



# **Lime Down**

## Solar Park

# **Environmental Statement**

## **Volume 3, Appendix 11-9: Flood Risk Assessment and Drainage Strategy – Lime Down Cable Route Corridor**

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# Appendix 11-9: Flood Risk Assessment and Drainage Strategy – Lime Down Cable Route Corridor

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# 1. Site Details

1.1.1 The aim of this section of the report is to outline key environmental information associated with the baseline environment of the Cable Route Corridor.

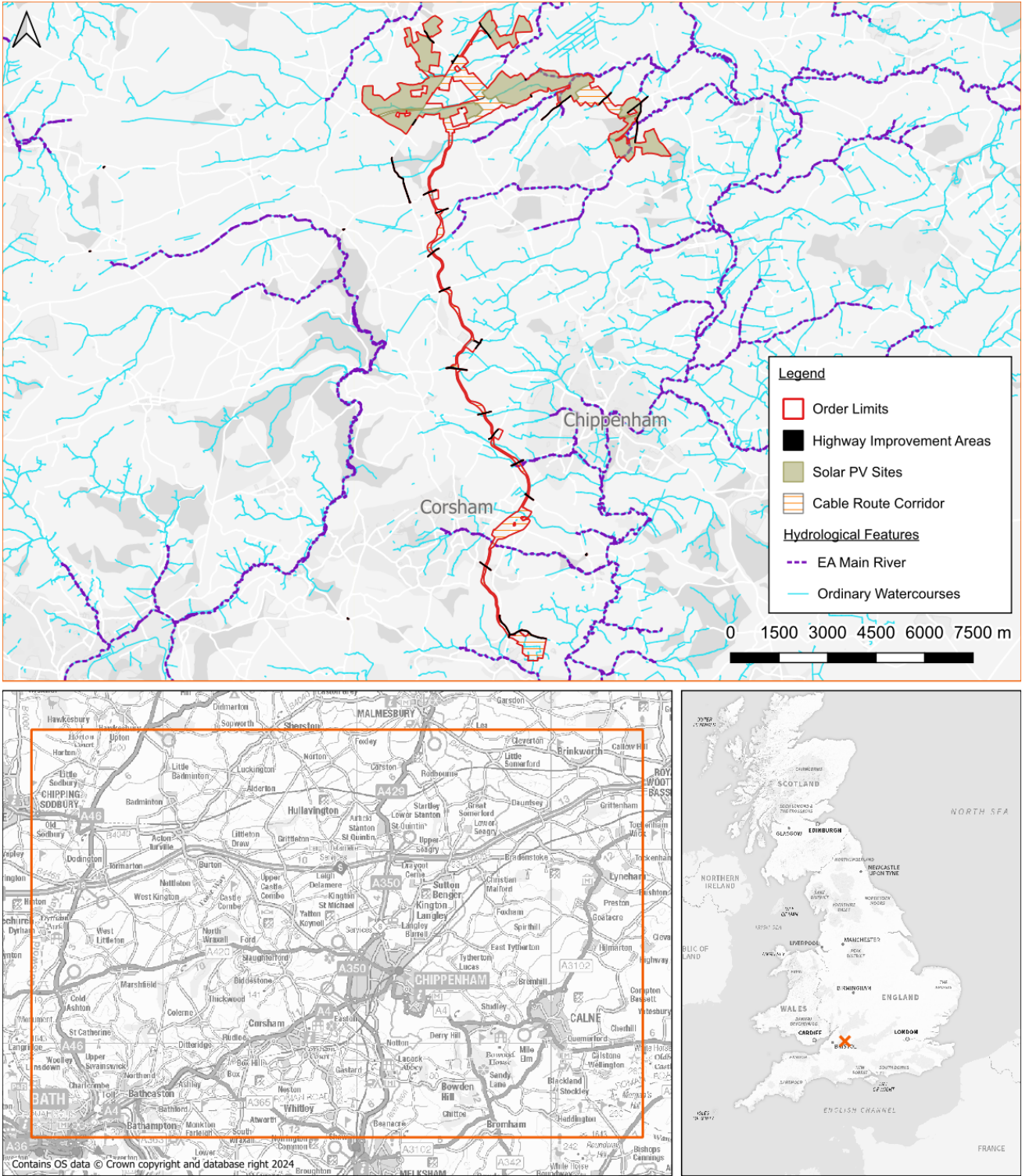


Figure 1: Site Location

## **1.2 Site Location**

- 1.2.1 The Cable Route Corridor has a typical width of a 50m wide buffer, and also encompasses the interconnecting cables between the solar Sites. However, the Cable Route Corridor incorporates a number of wider areas up to 600m wide, for example to allow additional working area for trenchless techniques such as Horizontal Directional Drilling (HDD), enable flexibility around areas of environmental sensitivity and temporary construction compounds. The Cable Route Corridor also narrows at certain points to avoid sensitive receptors such as habitat designations. The Cable Route Corridor will comprise underground electrical cables to connect the Sites to the Point of Connection (PoC) at the existing National Grid Melksham Substation.
- 1.2.2 The Cable Route Corridor is situated in the southwest of England, and to the north of Melksham and southwest of Malmesbury
- 1.2.3 The furthest point north is at grid reference 386290E, 185170N and the further point south is 389750E, 165480N.

## **1.3 Existing Site Conditions**

- 1.3.1 Online mapping (including Google Maps/Google Streetview imagery (accessed May 2025)<sup>i</sup>, shows that the Cable Route Corridor is greenfield comprising agricultural land.

## **1.4 Hydrology**

- 1.4.1 The Cable Route Corridor crosses several watercourses which includes; unnamed land drainage ditches, Gauze Brook, Pudding Brook, Bide Brook and South Brook (seen in Figure 1). The named watercourses flow from west to east across the Cable Route Corridor before moving in a southerly direction.
- 1.4.2 The River Avon flows in a southerly direction parallel to the Cable Route Corridor in the east. The Main River tributaries of the River Avon that are within the Cable Route Corridor include; South Brook along the southern boundary, Pudding Brook, Gauze Brook, Bide Brook and four which are unnamed.
- 1.4.3 However, the Cable Route Corridor passes through or comes close to many watercourses due to its significant size and length. Main Rivers are the responsibility of the Environment Agency (EA) to maintain and any watercourses that are not a Main River are designated as an Ordinary Watercourse, which are the responsibility of the Lead Local Flood Authority (LLFA) (Wiltshire County Council) to maintain.

## **1.5 Water Framework Directive Status**

- 1.5.1 The Cable Route Corridor is located within the Avon Bristol and North Somerset Streams Catchment, specifically the following Water Body Catchments:
- South Brook (source to conf River Avon, Bristol) has a Cycle 3 ecological status of Good in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022);
  - Avon (Bristol, conf River Marden to conf Semington Brook) has a Cycle 3 ecological status of



Moderate in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022);

- Bydemil Brook (source to conf River Avon, Bristol) has a Cycle 3 ecological status of Moderate in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022);
- Pudding Brook (source to conf River Avon, Bristol) has a Cycle 3 ecological status of Good in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022);
- Sutton Benger Brook (source to conf River Avon, Bristol) has a Cycle 3 ecological status of Good in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022);
- By Brook (Broadmead Brook to Doncombe Brook) has a Cycle 3 ecological status of Moderate in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022);
- Rodbourne Brook (source to conf River Avon, Bristol) has a Cycle 3 ecological status of Moderate in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022);
- Gauze Brook (source to conf River Avon, Bristol) has a Cycle 3 ecological status of Moderate in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022);
- Tributary (source to conf Sherston Avon) has a Cycle 3 ecological status of Good in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022);
- Sherston Avon has a Cycle 3 ecological status of Poor in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022); and
- Avon (Bristol, conf Tetbury Avon to conf River Marden) has a Cycle 3 ecological status of Moderate in 2019 and 2022 and a Failing chemical status in 2019 (no data in 2022).

1.5.2 A summary of the Water Body Classifications are included as Annex A.

## **1.6 Geology**

1.6.1 Reference to the British Geological Survey (BGS) online mapping<sup>ii</sup> (1:50,000 scale) indicates that the majority of the Cable Route Corridor is underlain by no superficial deposits, however, there are areas of the following superficial deposits:

- River Terrace Deposits consisting of sand and gravel;
- Head consisting of clay and silt; and
- Alluvium consisting of clay, silt, sand, and gravel.

1.6.2 The Cable Route Corridors is underlain by the following bedrock deposits:

- Forest Marble Formation consisting of mudstone;
- Cornbrash Formation consisting of limestone;
- Kellaways Clay Member consisting of mudstone; and
- Oxford Clay Formation consisting of mudstone.

1.6.3 The locations of the varying superficial deposits and bedrock can be seen in the Cable Route Corridor geology maps in Annex B.

1.6.4 The geological mapping is available at a scale of 1:50,000 and as such may not be accurate on a Site-specific basis.



## **1.7 Hydrogeology**

- 1.7.1 According to the EA's Aquifer Designation data, obtained from MAGIC Map's online mapping [accessed 02/06/2025]<sup>iii</sup>, the underlying Alluvium and River Terrace Deposits are described as Secondary A Aquifers.
- 1.7.2 The underlying Forest Marble Formation is described as a Secondary A Aquifer.
- 1.7.3 The EA's 'Source Protection Zones' data, obtained from MAGIC Map's online mapping [accessed 02/06/2025], indicates that the Cable Route Corridor is located within various Groundwater Source Protection Zone, which include Zone I: Subsurface Activity, Zone II: Subsurface Activity and Zone II: Outer Protection.

## **1.8 Proposed Site Conditions**

- 1.8.1 The wider proposed Scheme is for a ground mounted solar photo-voltaic plant and associated electrical equipment battery storage, Cable Route Corridor and access. This Appendix refers solely to the Cable Route Corridor, which will connect the Sites to one another. The Cable Route Corridor is provided to allow additional working area for trenchless techniques such as Horizontal Directional Drilling (HDD), and to enable flexibility around areas of environmental sensitivity and temporary construction compounds. The Cable Route Corridor also narrows at certain points to avoid sensitive receptors such as habitat designations. The Cable Route Corridor is also wider than the final required construction working area, to allow flexibility in the final location (micro-siting) of the cables. The location of the construction working area and cables will be identified and confirmed at the detailed design stage carried out following determination of the DCO application.



## 2. Assessment of Flood Risk

2.1.1 The aim of this section of the report is to assess and summarise the existing flood risk along the Cable Route Corridor.

### 2.2 Tidal Flood Risk

2.2.1 The Cable Route Corridor is situated inland at a minimum of approximately 38.5m Above Ordnance Datum (AOD). Given the nature of the Cable Route Corridor (sub surface cable) and that the construction phase will be mitigated through the implementation of the CEMP (Details in **ES Volume 3, Appendix 11-1: Flood Risk Assessment and Drainage Strategy – Covering Report [EN010168/APP/6.3]**), the risk from tidal flooding is considered Negligible.

### 2.3 Fluvial Flood Risk

- 2.3.1 According to the EA's Flood Map for Planning (updated in March 2025)<sup>iv</sup>, the Cable Route Corridor is situated largely within Flood Zone 1 (meaning it is an area considered to have <0.1% annual probability of flooding from rivers or the sea). However, Flood Zone 2 (0.1% to 1% AEP) and Flood Zone 3 (>1% AEP) for fluvial flooding are present in the far south of the Cable Route Corridor and along the various tributaries associated with the River Avon (which can be seen within Annex C).
- 2.3.2 The Cable Route Corridor passes through or comes in close proximity to many watercourses. The crossing of watercourses will be implemented by HDD in some locations which will allow the Cable Route to be constructed underneath the watercourses without impact the watercourse or flood risk. Other crossings will be in the form of open trench crossings.
- 2.3.3 The EA Historic Flood Map indicates that previous incidents of flooding within the Cable Route Corridor have remained within the channels of the Main Rivers, with the exception of a small area in the far south. The historic flood map appears to mirror the Flood Zone 3 extent which can be seen in the maps provided in Annex D.
- 2.3.4 Based on the above and given the nature of the Cable Route Corridor, it can be concluded that there is **Low** risk of fluvial flooding, and therefore no specific mitigation is considered necessary.

#### Consultation

2.3.5 Consultation has been undertaken throughout the EIA process with the EA and Wiltshire Council. Comments and recommendations received have been noted and applied throughout this Flood Risk Assessment and Drainage Strategy, with the methodology and watercourse crossing schedule shared with the LLFA prior to submission. A record of consultation and the Applicant's responses are included in **ES Volume 1, Chapter 11: Hydrology, Flood Risk and Drainage [EN010168/APP/6.1]**.

### 2.4 Surface Water Flood Risk

2.4.1 The EA's National Flood Risk Assessment Mapping (NaFRA), known as the Long Term Flood Risk Map (Surface Water)<sup>v</sup>, was updated in January 2025. The NaFRA mapping provides an updated view of





surface water flooding across the Site, however it should be noted that at the time of writing, the NaFRA mapping only delivers climate change insight up to the year 2060.

2.4.2 According to the EA's Long Term Flood Risk Map (Surface Water) the majority of the Cable Route Corridor is at Very Low risk of surface water flooding (maps included within Annex E), meaning it has a <0.1% annual probability of flooding. Surface water flooding with a Low to High risk (0.1% to >3.3% AEP) of occurrence concur with the courses of the watercourses.

2.4.3 Given the nature of the Cable Route Corridor (sub surface cable) and that the construction phase will be mitigated through the implementation of the CEMP (Details in **ES Volume 3, Appendix 11-1: Flood Risk Assessment and Drainage Strategy – Covering Report [EN010168/APP/6.3]**), the overall risk of surface water flooding is considered to be **Very Low**, and no mitigation is deemed necessary.

## 2.5 Groundwater Flood Risk

2.5.1 A description of the Cable Route Corridor's geology is included within Section 1.0.

2.5.2 The 2019 Strategic Flood Risk Assessment Online Data Explorer Mapping indicates that the far south of the Cable Route Corridor is within an area of groundwater near or within 0.025m of the ground surface. From the south to the central Cable Route Corridor, there is mainly no risk or groundwater levels between 0.025 to 0.5 m below ground level (bgl). There is no risk from groundwater within the north of the Cable Route Corridor.

2.5.3 It can be concluded that the risk of groundwater flooding is **Low** and no specific mitigation measures are required. Groundwater flows have been assessed within **ES Volume 1, Chapter 19: Ground Conditions [EN010168/APP/6.1]**.

## 2.6 Sewer Flooding

2.6.1 No Site-specific incidents of sewer flooding have been identified from relevant third party reports.

2.6.2 On the basis of the Cable Route Corridor's rural setting, the presence of sewerage infrastructure is unlikely. Utility records have been checked to identify any public sewers within or within close proximity to the Cable Route Corridor, the following locations have been flagged as areas where public sewers are present:

- North of Grittleton Road (approx. grid reference 386561E,179939N);
- Multiple locations in the vicinity of Bide Brook, adjacent to Thingley WwTW (approx. grid reference 388391E,169389N);
- Silver Street (approx. grid reference 3881601E,168733N);
- West of Chapel Knapp Farm (approx. grid reference 388294E,167961N); and
- Junction of Goodes Hill, Corsham Road and Westlands Lane (approx. grid reference 388966E,166568N).

2.6.3 It is assumed that once defined, the Cable Route Corridor will avoid the areas where sewers are located completely, and where this is not achievable, the cables will be buried with the required easements.



The utility records also show water mains in some parts of the Cable Route Corridor; these will also be considered with appropriate buffers applied during construction.

- 2.6.4 It can therefore be concluded that the risk of sewer flooding is **Negligible**, and no mitigation is deemed necessary.

## 2.7 Reservoir and Canal Flooding

- 2.7.1 There are no canals within the vicinity of the Cable Route Corridor and therefore there is Negligible risk.
- 2.7.2 The EA's 'Flood Risk from Reservoirs' map shows that the Cable Route Corridor is at risk from reservoir flooding when river levels are normal and/or flooded along Bide Brook, which the location can be seen in Figure 1.
- 2.7.3 The EA state that reservoir flooding is extremely unlikely. All large reservoirs must be inspected and supervised by reservoir panel engineers. As the enforcement authority for the Reservoirs Act 1975 in England, the EA ensure reservoirs are inspected regularly, and essential safety work is carried out.
- 2.7.4 It can therefore be concluded that there is at **Negligible to Low** risk of flooding from artificial sources and no mitigation is deemed necessary.

## 2.8 Residual Flood Risks

- 2.8.1 A residual risk is an exceedance event, such as the greater than 1 in 1000 year (<0.1% AEP) flood event that would overtop the land drainage ditches / rivers and potentially impact the Cable Route Corridor. As the probability of a 1 in 1000 year flood event occurring is <0.1% in any given year, the probability is low and, therefore, no further mitigation beyond what is proposed is required.
- 2.8.2 In the event of the defences failing or an exceedance event occurring, the residual risk to people working within the Cable Route Corridor can be managed through the implementation of an appropriate Site management plan, which recognises the residual risks and details what action is to be taken by staff in the event of a flood to put occupants in a place of safety.
- 2.8.3 In line with the embedded mitigation strategy set out in **Appendix 11.1: Flood Risk Assessment and Drainage Strategy – Covering Report [EN010168/APP/6.3]**, all infrastructure within the Cable Route Corridor, including joint bays, link boxes, and associated access points, will be installed below ground or flush with the surface, thereby ensuring resilience to both fluvial and surface water flood mechanisms. Above-ground infrastructure, if required at watercourse crossing locations or connection points, will either be located outside flood-prone areas or designed to withstand temporary flood inundation. Trenchless techniques such as Horizontal Directional Drilling (HDD) will be prioritised at key watercourse crossings to minimise disruption to floodplain flow routes and avoid introducing obstructions. The temporary nature and low profile of construction activities, combined with site-specific method statements and CEMP protocols, will ensure flood resilience is maintained and flood risk is not exacerbated during either construction or operation.

## 2.9 Summary of Flood Risk





- 2.9.1 It can be concluded that the Cable Route Corridor is at **Negligible to Low risk** of flooding from all sources. Therefore, no Site-specific mitigation measures are considered necessary.

### **Flood Warnings and Evacuation**

- 2.9.2 Parts of the Cable Route Corridor fall within areas covered by Environment Agency Flood Alerts and Warnings<sup>vi</sup>.
- 2.9.3 It is recommended that site management teams register with the EA's free Floodline Warnings Direct service to receive real-time flood alerts for the relevant areas.
- 2.9.4 Access to the cable is anticipated to be infrequent and largely limited to scheduled inspections or routine maintenance. These activities can typically be planned to avoid periods of heightened flood risk. In all cases, the safety of maintenance personnel will take precedence, and access will be restricted during unsafe conditions.
- 2.9.5 Where urgent works are required, such as to address damage or failure, these will be managed in line with the Construction Environmental Management Plan (CEMP), including flood risk protocols. If any temporary works such as trenching are required, their potential impact on local flood risk will be assessed and managed through site-specific method statements and mitigation.

## **2.10 Impact on Off-Site Flood Risk**

- 2.10.1 The cables within the Cable Route Corridor will be below the existing surface level and therefore, there will be no loss of floodplain volume as a result of the Scheme and no increased in flood risk elsewhere.
- 2.10.2 Surface water management has been considered in **ES Volume 3, Appendix 11-1: Flood Risk Assessment and Drainage Strategy – Covering Report [EN010168/APP/6.3]**.

## **2.11 Other Considerations**

- 2.11.1 The installation of the cable route will involve multiple crossings of watercourses, including both Main Rivers and ordinary watercourses. These crossings relate specifically to the cable installation works. Horizontal Directional Drilling (HDD), open cut trenching, or other suitable techniques may be employed depending on site-specific conditions, including ecological sensitivity, ground conditions and flood risk. The final method for each crossing will be selected based on environmental, engineering and permitting considerations, with appropriate mitigation implemented to manage potential impacts.
- 2.11.2 All crossings associated with the cable installation will be subject to the relevant regulatory approvals. Environmental Permits from the EA will be required for works affecting Main Rivers, while works to ordinary watercourses will require consent from the LLFA. Where disapplication of these consents is sought through the DCO, detailed method statements and impact mitigation measures will be secured through the appropriate Requirements.
- 2.11.3 It is acknowledged that temporary watercourse crossings may also be required to facilitate construction access. These access-related crossings do not form part of this FRA and will be addressed through the CEMP.



## 3. Conclusions and Recommendations

### 3.1 Conclusions

- 3.1.1 The Scheme is for a ground mounted solar farm and associated infrastructure and access roads. This Appendix refers solely to the Cable Route Corridor in which the Cable Route Corridor and Grid Connection Cables will be located to establish a connection between the Solar PV Sites and the Existing National Grid Melksham Substation.

#### **Flood Risk**

- 3.1.2 The Cable Route Corridor is situated largely within Flood Zone 1. However, Flood Zones 2 and Flood Zone 3 for fluvial flooding are present in the far south of the Cable Route Corridor and along the various tributaries associated with the River Avon.
- 3.1.3 The majority of the Cable Route Corridor is at Very Low risk of surface water flooding. Surface water flooding with a Low to High risk of occurrence concur with the courses of the watercourses.
- 3.1.4 The risk of flooding from all sources has been assessed and the flood risk to the Cable Route Corridor is considered to be **Negligible to Low** and therefore does not require Site-specific mitigation measures.
- 3.1.5 The Grid Connection Cables to be located within the Cable Route Corridor, will be below the existing surface level and therefore, there will be no loss of floodplain volume as a result of the proposed Scheme and no increased in flood risk elsewhere. The above ground works during the construction phase will be mitigated through the implementation of the CEMP, detailed in **ES Volume 3, Appendix 11-1: Flood Risk Assessment and Drainage Strategy – Covering Report [EN010168/APP/6.3]**.

#### **Drainage Strategy**

- 3.1.6 Given the nature of the Grid Connection Cables to be located within the Cable Route Corridor, no formal drainage will be required at the Site.

### 3.2 Recommendations

- 3.2.1 The recommendations below will be considered when determining the final location of the Grid Connection Cables within the Cable Route Corridor:
- 8m easements (to ensure access can be achieved) have been established around all watercourses, including Main Rivers and Ordinary Watercourses. Where crossings of watercourses are required, relevant permissions should be sought from the EA and/or Lead Local Flood Authority (Wiltshire Council).



## **Annexes**

## **Annex A- Water Body Catchment Classifications**

### **Summaries**

### South Brook (source to conf. River Avon, Bristol) Water Body Classification Summary

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Good	Good	Good	Good	2015	
Biological Quality Elements	Good	Good	Good	Good	2015	
Invertebrates	Good	Good	Good	Good	2015	
Macrophytes and Phytobenthos Combined	Good	Good	Good	Good	2015	
Macrophytes sub element	Good	Good	Good	Good	2015	
Physio-Chemical Quality Elements	Good	Good	Good	Good	2015	
Ammonia (Phys-Chem)	High	High	High	Good	2015	
Dissolved Oxygen	High	High	High	Good	2015	
Phosphate	Good	Good	Good	Good	2015	
Temperature	High	High	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Benzo(a)pyrene	Good	Good	N/A	Good	2015	
Dioxins and dioxin-like compounds	Good	Good	N/A	Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good	N/A	Good	2015	
Hexabromocyclododecane	Good	Good	N/A	Good	2015	
Hexachlorobenzene	Good	Good	N/A	Good	2015	
Hexachlorobutadiene	Good	Good	N/A	Good	2015	
Mercury and Its Compounds	Fail	Fail	N/A	Good	2040	Natural conditions: Chemical status recovery time
Perfluorooctane sulphonate (PFOS)	Good	Good	N/A	Good	2015	
Polybrominated diphenyl ethers (PBDE)	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority substances	Good	Good	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good	N/A	Good	2015	
Fluoranthene	Good	Good	N/A	Good	2015	
Other Pollutants	N/A	N/A	N/A	N/A	2015	

## Avon (Bristol, conf. River Marden to conf. Semington Brook) Water Body Classification Summary

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Biological Quality Elements	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Invertebrates	Good	Good	Good	Good	2015	
Macrophytes and Phytobenthos Combined	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Physio-Chemical Quality Elements	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Acid Neutralising Capacity	High	High	High	Good	2015	
Ammonia (Phys-Chem)	High	High	High	Good	2015	
Dissolved Oxygen	N/A	High	High	Good	2015	
Phosphate	Moderate	Moderate	Moderate	Good	2027-low confidence	Disproportionately expensive: Disproportionate burdens
Temperature	High	High	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Specific Pollutants	High	High	High	High	2015	
Copper	High	High	High	High	2015	
Triclosan	High	High	High	High	2015	
Zinc	High	High	High	High	2015	
Iron	High	High	High	High	2015	
Manganese	High	High	High	High	2015	
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time; Technically infeasible: No known technical solution is available
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time; Technically infeasible: No known technical solution is available
Benzo(a)pyrene	Good	Good	N/A	Good	2015	
Cadmium and Its Compounds	Good	Good	N/A	Good	2015	
Dioxins and dioxin-like compounds	Good	Good	N/A	Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good	N/A	Good	2015	
Hexabromocyclododecane	Good	Good	N/A	Good	2015	
Hexachlorobenzene	Good	Good	N/A	Good	2015	
Hexachlorobutadiene	Good	Good	N/A	Good	2015	
Mercury and Its Compounds	Fail	Fail	N/A	Good	2040	Natural conditions: Chemical status recovery time
Perfluorooctane sulphonate (PFOS)	Fail	Fail	N/A	Good	2015	Technically infeasible: No known technical solution is available
Polybrominated diphenyl ethers (PBDE)	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority substances	Good	Good	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good	N/A	Good	2015	
Fluoranthene	Good	Good	N/A	Good	2015	
Lead and Its Compounds	Good	Good	N/A	Good		
Nickel and Its Compounds	Good	Good	N/A	Good		
Other Pollutants	N/A	N/A	N/A	N/A	2015	Did not require assessment

**Bydemil Brook (source to conf. River Avon, Bristol) Water Body Classification Summary**

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Biological Quality Elements	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Invertebrates	Good	Good	Good	Good	2015	
Macrophytes and Phytobenthos Combined	Good	Good	Good	Good	2015	Disproportionately expensive: Disproportionate burdens
Macrophytes sub element	Good	Good	Good	Good		
Physio-Chemical Quality Elements	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Acid Neutralising Capacity	High	High	High	Good	2015	
Ammonia (Phys-Chem)	High	High	High	Good	2015	
Dissolved Oxygen	High	High	High	Good	2015	
Phosphate	Moderate	Moderate	Moderate	Good	2027	Disproportionately expensive: Disproportionate burdens
Temperature	High	High	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Specific Pollutants	High	High	High	N/A	2015	
Triclosan	High	High	High		2015	
Iron	High	High	High	N/A	2015	
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time; Technically infeasible: No known technical solution is available
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time; Technically infeasible: No known technical solution is available
Benzo(a)pyrene	Good	Good	N/A	Good	2015	
Cadium and Its Compounds	N/A	Good	N/A		2015	
Dioxins and dioxin-like compounds	Good	Good	N/A	Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good	N/A	Good	2015	
Hexabromocyclododecane	Good	Good	N/A	Good	2015	
Hexachlorobenzene	Good	Good	N/A	Good	2015	
Hexachlorobutadiene	Good	Good	N/A	Good	2015	
Mercury and Its Compounds	Fail	Fail	N/A	Good	2040	Natural conditions: Chemical status recovery time
Perfluorooctane sulphonate (PFOS)	Fail	Fail	N/A	Good	2039	Technically infeasible: No known technical solution is available
Polybrominated diphenyl ethers (PBDE)	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority substances	Good	Good	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good	N/A	Good	2015	
Fluoranthene	Good	Good	N/A	Good	2015	
Other Pollutants	N/A	N/A	N/A	N/A	2015	Did not require assessment

**Pudding Brook (source to conf. River Avon, Bristol) Water Body Classification Summary**

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Good	Good	Good	Good	2015	Disproportionately expensive: Disproportionate burdens
Biological Quality Elements	Good	Good	Good	Good	2015	Disproportionately expensive: Disproportionate burdens
Invertebrates	High	High	High	Good	2015	
Macrophytes and Phytobenthos Combined	Good	Good	Good	Good	2015	Disproportionately expensive: Disproportionate burdens
Macrophytes sub element	Good	Good	Good	Good	2015	
Physio-Chemical Quality Elements	High	High	High	Good	2015	Disproportionately expensive: Disproportionate burdens
Ammonia (Phys-Chem)	High	High	High	Good	2015	
Dissolved Oxygen	High	High	High	Good	2015	
Phosphate	High	High	High	Good	2015	Disproportionately expensive: Disproportionate burdens
Temperature	High	High	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Benzo(a)pyrene	Good	Good	N/A	Good	2015	
Dioxins and dioxin-like compounds	Good	Good	N/A	Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good	N/A	Good	2015	
Hexabromocyclododecane	Good	Good	N/A	Good	2015	
Hexachlorobenzene	Good	Good	N/A	Good	2015	
Hexachlorobutadiene	Good	Good	N/A	Good	2015	
Mercury and Its Compounds	Fail	Fail	N/A	Good	2040	Natural conditions: Chemical status recovery time
Perfluorooctane sulphonate (PFOS)	Good	Good	N/A	Good	2015	
Polybrominated diphenylethers (PBDE)	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority substances	Good	Good	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good	N/A	Good	2015	
Fluoranthene	Good	Good	N/A	Good	2015	
Other Pollutants	N/A	N/A	N/A	N/A	2015	Did not require assessment



**Sutton Benger Brook (source to conf. River Avon, Bristol Water Body Classification Summary**

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Good	Good	Good	Good	2021	Disproportionately expensive: Disproportionate burdens
Biological Quality Elements	Good	Good	Good	Good	2021	Disproportionately expensive: Disproportionate burdens
Invertebrates	High	High	High	Good	2015	
Macrophytes and Phytobenthos Combined	Good	Good	Good	Good	2021	Disproportionately expensive: Disproportionate burdens
Macrophytes sub element	Good	Good	Good			
Physio-Chemical Quality Elements	High	High	High	Good	2015	
Acid Neutralising Capacity	N/A	N/A	High		2015	
Ammonia (Phys-Chem)	High	High	High	Good	2015	
Dissolved Oxygen	High	High	High	Good	2015	
Phosphate	High	High	High	Good	2015	
Temperature	High	High	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Hydrological Regime	Supports Good	Supports Good	Supports Good	Supports Good	2021	Disproportionately expensive: Disproportionate burdens
Morphology	Supports Good	Supports Good	Supports Good			
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Benzo(a)pyrene	Good	Good	N/A	Good	2015	
Dioxins and dioxin-like compounds	Good	Good		Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good		Good	2015	
Hexabromocyclododecane	Good	Good		Good	2015	
Hexachlorobenzene	Good	Good		Good	2015	
Hexachlorobutadiene	Good	Good		Good	2015	
Mercury and Its Compounds	Fail	Fail		Good	2040	Natural conditions: Chemical status recovery time
Perfluorooctane sulphonate (PFOS)	Good	Good		Good	2015	
Polybrominated diphenyl ethers (PBDE)	Fail	Fail		Good	2063	Natural conditions: Chemical status recovery time
Priority substances	Good	Good	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good		Good	2015	
Fluoranthene	Good	Good		Good	2015	
Other Pollutants	N/A	N/A	N/A	N/A	2015	Did not require assessment

**By Brook (Broadmead Brook to Doncombe Brook) Water Body Classification Summary**

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Biological Quality Elements	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Invertebrates	High	High	High	Good	2015	
Macrophytes and Phytobenthos Combined	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Macrophytes sub element	Moderate	Moderate	Moderate			
Physio-Chemical Quality Elements	Good	Good	Good	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Ammonia (Phys-Chem)	High	High	High	Good	2015	
Dissolved Oxygen	High	High	High	Good	2015	
Phosphate	Good	Good	Good	Good	2027	Disproportionately expensive: Disproportionate burdens
Temperature	High	High	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Benzo(a)pyrene	Good	Good	N/A	Good	2015	
Dioxins and dioxin-like compounds	Good	Good	N/A	Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good	N/A	Good	2015	
Hexabromocyclododecane	Good	Good	N/A	Good	2015	
Hexachlorobenzene	Good	Good	N/A	Good	2015	
Hexachlorobutadiene	Good	Good	N/A	Good	2015	
Mercury and Its Compounds	Fail	Fail	N/A	Good	2040	Natural conditions: Chemical status recovery time
Perfluorooctane sulphonate (PFOS)	Good	Good	N/A	Good	2015	
Polybrominated diphenyl ethers (PBDE)	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority substances	Good	Good	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good	N/A	Good	2015	
Fluoranthene	Good	Good	N/A	Good	2015	
Other Pollutants	N/A	N/A	N/A	N/A	2015	Did not require assessment

**Rodbourne Brook (source to conf. River Avon, Bristol) Water Body Classification Summary**

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Biological Quality Elements	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Invertebrates	Moderate	Moderate	Moderate	Good	2015	
Macrophytes and Phytobenthos Combined	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Macrophytes sub element	Moderate	Moderate	Moderate			
Physio-Chemical Quality Elements	High	High	High	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Ammonia (Phys-Chem)	High	High	High	Good	2015	
Dissolved Oxygen	High	High	High	Good	2015	
Phosphate	High	High	High	Good	2015	Disproportionately expensive: Disproportionate burdens
Temperature	High	High	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Hydrological Regime	Supports Good	Supports Good	Supports Good		2015	
Specific Pollutants				N/A	2015	
Copper						
Triclosan						
Zinc						
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Benzo(a)pyrene	Good	Good		Good	2015	
Cadium and Its Compounds						
Di(2-ethylhexyl)phthalate (Priority hazardous)						
Dioxins and dioxin-like compounds	Good	Good		Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good		Good	2015	
Hexabromocyclododecane	Good	Good		Good	2015	
Hexachlorobenzene	Good	Good		Good	2015	
Hexachlorobutadiene	Good	Good		Good	2015	
Mercury and Its Compounds	Fail	Fail		Good	2040	Natural conditions: Chemical status recovery time
Nonylphenol						
Perfluorooctane sulphonate (PFOS)	Good	Good		Good	2015	
Polybrominated diphenyl ethers (PBDE)	Fail	Fail		Good	2063	Natural conditions: Chemical status recovery time
Tributyltin Compounds						
Priority substances	Good	Good	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good		Good	2015	
Fluoranthene	Good	Good		Good	2015	
Lead and Its Compounds						
Nickel and Its Compounds						
Other Pollutants	N/A	N/A	N/A	N/A	2015	Did not require assessment

**Gauze Brook (source to conf. River Avon, Bristol) Water Body Classification Summary**

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Biological Quality Elements	High	High	Good	Good	2015	
Invertebrates	High	High	High	Good	2015	
Macrophytes and Phytobenthos Combined	High	High	Good	Good	2015	
Macrophytes subelement	High	High	Good	Good		
Physio-Chemical Quality Elements	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Acid Neutralising Capacity						
Ammonia (Phys-Chem)	High	High	High	Good	2015	
Dissolved Oxygen	Poor	Poor	Poor	Good	2015	
Phosphate	Poor	Poor	Poor	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Temperature	High	High	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Hydrological Regime	Does not support good	Does not support good	Supports Good	Does not support good		Disproportionately expensive: Unfavourable balance of costs and benefits
Morphology	Supports Good	Supports Good	Supports Good			
Supporting Elements (surface Water)				N/A	2015	
Specific Pollutants				N/A	2015	
Copper						
Triclosan						
Zinc						
Iron						
Manganese						
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Benzo(a)pyrene	Good	Good		Good	2015	
Cadmium and Its Compounds						
Dioxins and dioxin-like compounds	Good	Good		Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good		Good	2015	
Hexabromocyclododecane	Good	Good		Good	2015	
Hexachlorobenzene	Good	Good		Good	2015	
Hexachlorobutadiene	Good	Good		Good	2015	
Mercury and Its Compounds	Fail	Fail		Good	2040	Natural conditions: Chemical status recovery time
Nonylphenol						
Perfluorooctane sulphonate (PFOS)	Good	Good		Good	2015	
Polybrominated diphenyl ethers (PBDE)	Fail	Fail		Good	2063	Natural conditions: Chemical status recovery time
Priority substances	Good	Good	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good	N/A	Good	2015	
Fluoranthene	Good	Good	N/A	Good	2015	
Lead and Its Compounds						
Nickel and Its Compounds						
Other Pollutants	N/A	N/A	N/A	N/A	2015	Did not require assessment

**Tributary (source to conf. Sherston Avon) Water Body Classification Summary**

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Good	Good	Good	Good	2015	
Biological Quality Elements	Good	Good	Good	Good	2015	
Invertebrates	Good	Good	Good	Good	2015	
Macrophytes and Phytobenthos Combined	Good	Good	Good	Good	2015	
Physio-Chemical Quality Elements	Good	Good	Good	Good	2015	
Acid Neutralising Capacity	N/A	N/A	N/A	Good	2015	
Ammonia (Phys-Chem)	Good	Good	Good	Good	2015	
Dissolved Oxygen	High	High	High	Good	2015	
Phosphate	Good	Good	Good	Good	2015	
Temperature	High	High	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Supporting Elements (surface Water)	N/A	N/A	N/A	N/A	N/A	
Mitigation Measures Assessment	N/A	N/A	N/A	N/A	N/A	
Specific Pollutants	N/A	N/A	N/A	N/A	N/A	
Iron	N/A	N/A	N/A	N/A	N/A	
Manganese	N/A	N/A	N/A	N/A	N/A	
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Benzo(a)pyrene	Good	Good	N/A	Good	2015	
Dioxins and dioxin-like compounds	N/A	Good	N/A	Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good	N/A	Good	2015	
Hexabromocyclododecane	Good	Good	N/A	Good	2015	
Hexachlorobenzene	Good	Good	N/A	Good	2015	
Hexachlorobutadiene	Good	Good	N/A	Good	2015	
Mercury and Its Compounds	Fail	Fail	N/A	Good	2040	Natural conditions: Chemical status recovery time
Perfluorooctane sulphonate (PFOS)	Good	Good	N/A	Good	2015	
Polybrominated diphenyl ethers (PBDE)	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority substances	Good	Good	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good	N/A	Good	2015	
Fluoranthene	Good	Good	N/A	Good	2015	
Other Pollutants	N/A	N/A	N/A	N/A	2015	Did not require assessment

## Sherston Avon Water Body Classification Summary

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Poor	Poor	Poor	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Biological Quality Elements	Poor	Poor	Poor	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Invertebrates	High	High	High	Good	2027 - Low Confidence	
Macrophytes and Phytobenthos Combined	Poor	Poor	Poor	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Physio-Chemical Quality Elements	Moderate	Moderate	Good	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Acid Neutralising Capacity	N/A	N/a	N/A	Good	2015	
Ammonia (Phys-Chem)	High	High	High	Good	2015	
Dissolved Oxygen	Moderate	Moderate	N/A	Good	2015	
Phosphate	Good	Good	Good	Good	2027	Disproportionately expensive: Disproportionate burdens
Temperature	High	High	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Supporting Elements (surface Water)	N/A	N/A	N/A	N/A	N/A	
Mitigation Measures Assessment	N/A	N/A	N/A	N/A	N/A	
Specific Pollutants	N/A	N/A	N/A	N/A	N/A	
Iron	N/A	N/A	N/A	N/A	N/A	
Manganese	N/A	N/A	N/A	N/A	N/A	
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Benzo(a)pyrene	Good	Good	N/A	Good	2015	
Dioxins and dioxin-like compounds	N/A	Good	N/A	Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good	N/A	Good	2015	
Hexabromocyclododecane	Good	Good	N/A	Good	2015	
Hexachlorobenzene	Good	Good	N/A	Good	2015	
Hexachlorobutadiene	Good	Good	N/A	Good	2015	
Mercury and Its Compounds	Fail	Fail	N/A	Good	2040	Natural conditions: Chemical status recovery time
Perfluorooctane sulphonate	Good	Good	N/A	Good	2015	
Polybrominated diphenyl ethers (PBDE)	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority substances	Good	N/A	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good	N/A	Good	2015	
Fluoranthene	Good	Good	N/A	Good	2015	
Other Pollutants	N/A	N/A	N/A	N/A	2015	Did not require assessment

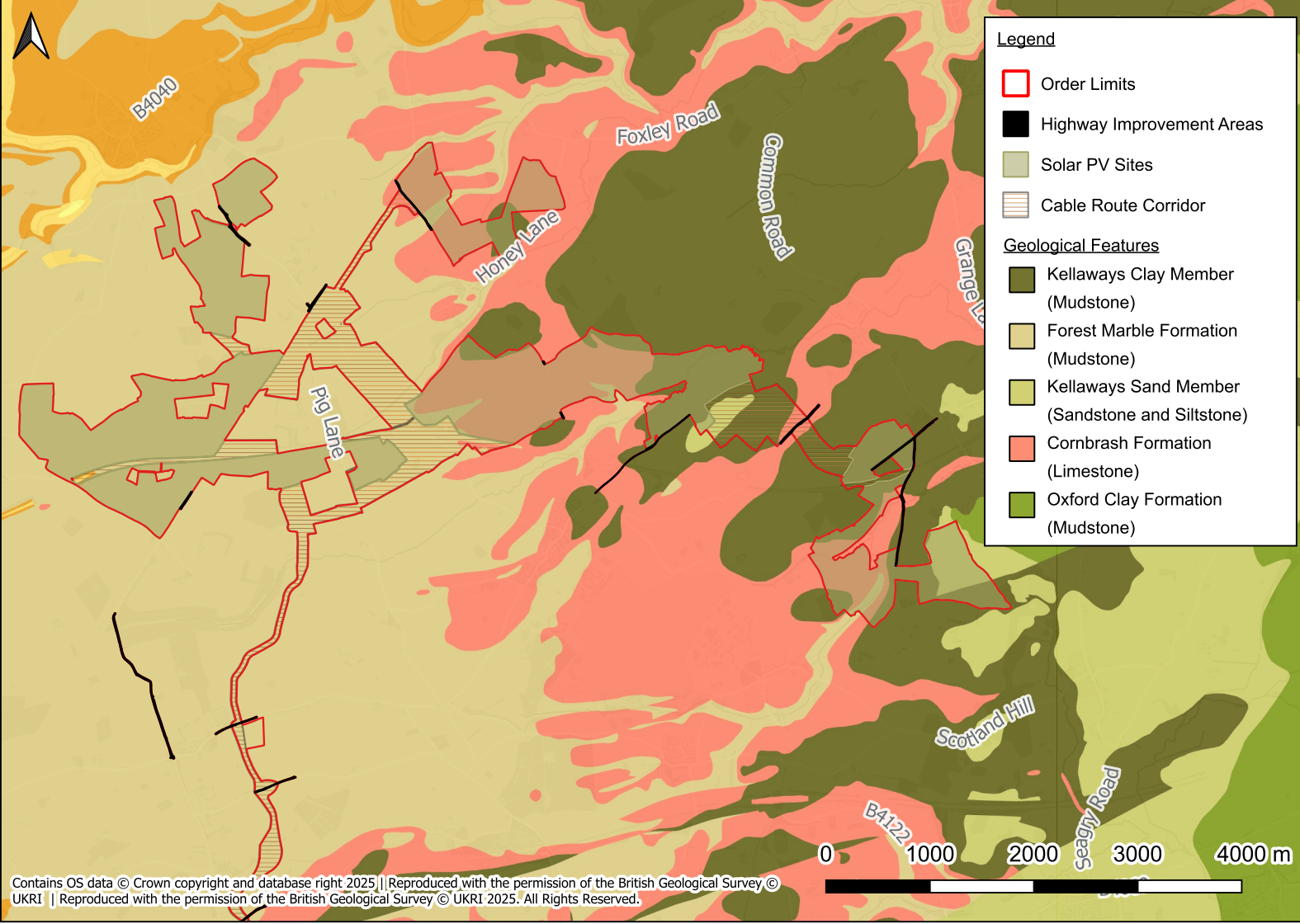


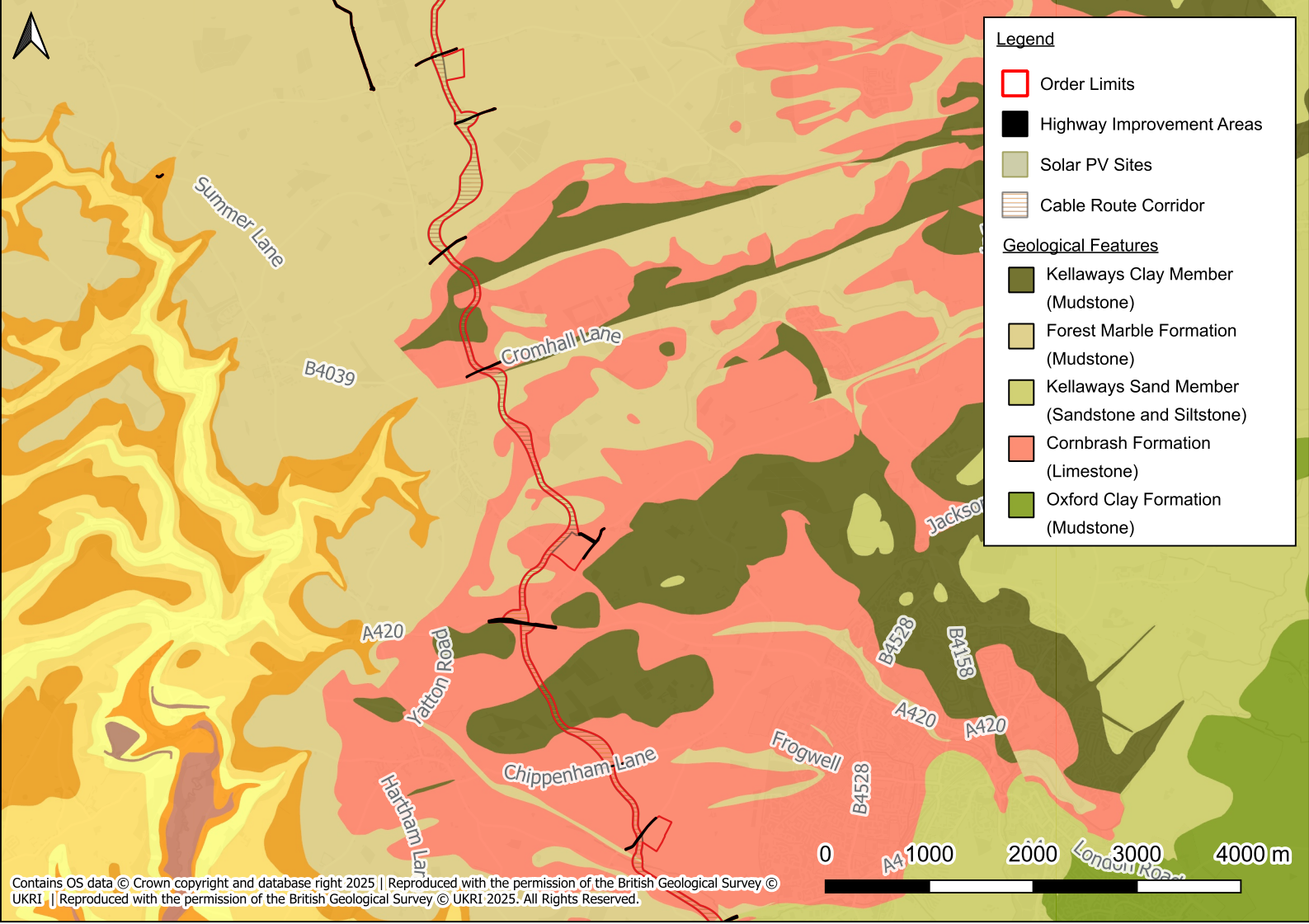
**Avon (Bristol, conf. Tetbury Avon to conf. River Marden) Water Body Classification Summary**

Classification Item	2019 Classification		2022 Classification	Cycle 3 Objectives		
	Cycle 2	Cycle 3	Cycle 3	Status	Year	Reasons
Ecological	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Biological Quality Elements	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Fish	Good	Good	Good	Good	2015	
Invertebrates	Good	Good	Good	Good	2015	
Macrophytes and Phytobenthos Combined	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Macrophytes sub element	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Physio-Chemical Quality Elements	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Acid Neutralising Capacity	High	High	High	Good	2015	
Ammonia (Phys-Chem)	High	High	High	Good	2015	
Dissolved Oxygen	Good	Good	High	Good	2015	
Phosphate	Moderate	Moderate	Moderate	Good	2027 - Low Confidence	Disproportionately expensive: Disproportionate burdens
Temperature	Good	Good	High	Good	2015	
pH	High	High	High	Good	2015	
Hydromorphological Supporting Elements	Supports Good	Supports Good	Supports Good	Supports Good	2015	
Hydrological Regime	Does not support good	Does not support good	Supports Good	Does not support good	2015	Disproportionately expensive: Unfavourable balance of costs and benefits
Morphology	Supports Good	Supports Good	Supports Good			
Supporting Elements (surface Water)				N/A	2015	
Specific Pollutants	High	High	High	High	2015	
Arsenic	High	High	High	High	2015	
Copper	High	High	High	High	2015	
Triclosan	High					
Zinc	High	High	High	High	2015	
Iron	High	High	High	High	2015	
Maganese	High	High	High	High	2015	
Chemical	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Priority Hazardous Substances	Fail	Fail	N/A	Good	2063	Natural conditions: Chemical status recovery time
Benzo(a)pyrene		Good		Good	2015	
Cadium and Its Compounds	Good	Good		Good	2015	
Dioxins and dioxin-like compounds	Good	Good		Good	2015	
Heptachlor and cis-Heptachlor Epoxide	Good	Good		Good	2015	
Hexabromocyclododecane	Good	Good		Good	2015	
Hexachlorobenzene	Good	Good		Good	2015	
Hexachlorobutadiene	Good	Good		Good	2015	
Mercury and Its Compounds	Fail	Fail		Good	2040	Natural conditions: Chemical status recovery time
Perfluorooctane sulphonate (PFOS)	Good	Good		Good	2015	
Polybrominated diphenyl ethers (PBDE)	Fail	Fail		Good	2063	Natural conditions: Chemical status recovery time
Priority substances	Good	Good	N/A	Good	2015	
Cypermethrin (Priority)	Good	Good		Good	2015	
Fluoranthene	Good	Good		Good	2015	
Lead and Its Compunds	Good	Good		Good	2015	
Nickel and Its Compunds	Good	Good		Good	2015	
Other Pollutants	Good	Good	N/A	Good	2015	





## **Annex B - Cable Route Corridor Geology Maps**










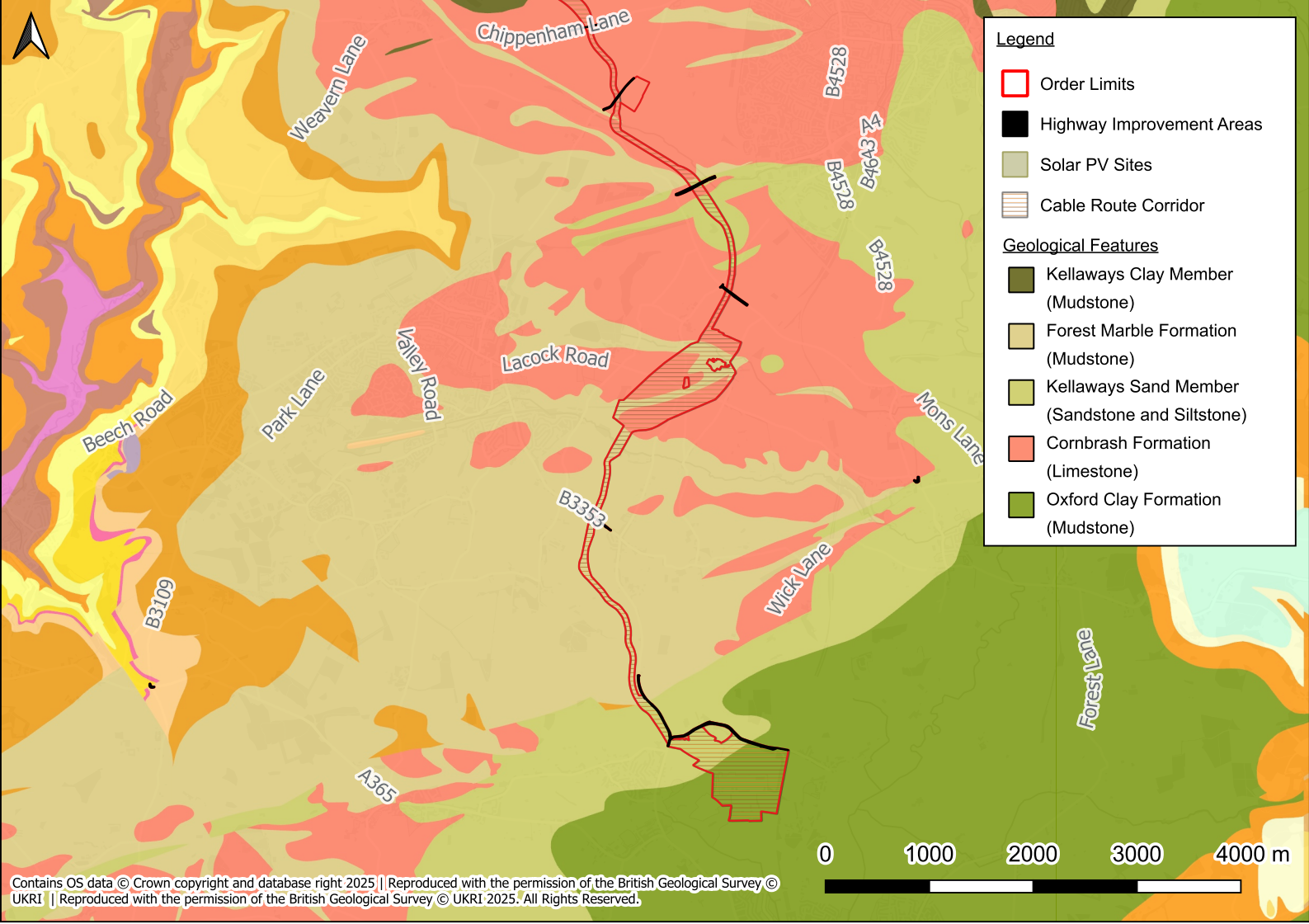


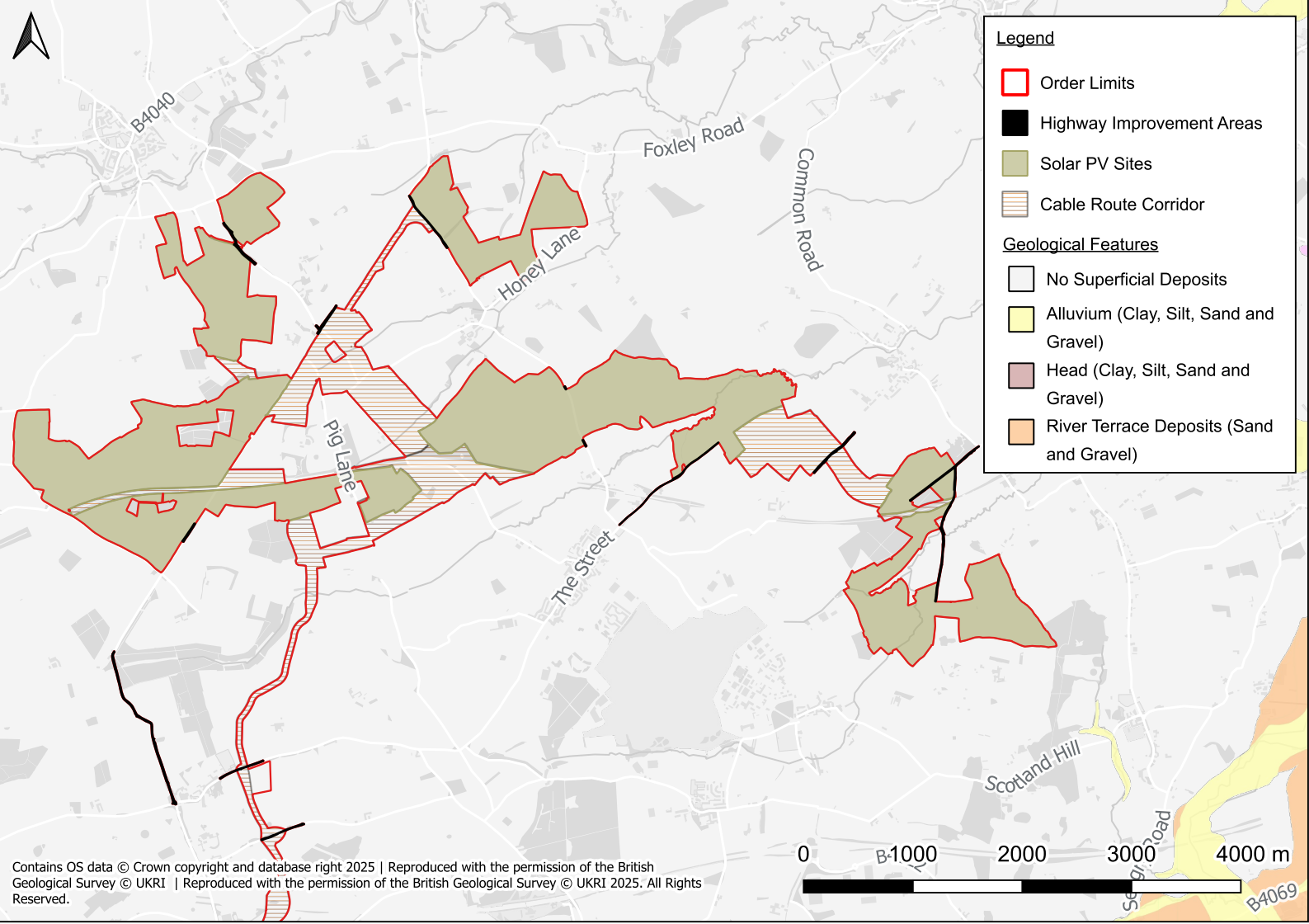
### Legend

-  Order Limits
-  Highway Improvement Areas
-  Solar PV Sites
-  Cable Route Corridor

### Geological Features

-  Kellaways Clay Member (Mudstone)
-  Forest Marble Formation (Mudstone)
-  Kellaways Sand Member (Sandstone and Siltstone)
-  Cornbrash Formation (Limestone)
-  Oxford Clay Formation (Mudstone)





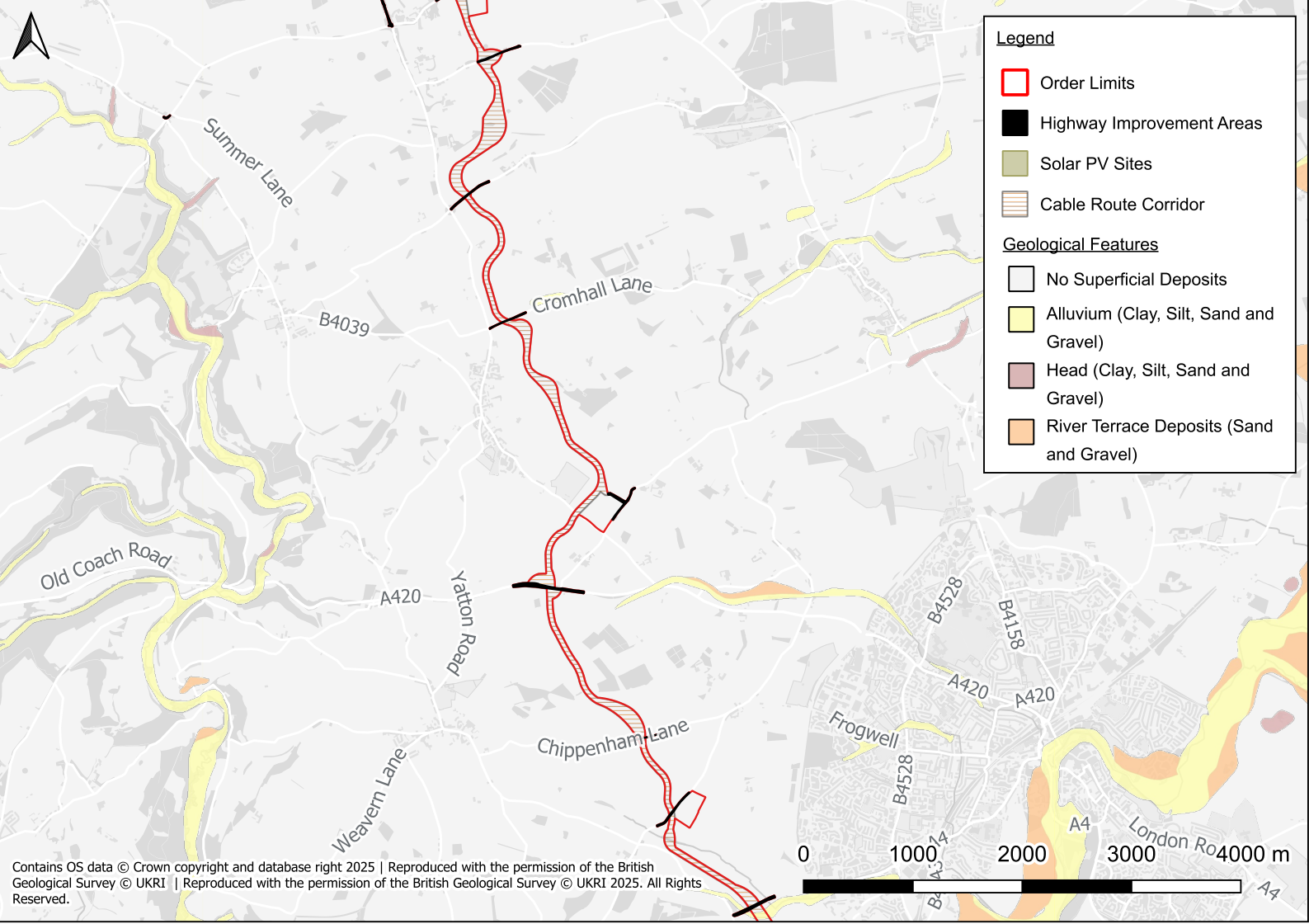
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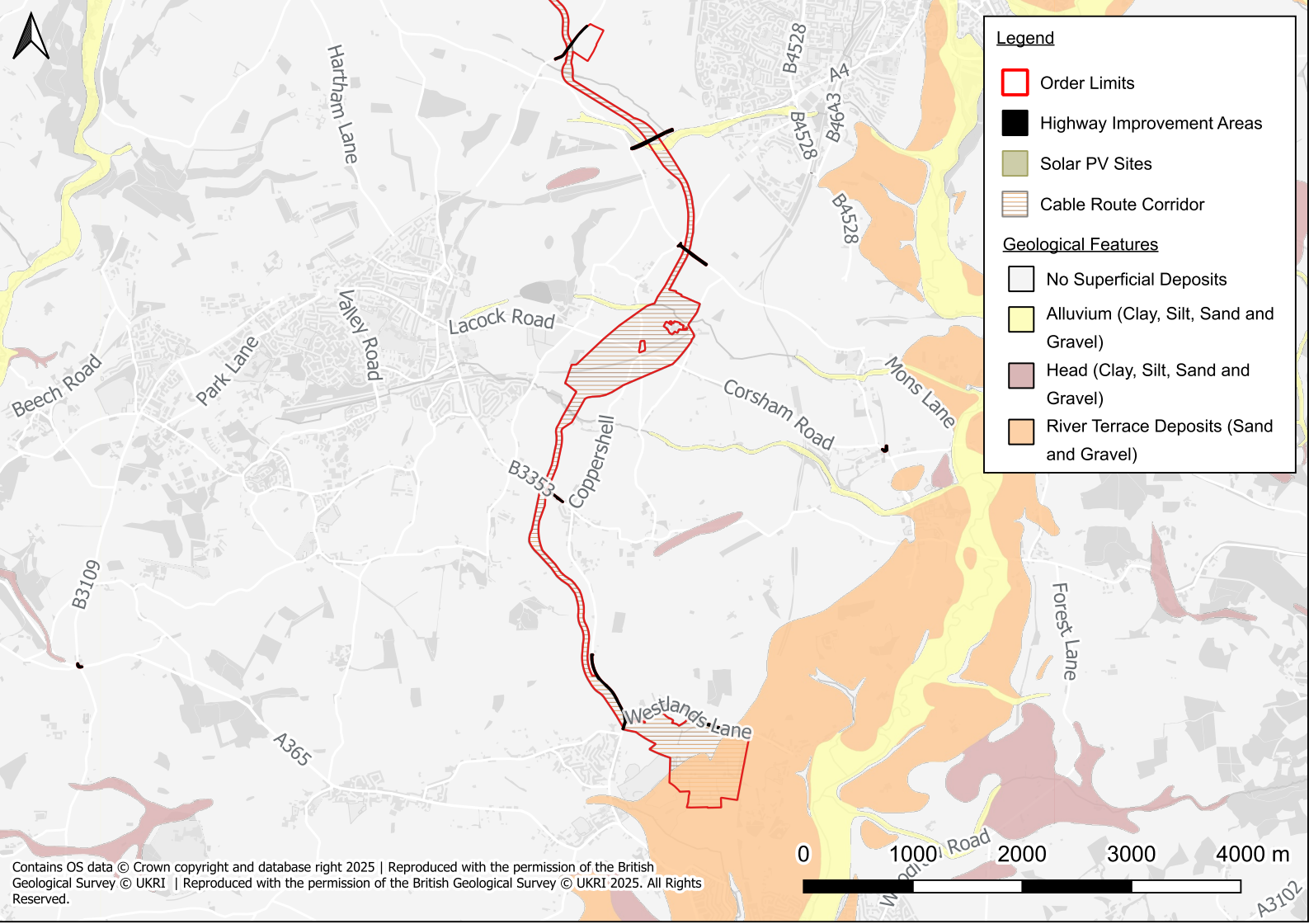
- Order Limits
- Highway Improvement Areas
- Solar PV Sites
- Cable Route Corridor

### Geological Features

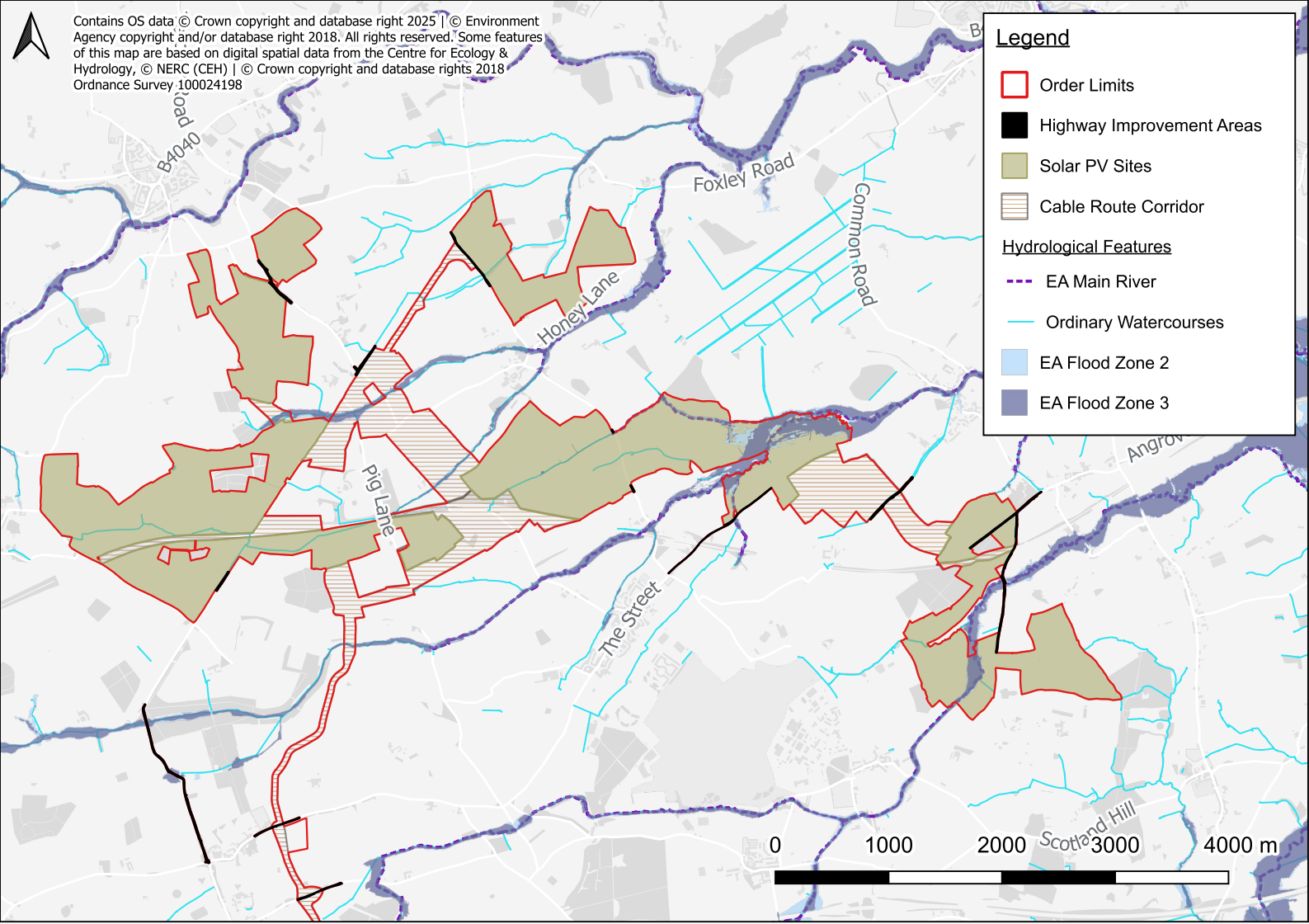
- No Superficial Deposits
- Alluvium (Clay, Silt, Sand and Gravel)
- Head (Clay, Silt, Sand and Gravel)
- River Terrace Deposits (Sand and Gravel)







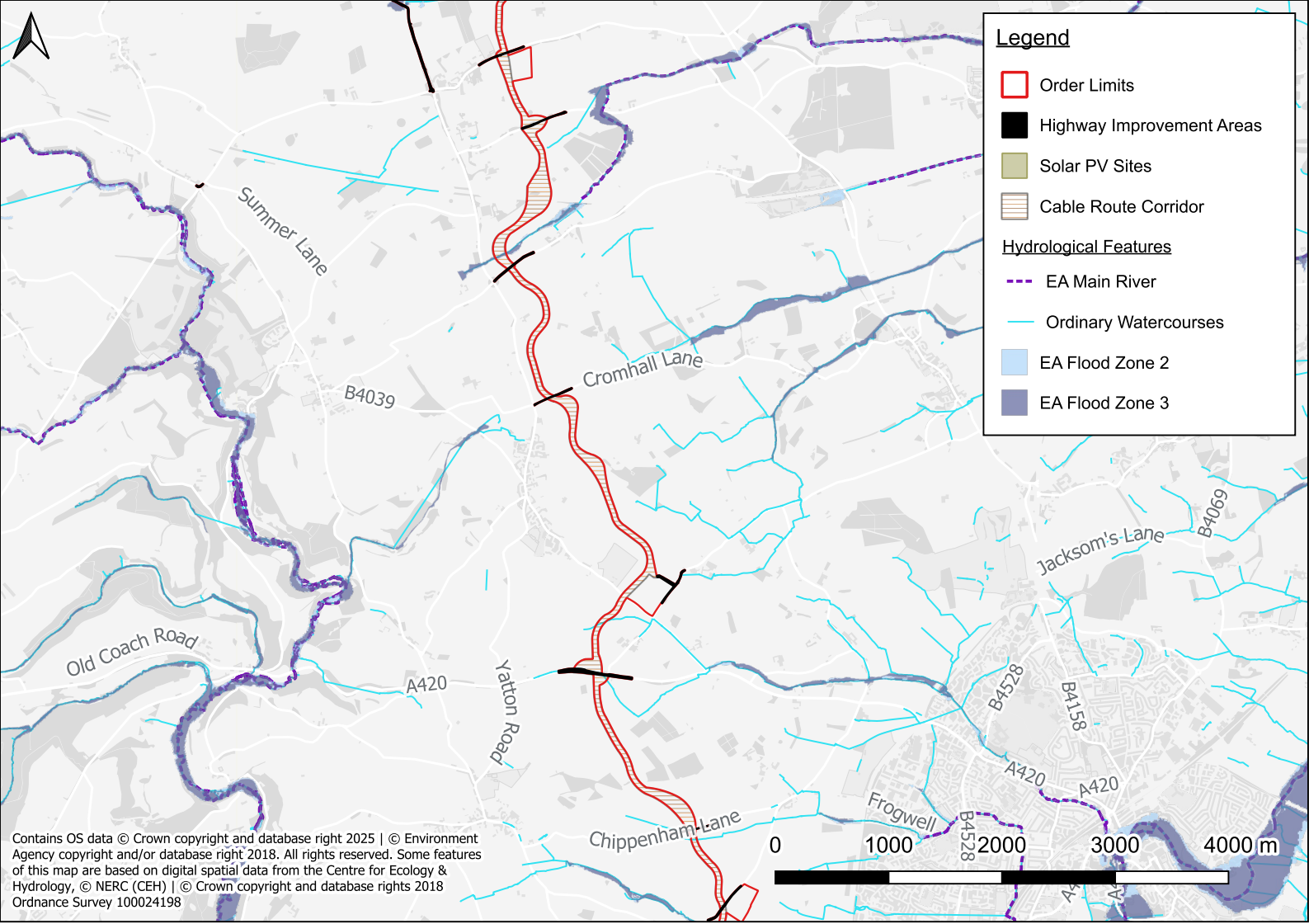
## **Annex C - EA Flood Map for Planning Maps**



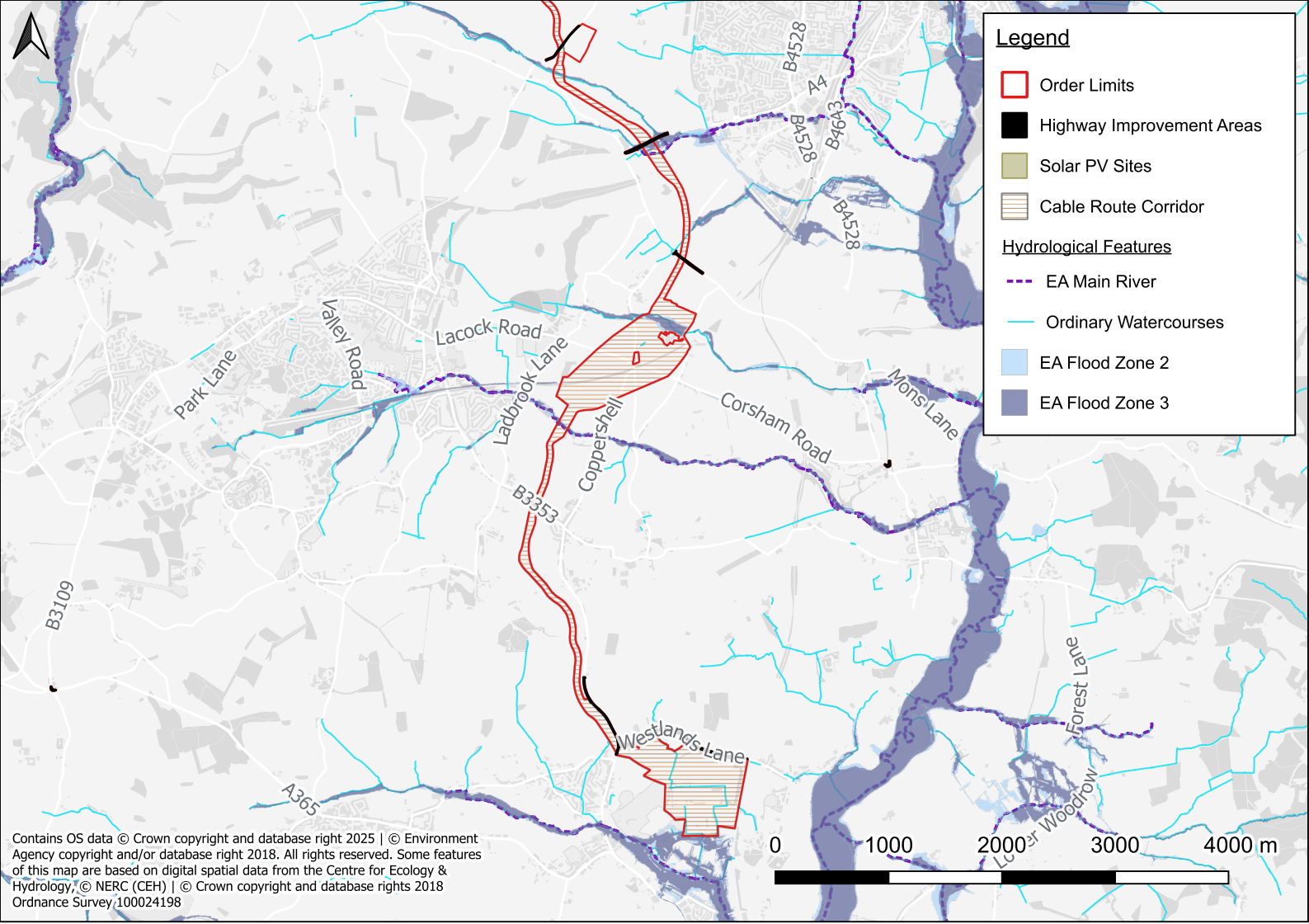
## Legend

- Order Limits
  - Highway Improvement Areas
  - Solar PV Sites
  - Cable Route Corridor
- Hydrological Features
- EA Main River
  - Ordinary Watercourses
  - EA Flood Zone 2
  - EA Flood Zone 3













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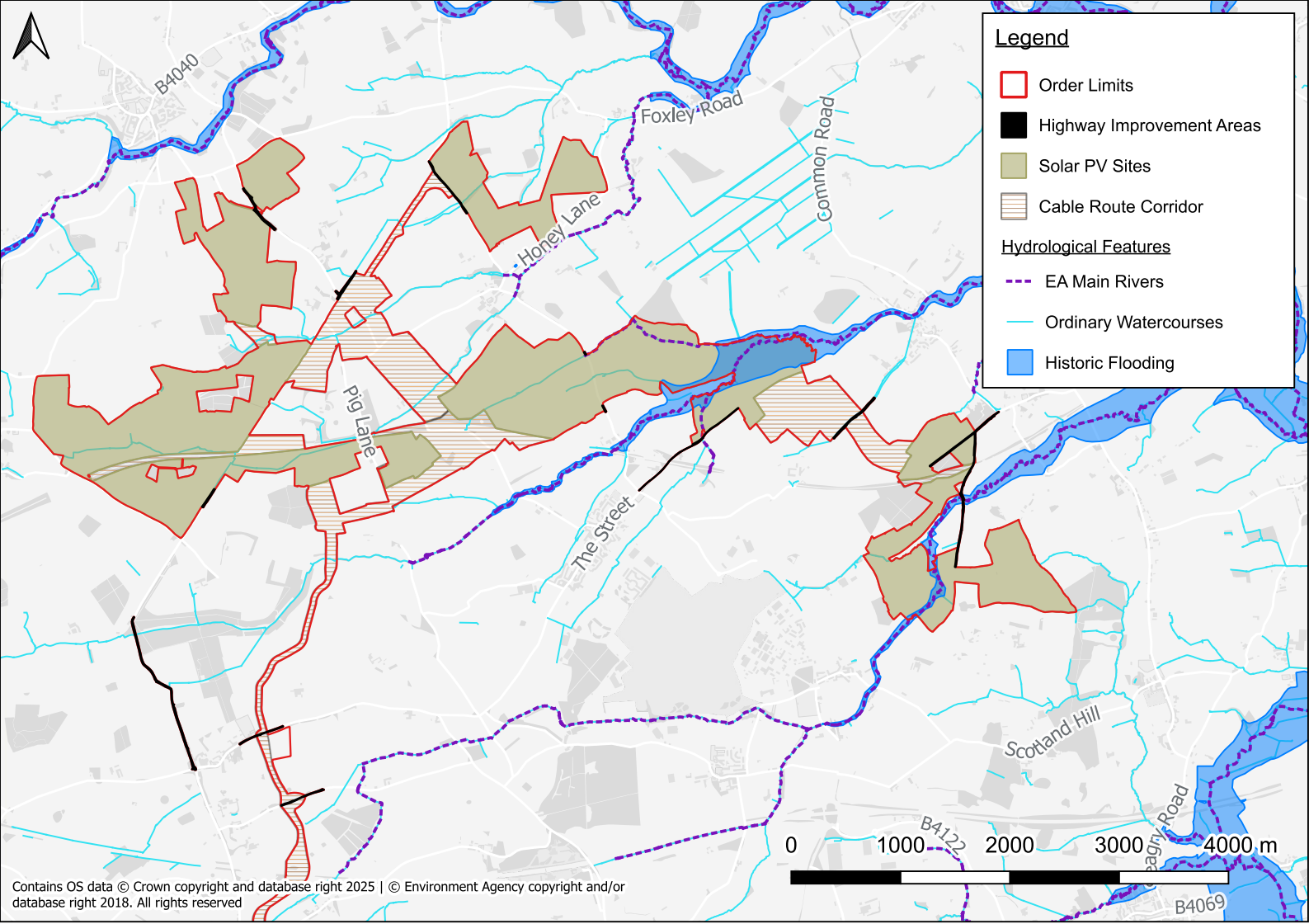


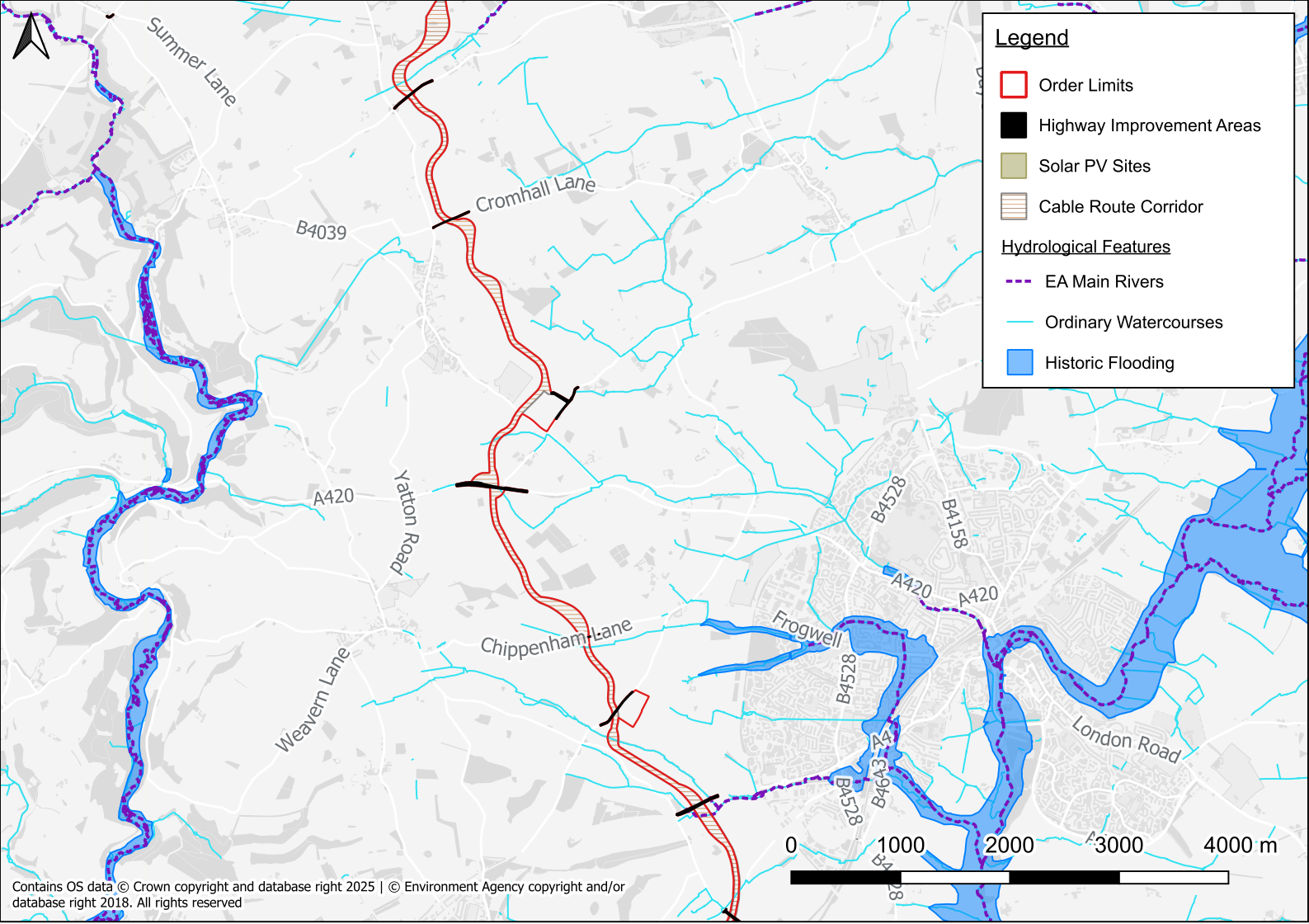
### Legend

-  Order Limits
  -  Highway Improvement Areas
  -  Solar PV Sites
  -  Cable Route Corridor
- Hydrological Features
-  EA Main River
  -  Ordinary Watercourses
  -  EA Flood Zone 2
  -  EA Flood Zone 3

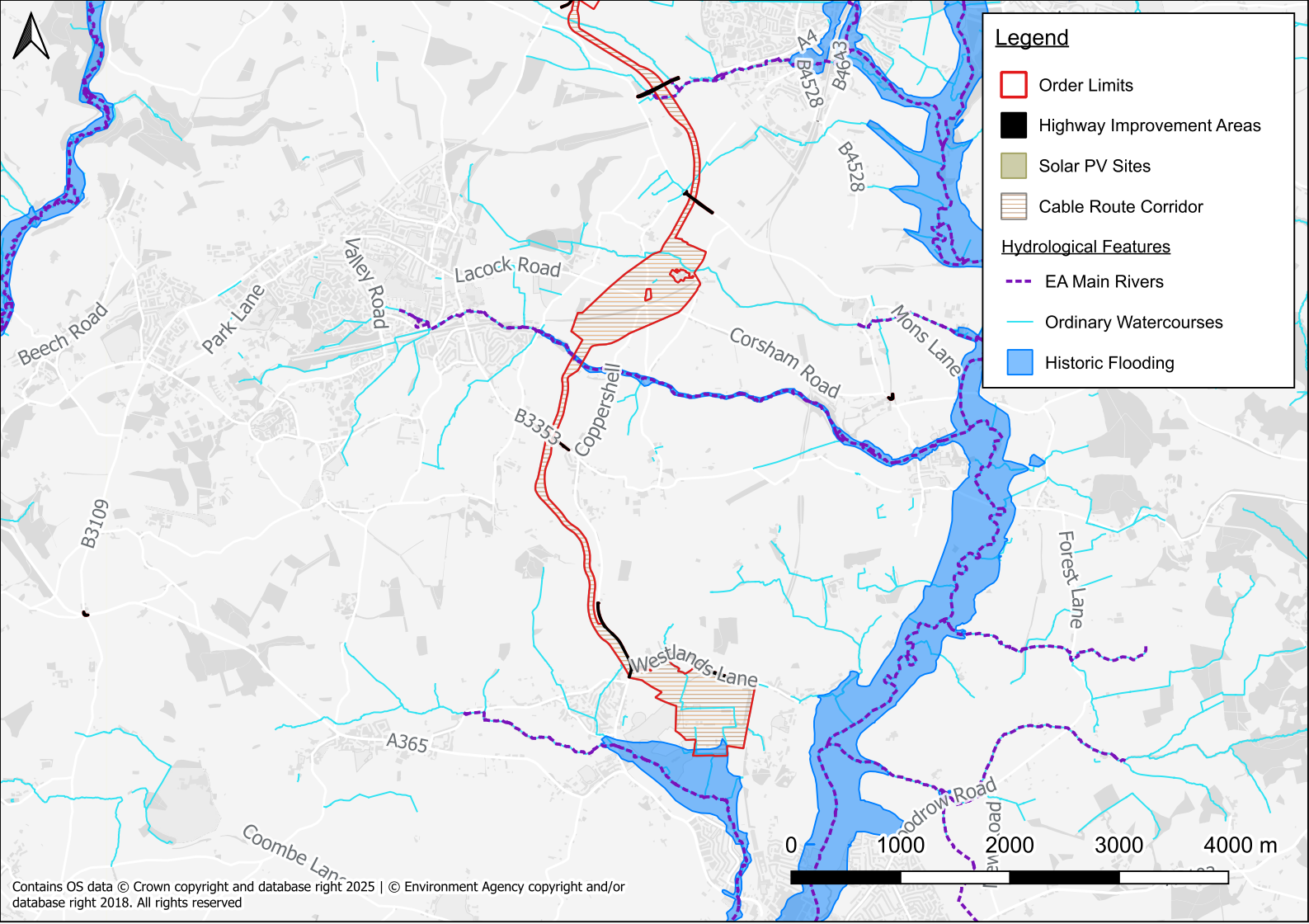


## **Annex D - EA Historic Flooding Maps**















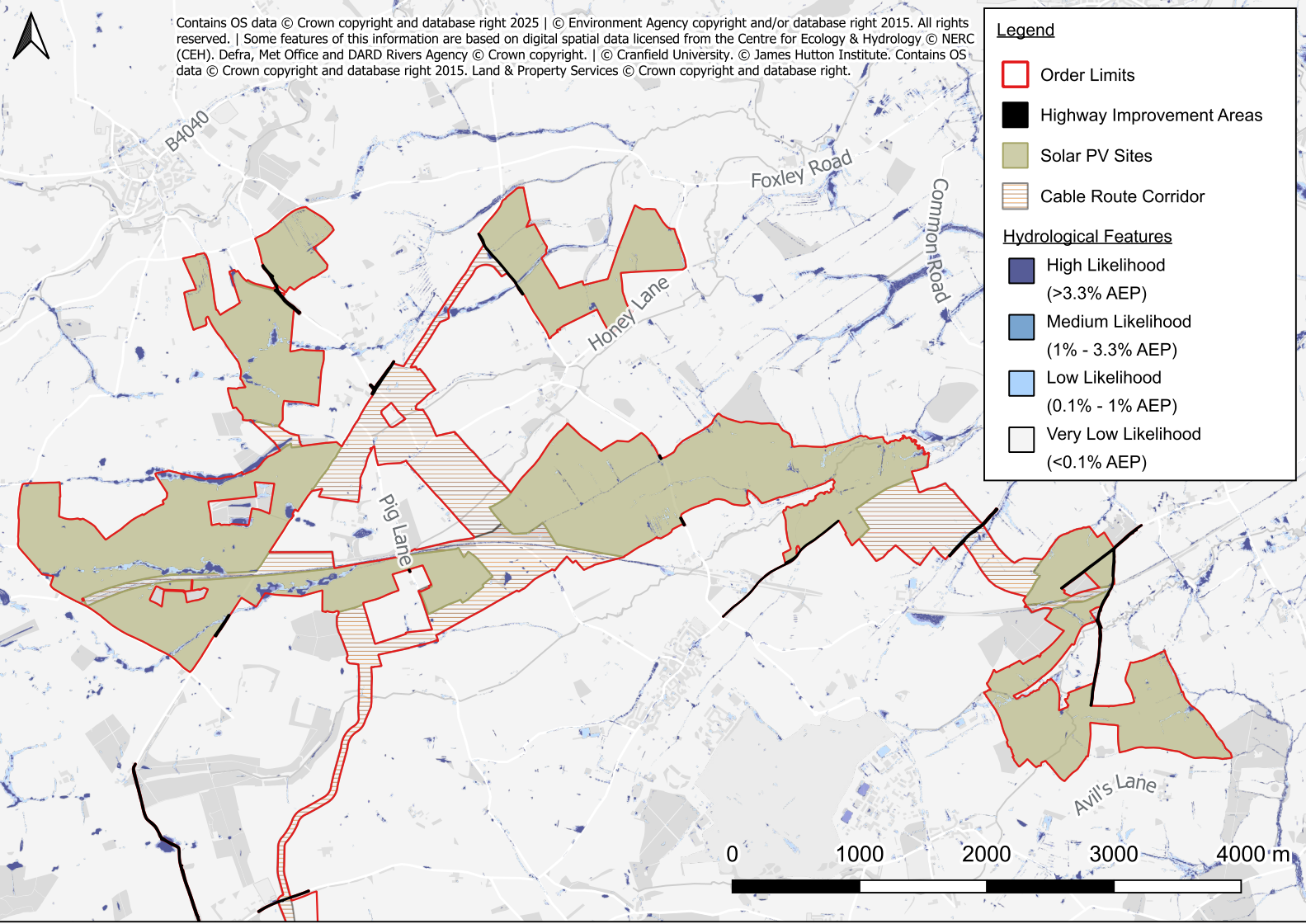


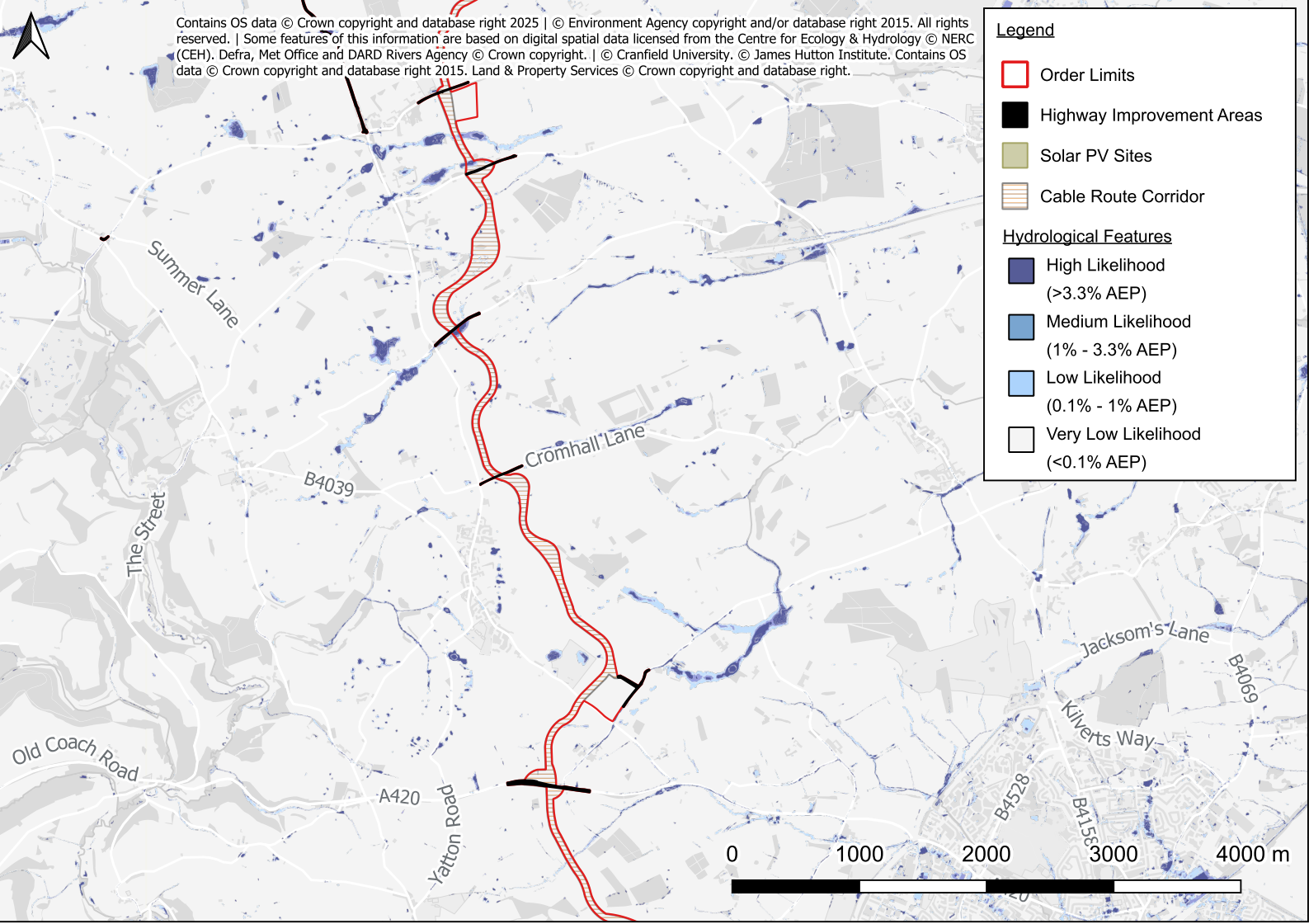
## **Annex E - EA's Long-Term Flood Risk Map (Flood Risk from Surface Water)**



### Legend

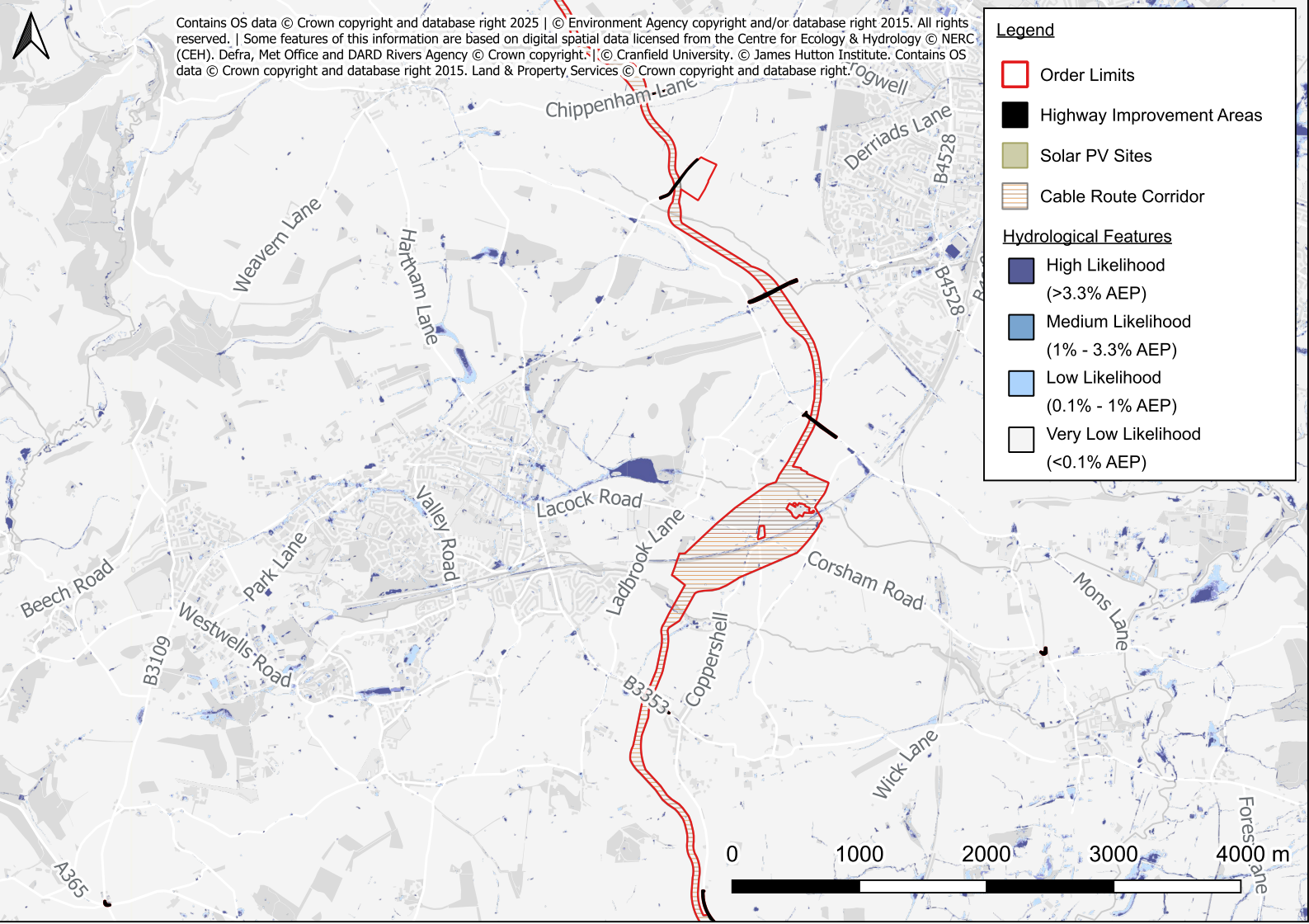
-  Order Limits
  -  Highway Improvement Areas
  -  Solar PV Sites
  -  Cable Route Corridor
- Hydrological Features
-  High Likelihood  
( $>3.3\%$  AEP)
  -  Medium Likelihood  
( $1\% - 3.3\%$  AEP)
  -  Low Likelihood  
( $0.1\% - 1\%$  AEP)
  -  Very Low Likelihood  
( $<0.1\%$  AEP)

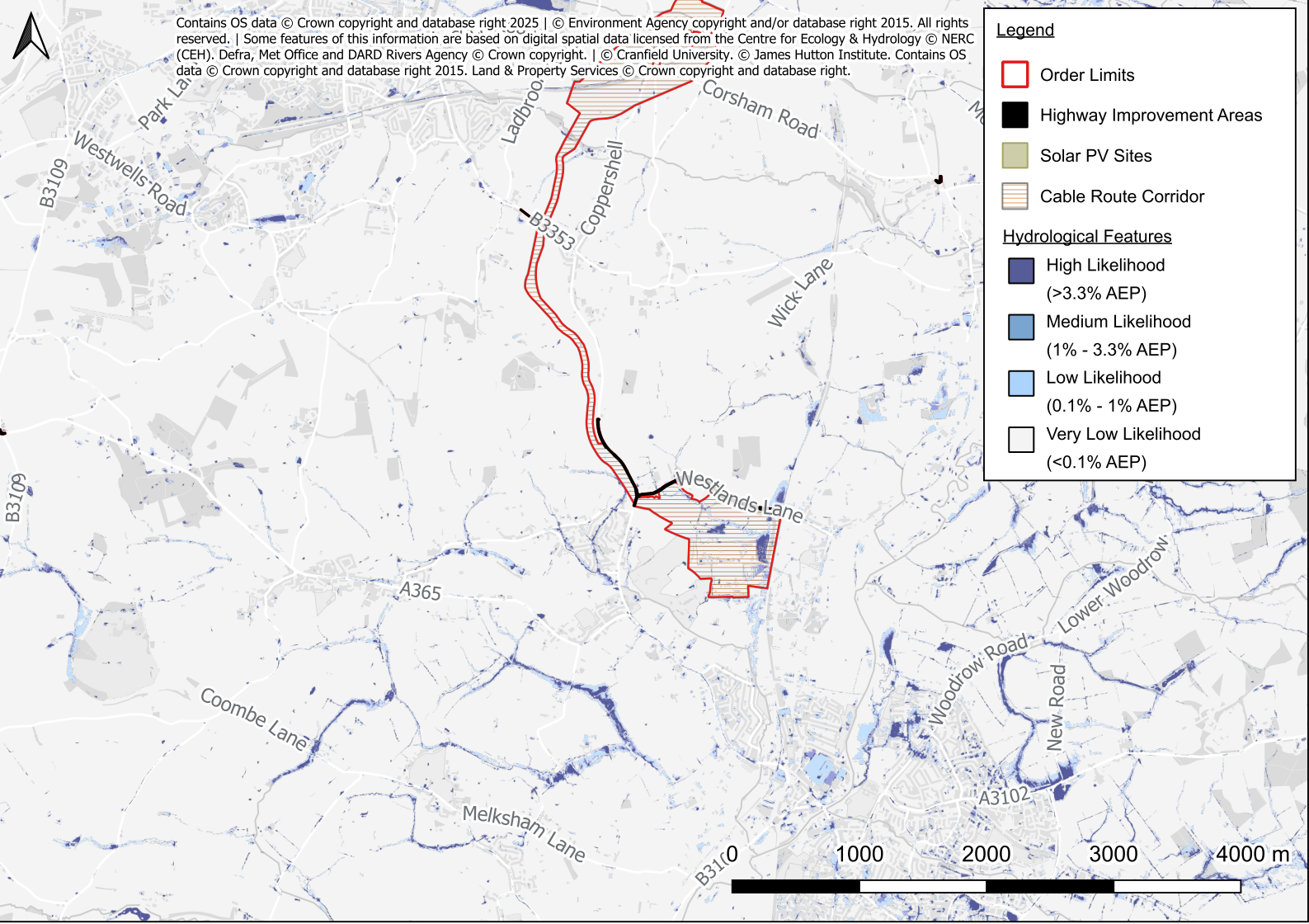




## Legend

- Order Limits
  - Highway Improvement Areas
  - Solar PV Sites
  - Cable Route Corridor
- ### Hydrological Features
- High Likelihood  
( $>3.3\%$  AEP)
  - Medium Likelihood  
( $1\% - 3.3\%$  AEP)
  - Low Likelihood  
( $0.1\% - 1\%$  AEP)
  - Very Low Likelihood  
( $<0.1\%$  AEP)





## Legend

- Order Limits
- Highway Improvement Areas
- Solar PV Sites
- Cable Route Corridor

## Hydrological Features

- High Likelihood  
( $>3.3\%$  AEP)
- Medium Likelihood  
( $1\% - 3.3\%$  AEP)
- Low Likelihood  
( $0.1\% - 1\%$  AEP)
- Very Low Likelihood  
( $<0.1\%$  AEP)

- 
- i [REDACTED]  
ii [REDACTED]  
iii <https://magic.defra.gov.uk/>  
iv <https://flood-map-for-planning.service.gov.uk/>  
v <https://check-long-term-flood-risk.service.gov.uk/postcode>  
vi <https://check-for-flooding.service.gov.uk/alerts-and-warnings>