or LCT is proportionate to the likelihood of significant effects arising. The assessment below summarises the process followed in deciding which landscape designations and character types have the potential to experience significant effects, and hence to scope out those designations and LCTs which do not have the potential to experience significant effects from further consideration.



Table 1 – Preliminary Assessment of Designations

Designation	Location relative to the Proposed Development	Comments	Detailed Assessment Required
Local Landscape Areas within South Lanarkshire			
Douglas Valley LLA	Situated approximately 8.3 km to the south-east of the north development area	Very limited wind turbine blade tip and hub height theoretical visibility. Due to the presence of the operational Douglas West, Hagshaw Hill Repowering and Hagshaw Hill Extension wind farms which are located in the western part of the LLA any effects would be very limited and would not be considered significant.	No
Middle Clyde Valley LLA	Situated approximately 10.9 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the limited theoretical visibility and the presence of existing wind farms to the west at Kype Muir, Auchrobert and Cumberhead West any effects would be very limited and would not be considered significant.	No
Lower Clyde and Calderglen LLA	Situated approximately 15.4 km to the north of the north development area	Due to the distance from the Proposed Development and the very limited theoretical visibility there would be no potential for significant effects to arise.	No
Leadhills and Lowther Hills LLA	Situated approximately 16.5 km to the south-east of the southern development area	Due to the distance from the Proposed Development and the very limited theoretical visibility there would be no potential for significant effects to arise.	No
Upper Clyde Valley and Tinto LLA	Situated approximately 17.4 km to the east of the northern development area	Due to the distance from the Proposed Development and the limited theoretical visibility there would be no potential for significant effects to arise.	No



Designation	Location relative to the Proposed Development	Comments	Detailed Assessment Required
Local Landscape Areas within East Ayrshire			
Uplands and Moorlands LLA	Borders the northern edge of the southern development area and the south-eastern edge of the northern development area	Potential for significant indirect effects to occur due to the theoretical visibility of elements within the southern development area and the proposed turbines within the northern development area.	Yes
River Ayr Valley LLA	Situated approximately 4.8 km to the west of the southern development area	Theoretical visibility is restricted to the eastern fringes of the LLA where there is predicted visibility of the proposed turbines and combined visibility of the proposed wind turbines and the BESS, substation and solar array within the southern development area. Potential for effects to occur but they would not be considered significant.	No
Local Landscape Areas within North Lanarkshire			
Clyde Valley LLA	Situated approximately 17.8 km to the north of the northern development area	Due to the distance from the Proposed Development and the limited theoretical visibility there would be no potential for significant effects.	No
Gardens and Designed Landscapes within South Lanarkshire			
Chatelharault (Wham)	Situated approximately 16.7 km to the north north-east of the northern development area	Due to the distance from the Proposed Development, the very limited theoretical visibility and the presence of a number of intervening wind farms there would be no potential for significant effects.	No
The Falls of Clyde	Situated approximately 17.5 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the very limited theoretical visibility and the presence of a number of intervening wind farms there would be no potential for significant effects.	No



Designation	Location relative to the Proposed Development	Comments	Detailed Assessment Required
Lee Castle	Situated approximately 17.6 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the very limited theoretical visibility and the presence of a number of intervening wind farms there would be no potential for significant effects.	No
Barncluith	Situated approximately 19.1 km to the north north-east of the northern development area	Due to the distance from the Proposed Development, the very limited theoretical visibility and the presence of a number of intervening wind farms there would be no potential for significant effects.	No
Gardens and Designed Landscapes within East Ayrshire			
Lafine	Situated approximately 10.2 km to the west of the northern development area	Due to the distance from the Proposed Development and the very limited theoretical visibility there would be no potential for significant effects.	No
Dumfries House	Situated approximately 12.7 km to the south-west of the southern development area	Due to the distance from the Proposed Development, substantial intervening vegetation and the very limited theoretical visibility there would be no potential for significant effects.	No
Loudon Castle	Situated approximately 14.2 km to the west of the northern development area	Due to the distance from the Proposed Development and the degree of intervening vegetation there would be no potential for significant effects.	No
Carnell	Situated approximately 19 km to the west of the southern development area	Due to the distance from the Proposed Development and the very limited theoretical visibility there would be no potential for significant effects.	No



Designation	Location relative to the Proposed Development	Comments	Detailed Assessment Required
Gardens and Designed Landscapes within North Lanarkshire			
Dalzell House	Situated approximately 19.8 km to the north north-east of the northern development area	Due to the distance from the Proposed Development and the very limited theoretical visibility there would be no potential for significant effects.	No



Table 2 – Preliminary Assessment of LCTs within the 20 km Detailed LVIA Study Area

Landscape Character Type	Location relative to the Proposed Development	Comments	Detailed Assessment Required
South Lanarkshire Landscape Capacity Study for Wind Energy (2016)			
LCT 1 Urban Fringe Farmland	15.9 km to the north of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the very limited theoretical visibility no potential for significant effects.	No
LCT 1 i Urban Fringe Farmland - East Kilbride and Hamilton	14.3 km to the north of the northern development area	Intermittent theoretical visibility. However, due to the distance from the Proposed Development and number of intervening wind farms no potential for significant effects.	No
LCT 1 ii Urban Fringe Farmland - Carluke	18.4 km to the north-east of the northern development area	Due to the distance from the Proposed Development and the number of intervening operational wind farms no potential for significant effects.	No
LCT 1 iii Urban Fringe Farmland - Larkhall/Fernigair and Calderglen	17.9 km to the north of the northern development area	Due to the distance from the Proposed Development no potential for significant effects.	No
LCT 2 Incised River Valley	11.5 km to the north-east of the northern development area	No theoretical visibility	No
LCT 2 ii Incised River Valleys - Mid Clyde Valley	15.5 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the very limited theoretical visibility no potential for significant effects.	No
LCT 2 iii Incised River Valley - Rotten Calder	15 km to the north of the northern development area	Due to the distance from the Proposed Development and the very limited theoretical visibility no potential for significant effects.	No



Landscape Character Type	Location relative to the Proposed Development	Comments	Detailed Assessment Required
LCT 2 iv Incised River Valley - Avon Water	14.3 km to the north-east of the northern development area	Due to the distance from the Proposed Development and the very limited theoretical visibility no potential for significant effects.	No
LCT 2 v Incised River Valleys - River Nethan	12.3 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the very limited theoretical visibility no potential for significant effects.	No
LCT 2 vi Incised River Valley - Mouse Water	19 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the very limited theoretical visibility no potential for significant effects.	No
LCT 2A ii Incised River Valley Broad Valley Floor - Mid Clyde Valley	10.5 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the very limited theoretical visibility no potential for significant effects.	No
LCT 3 Broad Urban Valley	19.9 km to the north of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the very limited theoretical visibility no potential for significant effects.	No
LCT 4 Rolling Farmland	18.5 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the very limited theoretical visibility no potential for significant effects.	No
LCT 4 i Rolling Farmland - North and East of Lanark	18.4 km to the north-east of the northern development area	Intermittent theoretical visibility across a large proportion of this LCT. However, due to the distance from the Proposed Development and the number of intervening operational wind farms no potential for significant effects.	No



Landscape Character Type	Location relative to the Proposed Development	Comments	Detailed Assessment Required
LCT 4 ii Rolling Farmland - West of Lanark/Clyde Valley	14 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the very limited theoretical visibility no potential for significant effects.	No
LCT 4 iii Rolling Farmland - South of Strathaven/Sandford	4.9 km to the north of the northern development area	Intermittent theoretical visibility across a proportion of this LCT. The intervening Kype Muir and Dungavel schemes would mean that any effects would be very limited and would not be considered significant.	No
LCT 4A Rolling Farmland Forestry	19.9 km to the north-east of the northern development area	Extensive theoretical blade tip visibility. However, due to the distance from the Proposed Development and the number of intervening operational wind farms no potential for significant effects.	No
LCT 5 Plateau Farmland	17 km to the north-east of the northern development area	Extensive theoretical blade tip visibility. However, due to the distance from the Proposed Development and the number of intervening operational wind farms no potential for significant effects.	No
LCT 5 Plateau Farmland	5.3 km to the north-east of the northern development area	Limited theoretical blade tip visibility. However, due to the adjacent Cumberhead West Wind Farm and the operational wind turbines at High Waterhead Farm and Cleughead Farm no potential for significant effects.	No
LCT 5 i Plateau Farmland - Western Plateau: East Kilbride/Strathaven/Drumclog	1.9 km to the west of the northern development area	Potential for significant effects	Yes
LCT 5 ii Plateau Farmland - Western Plateau: Larkhall/Lesmahagow/Coalburn	5.8 km to the north-east of the northern development area	Intermittent theoretical visibility across a large proportion of this LCT. The intervening Kype Muir and Auchrobert schemes would mean that any effects would be very limited and would not be considered significant.	No



Landscape Character Type	Location relative to the Proposed Development	Comments	Detailed Assessment Required
LCT 5B Plateau Farmland Opencast Mining -	9.6 km to the north-east of the southern development area	Due to the distance and the operational Dalquhandy Wind Farm being located in this LCT no potential for significant effects.	No
LCT 5C Plateau Farmland Wind Farm	12.1 km to the north-east of the northern development area	Extensive theoretical blade tip visibility. However, due to the distance from the Proposed Development and the number of intervening operational wind farms no potential for significant effects.	No
LCT 6 Plateau Moorland	5.2 km to the north-west of the northern development area	Extensive theoretical visibility across the LCT. However, the operational Calder Water and West Browncastle wind farms are located in this LCT. Potential for some effects but they would not be considered significant due to the proximity of the adjacent operational wind farms.	No
LCT 6 iv Plateau Moorland - Western Plateau, Broken Cross/Coalburn	7.9 km to the east of the northern development area	Due to distance from the Proposed Development and the limited theoretical visibility no potential for significant effects.	No
LCT 6 v Plateau Moorland - Western Plateau, Red Moss/Middle Muir	15.5 km to the south-east of the southern development area	Due to distance from the Proposed Development and the limited theoretical visibility no potential for significant effects.	No
LCT 6A Plateau Moorland Forestry	5.7 km to the north-west of the northern development area	Extensive theoretical visibility across the LCT. However, the operational Calder Water and West Browncastle wind farms are located immediately adjacent to the LCT. Potential for some effects but they would not be considered significant due to the proximity of the adjacent operational wind farms.	No
LCT 6A Plateau Moorland Forestry	7.2 km to the north-west of the northern development area	Extensive theoretical visibility across the LCT. However, the operational Calder Water Wind Farm is located in this LCT. No potential for significant effects.	No



Landscape Character Type	Location relative to the Proposed Development	Comments	Detailed Assessment Required
LCT 6B i Plateau Moorland Forestry Wind Farm - Western Plateau: Whitelee Moor/Calder Water	8.8 km to the north-west of the northern development area	The extensive Whitelee wind cluster is located in this LCT. No potential for significant effects.	No
LCT 6D iv Plateau Moorland Opencast Mining - Western Plateau, Broke Cross/Coalburn	13.6 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the limited theoretical visibility no potential for significant effects.	No
LCT 7 Rolling Moorland	1.8 km to the west of the northern development area at Mill Rig	Potential for significant effects	Yes
LCT 7 Rolling Moorland	Located to the immediate north of the northern development area at Hawkwood Hill	Potential for significant effects	Yes
LCT 7 Rolling Moorland	418 m to the north-east of the northern development area at Dunside Rig and Grouse Hill	Potential for significant effects	Yes
LCT 7 Rolling Moorland	5.9 km to the south-east of the northern development area	The operational Galawhistle and Hagshaw Repowering wind farms are located in this LCT. No potential for significant effects.	No
LCT 7 Rolling Moorland	5.4 km to the south-east of the southern development area to the south of the Ayr Valley	Theoretical visibility from north-west facing slopes. Potential for significant effects.	Yes
LCT 7 Rolling Moorland	10.5 km to the south-east of the southern development area	Limited theoretical visibility. The operational Andershaw Wind Farm is located within this LCT. No potential for significant effects.	No
LCT 7 Rolling Moorland	11.8 km to the south-east of the southern development area	Due to distance from the Proposed Development and the limited theoretical visibility no potential for significant effects.	No



Landscape Character Type	Location relative to the Proposed Development	Comments	Detailed Assessment Required
LCT 7 Rolling Moorland	12.7 km to the south-east of the southern development area	Due to distance from the Proposed Development and the limited theoretical visibility no potential for significant effects.	No
LCT 7 Rolling Moorland	16.1 km to the south-east of the southern development area	Due to distance from the Proposed Development and the limited theoretical visibility and the operational Middlemuir Wind Farm being partly located within the LCT no potential for significant effects.	No
LCT 7 ii Rolling Moorland - Crawfordjohn/Cairn Table (South of Douglas Water)	8.8 km to the south-east of the southern development area	Very limited theoretical visibility. The under construction Kennoxhead Phase 1 Wind Farm is located to the immediate north-west of the LCT. No potential for significant effects.	No
LCT 7A Rolling Moorland Forestry	2.4 km to the east of the northern development area	The operational Cumberhead and Cumberhead West wind farms are located within this LCT. No potential for significant effects.	No
LCT 7A Rolling Moorland Forestry	6.5 km to the south-east of the southern development area	Very limited theoretical visibility. The under construction Kennoxhead Phase 1 Wind Farm is located within this LCT. No potential for significant effects.	No
LCT 7A i Rolling Moorland Forestry - Hagshaw/Dungavel (North of Douglas Water)	Proposed northern development area is located within this LCT	Potential for significant effects.	Yes
LCT 7B Rolling Moorland Wind Farm	8.4 km to the east of the southern development area	The operational Hagshaw Hill Repowering and Hagshaw Hill Extension wind farms are located in this LCT. Very limited theoretical visibility. No potential for significant effects.	No
LCT 8 i Upland River Valley - Avon Water	Located to the immediate west of the northern development area	Potential for significant effects.	Yes



Landscape Character Type	Location relative to the Proposed Development	Comments	Detailed Assessment Required
LCT 8 ii Upland River Valley - River Nethan (east of M74)	3.7 km to the north-east of the northern development area	Limited intermittent blade tip visibility. LCT is located between the operational Kype Muir and Cumberhead West wind farms. No potential for significant effects.	No
LCT 8 iii Upland River Valley - Douglas Water	10.3 km to the east of the southern development area	Very limited theoretical visibility. No potential for significant effects.	No
LCT 8 iv Upland River Valley - Duneaton Water	10.9 km to the south-east of the southern development area	Due to distance from the Proposed Development and the very limited theoretical visibility no potential for significant effects.	No
LCT 8A Upland River Valley Incised	6.2 km to the south-east of the southern development area	Very limited theoretical visibility. No potential for significant effects.	No
LCT 8B Upland River Valley Opencast Mining	10.7 km to the south-east of the southern development area	Due to distance from the Proposed Development and the very limited theoretical visibility no potential for significant effects.	No
LCT 9 i Broad Valley Upland - Upper Clyde	18 km to the north-east of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the intermittent theoretical visibility no potential for significant effects.	No
LCT 9 iii Broad Valley Upland - Douglas Water	14.6 km to the east of the northern development area	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the intermittent theoretical visibility no potential for significant effects.	No
LCT 10 i Foothills - Carmichael/Roberton	15 km to the east of the northern development area	Intermittent theoretical visibility. However, due to the distance from the Proposed Development and number of intervening wind farms no potential for significant effects.	No



Landscape Character Type	Location relative to the Proposed Development	Comments	Detailed Assessment Required
LCT 10A Foothills Forestry	17.4 km to the east of the northern development area	Due to the distance from the Proposed Development and the number of intervening operational wind farms no potential for significant effects.	No
LCT 13 Southern Uplands	17.4 km to the south-east of the southern development area.	Due to the distance from the Proposed Development, the number of intervening operational wind farms and the very limited theoretical visibility no potential for significant effects.	No
East Ayrshire Landscape Wind Energy Capacity Study (2024)			
LCT 7c East Ayrshire Lowlands	9.7 km to the west of the southern development area	Due to the distance from the Proposed Development and the very limited theoretical visibility no potential for significant effects.	No
LCT 7c East Ayrshire Lowlands	2.7 km to the south-west of the southern development area	Intermittent theoretical visibility in proximity to the Proposed Development. Potential for significant effects.	Yes
LCT 7c East Ayrshire Lowlands	11.3 km to the south-west of the southern development area	Due to the distance from the Proposed Development and the intermittent theoretical visibility no potential for significant effects.	No
LCT 7c East Ayrshire Lowlands	15 km to the north-west of the northern development area	Due to the distance from the Proposed Development and the intermittent theoretical visibility no potential for significant effects.	No
LCT 9 Lowland River Valley	6.9 km to the west of the southern development area	Due to the distance from the Proposed Development and the very limited theoretical visibility no potential for significant effects.	No
LCT 9 Lowland River Valley	14.4 km to the west of the northern development area	Extensive theoretical visibility. However, due to the distance from the Proposed Development no potential for significant effects.	No



Landscape Character Type	Location relative to the Proposed Development	Comments	Detailed Assessment Required
LCT 10 Upland River Valley	3.6 km to the north-west of the northern development area in the Irvine Valley	Intermittent theoretical visibility in proximity to the Proposed Development. Potential for significant effects.	Yes
LCT 10 Upland River Valley	537 m to the south of the southern development area in the Ayr Valley	Potential for significant effects.	Yes
LCT 10 Upland River Valley	3.7 km to the south-west of the southern development area	Intermittent theoretical visibility of the proposed turbines and solar/BESS development. Potential for some effects but they would not be considered significant.	No
LCT 10 Upland River Valley	13.4 km to the south of the southern development area	No theoretical visibility.	No
LCT 15 Upland Basin	12.8 km to the south-west of the southern development area	Due to the distance from the Proposed Development and the very limited theoretical visibility no potential for significant effects.	No
LCT 18a East Ayrshire Plateau Moorlands to the north of the Ayr Valley	Southern development area is located within this LCT unit.	Potential for significant effects.	Yes
LCT 18a East Ayrshire Plateau Moorlands to the south of the Ayr Valley	2.9 km to the south of the southern development area	Intermittent theoretical visibility of the proposed turbines and solar/BESS development. Potential for significant effects from the northern fringes the LCT.	Yes
LCT 18b East Ayrshire Plateau Moorlands Forestry and Wind Farms	5.6 km to the north-west of the northern development area	Intermittent theoretical visibility. However, due to the presence of the operational Whitelee Wind Farm within the LCT no potential for significant effects.	No